THE STRUCTURE OF NOMINALIZATION

IN BURMESE

by

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DEDICATION

To the peoples of Burma,

who are an example of patient endurance

and who live by faith in the unseen.

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ABSTRACT

THE STRUCTURE OF NOMINALIZATION

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Nominalized sentential elements have long been observed in Tibeto-Burman languages, but the role and extent of nominalized patterns have not been explored as a base of formative structuring. This dissertation examines nominalization patterns in Burmese from the word to text level and posits a complex information packaging role of postposition particles in erecting a structure of predictable and iteratively patterned nominals which function to reduce information overload and facilitate online parsing. Burmese has been characterized as a predominantly verbal language (U Pe Maung Tin 1956). A complementary view is presented in which ontological objects created via a grammatical system of nominalization function to establish a sturdy skeletal framework for verbal and particle expression. Together the role of nominal and relational elements engender a balance realized structurally as ontological nominal objects whose juxtaposition iteratively creates larger nominals.

The claim is made here that an underlying ontological level of organization supports grammatical categorization. This organization is structurally simple and patterned. Only two word categories are posited —noun and verb. A third basic category of postposition particle functions abstractly as a type of grammatical verb. The role of the particle is expanded as an abstract nominalizing element that constructs and organizes the ontological structure of Burmese sentences and orders higher level units of discourse. Sentences are regarded as nominalized units based upon the unique and diverse functions of သည် **sany** as nominalizer. This key particle unlocks the role of nominalization in Burmese grammatical structure — as deictic specifier, as personalizer 'affix', as general nominal complementizer, as relativizer, and as sentence final particle of realis mood. The prototypical functions of သည် **sany** are realized as a vast 'conspiracy' of nominalization underlying the organization of Burmese grammatical constructions from simple noun phrase to paragraph to the discourse as a whole.

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ABBREVIATIONS

A	Agent /Source
Acc	Accompaniment / Instrument
Ad	Additional
Atr	Attribute
Att	Attitude
Adv	Adversative
C	Construction
CB	Colloquial Burmese
Cl	Clause
Clf	Classifier
Cnj	Conjunction
ConA	Continued Action
Cp	Complete
Cs	Causative
Dbt	Doublet
De	Deontic
Dm-d	Demonstrative - distal
Dm-p	Demonstrative - proximal
DQ	Direct Quote
Ds	Distributive
Emp	Emphatic
FB	Formal Burmese
G	Ground

FB	Formal Burmese
G	Ground
Gen	General
I	Interrogative (informational)
In	Instrument
Int	Interrogative
IQ	Indirect Quote
IrRl	Irrealis /Nominalizer
IO	Indirect Object
Loc	Locative
MLC	Myanmar Language Commission
N	Nominal
NP	Noun Phrase
ND	National Day Text
ND1	ND Sentence # 1
Ng	Negation
Nom	Nominalizer
Ob	Object / Goal
Obs	Observer
P	Particle
Pl	Plural
Pl-S	Plural-Subject marker
Pos	Possessive
Pr	Prior action/time
Plt	Polite

Pss	Possibility
Pth	Path
Pur	Purpose
Q	Quality
Rdp	Reduplication
Rel	Relativizer/Nominalizer
Res	Reason
Rev	Reversal of Expectation/ Change of State
Rl	Realis
RNg	Restrictive Negative
S	Source
S1	Sentence 1
SB	Snake Bite Text
SB2	SB Sentence # 2
Sf	Sentence Final
Tm	Temporal
Top	Topic
Ug	Undergo / Experience
V	Verb

CHAPTER ONE

INTRODUCTION

"Everyday language is a part of the human organism and is no less complicated than it."

Ludwig Wittgenstein, Tractatus Logico-Philosophicus

Real Burmese sentences are hardly like the basic forms taught in introductory Burmese classes. A real sentence begins with massive chunks of tightly packed information, bundled and stacked away by little words, particles, that provide the listener or reader with a bit of breathing space before they confront more stacks and bundles, as displayed in the constituency structure of Figure 1[1].

Figure 1. Sentence with Constituent Structures

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[1] This example comes from National Day text ND1 'To commemorate National Day, there are various activities and celebrations of preaching, exhibitions and competitions'. Numerous expanded examples are found in Appendix E.

Then, when the end goal of the sentence is encountered, the verb, it is as if all the energy and breath has been expended. A simple whisper of "it is" — or something as vacant — sums it all up. Finished. Is that it? What happened? What are all those bundles and stacks of information, all those nouns, doing by crowding into the beginning of Burmese sentences? How can Burmese pack so much information into such little space? Why does Burmese grammar appear so outwardly simple and yet so complicated in actual production?

1.1   Aim and Assumptions

The essential aim of this dissertation is to demonstrate the elegance of Burmese grammar in which grammatical units are recognized both by their constituent parts and their role in relation to other units at the same level of constituency. While the general pattern of constituency is extremely simple, combinatorial complexity can result in numerous levels with ornate branching structures, particularly within an expanded sentence. When one's view ascends to the text level, using the criteria established at the word and phrase level, what is often observed is a very simple formulaic propensity of the language to apply rules recursively to produce a massive information structure that is well ordered, principled, and both cognitively and aesthetically balanced such that encoding or decoding processes are simple and intuitive. Burmese eschews the sort of grammatical apparatus for construal so typical of European grammars, such as agreement marking of dependents for person, number, or gender, or case marking of sentential roles. Rather than explicit marking of constituents, Burmese prefers instead constituents to be built-up in patterns based upon categoriality, particularly that of nominals.

The focus of this dissertation will be to discuss the nature of the grammatical units themselves and the nature of the relations among constituent wholes. First, the nature of linguistic basic units of speech will be examined together with the rationale behind the analytic categories used by previous investigators of Burmese. It will be important to note that while each analysis of Burmese grammar in the past had its own purposes and audience, history and assumptions, it is not the aim of this study to judge those goals nor is it to judge the success or failure of previous analyses to reach these specified goals. At the same time, it is not meet to attribute the goals of this study to those analyses. Rather, the aim here is to utilize the insights from the observations and categorization schemas of past studies, where appropriate, and to incorporate these observations into new principles meant to provide a deeper understanding of the Burmese language. These principles help to explain both the essential nature of the grammatical categories themselves and the patterns of word, phrase, clause, sentence and text. It is expected that the reader will gain an appreciation for the elegant economy of Burmese, as well as draw inspiration from the generative capacity of a system that applies repeated rules to yield vast complexity. Furthermore, it is expected that the result of text analysis will have a payoff for attendant areas such as reading theory, particularly for those interested in practical linguistic applications such as promoting literacy. Perhaps also other applications may arise in machine translation of Tibeto-Burman languages and second-language teaching for larger patterns of text, such as those dense with information as are commonly found in expository text. It is also hoped that cross-linguistic applications such as the translation of textual information into Burmese or other related languages may be better understood and implemented.

1.1.1 Components of Language Processing

It will be demonstrated that there is a separable component of linguistic organization in Burmese called here *ontological*[2]. This level of linguistic processing renders an underlying linguistic form that is separable from grammatical and semantic processes. The basic organization of ontological form is perceptible via grammatical categorization, which is discussed extensively (Section 2.4), and through nominalization processes relating to word, sentence, text and information structure. It is proposed that the separable components of linguistic processing produce different types of nominals. Four component levels are proposed: a) the conceptual component or level of processing produces conceptual nominals that correspond to conceptual *things*, b) the ontological level of processing produces ontological nominals which relate to *form*, c) the grammatical level of processing produces grammatical nominals which relate to grammatical classes, and d) the semantic component produces nominals that relate to lexical classes.

1.1.2 Essential Pattern — Juxtaposition

The basic principle of Burmese grammar is juxtaposition. The essential role of juxtaposition linguistically is to predicate. To understand how juxtaposition can be a type of predication, one must examine the simplest example of it. The simplest of predications is the *existential predication* that specifies that something or other exists. The existential predication is the intransitive predication that underlies each

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[2] *"Ontology* is the theory of objects and their ties. The unfolding of ontology provides criteria for distinguishing various types of objects (concrete and abstract, existent and non-existent, real and ideal, independent and dependent) and their ties (relations, dependences and predication)" (Corazzon 2003). Such ontological objects and ties correspond to conceptual *things* and *relations* here.

nominal. For example, the bare noun 'cat' used either referentially or non-referentially presupposes the existence of some *thing* referred to, either an object or a conceptual category.

The other type of predication involved in juxtaposition is the *equational predication* that specifies that something is also something else. The equational predication is the transitive form of this juxtaposed predication. The intransitive could be represented as (1a) and the transitive form as (1b) below.

(1)   a.   'A is.'

      b.   'A is B.'

Alternatively, what we find in a verb-final language such as Burmese is that the equative or copula verb remains covert because the configurational pattern of juxtaposition suffices to specify this type of predication. It is, therefore, unnecessary to use an overt verb 'is' as it is the inherent semantic relation in the configuration.

Characterizing the nominal elements in the above examples as N, the following representation results in two predication types displayed in (2).

(2) a.   N   လူ   **lu**   'person'

   b.   N N   လူ အေကာင်:   **lu a-kaung:**   'a good person'

What is to be observed here is that in (2a) there is a predication, which is that of existence of the element itself. This predication is inherent in all nominals and may optionally be overt in the surface structure for pragmatic purposes, but is nonetheless implicit. It is the case in many verb-final languages such as Burmese that the verb 'is' is often omitted in existential clauses.

The (2b) pattern of N+N juxtaposition forms the basis of Burmese textual re-
lations and the essential typology of subordinate, immediate constituent relations of
compositional structures within the text, as will be discussed in later chapters. The
equational nature of the simple juxtaposed nominal pattern, while typical in many
languages of the world (Payne 1997:114), seems more common in verb-final lan-
guages where the semantically empty final copula verb is unnecessary for predica-
tion. This is particularly the case in Burmese since subject and object agreement is
unmarked on the verb, and neither tense, aspect nor modality are obligatory fea-
tures.

It is posited here that from the presence of a nominal element – any nominal
element within the language – there is at the word level an underlying predication of
existence of the unit to which it refers. A word itself is more than a lifeless object. It
has qualities of being and potentiality about it imposed by the observer/speaker of
that word establishing a pragmatic and cognitive dimension of ontological being,
from which further 'life' or 'action', motive or movement can be generated and pos-
ited linguistically. Being is attributable to nominal elements not in and of themselves
but in the action of naming or attributing the quality or nature of the object itself.
Thus the ontological status is derived not from the object itself but from the act con-
ducted 'behind the scene' of creating a conceptual object by the very act of naming it
(Husserl 1900:502, Searle 1969). The linguistic sense of being derives from the rela-
tionship of the speaker to speech. The speaker creates linguistic objects and rela-
tions in an alternative symbolic world that bears some relationship to what the
speaker wishes to communicate. Within this symbolic world of the speaker's creative
intention and communicative purpose the process of object creation takes on a life of
its own, standing as it does apart from and separate from any other form of empirical

reality. That is, the objects that are created linguistically do not exist necessarily in a one-to-one relation to some external, 'real' world object or relationship, though they may represent those relationships.[3]

The pattern in Burmese of juxtaposed nominals, N+N, may have not only equational interpretations but also non-equational interpretations. The predication underlying the non-equational form correlates to two structural types — compound noun (N+N 'picture book') and modified noun phrase (N+N 'good man' in Burmese). Both of these types of constructions have more complex predicates than an explicit verbal predication.[4]

(3) a. လူ အကောင်း   **lu a-kaung:**   N + N   'a good man'

  b. လူ ကောင်း   **lu kaung:**   N + V   'good man'

  c. လူ ကောင်း သည်   **lu kaung: sany**   [N + V] P   'the man is good'

---

3 "Husserl's theory of language and of linguistic meaning is based on this theory of objectifying acts. Language is seen as having meaning only to the extent that there are acts in which meaning is bestowed upon specific expressions in specific sorts of intentional experiences. Husserl argues that the acts which are capable of giving meaning to our uses of language must in every case be objectifying acts: the acts whose species are linguistic meanings are in every case acts of "representation" or "object-fixing". We can put this point in a more familiar terminology by saying that for Husserl *all uses of language approximate to referential uses.* More precisely: all expressions are associated either with *nominal acts* – which are directed towards objects in the narrower sense – or with *acts of judgment* – which are directed towards states of affairs. ... Husserl insists – in a way that will recall contemporary views of Frege, Russell and Meinong – that even syncategorematic expressions like *and, or, if, under* are referential in their normal occurrences of use, in the sense that they, too, have their own objectual correlates. They correspond to certain merely formal or abstract moments of complex structures of various kinds. *Under,* for example, is correlated with a certain spatial relation, *and* with a certain formal moment of combination." (Smith 1990:30)

[4] Levi (1978) distinguishes nine semantic types for the semantics and word formation of N+N compounds, each of which is an underlying predicate, some with a sentence level sense of 'case': HAVE (genitive) 'picture book'; USE (instrumental) 'gasoline engine'; LOC (locative) 'Michigan winter'; FROM (ablative) 'Florida orange juice'; FOR (benefactive) 'ice tray'; BE (existence) 'pine tree'; MAKE 'honeybee'; CAUSE 'tear gas'; BE CAUSED BY 'birth pains'. Such underlying predicates are not a part of compositional meaning as much as metaphorical paths in meaning construction.

The complex predications of what appears to be such a simple form, N+N, can best be understood in relation to the insights of modern cognitive linguistic studies, particularly the role of metaphor in structuring new meaning.

The contemporary development of cognitive linguistic theory is useful for understanding conceptual structuring of more complex predications than mere existence or equation. Particularly significant are the insights of Leonard Talmy (2000a, 2000b) with regard to the conceptual structure of events, and of Ronald Langacker (1987a, 1991b) on the cognitive nature of the grammatical categories of nouns and nominals. In particular Langacker's explanation of how the same conceptual reorganization occurs in a deverbal noun as in the nominalized clause provides a consistent means of handling the types of nominalization dealt with in this study — grammatical (morphological, clausal, phrasal, sentence) and ontological.

The cognitive process of constructing whole senses or whole scenes from smaller grammatical units, such as a noun phrase like 'mother of invention', or the role of organizing larger spans of text around a metaphor has been demonstrated by Lakoff and his associates (Lakoff and Johnson 1980, 1999; Lakoff 1987, Lakoff and Nuñez 2001) to belong to a rational function of language and the brain based upon metaphorical structuring processes that seem to be hard-wired into perception itself. Extending Lakoff's work on metaphor, Fauconnier and Turner (Fauconnier and Turner 2002; 1996; Fauconnier 1997; Turner 1996) have developed the analytical construct of *metaphorical blending*, also called *conceptual integration*, to demonstrate how complex situational analogies and extended metaphors are mapped between domains and various types of senses of meaning to result in whole integrated meaning.

The notions of metaphoric blending and conceptual integration, while useful for understanding the relationship between the basic elements of thought which cognitive linguists have been employing as heuristic primitives — image-schemas, frames, conceptual metaphors and metonymies, prototypes, mental spaces, are also applicable to grammatical constructions — phrases, clauses, parallel units, sentences, and so forth. Conceptual integration can be very useful to understand the relationships of new meaning of a newly created whole unit. This is the case with complex words, such as a compound nouns of the form N+N as in 'picture book', or noun phrases whose meaning is based upon metaphor, as in the abstract relation between head noun and modifier as in 'mother of invention'. The structured set of cultural objects and sets of relationships from the areas of general cultural knowledge, or from the linguistic semantic sets/domains and from grammatical structures provide a framework within which innovative generation of meaning occurs at a constructional level.

1.1.3 Conceptual Integration

Contemporary cognitive linguistics, particularly the direction practiced by Gilles Fauconnier and Mark Turner (2002; 1998; 1996), is relevant to both text linguistics as well as to linguistic studies focusing on smaller units of constructional meaning. Fauconnier and Turner posit a number of cognitive constructions and processes for metaphoric blending in a model of cognitive processing which they call 'conceptual blending' or 'conceptual integration.' This model describes a general cognitive analysis on par with analogy, mental modeling, cognitive categorization and framing. The process of deconstructing a metaphor is familiar to all translators who must determine the source, the target comparison, and the point of the com-

parison that is intended by the speaker. While a familiar problem to translators, metaphor has been avoided by most grammarians due to its apparent oddity or deviation from the typical manner in which grammar links to the lexicon. Lakoff, who as one of the first American linguists to seriously apply linguistic rigor to metaphoric processes, has noted that the different assumptions about the philosophy of language necessitates that metaphor be not part of the same system of semantics as ordinary language.

> Chomsky's (1981) theory of government and binding also accepts crucial assumptions from the philosophy of language that are inconsistent with the contemporary theory of metaphor. Government and binding, following my early theory of generative semantics, assumes that semantics is to be represented in terms of logical form. Government and binding, like generative semantics, thus rules out the very possibility that metaphor might be part of natural language semantics as it enters into grammar. Because of this defining assumption, I would not expect government and binding theorists to become concerned with the phenomena covered by the contemporary theory of metaphor. (Lakoff 1993:248)

Rather than being external to natural language systems, current cognitive theory argues that metaphor must underlie natural language semantics as well as other systems of thought such as mathematics and science (Lakoff and Johnson 1999; Lakoff and Nuñez 2001).

Sentences such as "Vanity is the quicksand of reason," require us to consider in what sense *vanity* is like *quicksand*, and what schematic scenes establish a sensible relationship of *vanity* to *reason* that would be similar to *quicksand*. We must, moreover, consider what are the relevant points of comparison, while ignoring the many possible irrelevant points, and once we establish the most salient factors of similarity, then draw the inferences. The conceptual–blending model schematizes the mental operations involved in analogical reasoning and sheds light upon a wide

range of semantic processing, particularly of the type involved in *constructional meaning*, as opposed to *compositional meaning*.

Mark Turner, one of the innovators of conceptual blending, uses in his early publication (1991) the notion of Source and Target domain for the two mental spaces typical of metaphorical conceptualization. He calls the English construction of the type found in (4) ' **x is y of z** '.

(4)　　a. Vanity is the quicksand of reason.

　　　　b. Wit is the salt of conversation.

　　　　c. Money is the root of evil.

The general structure of this metaphor is commonly recognized by native English speakers as a unique construction signaled by its grammatical form of '**x is y of z**', where **y** does not belong to the same conceptual space as **z**. To understand this construction, 'of' is not interpreted as a part-whole relation, a meronymy (a 'consists of' relation), neither is it a relation of possession of **y** by **z**, nor it is one of metonymy (a name of an attribute or an associate used for another). Rather the construction signals the hearer to conduct a cognitive process of mapping the meaning. This is done analytically by setting up a set of mental spaces, something akin to mental scratch pads for conceptualizing semantic relationships, and then working through the analogical correspondences between the Source and Target input spaces. Each of the circles in Figure 2 is a mental space. Fauconnier and Turner define mental spaces as:

Mental spaces are small conceptual packets constructed as we think and talk, for purposes of local understanding and action. Mental spaces are very partial assemblies containing elements, and structured by frames and cognitive models. They are interconnected, and can be modified as thought and discourse unfold. (Fauconnier and Turner 2001)
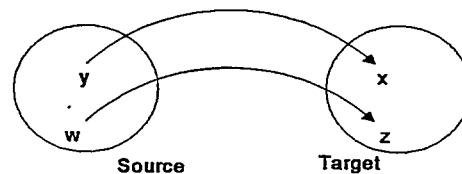
Figure 2. Mapping of Elements between Input Spaces

The meaning for the **x is y of z** metaphor is resolved by setting up the source mental space with the inclusion of an *unmentioned* **w** element in the comparison. The construction of the scene and relevant cultural items sufficient to resolve the 'riddle' are provided by the hearer's general knowledge. In (4a) the hearer establishes two mental spaces, one with the sense of a geographical scene with quicksand **(y)** and an unmentioned traveler **(w)**, and another target space of human behavior in which vanity **(x)** and reason **(z)** are related in some way. The selection of the characteristics for an inferred scene or event is highly cultural and ensues out of a rapid cognitive process that typically goes unnoticed. By pulling the process of the meaning construction apart, a greater understanding of the cognitive processes and logic underlying linguistic meaning can be made overt. The following table fills in the role of **(w)** in the examples in (4).

	Source		Target	
	Y	**W**	**X**	**Z**
Vanity is the quicksand of reason.	quicksand	(traveler)	vanity	reason
Wit is the salt of conversation	salt	(food)	wit	conversation
Money is the root of evil.	root	(plant)	money	evil

Table 1. Mapping to Source and Target Domains of Metaphors

Lakoff has written in numerous publications on metaphor that the whole process of metaphorical logic entails a restrictive selection of relevant details that hold a certain 'typology' across domains. This principle called 'the Invariance Principle' "preserves the cognitive typology (that is the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain" (Lakoff 1993:214). It is a consequence of this principle that in (4a) the mapping of surfaces, of paths, of goals or trajectories would be the same between the two mental spaces. The fixed similarity generates the inference, such as 'As one falls into quicksand suddenly, inadvertently and inextricably, so one who is vain will sink into unreasonableness.' Such an inference arises from the blend.

A later, more expanded model of conceptual blending adds two further mental spaces, in addition to the two input spaces of the Source and Target spaces. One takes into account an area for properties selected as points of similarity and a second space is for the resulting blend of properties. This expanded model from Fauconnier and Turner (2001) is presented in Figure 3 below.

Generic Space

Input I₁   Input I₂
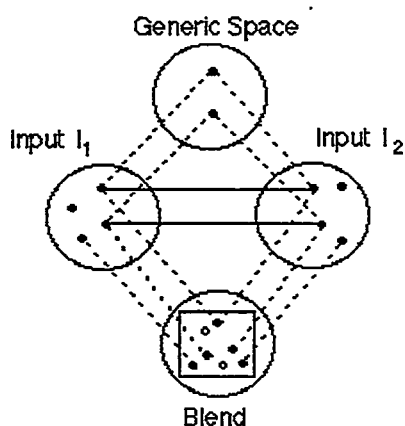
Blend

Figure 3. Conceptual Blending Process

The Generic Space in the figure above is a dynamic, creative, place of the
imagination where selected features necessary for understanding of the blending
process are placed for inputs into cross space mapping. From the Generic Space,
as the process of integration unfolds, come only the appropriate components into the
cross-space mapping between the Source and the Target mental spaces.

New meaning is created in the Blended Space where the resultant meaning
of a blend is greater than the sum of its parts. Meaning here is not compositional
meaning (in the sense of Frege), but constructional meaning, or metaphorical mean-
ing that arises from the process itself. It is emergent meaning which has its own
sense and components. The conclusion manifest in (4a) cited above is not composi-
tionally derivable from the sum of its parts, or from the subparts of its parts. The kind
of meaning, which is called constructional here, contrasts with a compositional ap-

proach to meaning in which the semantic attributes of an utterance necessarily follow from those of its elements.

Having sketched too briefly some general ideas about metaphor and meaning, we turn now to its role in the language under study here.

1.1.3.1 The Role of Metaphor in Burmese Constructions

In an essay entitled 'The elusive figures of Burmese grammar' Alton Becker (1993) records much the same proclivity for metaphor as that proposed in this study of Burmese, though more from an anthropological-rhetorical-linguistic perspective. He takes into particular consideration the extremes of context, any one of which may indicate a separate meaning or sense. He lists at least six types of context — the immediate words, the context of the language act, the context of memory, a specific belief system 'about the ontology of that world', the medium of the utterance -sound, writing, or thought, and the context of silence. In addition to context types, Becker recognizes two abstract functions of the extreme ends of the Burmese verb phrase. The right pole demonstrates a propensity to signal aspects of the speech event, while the left pole of the verb phrase, the area of the verb proper, indicates the world of *Nature*, or the world referred to in the content of the utterance. The right pole in contrast could then be called *Culture*. Becker's insights about the 'world' a Burmese builds-up, particularly the role of the poles in relation to information type plays a role in the different successive levels of nominal units of a sentence which are developed and expanded in this study.

To demonstrate how very different Burmese is from languages such as English, and how parsing and glossing is nearly impossible, Becker takes a 24-word utterance (reproduced here in the same orthographic shape) from a published Bur-

mese text in Colloquial style — "Let that be ... as soon as we arrived we bathed. After that we had a reception. That's just what I wanted."

... "ထားပါတော့လေ .... အဲဒါနဲ့ ရောက်ရောက်ချင်းရေချိုး၊ နောက် မိတ်ဆက်ပွဲကို သွားရတယ်၊ အဲဒါ အတော်ဘဲ။ (Becker 1993:63)

Using the transliteration system adopted here, this brief text reads as follows

(5)

hta:	pa	htau.	le	ai:	da	nai.	rauk	rauk	hkang:	re	hkyui:	rauk
put	Plt	Rev	Att	Dm-p	Dm-d	Acc	arrive	arrive	Tm	water	break	after
	Let that be			with that matter			arriving				after bathe	

mit	hcak	pwai:	kui	swa:	ra.	tai	ai:	da	a-tau	bhai:
love	connect	party	O	go	De	Nom/Rl	Dm-p	Dm-d	sufficient	Emp
to the reception				(we) must go			That's really just right!			

Each element in this very brief utterance is shown to have semantic, grammatical, and various other metaphorical senses which contribute to the whole, natural, and clear meaning in Burmese. "The whole thing can be seen as a string of metaphors" (1993:68). What is often analyzed as either grammatical or lexical words are analyzed separately, each as metaphors in their different contexts, the whole of which contributes to the metaphorical blend and the sense which a native speaker gains from the utterance as a whole.

For instance, the polite particle ပါ **pa**, which occurs near the end of the first clause, ထား ပါ တော့လေ **hta: pa tau. le** "Let that be...", is often glossed as a grammatical function (and is so glossed in this dissertation). It is actually a metaphorical use of an action verb that could be translated as 'include', 'be with', 'accompany'.

The act of including others is a very important social act in a society where social harmony and saving of face are highly valued. The metaphorical use of the polite particle contrasts with the literal use as a physical action of 'including', or 'carrying along with', particularly with an object. This physical sense itself has a productive extended use with humans or animate objects so that the sense becomes 'to be with' or 'together with', 'be present with', 'come with'. This physical sense is also highly social.

There are a number of conceptual blends at work here, but to reduce the complexity somewhat, the use of the **pa** as a politeness particle can be mapped as follows. The Input 1 mental space is one of general social relations, the scene of a visitor and host is most saliently selected as one in which the strong cultural value of inclusion is demonstrated with a definite physical component implied of specific bodily actions involved in attending to a visitor. The Input 2 mental space is one of speaking with another person. The following figure demonstrates the cross-space mapping of the selective projection of two scenes blended into a speech act that accomplishes the action of politeness by saying 'include' ಎ **pa** . What comes from the Input 1 space of social actions are acts of inclusion that are regarded as indicating an attitude of politeness or respect. What comes from the Input 2 mental space of the speech act is the action of speaking. Both action and attitude demonstrated by that action are in focus, not necessarily the attendant roles of the agent and patient in the two scenes, although they must be selected in the Generic Space to make sense of the metaphor of the action indicating a specific attitude.
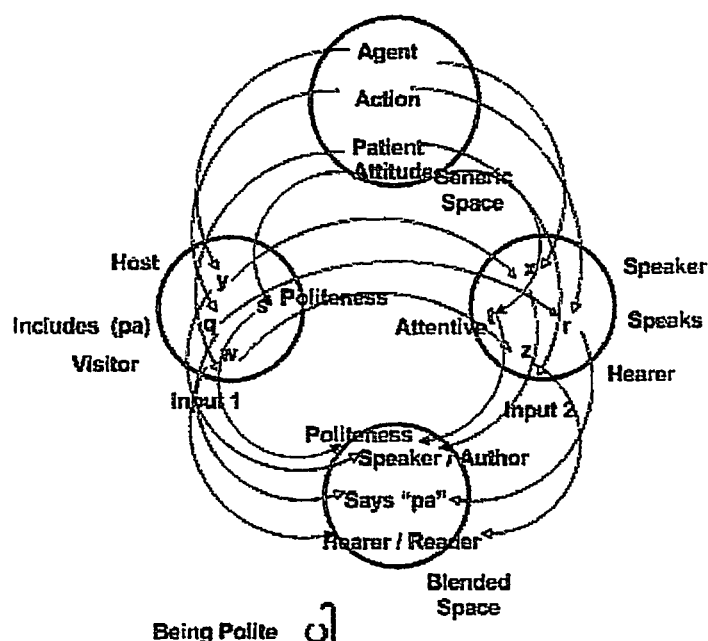
Figure 4. Conceptual Blend of the Polite Particle

The blend establishes the performative (Austin 1962) of doing a politeness by saying it. Performatives as a class do not include the statement about which they perform. For instance, a performative promise does not involve the statement that one is promising. Rather it is a separate act of a specific kind (promising) which is named by the performative verb. The same is true with politeness ပါ pa; it the act of being polite.

The placement of the performatives is toward the far right pole of the sentence in the area of the social situation, outside the content of the utterance in what could be called Culture.

The use of ပါ pa itself may not be felt as extremely polite in contemporary Burmese society because it has become a threadbare metaphor. The opposite of

inclusion is exclusion and this is strongly prohibited culturally. Importantly, absence of the polite particle does not necessarily indicate impoliteness. There are other ways to indicate that! The polite particle evokes Input 1 space of a scenario of host to a visitor and occurs as a grammaticalized verb in a fairly fixed position in the verbal syntagma, the right pole, where it evokes the social context of the speech act. Situated in this position its scope is the whole sentence, not just the immediately preceding verb. (See numerous examples in Appendix D and E.) The metaphor of inclusion here is like a sweep of the hand to welcome one to come in and sit down. It is very polite and overtly inclusive, just as most Burmese people are.

A few words farther to the right into this verb phrase, is the particle ေတာ. **tau.**[5] 'change of state'. Becker reports "It is used metaphorically of a verb that describes the act of hitting something into the air with hand, foot, or stick — as in the widespread Southeast Asian game (Burmese **hkyang:loun:** ခြင်းလုံး) in which the players, either singly or in a group, keep a rattan ball in the air with their feet."[6] The contextual level to which ေတာ. **tau.** relates is the discourse itself as an 'object'. It refers to the state of affairs of the preceding linguistic context, but also to a projected world or scene in which the speaker of this text changes the topic. Another way to translate this into English could be "Well, then..." where the 'then' signals a new state of affairs, whereas the 'well' indicates a continuing state. The new state in the imagined world comes into the blend as emergent meaning, which in Burmese has a bodily, felt sense of more abruptness, like the act of hitting or kicking something ... metaphorically speaking.

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[5] Tones in transliterated Burmese are indicated with punctuation marks — creaky tone is the period mark, and breathy tone is the colon. See Appendix A for a detailed description.

[6] This pastime is similar to 'hacky sack' in America and to 'footbag' as a popular international sport.

While the immediate glosses of Burmese words into English is quite possible, at least in a rough sense, as in (5), the expanded sense of a text as a whole is often untranslatable. It is just this broad range of meaning that a Burman might sense Becker attempts to enhance for his non-Burmese reader. One might say that the many 'flavors' of Burmese words are in the multitude of scenarios they engender.

Grammaticalization of Burmese verbs is a vast, highly productive process, serving as the pathway for the development of postposition particles, which are so important to the Burmese sentence and textual organization. Particles serve as the grammatical counterpart of verbs in the structuring of information (see Section 3.2.3). The particles have evolved a more background function and go unnoticed in comparison to prominent lexical forms of meaning. Without particles though, a text makes little sense; has little significance. These particles, or grammaticalized verbs, intimate areas of meaning by metaphorically structuring the spatial, temporal, and logical relations with the range of semantic properties they still retain.

Postposition particles serve as a background for a Burmese listener who needs pay only scant attention to the relations, images or metaphors they evoke. These "closed-class forms trigger cognitive operations that manipulate conceptual structures" (Talmy 2002a:13). Postposition particles serve as the skeleton of a text in relation to the lexical 'flesh' of the textual body, yet they often retain a part of their former lexical properties. In any one context, the portion that is retained or the sense that is taken is dependent upon the context for selectional criteria activated, in much the same way that conceptual integration relies on contextual relevance for the contents of the Generic Space.

A Burmese sentence unfolds like a landscape painting in words. Different types of synesthetic images arise via juxtaposition of simple words, something like

Haiku poetry. These may be visual images, of the scene, bodily actions, responses such as disgust or pity, smells, colors, moods, atmospheres, a bodily sense of ease or abruptness, as well as the feelings of the speaker toward the text, or persons or issues within the text, the feelings and relationship of the speaker to the hearer or addressee, and so forth. These types of cross-modal descriptive senses are more delicately and directly communicated by juxtaposed metaphors, which can be analyzed using the basic model of conceptual integration. Some words may syntagmatically function as grammatical particles and paradigmatically function as metaphors amplifying the sense of the whole unit that they unite or govern.

1.1.3.2 Conceptual Integration and Framing

Philosophically the nature of identity between two items is one of the mysteries of human cognition and consciousness. A common experience of this process can be exemplified in the reader's experience of the English alphabet. The cognitive apparatus that allows a perceiver to construe two letters such as "A" and "a" as the same, when they are clearly visually different is a process of abstraction. This process is closely allied to that of individuation, of recognizing something as 'different, but the same', which is also the conceptual, 'the same as' process that underlies metaphor. For instance, one may abstract a general class 'A' of which there may be infinitely many members such as both the capital letter and small print letter 'A', then different glyphs "A, A, A, A", as many as may be created. This class also includes all the different individual handwriting styles of which there are perhaps as many variants as people who have written the letter 'A' and all the individual variants of an individual person. This class is not only English 'A's, but may include all the languages of the earth, past and present, that have some form, written and/or spoken, which is

recognized as the letter 'A'. Each of these 'A' samples have a relationship to each other of being 'the same'. All representatives belong to the same class.

Abstraction as a perceptual process by which different objects are construed as 'the same' is closely akin to the process of conceptual integration. New class membership in Input Space I_1 and Input Space I_2 are identified along some parameter as 'the same'. The Generic Space and the juxtaposed construction itself help to impose that new identification of the component elements and is a major factor in the creation of emergent meaning.

A variety of cognitive operations have been hypothesized to account for patterns of linguistic behavior. One of these is the *windowing of attention*, which has to do with the foregrounded information (*windowing*) by explicit mention versus the backgrounded information that is left implicit in an *event-frame*, the understood situation or cultural scene missing from the sentence (Talmy 1996). Windowing of attention has direct relevance to grammatical relations. Another is *schematic structuration* — that the structural specifications of linguistic forms are regularly conceptualized in abstracted, idealized and sometimes geometric patterns in relation to each other (Talmy 2000a). Another is that of the *trajectory of a path* (Langacker 1987a:231) or of a *force dynamic* (Talmy 1985) in action sequences or transitivity systems. Another is the *role of parable or story* (Turner 1996). These processes of categorization, differentiation, and abstraction directly relate to the processes of grammatical and semantic categorization in a sentence or text.

Conceptual integration serves as a major organizing principle for meaning construction, bringing together various other basic cognitive operations, such as composition (selection of elements for input, and monitoring both the mapping rules and whether units continue as separate or merged items in the blend), completion

(recruitment of patterns or schemas from general cultural knowledge that contribute a sense of completeness to the blend), and elaboration (expansion of the logic of the blending process with new inputs) and by integrating these functions as variations on the pattern of projected mapping from one mental space to another (Fauconnier and Turner 1996, 2001; Fauconnier 1997; Turner 1996; Coulson Seana 1997; Sweetser 1990).

In relation to Burmese, cognitive integration provides an underlying mechanism that accounts for the force of grammatical constructions, such as *reduced relative clauses* (which become similar to attributive clauses), *reduced predications* (which are similar to stative attributive phrases). There is a general principle at work in Burmese; *tighter constructions mirror tighter conceptual blends.*

In Burmese, basic-level conceptual units are realized as a simple binary opposition between Thing and Relation. In this dissertation, the nature of a Thing is often grammaticalized as a nominal and the nature of a Relation is often grammaticalized as a verb (action, event, state or process) or a particle (textual action, event, state, or process)[7]. Thing and Relation are manifested in the prototypical ontological categories of Noun (N) and Verb (V). These two basic grammatical classes when combined as blended constructional units (N + V) also result in ontological nominals — that is, linguistic, textual Things (N). Such complex, whole constructions are a result of the process of sentence meaning creation — *predication. Sentences in Burmese are ontologically nominals that result from underlying cognitive processes by innovatively creating emergent meaning.* The nominalization process is an iteratively applied part of the hardwiring of conceptualization and perception.

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[7] Particles relate textual units whereas verbs relate participants or props, agents or adjuncts. See Section 1.1.4.

1.1.3.2.1 The Role of Framing in Creating Units

Framing is one way in which an interpretation of an utterance can be shifted depending on the context or the mental scene constructed which conceptually bounds the utterance. The role of the frame is to recruit background, world knowledge as a specifier or delimiter of the particular linguistic representation. The expectational aspects of recognition and comprehension have been attributed to the role of the frame, which selects, organizes relevant knowledge, fills in details, makes conjectures and inferences, tests and revises assumptions (Minsky 1980). A text frame in this sense performs a role similar in part to that of conceptual integration model's Generic Space. Minsky's notion of frame refers to more than a static, immediate context. Rather it is a mental model that evokes an active, cognitive construct that functions as a heuristic devise to dynamically construct and to shift meaning. Assuming that a similar operation takes place in textual understanding, then this process would have to be both rapid and natural, and would very likely be outside awareness, though not subconscious.

The ability to conceptually bound or frame is an aspect of perception and is not part of objective reality. That is why we cannot account for meaning objectively but must study the processes that structure conceptualization. These bounding structures of concern here are those a person imposes and employs during his mental experience of linguistic construal of a conceptual scenario.

1.1.3.2.2 The Role of Bounding in Creating Units

Langacker's basic definition of a nominal is "a bounded region in some domain" (1987a; 1991b). The beauty of this definition is that it encompasses an almost infinite scope of internal structures, arrangements, activities and states in various

profiles — 'plane', 'cup', 'sphere', 'area', ' a run', "abstraction', 'destruction'. Thus, what is bounded may be a simple verb, 'run' or a.verb and nominalizer ('runner'). Alternately, what is bounded may be a whole scenario with actants (nouns) as well as relations (verbs), as in 'a run', or it could profile a process of successive temporal 'scans', scripts, where the verb is characterized as a sequence of temporal states, 'a race', or as a progressive aspect 'racing'. The bounding nature of nominalization is essentially a function of profiling information. The content of a nominalization, e.g. 'complain' versus 'complainer', is not necessarily altered by construal as a bounded set, only how it is viewed.

The above definition of a noun refers to the prototypical noun — the count noun. The ability to pluralize in and of itself designates an abstract boundary by the fact that it can be enumerated; that, as a group, it can be composed of distinctly bounded units. Mass nouns, on the other hand, are characterized as not so bounded. Rather they simply "name the substance without imposing any inherent limitation on its spatial extension" (Langacker 1987a:203) — 'water', 'gravel', 'beer', 'snow'. Count nouns profile a region that is bounded, where there is some kind of limit of extension on the set of entities in that region. Mass nouns are characterized by "indefinite expansibility and contractibility" (1987a:204). For instance, 'water' will be so designated no matter how much the volume is increased. As a named substance, 'water' has an inferred boundary or limit, but as such is less fixed.

Abstract nouns are characterized in Langacker's model as replicating the bound and unbound distinction of concrete nouns. He categorizes the deverbal noun as the count type of the abstract noun — 'jump', 'walk', 'dance', 'argument', 'complaint'. The count abstract noun form designates only one instance of the process indicated by the verb stem. The more typical abstract noun or the gerund is catego-

rized as the mass type of the abstract noun —'destruction', 'love', 'hope', 'procrasti-nation' 'abstraction', and also 'jumping'. The mass abstract noun form designates a much less distinct boundary.

The important insight of Langacker is that nominal forms are bounded in some sense in relation to another figure he identifies as a 'region'. Region can be understood as matrices of relevant dimensions, such as of hue or brightness in color domains or as types of surfaces or curves in two or three dimensional spatial do-mains.

Nominal boundaries can be of varying types. The discussion of the difference between count and mass nouns as to boundaries could as well be a discussion of types of centers and boundaries. The notions of concreteness versus abstractness of a noun refers to both center and boundary type, but the center of 'jumping' classi-fied as an abstract mass noun profiling an action is quite different from the verbal center of 'love'. Leaving the discussion of centers aside, boundaries will be sufficient here to distinguish different types of nominals. Three types will be assumed rather than just two. These are analogous to the types of cognitive experiences in viewing the forms in Figure 5. The ability to perceive a circle in each of these forms, moving in the direction from a) to c), is a process of greater abstraction since there is less information and greater mental attribution of shape in c), in this case that of a boundary. Reversing the process by moving from c) to a), from the more abstract towards a form with greater definition or concreteness is a process of reification, the inverse of abstraction (Lehar 2003). Reification or substantivization, are other names for the process of nominalization — to attribute a sense of substance or a quality of being a Thing.

Increasing Abstractness of Boundaries
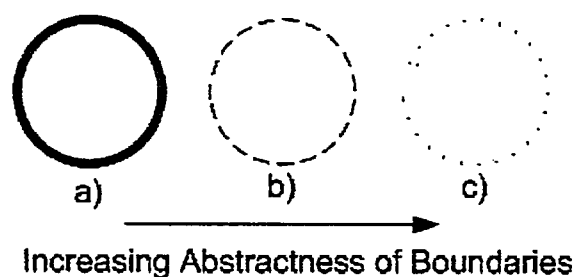
Figure 5. Abstractness of Boundary Types

The types of boundaries schematized in Figure 5 represent three types of nominal boundaries: a) count, b) mass, c) abstract. See Section 3.1.2 for further discussion of nominalization from a cognitive viewpoint.

One of the crucial aspects of understanding the approach in this dissertation is to recognize the role of conceiving of diverse parts as a whole unit — that is, framing, bounding, unitizing, reifying, substantivizing, as conceiving of a series of elements in a linguistically (that is, grammatically) realized or finalized sense. This process is here called *nominalization*.

1.1.3.2.3 Ontological Nominals

A separate type of ontology for linguistic categories is proposed here as a form of linguistic objects[8] that arise out of the grammar by the abstraction of the linguist. One might ask, "In what sense does a noun *exist*?" "In what sense does grammar *exist*?" "What kind of ontological status does the noun *noun* possess?" The

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[8] The term 'object' is used in a wide sense, as it can encompass qualities, relations, actions, events, processes, spatial or temporal aspects, mental acts or states, and /or all of the above, or only parts of them, or some mixture of the same.

answer to that question establishes the basis for distinguishing whether there are two types of nominals. Depending on one's philosophical view of language the answer could be a) a noun is a physical object (American structuralism), or b) mental knowledge that exists in the speaker's concepts (Conceptualists), or c) it exists as an abstract theoretical entity (Realists), or d) the noun only exists as social behavior (Sociolinguists and systemicists).

Moderately adopting a realist position for grammar, it is assumed in this dissertation that the existence of a noun is as an abstract entity in a grammatical system that is derived by abstraction from physical world data —language as a physical, psychological and social entity. It is not assumed that the analytical categories have any physical world existence, either as a mind or brain state, or that they exist as a Platonic ideal. Rather the existence of the linguistic category *noun* is assumed to have some sort of psychological and social 'reality' in the sense that it can be tested indirectly and that it can be verified to some degree, or falsified should that be the preferable philosophy of science. The approach for theory development is quasi-realist and quasi conceptualist, which is probably more cognitivist. It is assumed that conceptual structures or processes of some sort are used by native speaker's when producing grammatical utterances, but how linguists model them is not 'what they are' actually. It is assumed that some models are better than others, and that the better model is that one that represents the data is the more natural, with the least 'foreignness.'

> Philosophers of science have repeatedly demonstrated that more than one theoretical construction can always be placed upon a given collection of data. (Kuhn 1970:76)

If grammatical nominalization is an abstract entity then the ontological nominal is as well. Nominalization is a process that is both grammatical in the traditional sense (derivational morphology and nominalized noun phrases and clauses) but is also supra-grammatical in Burmese and manifest by another process of nominalization in which grammatical nominals are collected as constituents of higher, more abstract nominal units that function in the sentence and text as arguments, adjuncts, or other types of constituents of the discourse. The structures generated particularly by the role of postpositional particles are abstract units of the text which also have a linguistic ontological status. That is, they can be questioned and answered as units by native speakers. They can be moved about or transformed in information restructuring. They exist as textual objects and provide regular organization to the grammar. These abstract units are called *ontological nominals*.

1.1.3.3 Systematic Summary of Conceptual Dimensions

The relationship of the various concepts presented here so far can be summarized as a set of units (metaphorical blends) in a dimension (such as grammatical category) manifesting a bipolar relationship (such as Noun and Verb) that are contrastive yet systematically complementary along each dimension.

Dimension of Application	Ground	Profile
Abstract Thought	Unit	Relation
Semantic Concept	Thing	Relation
Grammatical Category	Noun	Verb
Conceptual Processing	Framing	Conceptual Integration
Ontological Status	Be(ing) (State to Gerund form)	Become (Process to Result)

Table 2. Application of Ground to Profile Framing

1.1.3.4 Contextual Integration and Lexical Processing

Lexical and post-lexical processing had been assumed by most psycholinguistic research to be separate cognitive processes up until Coulson and Federmeir (2002). Lexical processing (word) was thought to be more rapid, earlier, and almost automatic, while post-lexical (phrase and sentence) processing was assumed to be slower, done subsequent to lexical processing, and was the result of more complex cognitive operations. Their recent research showed that the influences in lexical processing time could be attenuated by contextual factors. The difference in processing time argued against automaticity in lexical processing, and suggested that lexical access and contextual integration are to some extent interdependent processes.

The significance of this study to the topic here is to suggest that the processing difference in processing time between the *lexical compound word*, so common in Burmese and in other Southeast Asian languages, and that of *the phrase* is essentially minimal. If constructional meaning is accomplished by the same conceptual processes as lexical meaning since immediate context was found to significantly decrease processing time for both types of meaning, then there is little conceptual dif-

ference between the word and larger units such as compound nouns or modified noun phrases. This would suggest that processing times of more complex abstract nominals, such as are found in typical Burmese sentences (see Chapter 4) would also be processed by the same rapid conceptual operations.

A further implication with regard to the conceptual blending model is the relevance of the Generic Space in selecting a 'frame' of inputs, which itself is a form of contextual selection and narrowing of options that can increase response time for cross-space mapping sets for various kinds of blends — both constructional and lexical meaning.

1.1.4 Conceptual Blends in N+N Constructions

As a head final language, the Burmese order is Modifier + Head. Compound nouns also manifest the asymmetrical relation of the final noun of the compound serving as the psychological ground or basis, with the first element similar to a modifier. Although there are cases where semantically the relation is balanced or coordinate, the predominant pattern is where the final noun serves as the head of the compound.

Conceptually the Modifier position fills the conceptual blend role of Source space, while the Head or Ground, fills the role of conceptual Target space in what is an asymmetrical relation of Input spaces. So, for example, the word for a medical doctor (6a) in Burmese is often analyzed as a compound noun or a modified noun that has become lexicalized pragmatically into a unitary noun, a completed blend.

Burmese Compound Nouns		Component Parts	Meaning in English
(6a)	hcăra wan ဆရာ ဝန်	teacher/doctor + official/minister	= medical doctor
(6b)	a-myui: sa: အမျိုးသား:	a kind/race/some + son/male/person	= countryman / national / citizen
(6c)	ca pe စာ ပေ	writing/paper + palm (leaf)	= literature

Table 3. Burmese Compound Nouns

Using the notions exemplified in Figure 2 and Figure 3 above, Table 4 displays the roles of (6a, 6b, 6c) in the conceptual blend. Elements that are brought into the Input spaces from the Generic space are not semantic primitives in some absolute, universal lexicon but rather are relativistic, relational, and perceptually cognitive. They can be individualistic, in fact, as is notable for poets and more creative thinkers or speakers, but the resources of the Generic space, the cultural set of relevant similarities, are usually conventional so that working out the meaning of an innovation is possible and an intellectually pleasant experience.

Grammar	Modifier	Head
Conceptual Structure	Source Input Space	Target Input Space
	Y	Z
hcăra wan ဆရာ ဝန်	teacher, respected, title, doctor	government minister, cabinet official
a-myui: sa: အမျိုးသား:	a kind, a race, a variety,	son, male, person
ca pe စာပေ	writing, paper, religion, specialist	palm (leaf)

Table 4. Blended Elements in Burmese Compound Nouns

The process of juxtaposing two nominals implicitly states that there is a relationship between them. The cognitive process of determining that relationship is here called *conceptual blending* or *semantic integration*, which other models would call an *intersection of features*. It is also a process that underlyingly is equative, and as such is very like the stative predication in Burmese. Being a verb-final language, equative clauses are as a rule simply juxtaposed nominals with a verb 'be' often omitted in non-Formal Burmese. "Today Saturday" is sufficient information in Burmese. The construction imposes the equative verb so it is unnecessary. That is, to say that A is B, is to request the listener to establish the cross-linked mapping of elements that are relevant and to blend or resolve the two differences into some sort of integrated sense either as an equative statement or as a blended nominal compound. This processing of equative or existential predications is different in complexity but not different in nature to the cognitive processing that goes on with more lexically elaborate predications, such as 'enveloped', 'established', 'comforted',

'equipped'. In these predicates the elements contained in the Input spaces are more specific, which is why these types of verbs are more pictorial, more expressive, easier to process cognitively, flow with the discourse better than the relations established via juxtaposition due to the extensive online cognitive operations required unless the collocation is already highly conventionalized into a unitary, blended meaning. Such word combinations in English, which may have initially taken more processing time, and still may for some segments of the population regarding them as unconventional, are 'same-sex marriage', 'dead right', 'birth mother', 'mouse click', 'web post'. In each of these cases the two input domains are constrained by the linguistic context, which makes cognitive processing easier and faster. For instance, in English it is not immediately clear without context whether 'post' and 'click' are nouns or verbs. The grammatical word class allocation further reduces processing time by restricting the number of options considered relevant to the Input spaces.

One cognitive function of the grammatical word class as noun or verb has just this function, to reduce the interpretive options and to enable optimal processing of semantic blended elements. Grammatical constructions then are those more complex arrangements of words into patterns that, as a whole, restrict the level and degree of interpretive possibilities, thereby facilitating more rapid resolution of meaning, establishing quickly the intended sense in the connected flow of speech, and specifying how a particular chunk of meaning relates to other chunks of meaning.

1.1.5 The Role of Grammatical Particles as Predicators

Post-positional particles (p-articles) are central to Burmese grammar. A sentence in Burmese typically consists of a number of preceding nominal adjuncts and a final verb. Each of these units is typically bounded by a post-position particle that

orients the nominal unit in relation to other units and designates its semantic role within the sentence. As mentioned earlier, Burmese does not have case, gender, agreement, or indexical role marking of nominal elements on the verb. Post-position particles are often designators of conceptual space, much as English prepositions are prototypically spatial, and then extended for temporal or and logical domains.

The local subject is not prominent in Burmese and is often null. Europeans would say this is because it is understood from the context, either the textual context due to continuing topic reference or in the social context of expected reference. It is possible that the Burmese speaker would have no comment when asked to specify information structure of a particular sentence, as none is needed. He also may not understand the need of the European to make up something that isn't there. Resolution of topic ambiguity is more a Western problem and bringing up the issue to a Burman can result in loss of face because he may have no idea what and why the question is being asked. For the European, who is accustomed to obligatorily and obsessively marking each nominal for case, gender, and number along with all the modifiers in an overt system of agreement that makes grammatically clear the role of each element of the sentence, to leave out all such necessary sentential 'plumbing' results in a feeling of random leaks in the system of meaning. This is not the case at all with the Burman. The notion of subject in Burmese is textual, not sentential. (See Section 4.2.5)

Grammatical meaning resides in the postpositional particles. Thus the role of the particles and their individual functions have formed the bulk of many of the initial grammars of Burmese done by European-influenced grammarians (Judson 1866; Taw Sein Ko 1891; Steward 1939), even though in many of the early studies, the na-

ture of word-form categories were cast in terms of a European requirement for grammatical role and semantic clarity, e.g. adjective, adverb.

The particle determines the sentential role of the operand it governs, whether nominal or verbal. In this analysis, the particle is the governor wherever that particle occurs, much as Principles and Parameters Syntax regards the determiner as governing the head of the determiner phrase. As will be seen in the course of the analysis here, the particle rules.

Additionally each particle, whether governing a nominal or a verbal element, also establishes a relationship with that constituent. The type of relationship indicated by the particle may vary along the spectrum from the purely grammatical to the purely semantic. Strictly nominalizing particles appear to have little semantic function, whereas accompaniment particles are richer semantically, encoding different semantic roles and orienting more salient arguments of the sentence. Both types of particles however establish a relationship to the governed, and that relationship as a relation is in the broadest term is predicational as a Relation (see Table 2 above). For example, a locative particle prototypically situates its object somewhere in space. That situating is a predication in the underlying semantics. The role of locative ၂ **hma** Loc in relation to ၃ **di** 'this' in (7), is not only to designate a grammatical category (specify the Θ structure of the verb), but to create an object relationship with the operand (by locating the deictic marker ၃ **di** 'this' in significant social and linguistic space), and a predicative relationship of spatial being or position ('x is located').

(7)

ဒီ   မှာ   ထိုင်း   ပါ

di   hma   htuing: pa

[[[this   Loc]   sit]   Plt]

'Please sit down here!'

The particle creates a nominal by virtue of the structure itself. Thus, the deictic maker ဒီ **di** 'this' takes on nominal properties via this construction becoming more like 'here' than 'this place', although the latter is literally accurate in regard to its compositional sense. Ontologically, a nominal is formed, a sense from the deictic particle of a 'thing', that is this place called 'here.'

Semantically, using the conceptual blending model, the two juxtaposed parts of this particle phrase function as resources for the Input spaces of the semantic blend. A Burmese speaker would not segment the two, but conceives of the phrase as a whole unit of meaning, a blend.

Thus, a nominal with its post posed particle, N+P, results in a type of ontological predication, here symbolized as N. The rule is N+P=N. Part of the rationale for this operation, discussed in more detail later, is that Burmese indicative sentence final particle **sany** သည် provides a clue into the substantive function of predications as nominals, or ontological units and to the role of all particles as secondary nominalizers. That is, particles orient or relate 'something'. It is the 'thingness' of the operand that is designated by the operation of the particle. It is akin to the process of naming something, thereby establishing its identity and uniqueness, designating it as 'something' and giving to it a quality of existence. That quality of existence could be called 'nominal existence', that is, existence in name only, but it is that quality of

'named existence' which is structurally represented in Burmese text and which has ontological structure — the structure of nominalization. Such a structure assists a Burmese speaker or listener in text processing because this structure maps out the metaphorical and mental space relations called information processing.

The particle is said to perform secondary nominalization because a nominal type element is the byproduct of the particle application. There are particles whose primary role is to bind overtly a nominal unit and then to link the whole nominal to another nominal. Such particles are recognized as explicit or active nominalizers. It is no accident that they are morphophonemic variants of the sentence final particle **sany** သည်(see Section 3.2.3).

In Burmese, as a head-final language, the sentence-final particle is also the last (structurally highest) governing head of the entire sentence and, furthermore, is the operator on the entire sentence, its operand. However, the current analysis is not limited to the sentence; it examines the wider textual context. The final sentence particle also marks the adjunct role of the sentence to the whole paragraph or a larger textual section (see Section 4.2.4.2.2). Similarly, at the next level of hierarchy, the another particle marks the role of the paragraph-like section in the text as a whole. These type of discourse units are also nominals.

The nature of the sentence and the expanded textual tree structure emerges as a repetition of simple patterns employing a simple set of rules regarding juxtaposition and particles (see Section 4.1.4.2 and also Appendix E and F). These structures may consist of juxtaposed nominals or of a nominal with a verbal, both of which produce a conceptually blended nominal element. Additionally abstract nominal units are constituted by the role of postposition particles. The resulting nominal element is a concept which Burmese grammar explicitly and sometime implicitly

treats as a noun or substantive. What is called <u>nominalization</u> here is used more broadly than word level derivational nominalization. It is also broader than nominalized clauses. It, of course, includes all of these and the process of word-level nominal compounding, but is also the result of higher level, juxtaposed sentential units or adjuncts, which in combination form conceptual blends of greater abstract type than word or sentence.

Juxtaposed abstract nominal elements within the text are treated as the same pattern as found at the word level, a) [N+N = N] as a compound nominal, b) [N+N = predication of existence or equation], c) [N+V= predication = N] as all sentences are regarded as nominals at varying levels of abstractness, and d) [N+P = N] as predication of some positional relationship.

The inventory of abstract structuring units can be minimal, only three types: nominal (N), verbal (V) and postposition particles (P). All units in combination create nominals. All units in combination create predications, though of different types. Nominal juxtaposition imposes an equational interpretation ('a race + offspring' = 'offspring that is of a certain race' = 'nationality'). Verbal juxtaposition directs the predication associated with the semantics of the verb, the normally expected type of predication. Particle juxtaposition creates a reduced type of statement about the relationship to the nominal ('at', 'by', 'with' and so forth).

That postpositions are regarded as abstract predicates is not as unusual as it at first may seem. In a discussion of English prepositions, Becker and Arms (1969) noted that verbs can be substituted for certain classes of prepositions, e.g. instrumental 'with' and 'use', even though it has 'case role' properties. They detail other features of prepositions as *motion, location,* and *cause* assigned to speech act participants and argue for prepositions to be considered as a type of abstract predicate.

Bahasa Indonesia and Thai (Stein 1969) are contrasted with English for the way in which particles function as verbal counterparts. While neither Becker and Arms nor the present author proposes that positionals, post or pre, are verbs, there is agreement that in Asian languages, and even in English, that positionals provide an alternate way of presenting very similar information and follow some of the same constraints such as object deletion, conjoining of prepositions (both must be of the same type i.e. locational or motional), and some correlations of path in the semantics of some motion verbs.

This feature of verbs in relation to prepositions has been systematized and come to be informally known in cognitive linguistics as 'Talmy's law' — 'that roots of motion verbs tend to co-encode, alongside the superconcept of motion itself, exactly one additional factor such as Path, Manner, Figure, Cause'. (Talmy 2000b:21-117). Certain language families tend to conflate different roles and then to leave the other roles for 'satellite' constructions. These he calls 'verb-frame' versus 'satellite frame' languages. English tends to encode the Motion and co-event in a verb-frame form and to represent Path in an external satellite.

(8)   a. He went by plane to Dallas.
        b. He flew to Dallas

The satellite constructions are the places for degraded verbs that have lost their main lexical function and been reduced to more closed class function similar to prepositional functions.

While the origin of the postposition particles in Burmese is not within the scope of this dissertation, it may be noted that many of the postpositions have de-

rived from verbs. A very interesting future study would be to examine the various diachronic pathways of Burmese postpositions. .

1.1.5.1 Nominal Constructions of Predications

The basic elements of a sentence in this analysis are minimal word forms, of which there are three types — verb (V) and noun (N) as lexical, free, and open classes, and particles (P) as the dependent ordered class. A minimal sentence can consist of either a single noun or a single verb, but not a single particle. The structural representation of such constructions is a bifurcating tree, as is demonstrated in the following figures of three different types of constructions, the clause, the compound nominal and the particle nominal construction.

re mya:
water many
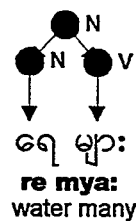
Figure 6. Clausal Pattern of Noun and Verb – Clause: 'There's a lot of water.'

dhat mi:
element fire
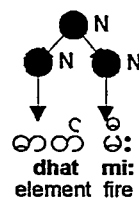
Figure 7. Compound Noun Pattern – Compound Noun: 'flashlight'
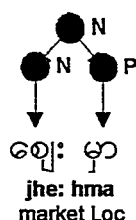
Figure 8. Particle Nominal Phrase – Locative Phrase: 'At the market'

In each case, the above patterns are regarded as a type of low-level predication, in the sense that the same cognitive operation of blending is required. That is, a relationship (predication) is posited for an item — for Figure 6, the N + V series, ("There's a lot of water"), for Figure 7 N+N ('flashlight'), and for Figure 8 N+P ("at the market").

The whole unit which results from the predicative operation signaled via juxtaposition is here hypothesized to be a nominal in the above sense of an ontological unit, a whole set of blended elements into a new whole. In metaphorical blending, the process takes place within the mind and we expect very little overt linguistic structure that would indicate this blending process has taken place.

One particularly striking piece of linguistic evidence that a blending process has taken place in referential structure is the behavior of some cases of anaphora. This type of anaphora is inter-textual and links the 'objects' created within the text via linguistic or metaphorical processes. Ontological objects are then referred to as 'things' by the use of deictic pronouns. They can be thoughts, arguments, evidence, procedures, points, and various types of analysis or perceptions that are presented as part of the build-up of the text, or are part of the work to establish the ground from which argument or explanation is based. While this type of analysis is common within composition or creative writing classes, it is often missing from a linguistic un-

derstanding of text processing. The linguist's formation of 'linguistic reality', the structures of the text, will differ substantially from the worlds of argument or points that the text itself creates. What is interesting in Burmese is that the creation process of linguistic reality is grammatically manifest and observable within the word, phrase, clause, sentence, paragraph, and text structure. There is often a mapping of the processes that construct meaning. That map is the structured text.

The 'objects' called into being by a text, here called nominals, are reified units having the sense of a whole. As reified linguistic units, often labeled as deverbal nouns, the nominalization has in the past taken reference to the clause (Lees 1960, Chomsky 1970, Vendler 1967) or to embedded varieties of such. What sets this study apart from previous views of nominalization is that this process is not restricted to clause-level grammatical units but encompasses sentences and paragraphs, extending to the text as a whole as an object marked by postposition particles whose scope is the whole text.

1.1.6 Bifurcation as the Preferred Burmese Pattern

Bifurcation is the binary structural complement of the phenomena of semantic doublets in Burmese. These are the two word semantic pairs which are the normal stuff of ordinary Burmese conversation and text. Doubling of nouns and verbs is a preferred pattern found throughout the Burman's experience of the world. Burmese text tends to present the world of experience by casting that experience in a balancing process of symmetry. One linguistic manifestation is found in the two-element compounds composed of pairs from the same semantic domain (ဝင်္ဝစ် **cang cac** be clear + examine = 'in fact'; ထပ်တူ **htap tu** repeat + be like = 'identical'; ဘွဲ့လွဲ့ **bhwai: lwai:** hang down + swing = 'in a pendular manner'). The product of this

preference for balancing is compounding — compound nouns, compound verbs, semantic and phonological doublets, rhyming pairs, repetition of structural patterns, broad patterns of textual units that balance out each other, creating harmony and a sense of wholeness to the discourse unit. The sensory experience often presented in the doublets of sight, taste, sound, body motion are all areas of linguistic expression which are often presented in nominalized constructions as a means of conveying indirectly a new experience to the audience, who has the joy of the intellectual and sensory process of conceptual blending.

1.2   General Overview of Burmese

1.2.1   Linguistic Affiliation of Burmese

Historically, Burmese belongs to the Tibeto-Burman branch of the Sino-Tibetan language family. Bradley (1997) classifies the expansive Tibeto-Burman family of languages into four principle sections based upon present-day geographical location and their reconstructed, genetic relationships as shown in Figure 9.
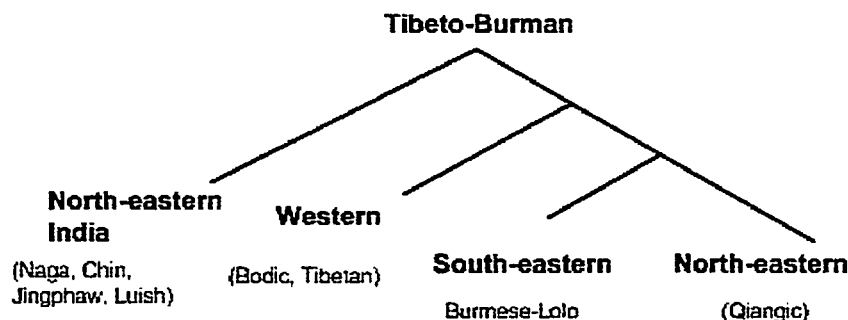
Figure 9. Overview of Tibeto-Burman Languages

Of the major divisions within Tibeto-Burman, Burmese belongs to the Burmese-Lolo branch, whose primary geographical focus is in the area southeastern of Tibet. It is generally assumed that the vast family of people and language groups derived from Proto-Tibeto-Burman originated high on the Tibetan plateau and descended into the East, South and Southeast via the great rivers of the region — the Brahmaputra, Salween, Mekong, and Yangze rivers. These riverways formed the 'interstate highways' of the ancient world, carrying refugees and wanderers as far away as northern Vietnam, southern Burma and Bangladesh. The Salween and the Mekong are at points a mere 25-50 miles apart running in deep fissures on their journey to empty into separate oceans.
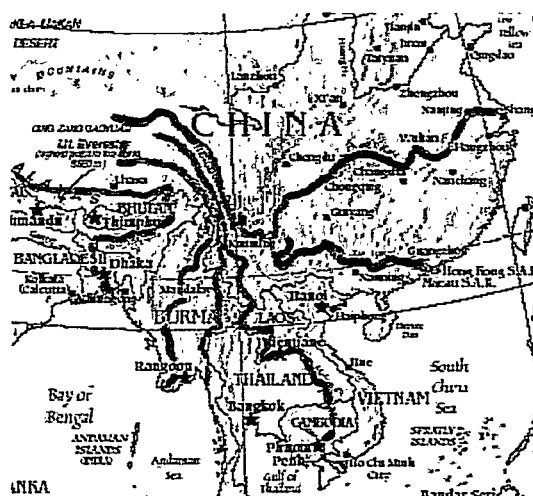
Figure 10. Mainland Southeast Asia Riverine Migration Routes

Depending on which 'river highway' a particular language group traveled, cousin members of that Tibeto-Burman parent language could have ended up thousands of miles apart at their terminal points — one in eastern China, the other in southern Burma. Similar routes were presumably also used in even earlier migration

by the Mon-Khmer language groups as they dispersed off the Tibetan Plateau, being pushed south and eastward by some unknown 'cause' in Central Asia.

The Burmese-Lolo branch of Tibeto-Burman is composed of the two principle groups — Burmish and Loloish. This grouping of languages began to disperse from the Tibetan plateau about 3,800 - 3,600 years ago according to recent estimates (Peiros 1997).

Loloish is also known as the Yi branch in Chinese, or Yipho (adding the northern Loloish male human suffix). Modern linguists are increasingly referring to this branch as Yi. Bradley (1997), whose classification is being followed here, in addition to the major groupings of Burmese and Loloish languages adds two isolates to the Burmese-Lolo grouping — Ugong, a small, dying language of western Thailand, and Mru, whose place and identity in Tibeto-Burman has puzzled linguists for decades.[9]

The stammbaum of general relationships for Burmese-Lolo adapted from Bradley (1997) is presented in Figure 11.

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[9] The problem of where Mru belongs is complicated by the fact that diverse groups call themselves Mru. One Mru language of Chittagong in Bangladesh is certainly not Tibeto-Burman (Ebersole 1992). Another Mru of the Southern Chin hills appears to be rather closely related to other Chin dialects of the Palewa township (So-Hartmann 1988). Shafer (1955, 1966, 1967) classified it as an isolate immediately subordinate to his Burmic Division, which included massively diverse groups of languages such as Kachinish, Luish, Kukish, etc.

Burmese - Lolo

MRU   UGONG   BURMISH   LOLO

Burmese   Burmish   Southern   Central   Northern
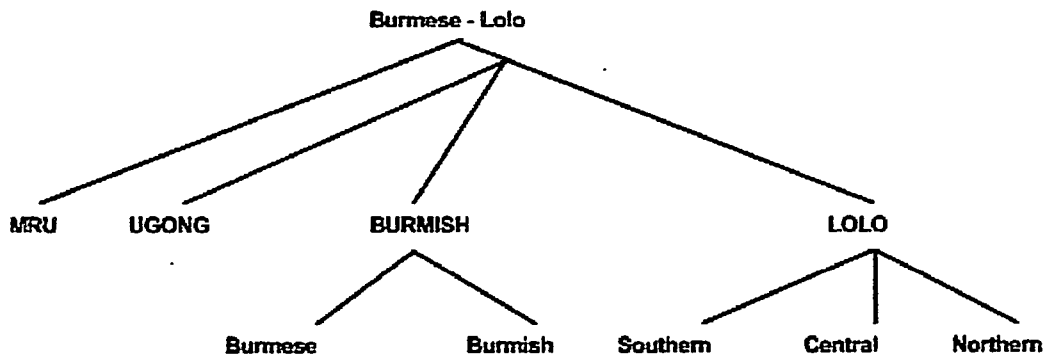
Figure 11. Burmese-Lolo Branch of Southeastern Tibeto-Burman

The Loloish branch of Burmese-Lolo is large and diverse, with most languages found principally in Southwestern China, Northern Laos, Northwest Vietnam, Northeastern Burma, and Northern Thailand. It is composed of three subgroups, named for their geographical relationship to each other: Northern, Central and Southern Loloish. The Northern sub-group is composed of such languages as Nosu, Nasu, Sami, Nisu, Phula, Kathu, and so forth. The Central sub-group consists of such languages as the Sani, Axi, Lisu, Lipho, Lahu, Jinuo, and so forth. The Southern sub-group contains languages as Akha, Hani, Phana, Sila, Mpi, Bisu, Phunoi, and so forth.

Further detail of the genetic relationships for the Burmese sub-branch is symbolized in the stammbaum from Bradley (1997) detailed in Figure 12.
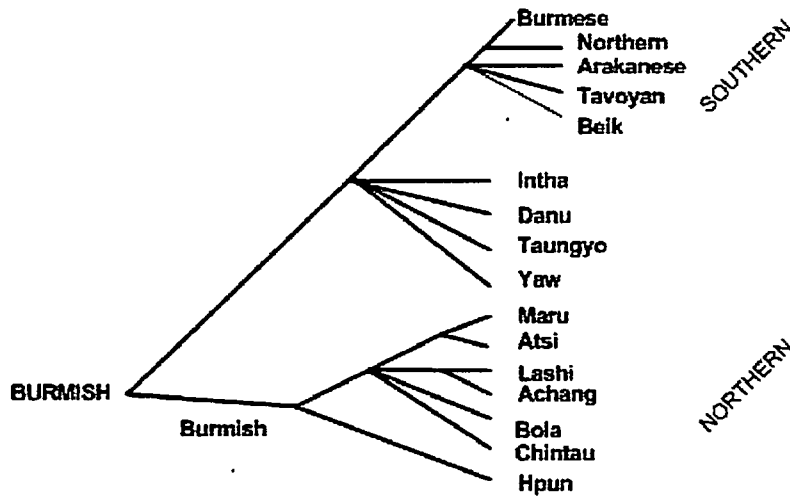
Figure 12. Burmese Sub-Branch of BURMISH

The BURMISH branch is composed of two sub-branches, a northern set of languages grouped by Bradley into Burmish and a branch simply labeled Burmese. These correspond to different waves of migration by the proto-Burmese from the region in China west of the upper Mekong River during the 9th century A.D. The languages of the southern group, called Burmese, are all regarded in modern Burma as regional varieties of Burmese. The recognized Burmese dialects are: Burmese, Arakanese, Yangbye, Yaw, Danu, Intha, Taungyo, Mergui, Tavoy, and (Taylor 1922, 1956). The languages of the northern group of Burmish are often identified ethnically as Kachin, a multi-ethnic confederation of widely differing Tibeto-Burman languages which incorporates some languages of the North-eastern India group. The northern Burmish group languages are found within the modern-day Kachin State of the north and in the Shan State of northeast Burma. Linguistically these languages — Langwa (Maru), Zaiwa (Atsi), Lachi (Lashi), Hpon, are popularly known in Burma as ethnically Kachin but linguistically are not closely related genetically to 'Kachin', that is,

the Jinghpaw language at all. In some respects this set of languages is much closer to an older form of Burmese represented by orthographic Burmese from the 12th to 15th centuries C.E.

The linguistic distinction between Burmese 'dialect' versus 'language' is not a clear, fixed one but is mostly left to pragmatic, political factors of policy making in Burma. What is clear is that apart from bilingualism a speaker of modern standard Burmese in many cases would not understand the speech of the other Burmese languages. These languages have more recently been linguistically documented (Okell 1995). Phonological features of languages like Arakanese and Tavoy are well known for their anachronistic retention of Old Burmese medial -r and -l, which are evidenced in inscriptional Burmese of the 12th and 13th centuries. The attitudes by contemporary speakers of standard Burmese generally fail to recognize and respect this antiquity, attributing to such speech humorous irrelevance.

The languages of the northern group of Burmish, retain yet older features which the more southern Burmese dialects have lost, such as differentiation of syllable final oral and nasal consonants. Such consonants are attested in written Burmese, but have been reduced in most Burmese dialects to glottal stop from oral stops, and nasalization of the preceding vowel from final nasal stops. Vowel quality changes have also been triggered by the erosion of the finals, providing a playground for linguists who have in the ancient written language, still in use today, a solid baseline for reconstruction.

1.2.2 Modern Burmese

Burmese, like most of Tibeto-Burman, is an SOV language. As such, it demonstrates a consistent head-final typology — verbs are final in relation to preceding

sentential arguments; modifiers consistently precede nominal and verbal phrases. Grammatical post-position particles consistently follow the grammatical term that they relate to the rest of the sentence. In fact, post-position particles perform the bulk of the duties of grammar. These particles, which are analogous to English prepositions, 'in', 'at', 'with', 'along', and so forth, encode the function in European languages filled by tense, aspect, inflections for case, gender, person and number, all types of agreement and disagreement or disjunction, logical, chronological and situational relations. They mark textual and discourse information structure, as well as pragmatic functions of the speaker-hearer relationship and the general marking of all important social roles within society and the family. These particles are regarded here as the heads of their phrases, with their constituents consistently preceding them. The apparent few exceptions to the particle-as-head of the phrase, which other approaches to Burmese grammar have lamented, can be resolved under the method of analysis undertaken here. It will be demonstrated that an underlying consistency in typology gives Burmese information structure, which may at times appear heavily laborious and confusingly complex, a simplicity and predictability that reduces the information-processing load and enhances comprehension.

Regarding word classes, modern linguists have assumed but two basic types — nouns and verbs, with the addition of a third, closed-class of particles. The present analysis supports this view consistently and attempts to demonstrate structurally how this structuring principle is followed throughout the phrase structure up to the top-most, text structure.

A typical Burmese sentence might be "Have you eaten rice yet?" which is a very common greeting, and while situationally sensitive is almost always appropri-

ate. There is no generic greeting like 'Hello.' The constituents of this sentence are laid out in Figure 13.

-Subject	+Object	+Verb	+ Particles
	tamang:	**ca**	**pri pi la:**
	rice	eat	Cp Cp I
	တမင်း:	စာ	ပြီး: ပြီ: လား:
'Have you eaten rice yet?'			

Figure 13. Overview of Burmese Sentence Structure

The grammatical subject in Burmese is frequently unnecessary to specify and assumed to be clear in most natural conversation and writing. Post-positional particles can typically 'stack up' as can be seen from the three at the end of the verb phrase. When viewing this kind of structure linearly, one might be tempted to call this a chaining effect. Most other studies of Burmese grammar have taken a linear view of constituent structure. A nonlinear view of constituent structure preserves the consistency of final headedness and breaks apart apparent chains, both of verbs and particles.

1.2.3 Diglossia

Written Burmese has had a very long history of almost a thousand years — since 1044 AD. The written form of Burmese tends to be highly conservative in spelling, preserving over the centuries forms that no one ever reads 'as written', rather new rules of pronunciation have necessitated a consistent set of subconscious reading rules that the literate person can blissfully ignore. The spoken language has

diverged phonologically from the older written form via syllable reduction, initial consonant cluster coalescence, degrading of final consonants, the shifting and gliding of vowels in specific environments, and a unique type of tonal development from the reorganization of proto syllables. Lexically, the modern spoken language diverges from the older written form by the introduction of a vast array of new vocabulary and terminology. Grammatically, the difference between the two forms of Burmese (spoken and written) is demonstrated best by the postpositional particles. A completely different set of particles is employed if writing in 'spoken' Burmese versus writing in 'written' or formal Burmese. With such extensive differences between the two languages, one might ask why would someone think they are the same language. Indeed, some of Burma's finest linguists have called for educational and social reform by promoting the use of 'spoken' Burmese for all domains of modern language use (Minn Latt 1966). Such calls have been lonely 'cries in the desert' as the mainstream in Burmese government and educational institutions are conservative and tradition-oriented. Such a conservative position actually can work even though the difference between a 'written' text and the same text in 'spoken' Burmese can be as much as 75% in lexical and grammatical particles. The reason the written language can be used successfully to the extent it has, is because the same basic, underlying template is employed for both languages. This grammatical framework, particularly the phrase structure and the functions of post-position particles has remained quite stable over time. The surface forms may be quite different, but the arrangement of information between the two 'languages' is basically the same. Thus, the exercise of switching between the two codes is principally a matter of lexical and particle substitution. This would be like the language learner's dream, where knowing one language all one needed was to learn word forms to refill the structural posi-

tions in other language. The regularity of pattern keeps the two languages 'together' and usable as 'one' social communicative form, called Burmese.

The result is that technically one rarely, if ever, pronounces words the way they are written (as they were written hundreds of years ago), but this is not noticed by native speakers since everyone reads the written form with basically the same pronunciation. The modern speaker is unaware that long ago the same spelling sounded different, perhaps as different as local vernacular forms of Burmese or its northern language cousins. The native speaker is aware of lexical changes. He can simply substitute the Formal Burmese particle for the Colloquial Burmese particle through a process of lexical-functional equivalence, change nominal and verbal lexical variants to a higher speech register lexicon, increase the number of word pairs as a kind of elegant doubling, and smooth over the whole operation for consistency, coherence, and for overall naturalness. While this summary is an over-simplification, and the exact psycholinguistic processes of changing from one speech form to another would make a most interesting study, the transformation between Formal (written) Burmese (FB) and Colloquial (spoken) Burmese (CB) occurs primarily in the lexicon.

The difference in usage between written and spoken Burmese is one of appropriateness of social context. It is quite likely that there is a gradient quality to the transition from 'written' to 'spoken' Burmese. In this study, the labels for written Burmese will be "Formal Burmese" (FB) as opposed to "Colloquial Burmese" (CB).

Since the phonology, lexicon, and post-positional markers all have shifted over time between the two forms of Burmese, modern linguists utilize Burmese for historical linguistic purposes to compare dialects of modern Tibeto-Burman spoken languages (focusing on the changes). Also profitable are studies which examine the

historical rules for changes in modern CB as compared to FB. By comparing and contrasting the underlying system that has held it all together over time, a system is displayed that promotes the subconscious view that these two languages are the 'same'. This dissertation will explicate a portion of that underlying template.

1.2.4 Constituency in Burmese

1.2.4.1 Phonological Aspects of Constituency

By separating the three linguistic components of Phonological, Semantic, and Grammatical, it is possible to analyze constituency within different frames. The analysis of what is a constituent is different, depending upon the properties of the level of grammatical or phonological analysis to which one attends. The solution to the problem of identifying a word versus a phrase has often appealed to phonological criteria, particularly the very interesting phenomena of *close* versus *open* juncture. The following discussion of juncture is meant to supplement the grammatical analysis presented in this study. The long-range objective would be to keep all three components separate for the purposes of constituency and then to devise a rule-based principle for combining the full scale analysis of Burmese text generation and interpretation.

1.2.4.1.1 Juncture in Burmese

The phenomena of close juncture has been studied by U Pe Maung Tin and L.E. Armstrong (1925), McDavid (1945), Sprigg (1957), reviewed by Forbes (1967) and summarized by Wheatley (1982). The distinction between *word* and *phrase* in

Burmese has principally relied on differences of juncture, close juncture within words and open juncture within phrases.

Table 5 below summarizes seven of the various phonological tests of close versus open juncture. Of these seven types of phonological manifestations of juncture, two of them focus on the voicing and stress reduction of the second syllable of a complex of syllables and the other five concern changes that occur in the first syllable (as demonstrated in bold below). What is important to note for the purposes of this study is that while phonology has been used to determine the nature of grammatical and semantic constituents within Burmese, the current analysis regards sentence final particles as belonging not to the verb phrase but to a superordinate level of the sentence. Many of the post verbal particles have little to do with the main verbal predication of the sentence. They typically refer to sentential functions such as mood and speaker attitude either toward the sentence content or toward the hearer. Semantically sentence final particles are not part of the verb phrase but they have been analyzed as such in the past because of phonological binding between the verb and the following particle, thus his 'cementing' a phonological connection where no immediate grammatical connection occurs. Therefore the structuring of sound and the structuring of meaning are not aligned.

It is helpful to keep in mind the difference between constituency of phonological units and constituency of grammatical units. Table 5, section five and six below demonstrate phonological coarticulation of the verb with the sentence final particle ေသာ **sau** and သည် **sany.** These particles are morphophonemic variants of each other, one occurring as an embedded sentence (non-final) particle and the other the final sentence (see 3.2.4 and 3.2.4.1) . Okell (1969:119) analyzed such final particles as constituents not of the verb phrase but of a unit he calls the 'verb-sentence',

which is separable from the sentence itself in terms of the types of particles that can terminate the sentence — mostly speaker attitudinal or belief particles. His treatment is linear and analyzed the different role of the particles by positing different construction types. The role of phonology in grammatical constructions was not discussed except to describe spreading of voicing in close juncture.

Close juncture, though it might be expected to signal a higher grammatical unit above the morpheme, e.g. word, or a semantic unit, a lexeme of some variety, it does, in fact, not function to mark a higher grammatical unit. Phonological units and semantico-grammatical elements are not co-terminus. There is not a one-to-one relationship between sound and meaning. Actually constituent elements of semantic constructions are not always in close juncture, though there is a tendency for such as noted by Wheatley (1982:26) for juxtaposed compound nouns of the type N+N to be in close juncture, (မြေပုံ **mre pum** /mjebo̞u/ 'map'; လမ်းပြ **lam: pra** /lambja/ 'guide') but also open juncture is found in this type of compound (ဆေးဆရာ **hce: hcăra** /hse hsəja/ 'doctor'). The situation with compound verbs of the type V+V is even more variable.

At the phrase level, Wheatley noted that close juncture is a regular feature of the attributive noun phrase, e.g. Noun + Stative Verb, (what is here analyzed grammatically as a reduced clause) but not of other types of phrases, such as Determiner + Noun. Interestingly, he notices that "all particles are in close juncture with preceding syllables" and that it is therefore not possible to predict whether morphemes will be in close or open juncture. It is the assertion here that grammatical properties, particularly constituency, are not predictable from the phonological features such as juncture. The following table summarizes the phonological processes associated with juncture in Burmese.

	1ˢᵗ Syllable Environment	2ⁿᵈ Syllable Environment	Examples
1) Voicing	**1ˢᵗ Syllable**	**2ⁿᵈ Syllable**	
Open Juncture	(unchanged)		
Close Juncture	Vowel + Nasal; or open syllable V, or /ə/	Voicing of Stop, Affricate, or Fricative (other than ရ)	
2) Reduction of Vowel	**1ˢᵗ Syllable**	**2ⁿᵈ Syllable**	
Open Juncture	full vowel quality in open syllable		ကုလားထိုင်:/kəlɑ: tʰǎi/ "the Indian sits" < kula 'Indian' + htuing: 'sit'
Close Juncture	reduced to schwa / /	(unchanged or Voiced)	ကုလား /kəlɑ:/ 'Indian' < kula ကုလားထိုင်:/kələ tʰǎi/ "chair" (Indian sitting thing) < kula 'Indian' + htuing: 'sit'
			စကား:/zəgɑ:/ 'word' စကား:ပြန်/zəgəbja:/'translator' < sa.ka: 'word'+ pran 'return'
3) Nasal Assimilation	**1ˢᵗ Syllable**	**2ⁿᵈ Syllable**	
Open Juncture	Vowel nasalized	(unchanged)	လမ်း:ပြ /lǎ: pja/ 'show the way' < lam: 'road' + pra. 'show'
Close Juncture	Homorganic nasal copy from 2ⁿᵈ syllable	Voiced	လမ်း:ပြ /lambja/ 'guide' < lam: 'road' + pra. 'show'

Table 5 – Continued

	1st Syllable Environment	2nd Syllable Environment	Examples
4) Glottal Assimilation	**1st Syllable**	2nd Syllable	
Open Juncture	V?	Stop (voiceless)	စစ်/ sɪ?/ 'army', တာတ် /də?/ ɜ element', အိပ် /?eɪ? / 'sleep'
Close Juncture	V Stop copy from 2nd syllable	Stop (voiceless)	စစ်တပ် / sɪtta?/ 'the military', < war + troop တာတ်ဆီ /dəssʰi/ ɜ gasoline/ 'petrol' , < element + oil အိပ်ခန် /?eɪkkʰằ / 'bedroom' < sleep + room
5) Vowel Shortening	**1st Syllable**	2nd Syllable	
Open Juncture	V — any vowel with Heavy or Plain tone		လာ / laː/ 'come' သွား /θʷaː/ ' go'
Close Juncture	V·	Voiced	လာသော / laðɔː/ 'which came' သွား သော /θʷaðɔː/ ' which went'
6) Tone Rising	**1st Syllable**	2nd Syllable	
Open Juncture	V + Heavy Tone		သွား /θʷaː/ '' go'
Close Juncture	V + Rising or High	Voiced	သွားသည် /θʷaði/ ' go'

Table 5 – Continued

	1st Syllable Environment	2nd Syllable Environment	Examples
7) Stress Reduction	**1st Syllable**	**2nd Syllable**	
Open Juncture	Stressed at head of phrase with all tones except Plain	Stressed at head of phrase	ကောင်း / kằűˀˡ / 'good' ကောင်းသည် / kằűˡ ðiː/ ' It's good'
Close Juncture	Stressed, with all tones but Plain tone	Reduced stress	ကောင်းကောင်း / kằűˡ gằűˀ‚ / 'very good'

Table 5. Summary of Phonological Processes Associated with Juncture

1.2.4.2 Semantic versus Grammatical Constituent Structure

The contrast between semantic analysis and grammatical analysis can best be seen in the compound nominal construction. Nominal compounds are often re-analyzed semantically as nested attributes closest to the head nominal. The attributive modifier immediately preceding the head is often categorized as 'one thing' semantically — that is, the immediate constituents are reanalyzed as a conceptual blend. In this type of relation the constituent structure semantically would appear as (9), which is graphically displayed in Figure 14.

(9) [Modifier + [Modifier + Head]$_H$]$_{NP}$
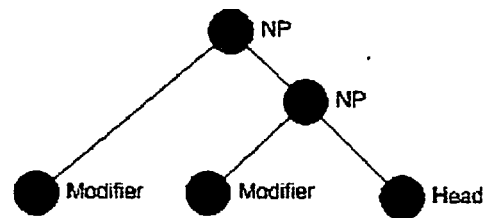
Figure 14. Semantic Constituency of Blended Heads

The internally nested modifier NP in Figure 14 becomes head of the second modified NP. Often the justification of this type of constituency is social with pragmatically dominant use of the NP as a semantic whole or unit, thus giving the phrase a sense of immediacy of constituency. Semantically, the resulting constituency is left-branching.

Contrastively, grammatical constituency is mostly right-branching with modifiers grouped as a series in their grammatical role of modifiers in a series in relation to each other first and then to the head, as displayed in (10) below and Figure 15. More detailed explanation of this process is illustrated in Section 4.2.2.

(10) [[Modifier + Modifier]$_M$ + Head]]$_{NP}$

Figure 15. Grammatical Constituency of Blended Heads

The two types of analysis are displayed in (11) where the first grammatical reading is shown as 'first mark' and then the subsequent nominal forces the grammatical reading 'first marked post'. Semantic processing on the grammatical structure produces a semantic blend of 'marked post' to 'bus stop' as a single lexical compound noun. The first reading is entirely grammatical but is semantically less astute since the most common understanding would be to interpret this sequence as 'bus stop'. One might say there is semantic ambiguity between the purely grammatical and the semantically blended heads.

(11)

ပထမ	မှတ်	တိုင်
pa.hta.ma.	**hmat**	**tuing**
'first'	'mark'	'post'

'first bus stop'

| [| M | | H |] | | Grammatical Constituency |
| [| M | | | H |] | |

'first marked post'

| | | [| M | | H |] | Semantic Constituency |
| [| M | | | H | |] | |

'first [bus stop]'

At the clause level, U Pe Maung Tin (1956:194) called this type of semantic constituency 'noun-verbs'. The meaning of these verbs is "enlarged by an immediately preceding noun which has lost its nominative suffix". Okell (1969) called these 'tied nouns'. This process can occur with either grammatical subject, object or an oblique, so it is not the predicate (object and verb) of traditional grammar. For this semantic process to occur, it is necessary that no intervening postpositional occur on the nominal unit. Should it be used, the unity of the construction is broken and a different semantic interpretation results as in (12) and (13).

(12)

မောင်ဘ   ခေါင်း   ကိုက်   သည်
maung ba   hkaung: kuik   sany
[Maung Ba   [head   hurt]]   Nom/SF
'Maung Ba's head aches.'

U Pe Maung Tin parses this type of example not as 'Maung Ba's head' but as 'headache'. Thus, 'Maung Ba's headache' is close to the meaning of the Burmese, where the nominal 'head' is incorporated into the meaning of the verb. This is the semantic interpretation; it is a process of cognitive blending that occurs where the conditions are ripe due to juxtapositioning with no intervening postpositional. If the grammatical object/patient postpositional occurs, the interpretation must be different. It is what is displayed above as the simple grammatical reading.

(13)

မောင်ဘ   ခေါင်း   ကို   ကိုက်   သည်
maung ba   hkaung: kui   kuik   sany
[[[Maung Ba   head]   O]   hurt]   Nom/SF
'Maung Ba's head aches.'

The presence of the postposition forces the grammatical reading to be the grammatical reading. That is, it objectifies the grammatical object by creating an explicit object 'head' with ကို **kui.** and configures that object as the focus in (13). Whereas the possibility of semantic merger in (12) is actually reinforced pragmatically by the social use of the term ခေါင်းကိုက်သည် **hkaung: kui kuik sany** 'headaches' as a commonly used response since the subject is often unnecessary for explicit mention. This type of noun-verb pragmatic extension or implicature often acquires a new meaning greater than the sum of its parts: ရေသောက် **re sauk** 'water drink' means 'drink'; ကြမ်းပိုးထို: **kram: pui htui:** 'bug bites' means to 'loaf around' (literally 'bed bug bites', with an underlying implication of sleeping around).

1.3 Scope Limitations

The present study focuses on the role of nominals in Burmese, particularly the process of nominalization in structuring text. Therefore, a detailed analysis of the verbs and verb phrase, while certainly interesting, is beyond the scope of this study. The question of whether Burmese is more highly verbal or nominal will also not be argued, though it is quite possible that such a generalization (Pe Maung Tin 1956), is contextually dependent on genre.

Another scope limitation imposed on the current study is that the textual genre has been limited to expository and narrative text types. Expository text is the text type in which the author or speaker is explaining or talking about some topic. This genre contrasts with Narrative, that of telling a sequence of events. Both of these contrast with Procedural, telling someone how to do something, and with Hortatory text, where someone is attempting to convince or argue a point. Expository

text is well known for its explicit nominalization processes, and thus it is of interest concerning the processes under examination here.

A further scope limitation is that the framework of analysis and generalization has been artificially limited to Formal Burmese, though some examples will be used occasionally of Colloquial Burmese.

1.4   Summary

Key concepts have been introduced that serve to establish the ground of the expanded investigation of nominalization in Burmese. These are a) a separate level of ontological level of linguistic processes, b) juxtaposition as a principle structure of nominals, c) the role of conceptual integration in juxtaposed nominals, d) the role of the grammatical postposition particle as an operator and inherent nominalizer, e) abstract objects and ontological nominals, and f) the pattern of bifurcation as a structuring principle of grammar. The linguistic affiliation of Burmese has been presented along with some of the *sociolinguistic aspects* of dialects and diglossia, together with a brief overview of underlying issues of constituency in phonology, semantics and grammar.

Chapter 2 presents a more detailed analysis of Burmese grammatical categories and focuses particularly on the word category in Burmese as the basis for constructions which are summarily presented — Word, Expression and Sentence.

Chapter 3 examines nominalization in greater detail providing background studies and issues in nominalization and then looks more closely at Burmese nominalization, both grammatical and semantic nominalization, the role of the prototype nominalizing particle သည် **sany**, and various types of ontological nominalization.

Chapter 4 examines two texts in Burmese and demonstrates the role of nominalization in the information structure and discusses the simple abstract patterns of ontological nominalization underlying highly complexity patterns of constituency.

Chapter 5 summarizes the dissertation, examines some of the shortcomings and presents some topics for further research.

CHAPTER 2

BURMESE GRAMMATICAL UNITS

*If we continue to do things the way they have always been done,
the most we can expect is what we already have.*

- Dennis Bay

*Nothing will ever be attempted if all possible objections must be first
overcome.*

- Samuel Johnson

2.1 Grammatical Hierarchy in Burmese

The grammatical hierarchy is a useful notion of successively included levels of grammatical construction operating within and between grammatical levels of analysis. This hierarchy is generally assumed in this study as a heuristic principle for the purposes of laying a foundational understanding of Burmese grammatical units and constructions. This hierarchy is a compositional hierarchy in which lower levels typically are filler units for the next higher level in the hierarchy (Longacre 1970, Pike and Pike 1982). Displayed below is the hierarchy from the lowest level to the highest

Text	
Paragraph	·
Sentence	
▲ Clause	
Phrase	
Word	
Morpheme	
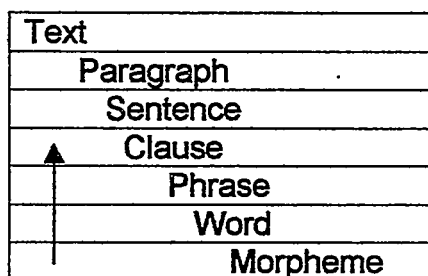
Figure 16. Grammatical Hierarchy

The following sections discuss each of the grammatical levels in Burmese, presenting views of previous linguistic studies of Burmese as a framework for the introduction to the views of the present author. Rather than present a full grammatical analysis of each level, as one would find in a grammar, such as Okell 1969, Wheatley 1982 or Soe Myint 1999, only the elements of those constructional levels relevant to the purposes of understanding nominalization in Burmese will be discussed.

The type of 'emic'[1] grammatical hierarchy adopted here for the purposes of understanding the scope and role of nominalization is Sentence, Expression and Word (see Section 2.5.2).

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[1] *Emic* is a term devised by Kenneth L. Pike (1960) as a contrast to *etic* to represent the two different perspectives on language or cultural systems. Etic refers to the outsider's schema or grid used to perceive a language or culture not his own. Emic represents the tacit categorical system employed by insiders to the culture or language. One goal of linguistic description is to represent the emic categories of a language. Alternatively, etic descriptions may focus on categories of importance to the analyst's culture or career goals.

2.2 Morpheme

The morpheme is the lowest compositional level of grammatical meaning. Typically, this unit corresponds in Burmese to the syllable of the phonological dimension. Most morphemic units in Burmese also correspond to a basic orthographic unit to which spelling rules apply in Formal Burmese. That is to say, the orthographic morpheme is also a syllable, with the one exception of the possessive phrase marker which can be signaled either by a separate morpheme (a specific vowel with creaky tone) or by creaky tone alone written with a tonal diacritic on the possessor morpheme in orthographic Burmese.

Morphemes are either free or bound forms, with the free forms corresponding to word level units and the bound forms to a closed class of grammatical affixes. Burmese represents what is popularly called a 'monosyllabic language', in that a free form is typically a one-syllable morpheme and also a type of the minimal word. Thus the grammatical hierarchy at the lower two levels tends to merge in Burmese, but must be kept separate due to a variety of word types greater than the minimal word.

There are only two productive bound morphemes in Burmese, both are prefixes. The first is the unstressed ă- prefix (အ–), which proto-typically functions as a deverbal nominializer (**ă-puing** အပိုင် Nom + 'possess'> 'possession'; **ă-sang.** အသင့်. Nom + 'be suitable' > 'appropriate'). Other investigators have analyzed this affix as an adjectival or adverbializer used in complement clauses (Okell 1969:155; Wheatley 1982:33). The different set of structural assumptions regarding the role of nominals in Burmese assumed in this study results in this formative prefix being viewed entirely as nominal. For further discussion of this issue, see word categories below.

The second bound morpheme is the negative prefix **mă-** (မ–), which usually is found on the first verb in the final clause of a negated sentence. The negative function is marked twice in Burmese. Once as negation of the verb, negating the predication, and secondly, at the sentence level where this negation functions as mood or modality. These two negative markers usually co–occur and belong to different levels of syntactic scope. The prefix **mă-** (မ–) is an immediate constituent of the verb, which is the head of the word construction as in: **mă-swa:** မ–သွား: 'not go'; **mă-kaung:** မ–ကောင်: 'not good', The scope of verbal negation extends to the whole compound of a compound verb, as in **mă-tang pra.** မ–တင်ပြ 'not put–up show' = 'not submit (a case)'; **mă-hcaung rwak** မ–ေဆာင်ရွက် 'not bear carry' = 'not execute, carry out'. Another pattern of negation is possible with verb compounds or verb phrases by individualized negation of each portion of the compound, as in: **mă-ip mă-ne** မ–အိပ် မ–ေန 'not sleep not stay' = 'not sleep at all'; **mă-tang mă-kya.** မ–တင် မ–ကျ 'not elevate, not drop' = 'noncommittal'. Yet another pattern of verbal negation is found in such patterns where the second verb of a compound is marked with the negative prefix, as in **ne mă-kaung:** ေန မ–ေကာင်: 'be not good' = '(I'm) unwell'.

Another morpheme that has been analyzed by previous investigators as a prefix with a similar function of nominalization is **tă-** (တ–) (Okell 1969:409). Wheatley (1982:33) regards this form as a reduced syllable and Okell and Allott (2001:71) take it as both a full and a reduced syllable. This productive operator utilized in various word and phrase patterns is regarded here not as an affix but as a numeral at the word level. The form **tă-** (တ) patterns as a phonologically and orthographically reduced form of the numeral one, **tac** (တစ်), in compounds. Paradigmatically, it strongly resembles the **ă-** nominalizer prefix due to a) its dis-

tribution before the head, b) its phonological and tonological reduction to that of a presyllable with phonological reduction of the tone to that only found in the presyllable and vowel quality reduction to schwa, and c) a similar semantic function of creating a reified, nominal-like entity. It can be argued that the numeral one contributes semantically a nominal sense by attributing 'thingness' to a verb by the process of enumerating it, as in: တလွဲ **tă-lwai:** one + 'swing; miss, be in error' = 'wrongly' or 'a wrong'.[2] Whatever is countable must be a kind of object or 'thing' in some sense. By simple juxtaposition of the numeral one, the semantic specification of the head of a numeral phrase or compound is reified.

2.2.1 Morphemes and Language Contact

Burmese words are predominantly monosyllabic but some disyllabic forms exist, some of which are from loanwords from contact languages. In these cases the one-morpheme, one-syllable, one-word generalization does not hold true. Pali, an Indo-Aryan language of northern India and the language of the Buddhist canon, is the source of many Burmese polysyllabic forms in a wide variety of domains such as statecraft and kingship, religion, science, art, literature and language, and social relations. Mon, a Mon-Khmer language of southern Burma in which the disyllabic word predominates, was the donor source of the Burmese script. It is also the source of common geographical terms for lower Burma, for flora and fauna, and terms for government, culture and transportation. The loanwords can be socially elaborate or for commonly used terms — from Pali (**mud-**

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[2] The reason for translating this as an adverb is that these types of nominals are used in what is in English adverbial meanings.

da-za. (မုဒ္ဓဇ) 'alveolar' (phonetic term) < Pali **mud-da-za.** (မုဒ္ဓဇ) 'alveolar'; ra-si (ရာသီ) 'any one of the twelve signs of the zodiac < Pali ra-si. (ရာသီ) 'a sign of the zodiac'; (**tă-ră-htat** (တရပတ်) 'fan made of palm fronds'<Pali); from Mon ('slipper, shoe' **bi.nap** (ဘိနပ်) (< Mon **hka-nap** (ခနပ်), **ga-nap** (ဂနပ်), **da-nap** (ဒနပ်) 'shoe') (Hla Pe 1967:84); from English (**di-zuing:** (တီဇိုင်း) 'design' < English); even from Thai ('stuffed omlette' **hka-num htup** (ခနမ်ထုပ်) < Thai **kanom** กะนม 'snack'+ Burmese **htup** ထုပ်'pack'). Other very common words represent phonologically Burmanized syllables but not morphemes with transparency in function or compositionality in meaning. Such words as place names, for example, are often polysyllabic, and may have been borrowed in part or whole from other languages in which the syllables have their own function, e.g. 'Insein' (town north of Rangoon) **ang:sin** (အင်းစိန်) (< Mon **ang-sing** (အင်စိင်) 'natural pond **ang** အင် + elephant **sing** စိင်' = 'a pond frequented by elephants'); Mingaladun (the area of the Rangoon airport) (< Pali **mang-ga-la** (မင်္ဂလ) 'blessed' + < Mon **dung** (ဒုင်) 'town')(U E Maung 1956b:188).

Although loan words are unanalyzable and opaque from a point of view of Burmese grammar, there is an historical precedent for prestige borrowing from Pali and the subsequent integration and grammaticalization of foreign features into classical Burmese in order to accommodate not only high status vocabulary but also prestigious grammatical order and constructions (Okell 1965, 1967). The *nissaya* style of producing a Pali text with Burmese glosses (literal, free, ornate or with added explanatory material) intermixed into the text is one of the oldest types of preserved, written Burmese text. It reads like a horizontal interlinear glossed text. One word in Pali is followed by an immediate translation in Bur-

mese. Okell discusses how the need to develop a translation of an Indo-Aryan language with tense, aspect, and case into Burmese which has no tense or case and a very different type of aspectual system has resulted in a written style that was unlikely to reflect an ancient spoken language counterpart. That is, parts of Formal Burmese may not necessarily indicate an older form of Burmese spoken during the 11-16th centuries. Comparative linguists use Formal Burmese as one baseline for comparison with modern-day Tibeto-Burman dialects since it clearly retains in the written form such characteristics as distinct final stops, differentiation of syllable onset clusters, differentiation of final nasals, and so forth. What Okell suggests is that the grammar of Formal Burmese may have changed under the prestige influence of Pali grammar in the nissaya tradition, particularly the development of postpositional particles to represent systematically such Indo-Aryan functions as number, case, tense and mood. While there may be some danger of imposing meaning onto Burmese of such contact-induced structures, presumably what eventually results is assimilation into the Burmese 'system' of semantics and of grammar. The "intractable translation problem" — representing text or text pieces from one whole language and cultural into another — amounts to clinically separating a functioning organic part from its synergistic relations and parts, and transporting it into another language, into another system that in time remolds and distorts it for its own purposes. Such 'organ transplants' are the common stuff of linguistics through the process of nativizing and integrating it into the system, but languages, like human bodies, often resist alien material for a time, compartmentalize it until it later ceases to be regarded as unnatural, foreign wordstuff.

One such foreign structure in Formal Burmese is reported to be the indirect object particle **a:** (အား) for the Pali, Indo-Aryan dative case into Burmese

(Okell 1965, 1967). The issue of what is original Burmese of the 12th century is not resolvable from Burmese itself, but rather from grammatical study of Burmese dialects. Even here, the lack of influence from Pali cannot be assumed since contact with Pali is almost universal in Burma, particularly among males, who in Buddhist Burma reside for a period of time in a monastery where they are taught to read Burmese script and to recite Pali texts in nissaya Burmese. Pali has to some extent affected the very fabric, not just the color, of the Burmese languages of Burma. For centuries all education, mass communications, and linguistic tokens of Burmese culture were in forms which identified closely with nissaya Burmese. Even today, the news, when read on the radio, is in Formal Burmese. However, news read on television, which was introduced into Burma as late as 1980, is in the Colloquial form of Burmese. Modern-day accommodations to the spoken form of Burmese are increasingly being made in print and non-print media, but this is a trend only of late.

Pali morphemes are identifiable within their own grammatical traditions, e.g. **takkasuil** (တက္ကသိုလ်) 'university' < Taxila (home of ancient scholarship in what is modern-day Pakistan), as are those of English, e.g. **kau:-lip** (ကောလိပ်) 'college'. The morpheme in Burmese cannot be identified absolutely with the syllable because of these exceptional polysyllabic word forms.

2.2.2 Vestiges of Proto Tibeto-Burman Prefixes

A further type of disyllabic word that is not strictly analyzable as two morphemes is the sesquisyllabic syllable structure found throughout Southeast Asia, particularly among Mon-Khmer languages. The first syllable of this structure is typically a reduced, phonologically weaker open syllable, having an unstressed

schwa vowel, no contrastive tone and a reduced inventory of initial consonants. The other syllable has the normal syllable cognates of the language. These unique presyllables may have their origin in Proto–Tibeto–Burman prefixes that have not been fully nativized in regard to syllable structure, tone, or initial consonant manner of articulation. Semantically and grammatically, the productive function of the presyllable is typically lost. In these environments, the presyllable is not classified as a morpheme, and is thus one of the exceptions to the otherwise general rule that most Tibeto–Burman syllables are morphemes.

One such prefix reflects the Proto-Tibetan *s– causative and can be traced back to a contrastive aspirated and non-aspirated series of initial stops, but because aspiration is a widespread lexical and contrastive feature of Burmese the role of this causative is no longer transparent. It can be visually observed in orthographic Burmese as the letter (⊤) **ha.-htui**: ဟသ္ထို: affixed to the nasals, liquids and semivowels, thereby generating an aspirate causal variant in some cases. In other cases, the unmarked, orthographic aspirated consonant can be found in semantic causative – non-causative pairs, samples of which are presented in Table 6. Okell (1969:205) lists many more sets.

Unmarked / Stative/ Intransitive	Causal / Active/ Transitive
kwe: (ကွဲ) 'be split, separated'	**hkwe:** (ခွဲ) 'split, separate'
kyak (ကျက်) 'be cooked'	**hkyak** (ချက်) 'cook'
lut (လွတ်) 'be free'	**hlut** (လွှတ်) 'set free'
pyak (ပျက်) 'be ruined'	**hpyak** (ဖျက်) 'to ruin'

Table 6. Causative Pairs Derived from Proto Tibeto–Burman *s–

2.3 Word

The word in Burmese is most difficult to define (Minn Latt 1959:318), principally due to recursive embedding of other grammatical levels into the word form and to the active process of conceptual blending in compounding. The result is that the word in Burmese is typically complex with numerous semantic processes at work creating conceptual whole units out of numerous parts which have lost their independent sense within the newly constructed 'whole'. The whole units of Burmese might be viewed from an English perspective as a larger construction in the grammatical hierarchy, such as a phrase or even a clause. Despite the indeterminations, it is possible to define words into two classes of simple and complex.

2.3.1 Simple Words

The simple word corresponds roughly to a single morpheme that demonstrates lexical, semantic and grammatical autonomy. That is to say, it is not a bound form. The simple word is found in the mental lexicon as a main entry. It is

used as a lexical base for building complex word forms, e.g. **hnaung** (ဗ္ဗောင်) 'tie up; bind'; **rany** (ရည်) 'aim at; hope for'; **daung** (ဒေါင်:) 'peacock'; **mrwe** (မွေ) 'snake'; **te:** (သော:) 'song'. The category of simple words also contains representatives of grammatical function words, here called *particles*, which at the word level are independent but at the phrase or higher levels function obligatorily with other constructional elements, e.g. **twang** (တွင်) 'in'; **hnai.** (၌) 'at' ; **hnang.** (နှင်.) 'with'.

2.3.2 Complex Words

The complex word is what this study of nominalization is about. To introduce the topic briefly, it can be said that the most basic complex word in Burmese is the structural compound. The prototypical compound consists of two unbound forms juxtaposed. These words are of the same grammatical category. That is, words in a simple compound construction are either both nouns or both verbs. The simple compound word at the basic level can be grammatically represented by N + N or V + V, where N represents any simple noun, and V represents any simple verb. Some Burmese compounds derive from minimal free forms whose independence has been lost, resulting in some compounds with no clear sense of the meaning of one or both of the terms. The compound word is typically recognized by the native speaker to mean a uniquely defined whole. Speakers are resistant to analyze the parts of compounds, particularly when the meaning is distinctly different from the contributing parts. In such cases, the process of conceptual blending is inferred to have resulted through pragmatic factors in such a tight blend that segmentation of meaning into analytical component processes is resisted as a distortion of meaning.

(14) Examples of N+N Compounds

im (အိမ်) 'house' + sa: (သား:) 'son' = 'person living in the house; family

member'

cit (စိတ်) 'mind' + dhat (ဓာတ်) 'element' = 'spirit; mind set'

htaung (ထောင်) 'jail' + sa: (သား:) 'son' = 'prisoner'

nui. (နို့) 'milk' + rany: (ရည်:) 'liquid' = 'milk'

(15) Examples of V+V Compounds

lwai (လွယ်) 'easy' + ku (ကူ)'cross' = 'be easy'

hau: (ဟော) 'preach' + prau (ပြော) 'say' = 'preach'

hlam. (လှုံ့) 'exhort' + hcau (ဆော်) 'attack ' = 'stimulate; arouse'

htaung (ထောင်) 'trap' + hpam: (ဖမ်:) 'catch'= 'ensnare (by wile or guile)'

These two types of simple and complex words correspond roughly to
what Minn Latt labeled 'primary word ' and 'word proper', the first being "the basis
of lexicology and the second that of grammar" (1959:321). An expanded com-
pound may take as one of its member parts a complex N, one which is structur-
ally a phrase or clause. The topic of compounding is discussed in detail below.

2.4   Past Approaches to Word Categories

The questions of the number and types of word form categories identified
for Burmese has been a matter of both the historical era to which the analyst be-
longed and the stage of development of linguistic theory. More important has
been the functional purpose of the description. The first grammars written by

Westerners and Burmans alike were principally for language learning. This motivation has remained the principle productive drive to the present day. Linguistic descriptions are few and most belong to the later half of the 20th century.

The following discussion surveys the types of approaches taken over the last hundred and fifty years with regard to the problem of classifying word forms, their number of types and their differentiation. This discussion provides a background to the view of word form categories adopted in this dissertation. Subsequent to the discussion of the word in Burmese, each of the successive levels of the grammatical hierarchy is briefly summarized (sections 2.5 - 2.8) laying an expansive basis for the subsequent chapter on nominalization.

2.4.1 Judson

The first Western grammar of Burmese was developed by Adoniram Judson (1866) along with his Burmese – English Dictionary (1893) for the purpose of assisting Westerners, particularly native speakers of English needing to learn to speak and read Burmese. As such, the grammar utilizes word categories which would be most familiar to those from European linguistic traditions. The six classes of words Judson identified were Noun (common and proper), Pronoun, Verb, Adjective, Adverb and Interjection. Though he does not classify particles as one separate word class, he deals with the functions of particles extensively for his brief grammar (46 of 66 pages) under the classification for each word class. Nominal particles are labeled as 'case'. Nine 'cases' are identified: Nominative (**sany** သည်, **ha** ဟာ, **ka:** ကား), Objective (**kui** ကို **sui.** သို့), Possessive (**e** ၏, **rai.** ရဲ့ , (creaky tone) ့ Dative (**a:** အား , **kui** ကို), Causative (**kraung.** ကြောင့် , **lo.** လို့), Instrumentive (**hpang.** ဖြင့် **hnang.** နှင့် **nai.** နဲ့) , Connective (**hnang.**

နှိင်., **hpang.** ဖြင်.), Locative (**twang** တွင်, **hnai.** ၌, **hma** မှာ) and Ablative (**hma.** မှ , **ka.** က).

Judson's classificatory scheme formed the basis for subsequent studies. His description of grammatical constructions was limited to minimal constructions illustrating the use of the parts of speech under discussion. There is no discussion of syntax per se.

2.4.2 Taw Sein Ko

Judson's grammar was followed by an equally brief grammar by a native Burman, Taw Sein Ko (1891), who worked as a government translator. The purpose of his grammar was not to be exhaustive, but to "offer suggestive hints" regarding the character and structure of Burmese for foreigners, and to assert that Burma has its own literature, contrary to the assumptions of most resident Europeans. "There is no native work worthy of being called a Grammar, and the word Grammar itself is a misnomer when applied to Burmese (1891: preface)". Taw Sein Ko's classification mirrors Judson's but with the addition of two categories called Preposition and Conjunction, making a total of eight form classes. His prepositions are postpositionals of direction (from/to), of time and of place. Conjunctions consist of Judson's 'connective case', together with multi–postpositional combinations to create various inter-clausal operations: beside copulative there are Disjunctive (**hma. ta. pa:** မှတပါ: , **le.kaung prang** လည်းကောင်းပြင်, **prang** ပြင် all which basically mean 'besides'; **hprac ce** ဖြစ်စေ, 'either–or'; **sui. ma. hat** သို့မဟတ် 'or'), Adversative (**sau lany:** သော်လည်:, **sui. sau lany:** သို့သော်လည်: **sui. ra twang** သို့ရာတွင် 'but, although'), Illative (**sui. phrac rwe** သို့ဖြစ်၍, **htui kraung.** ထိုကြောင်. 'therefore'), and Telic (**hnang. a-nye** နှင်.အညီ, **sa. hprang.**

သဖြင်., **sany. a-tuing:** သည်.အတိုင်:, **kraung.** ကြောင်., **sau: kraung.** သော ကြောင်., **ra.ka:** ရ ကာ: 'because'). Although Taw Sein Ko proposed eight form classes, in his book he used as explanation basically three classes: Nouns (with Pronouns), Verbs and Particles. This observation will prove helpful to the overall structure of the proposed nature of form classes and the eventual manner in which a reduced set of three generic forms organize Burmese constituent structure.

2.4.3 Stewart

Stewart (1936; 1955) developed language course materials for Colloquial Burmese and taught at the School of Oriental and African Studies, University of London. He observed only three parts of speech in Burmese — nouns, verbs and particles (1955:10). Many of the early observations by Stewart agree with the approach of this dissertation.

> 'There is no evidence that more than two classes of full words exist — nouns, including pronouns, and verbs. Besides these there are form words, either mere particles or broken down full words which are used to show grammatical relation. It is no doubt true that we find nouns and verbs in subordinate uses, used, that is, to express meanings which would be expressed in English by an adjective or an adverb, and that collocations of nouns and verbs are used to express the meanings of our distributive adjectives or reflexive pronouns (Stewart 1936:1)."

Stewart's work has served as a welcome influence for successive linguists to depart from European analytical categories of grammar toward more natural, emic, categories of word forms. His influence was recognized on the next generation of Burmese grammarians, both in England and America.

2.4.4 Comyn

Comyn (1944), working in the United States during the World War II, produced an outline grammar sketch of Colloquial Burmese for the purpose of a doctoral degree in linguistics from Yale University. One practical purpose of this grammar was to provide a linguistically informed analysis of Burmese for the American war effort, including second language structure acquisition. Studying under Leonard Bloomfield, the approach is singularly structuralist and taxonomic. His astonishingly succinct analysis (34 pages) attempts to accommodate the grammatical structure of the language itself rather than to impose external linguistic categories. Comyn divided the form class into two types of free and bound. He classified two types of what he called the minimal free form (words) — either nouns or verbs. Bound forms included particles, proclitics, enclitics, and rhyming syllables.

Including bound form with the minimal free form, he differentiated the following types of nouns and verbs, which in other systems of grammar would be called phrases (1944:11):

1) noun or verb plus particle: ဒီမှာ **di-hma**[3] 'here' (deictic pronoun + location particle[4]); သွားတယ် **twa-de** 'goes' (verb 'go' + Sf),

2) as noun derived from verbs with a proclitic: အလုပ် **?a-lou?** 'work' (nominalizing prefix + verb 'work'); တလွဲ **talwe** 'wrong' (reduced syllable 'one' + verb 'err'),

3) as a verb with an enclitic: လုပ်တာ **loutta** 'work' (verb 'work' + nominalizing particle),

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[3] This representation is Comyn's transcription of spoken Burmese.

[4] The parenthetical representation of form types is this author's.

4) as nouns formed by doubling, with or without the proclitic and rhyming

syllables: ကောင်းကောင် **kaun:gaun:** 'good' (verb 'good' + verb 'good' with

voiced onset in close juncture); မပြည့်တပြည့် **mapyei tabyei** 'not quite full'

(negative prefix mă- verb 'full'+ reduced numeral one tă- verb 'full'); **kanlan**

'across' (verb 'across' with tone change to match following syllable + 'road'); နီ

တီတီ **ni tidi** 'reddish' (verb 'red' + reduplicated rhyming syllable t-t- which copies

vowel and tone of the main verb, in close juncture to indicate diminished quality

of the verb). The doubled verbs as well as doubled nouns are considered as

noun expressions to Cornyn (1944:31).

It could be said that Cornyn's treatment constituted a further advance to-

ward emic categorization of Burmese word forms, shedding European construc-

tions deemed necessary for the second language learner. His classifications also

incorporated the concept of embeddings from other levels. The word level forms

listed above demonstrate a sense of the categoriality of free forms as a su-

perordinate category incorporating structural properties of both free and bound

forms in various combinations. This level he labels Form. A similar breath of in-

clusion is demonstrated in his next level of category labeled Expression. Cornyn

utilized a kind of tacit hierarchy without actually specifying or discussing how lev-

els relate to each other. This hierarchy has been inferred to have the form of Fig-

ure 17 below.

Sentence
Expression
Form
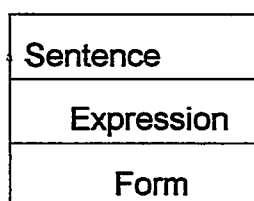
Figure 17. Cornyn's (1944) grammatical hierarchy

The Expression unit includes the construction of compounds, phrases, relative clauses, all units marked by postpositional particles that relate information to the wider sentence. The Sentence unit has three types: narrative, imperative and equational.

2.4.5 Forbes

Forbes (1967:195) recognized two kinds of words, the simple word (a minimal free form) and the complex or compound word. The work cited here is only about nouns so it's unknown how she would distinguish other word classes. This analysis distinguished nouns, verbs and relational markers (postpositional particles). Regarding nouns, Forbes noted the way in which simple and complex forms, often labeled phrases functioned as nouns in Burmese. Simple nominal words like ခွေး **hkwe** 'dog', ထီ **hti** 'umbrella', ဆရာ **hca.ra** 'teacher' function in clear nominal ways. Larger sequences also function as single nominal units, such as လူဆိုး **lu hcui** 'criminal', မနေ့.ကလာတဲ့လူ **mane.ka. la tai. lu** 'the man who came yesterday', and လူခြောက်ယောက်. **lu hkauk yauk.** 'six people'.

Forbes' criterion for distinguishing between the nominal word and phrase is principally phonological. She does not even suggest that 'the man who came yesterday' is a relative clause, rather it is a sequence with *open juncture*. Open versus close juncture is the principle criteria, but also consideration is made to free versus bound, and the type of numeral classifiers taken by the nominal. Her paper focused primarily on describing the various types of combinations of nouns and verbs in the *compound noun* construction. Each type of compound is systematically described for its structural properties and constraints on combination. Two-member compounds (N+N, N+V, V+N) with sub-types are classified. It

should be noted that Forbes not only judged NN sequences to be *compounds* but also NV, which some have called an *attributive phrase*. In addition, the VV sequence can be nominal, though it can also be verbal. The distribution of such compounds within the sentence determines the interpretation of nominal versus verbal. Table 7 below lists compound nouns with two members of the compound.

	Pattern	Example	Component Meaning	Compound Meaning
1	NN	နည်းလမ်း **nany: lam:**	way + road	way / means
		ပြည်သူ **pyany su**	country + person	citizen
2	NV	ခွေးရူး **hkwe: ru:**	dog + wild	mad dog
		လူငယ် **lu ngai**	person + young	youth
3	VN	ဝင်ငွေ **wang ngwai**	enter + silver	income
		အောင်သူ **aung su**	victory + person	conqueror
4	VV	စည်းဝေး **cany: we:**	bundle + be far	meeting
		ကြော်ငြာ **krau ngra**	shout + shout	advertisement

Table 7. Two-member Compound Nouns

Three-member compounds for which it must be noted that the internal structure always consists of two members, N or V, which first combine into a single constituent and then subsequently combine a third element to the first combination to form the whole three-part compound nominal. The preference of Burmese structure for pairs or doublets is clearly manifest the three-member compound noun, e.g. N/V+N/V > N first, and then N + N to complete the compound. Table 8 lists the types of three-member compound nouns.

	Pattern	Example	Component Meaning	Compound Meaning
1.	(NN)N > NN	အလယ်တန်းကျောင်း **a-lai tan: kyaung:**	(middle +grade) + school	middle school
		မြေပဲဆီ **mre pai: hci:**	(ground + bean) oil	peanut oil
2.	(NV)N > NN	ရေနွေးအိုး **re nwe: ui:**	(water+ hot) pot	kettle
		ရေချိုငါး **re hkyui nga:**	(water + sweet) fish	fresh water fish
3.	(VN)N > NN	သင်တန်းခန်း **sang tan: hkan:**	(study + line)_{class} room	lecture hall
		သင်တန်းသား **sang tan: sa:**	(study + line) son	trainee
4.	(NN)V > NV	ကြက်ခြေနီ **krak hkre ni**	(chicken + foot)_{cross} red	red cross
		အတွင်းရေးမှူ **a-twang: re: hmu**	(inside + matter) regard as important	secretary
5.	(NV)V > NV	ငါးခြောက်ကြော် **nga: hkrauk krau**	(fish + dry) fry	fried dried fish
		ရေနွေးကြမ်း **re nwe kram:**	(water + hot) harsh	plain tea

	Pattern	Example	Component Meaning	Compound Meaning
6.	(VN)V > NV	မြင်ကွင်းကျယ် **mrang kwang: kyai**	(see + area) _{view} wide	panoramic view
		အိပ်ရာခင်း **ip ra hkang:**	(sleep + place) spread out	bed sheet

Table 8. Three-member Compound Nouns

It should be noted that the pattern of N +V is that of the clausal predication in Burmese. Significantly, this particular structure of nominal compounding demonstrates what we find at the clause and sentence level — that both these structures are nominal units. This supports the present thesis that clause and sentence units in Burmese operate with the similar conceptual and grammatical on nominal structures.

The matter of headedness also arises in these constructions. Forbes noted that immediate constituency did not necessarily follow juncture patterns. The grammatical head of the final nominalization sequence in a three-member compound often had close juncture whereas the first two elements which were semantically more blended and grammatically immediate constituents were often marked by open juncture. This is contrary to the iconic principle and another indication that phonology, grammar and semantics are not isomorphic, that is to say, not related constructionally one-to-one.

2.4.6 Min Latt

Writing in the 1960's under the structuralist influences of Prague, Minn Latt published a series of articles, one of which dealt specifically with the parts of speech in Burmese (1959). This is an informative set of articles, particularly as they display a Burman linguist struggling with the issues of categories of speech, with what a word is, and with a European-biased terminology which he ultimately rejects. The distinction between free and bound forms figures heavily in his categorization. Words are divided into *primary words* (morphemes) which are registered in the lexicon, and *word* or *word proper*, which are the grammatical forms. Not surprisingly, he concludes there is no isomorphism between grammar and lexicon. Each word class has both bound and free members. One aspect of his free forms is that "they may become a sentence all on their own (1959:323)." Thus, the term *free form* receives quite a different interpretation than from most Western linguists. Minn Latt's attempt to "Burmanize" linguistic categories is informative for the purposes of this study. First was his view that single, independent words could predicate, irrespective of being nouns or verbs. The pragmatic use of a single word as an utterance was a classificatory criterion. This observation is significant in the claim being made here that a predication of existence can underlie all nominals when used in speech.

Beyond these observations, one needs to append that Minn Latt focused on Colloquial Burmese, that he had a propensity for taxonomic units of ever-finer detail, and that he concluded with fourteen parts of speech and eight subcategories. Minn Latt's conclusions are listed in Table 9.

Component		Part of Speech	Sub–category
Lexical Words	1	Nouns	
	2	Pronouns	
	3	Attributes	
	4	Numerals	
	5	Verbs	
	6	Interjections	
Grammatical Words	1	Grammatical Prefixes	
	2	Numeratives	
	3	Rhyming Syllables	
	4	Auxiliary Verbs	
	5.	Verb Affixes:	a) Ordinary
			b) Emphatic
			c) Adjectival
			d) Adverbial
	6.	Interjection Affix	
	7.	Postpositions:	a) Auxiliary
			b) (— Proper)
	8.	Particles	a) Modification
			b) Syntactical

Table 9. Parts of Speech in Burmese According to Minn Latt (1959)

The distinction between bound and free forms appears to rely heavily on his classification of lexical versus grammatical forms. This distinction is so striking in Burmese, that one might say "Grammar is in the particles." They are the logical glue and the manifestation of cognitive operations. They function like the skeleton of a text to which is attached the flesh of the lexicon.[5]

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[5] In an informal experiment testing the cognitive salience of the postposition particles conducted by the author, a text was stripped of all lexical items, leaving only dashed line traces representing missing text, so that only the postposition particles remained — a kind of cloze test. Two speakers of Burmese were asked questions such as "What type of story is this? formal or informal?", "What is the author's occupation? What ethnicity?", "Why was this written?", "Was the author witness to the events?" "What gives you that sense?", "What is the author's attitude – to the reader? to the topic?", "Is there a point to the story?" "Where in the text does this occur?", "What

2.4.7 Pe Maung Tin

U Pe Maung Tin is a translator who worked with G H Luce translating the Glass Palace Chronicles, the early court histories of Burmese rule. As a grammarian he wrote a grammar in Burmese, which unfortunately has not been available for inclusion here. Nevertheless, in a published article he observed a number of relevant aspects of Burmese language that are significant toward the topic of nominalization. First, he states, "There are really only two parts of speech in Burmese, the noun and the verb, instead of the usually accepted eight parts (Pe Maung Tin 1956:195)." He further adds, "Burmese nouns and verbs need the help of suffixes or particles to show grammatical relation." It appears that U Pe Maung Tin has three classes of grammatical forms, nouns, verbs and postposition particles.

Regarding information structure, he notes that nominals right-shifted to the position immediately before the verb and which are unmarked for their semantic-grammatical role, without a postpositional, are regarded as 'more emphatic' (Pe Maung Tin 1956:193). This shifting can happen with subject or object nominals and results in a type of nominal incorporation. If it is the subject that is right-shifted, then the fact that the object occupies initial position is epiphenomenal. It is not the result of explicit 'fronting' as in European languages. The normal order with the postposition in place is shown in (16) and with the subject shifted to the right in (17).

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kind of story is this?", "Do you feel that the writer is someone you would like to meet?", "Where would you probably meet"?

The answers were surprisingly possible with such little information. From that informal investigation, it became obvious that postposition particles in Burmese carry not only local logic of the sentence and information structure, but also pragmatic information about the speaker-hearer interaction.

(16)

ခွေး သည် ကြောင် ကို ကိုက် ၏

hkwe: sany kraung kui kuik e

dog Nom cat O bite Nom/Sf

'the dog bites the cat'

(17)

ကြောင် ကို ခွေး ကိုက် ၏

kraung kui hkwe: kuik e

cat O dog bite Nom/Sf

'the dog bites the cat'

U Pe Maung Tin claims the right-shifted subject (into Pos 1 closest to the verb) is no longer a grammatical subject but when it occurs without post-positions but a construct he calls a *noun–verb*. In this type of construction, the verb incorporates the meaning of the nominal and functions as a semantic whole. Okell refers to these as 'tied nouns'. The sense is that the shifting position, the loss of the postpositional and the close proximity to the main verb results in the nominal being 'pull into' the sense of the verb. There is often a new meaning that results from this process, and although the new meaning is not predictable on the basis of the component parts, it is predictable for blending occur on the basis of the iconic principle of proximity promoting conceptual blending.

Another example of a complex word form is where the process is reversed according to U Pe Maung Tin resulting in a form he calls *verbal noun*. These are of two types: a) the more typical deverbal nouns formed by postpositional particles such as ခြင်: **krang:** , an action nominalizer, in word forms like စစ်ဆေးခြင်:

cac hce: krang: 'inspection' < (inspect +clean) + Nominalizer, ပွါေစြင်း **pwa ca krang:** 'propagation' < (swell + causative)+ Nominalizer, and b) the type of deverbal noun formed by the prefix nominalizer အ– **a-** as in the sentence အဆိုေကာင်း၏ **a-hcui kaung: e** 'the saying is good' (Nom+saying good), where အဆို **a-hcui** is the verb–noun from the verbal base of ဆို **hcui** 'to say'. This process would rightly be called nominalization, where as the former process would be the opposite, verbalization or denominalization.

U Pe Maung Tin's overall observations about Burmese are that it is a highly verb-prominent language and that suppression of the subject and omission of personal pronouns in connected text result in a reduced role of nominals. This observation misses the critical role of postposition particles marking sentential arguments and also of the verb itself being so marked.

Interestingly his predisposition is to highlight the verb, whereas the perspective of this study emphasizes the nominal. In constructions with postpositionals U Pe Maung Tin observed of the verb,

> "It makes the fullest use of suffixes to express not only the tenses but also other distinctive meanings, four or five suffixes being sometimes tacked on to the end. It makes compounds with other verbs ... enlarges its meaning by means of auxiliary or helping verbs... forms adjectives and adverbs... forms verbal nouns and noun-verbs and verbal noun-verbs... forms some of the most commonly used conjunctions... the Burmese sentence is dominated by the verb and verb-formations. (U Pe Maung Tin 1956:200)."

Given that there are basically two parts of speech as building blocks, and since much of the grammar is generated by compositional construction using the same two types of building material, it is reasonable to champion the verb as the

predominant form for it is present in many nominalizations. The key to the view of Burmese being structures by nominals is found in the role of the particles.

2.4.8 Okell

Okell (1969, 1994a, 1994b, 1994c, 1994d), a Burmese language lecturer at the School of Oriental and African Studies, University of London, presents one of the most thorough analyses of Burmese to date. Indeed his productivity benefiting Burmese language linguistics only increases. His earliest work on Colloquial Burmese (1969) distinguished two basic forms, types of 'units of meaning': words and particles. The first refers to lexical meaning and the second to grammatical meaning. Figure 18 demonstrates the membership of the six form classes within these two basic divisions.
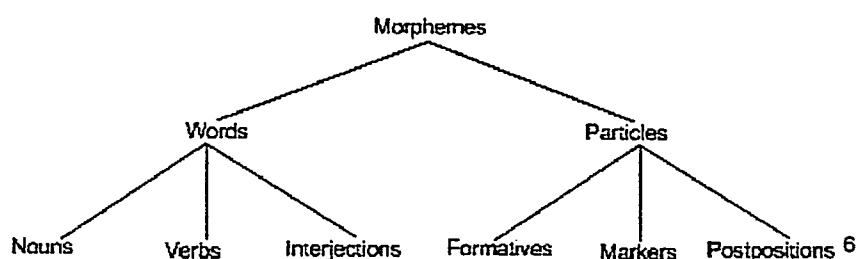
Figure 18. Basic Form Classes and Sub–Classes (Okell 1969:1)

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[6] Okell's Particles are divided into three classes - Formatives (the ɜə- a- nominalizing prefix, and an array of phonological process templates that carry lexicalized meaning), Markers (subordinating and coordinating particles), and Postpositions (sentence-medial and sentence-final pragmatic particles).

For constructional types, Okell follows an approach similar to Cornyn's (Figure 17) divisions of Form, Expression, and Sentence but with a two-part division of Word and Expression presented in Table 10 below.

One difference between Okell's 1969 reference grammar and his 1994d language learner's grammatical outline is that in 1969 his approach was more abstract reducing the various constructions into two basic forms, his categories were more elaborate, and since it was a full reference grammar he made many distinctions of pattern variation critical for a comprehensive analysis of Colloquial Burmese. The later work is specifically for language learning and the grammar outline (1969: 209-246) aimed to facilitate that purpose. While both approaches are valid for their different purposes, the earlier grammar dealt with the nature of Burmese categories on their own terms and results in something quite different from the standard European language perspective and a different form of grammatical hierarchy (Figure 16). Okell's Word classification is the unit of the prototypical Noun or Verb, whereas the Expression classification is the unit of predication. It should be noted that simple or complex words, with or without a particle, may form pragmatic predications.

Classification	Types	Examples
Word	Simple word	word alone
	Compound word	word + word (+ word..)
	Derived word	word + formative
Expression	Word	word (simple, compound, derived) with or without markers and/or postpositions, used as a constituent element in a phrase, clause or sentence
	Phrase	expression (subordinate or coordinate) + head (co–head)
	Clause	Noun Clause: Independent, Dependent.
		Verb Clause: Independent, Dependent.
	Sentence	One Independent Clause optionally with other Dependent Clauses.

Table 10. Constructional Units of Burmese (Okell 1969:2, 169, 170)

The types of classifications used in the 1994d grammatical outline are more like the traditional grammatical hierarchy: noun phrase and verb phrases (word units with 'suffixes'), clauses (subordinate and relative) and sentences. A slot–filler approach is taken with regard to structural patterns, and the role of particles ('suffixes') in relation to the appropriate constructional types are displayed. Okell (1994d:212-213) takes an innovative approach to the rather complex embedding patterns of natural Burmese by developing the terms 'inside the phrase' and 'outside the phrase' to refer to the lowest level of immediate constituents in the former and then, in the latter, to the construction in which the first pattern is a constituent structure. These patterns typically refer to the structured use of particles. 'Outside the phrase' refers also to the sentence final pragmatic particles ('suffixes' in Okell's system). The following example in Table 11,

adapted from Okell (1994d:212-13) demonstrates this way of handling some of the recursive embedding structures of the Burmese sentence.

Out-side:	Noun phrase 1			suf fix					Verb Phrase		suf-fix
Inside:	Noun phrase 1					Noun phrase 2			Verb phrase		
	noun			suf fix		noun		suffix	verb	suffix	
	noun	noun				noun	noun				
		verb	noun								
	ကျနော့	မိတ်	ဆွေ	–	လဲ	ဂျပန်	ပြည်	က	လာ	တယ်	လေ။
	kya.nau	mit	hcwe	lai:	gya.pan	pyany	-ka.	la	-tai	- le
	I (male)	love	relative	also	Japan	country	S	come	Nom/ SF	Sf
"My friend comes from Japan, as well, you know."											

Table 11. Representation of Okell's Inside/Outside Phrase Structure

Okell's presentation of the generalized phrase structure rather than the role a specific constituent played in the sentence (i.e. complement clause, derived noun reflexive complement) is an advance toward generalizations of the type drawn in this study. By naming a construction by its lexical form (e.g. noun phrase or verb phrase) the role of the particles is missed. The example in Table 11 shows that the particle is the unit structuring the embedding. One solution is to recognize that the lexical form is not the head of the construction, but rather, the particle. What appeared as a linear stacking up of particles at the end of a noun or verb phrase is as Okell demonstrates a higher level of constituency. By taking a non-linear view of constituency beyond the immediate phrase, we find a repeated order, or rule of ordering, of the Burmese sentence as a whole. These ordering patterns extend not only to the sentence, but also beyond and represent

a conceptual framework which operates as a default pattern of Burmese grammar.

2.4.9 Wheatley

Wheatley (1982), working under the University of California at Berkeley, conducted field research in Burma to produce a doctoral dissertation on Colloquial Burmese grammar. He divides Colloquial Burmese words into two classes: lexical and functional words. The following chart summarizes his classificatory schema.

	Lexical Words	Functional Words
1	Nouns	Particles
2	Pronouns	Intermediate Forms
3	Verbs	
4	Adverbs	
5	Interjections	

Table 12. Word Classes of Burmese (Wheatley 1982)

The basis of classification is unapologetically justified as circular, with lexical categories based upon the type of functional word with which they occur and functional words classified according to the lexical class they accompany. Additionally, function in constructions is also a basis for categoriality. For instance, for nouns, "a word that can stand as head of any constituent other than a manner adverbial or verb phrase" (1982:84). Further empirical tests of nounhood are the capacity to be followed by a quantifier phrase or a nominal postposition. Similar tests are made for pronouns, verbs, and adverb. No category of adjective is pos-

ited, since verbs account for this type of modification of nouns. Wheatley determined five categories of lexical words and two of functional words, seven in all.

Wheatley's categorization does not limit his observing the cross–categorical nature of Burmese word forms. Words classified as adverbs in Burmese are typically derived from verbs via a deverbalizing process of either repetition or prefixing with the nominalizing prefix အ- a-. Recognizing the intermediate status of the adverb between the noun and the verb, Wheatley notes that it has the status similar to "gerunds and (other) derived nominals in European languages, which behave like nouns in their ability to be the head of a noun phrase, but verbs in their ability to take complements" (1982:87). It is just this intermediate status between word forms that nominalization captures.

2.4.10 Myanma Language Commission

The government authorized, Myanma Language Commission (MLC), Department of Higher Education produces in Burma a series of Burmese graded grammar booklets for Burmese schools. Using their grammar of Volume 1, No 1 (1999), and Volume 2, Number 5 (1994), the following classifications of parts of speech are taught to Burmese schoolchildren:

	Part of Speech	Burmese	Types
1	Noun	emrf	singular, plural, abstract, mass, natural, Compound, Verbal and attributive.
2	Pronoun	emrfpm:	personal, demonstrative, interrogative and numeral
3	Verb	jud<m	action, event/equative, quality, existence
4	Adjective	emr0daooe	qualitative, demonstrative, enumerative, interrogative
5	Adverb	jud<m0daooe	Manner
6	Division Particle	0dbwf	sentence final, phrase or clause final
7	Conjunction	orå!$	coordinate and subordinate
8	Function Particles	ypPnf:	plural, relative clause, restriction on an object, restriction on an action, demonstrates speaker's bravery, interrogative, negative
9	Exclamation/ Interjection	tmarÉdwf	emotive words registering shock, pity, surprise, wonder, fear, unexpected events.

Table 13. Parts of Speech Recognized by the MLC

It should be noted that the official Burmese position on parts of speech follows Indo-Aryan, Pali traditional categories generally. This may be due to the prestigious position of Pali scholarship historically and to a European educational cultural overlay where similar types of linguistic categories are preferred. The Myanma Language Commission's categories basically agree with Taw Sein Ko's analysis.

2.4.11 Myint Soe[7]

The recent University of Oregon dissertation by native Burman linguist, Myint Soe (1999), employed a functional/semantic linguistic model to present a refreshingly modern grammar of Colloquial Burmese. Regarding word classes Myint Soe agreed with Stewart (1936) that there are two major lexical word classes – the noun and the verb. Grammatical morphemes (particles) as a class were sub-classified according to their position in the noun phrase, verb phrase and clause. The functional grammatical relation of adverb and adjective is treated as the derived nominal form.

Three type of nouns are distinguished, the simple, compound and derived noun. Of the simple there are two subtypes — monosyllabic and disyllabic. Four types of compound nouns are distinguished based upon the lexical classification and the type of semantic head within the compound (Myint Soe 1999:22) and are displayed below in Table 14 together with their distinguishing characteristics. Derived nouns are formed either by 1) prefixation with အ– **a-** +Verb to form deverbal nouns, or by 2) suffixation of a clause with the တာ **ta** (realis) or မှာ **hma** (irrealis) nominalizing postposition particle of Colloquial Burmese.

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[7] There is no surname in Burmese proper names. A two or three word name typically consists of positive character attributes arranged in free order. The title of U (uncle) is honorary and roughly the equivalent of 'Mr.' in English. The female title of Daw (aunt) is the equivalent of 'Mrs.' Titles in publishing often become part of the *nom de plume*. Additionally out of the 'requirement' to have a surname some have opted to list in bibliographies one of their names as if it is a surname. Thus Myint Soe lists his own name as 'Soe, Myint' in his bibliography. Where an author uses this style, it has also been followed here. Otherwise alphabetical listing is by the first name.

	Type of Compound Noun	Characteristics	Semantic Head	Example
1	N+N	coordinate	with no head	နည်း လမ်း nany: lam: way + road = method
		subordinate type	attribute + head	ဆီ မီး hci: mi: oil+ fire = oil lamp
2	V+N	Transitive verb usually	resembles reduced relative clause	ရေ သောက် မြစ် re sauk mrac [[water drink] root] = tap root, (N+V)+N
3	N+V (transitive)	N is usually the semantic object		ဆန်ပြုတ် hcan pyat rice boil = rice gruel
4	N+V(stative)	Close juncture		ရေခဲ re hkai: water hard = ice

Table 14. Types of Compound Nouns According to Myint Soe

Myint Soe's analysis covers a vast array of topics demonstrating insight, particularly into the semantics and relative ordering of particles. He posits word, phrase (noun phrase and verb phrase), clause — transitive and intransitive, nominal complement, sentential complement, adverbial relative, and adverbial nominalized clause types, and the simple and complex sentence.

As a lead into a discussion about phrase, clause and sentence, a summary of Myint Soe's grammatical constructions will be presented here. This approach, as mentioned above, is functional/semantic and therefore the types of categories used and distinctions made have been on the basis of semantic function. In contrast, such distinctions are not being made in this dissertation, since

the aim is toward a basic framework of Burmese grammar and the role of nomi-
nalization in that framework.

On Phrase, Myint Soe (1999:39) presents a helpful chart outlining the
structure of the Noun Phrase. This chart is reproduced in an adapted form in Ta-
ble 15 to characterize succinctly his point of view. It will be used to compare the
functional constructions with the nominal structural view of Burmese grammar.

Restrictive	Attributive₁		Attributive₂		Quantity		
Demonstrative	Active V	NP	Stative V		Number	Classifier	Quantity
Genitive phrase	NOM.V$_{stative}$	HEAD	NOM.V$_{stative}$	Plural mkr.			
Complement							
Relative clause							

Table 15. Noun Phrase Structure

The Verb Phrase is one of the areas which will not be addressed in this
dissertation, since the focus is on nominals, but it will be helpful to demonstrate
other scholars' categories and viewpoint. The following table is an adaptation
from information summarized from Myint Soe's work (1999:120). The column or-
der follows the syntagmatic ordering. The polite particle is represented twice as it
can be found in either position, but only once in a verb phrase. It should be noted
that the post-head particles move in a direction out toward the speech situation.

Pre-head Auxiliaries	Verb Head	Post-head Auxiliaries	Particle polite	Particle aspect	Particle polite	Particle attitude
36 possible versatile verbs		42 possible versatile verbs	polite ပါ pa	4 aspects	polite ပါ pa	3 parti-cles

Table 16. Verb Phrase Structure

Again employing an adaptation of Myint Soe's charts as a basis, it will be helpful to present here the basic framework for the independent clause (1999:129). It should be noted that from the Verb Phrase and the Independent Clause below that the elements and relationships to the head of the particles is conceived as linear, a placement in the horizontal string, an 'affix ordering chart' view to the relations of the particles to the main verb.

Verb Phrase	Particles speech act, tense, polarity	Particles attitude
Verb Phrase (see Table 16)	Positive Declarative (Nomi-nalizer သည် sany)	Concessive, gentle
	Negative Declarative	Gentle
	Positive Imperative	Manly, male
	Negative Imperative	Nonchalance
	Horatative	Of course, naturally
	Interrogative	
	Negative Interrogative	

Table 17. Independent Clause

Finally, the dependent clause, called the Independent Nominal Sentence is presented in Table 18, adapted from Myint Soe (1999:130). It is because his analysis is clear and his charts are conceptually precise that his work is being

represented here as the more traditional linguistic approach to categories in

Burmese.

Verb Phrase	Particles speech act, tense, polarity	(Particles attitude)
Verb Phrase (see Table 16)	In Colloquial Burmese hta/hma	polite
	In Formal Burmese သၫ္ sany ဟၫ္ many	indeed
		gentle
		So, in fact he did VP
		'VP really?
		of course

Table 18. Independent Nominal Sentence

While the focus of this dissertation is limited to the classification of basic

word forms and types of nominals, it is important to deal with how others have

handled the grammar of Burmese and the way in which the proposed under-

standing of structural functioning of nominals underlies Burmese grammatical or-

ganization.

2.4.12 Summary

The above summaries of various scholars of Burmese indicate an increas-

ing recognition, particularly among linguists whose purpose is more theoretical

than the applied purpose of language teaching, that there are only two lexical

word classes, noun and verb, and one general grammatical form class of parti-

cles. The next section will deal with the proposed nature of word form categories

from the present approach regarding nominalization. Then follows a brief summary presentation of the basic principles of grammatical organization for ontological nominalization and a discussion of the constructional forms of Word, Expression and Sentence.

2.5 Current Approach to Word Categories

In view of the preceding discussion, the approach adopted here is presented in the following sections, first regarding basic word forms and the cognitive basis for these categories. The following sections deal with the issue of adjectives and adverbs demonstrating that both forms are nominals within the pattern of the complex word. A discussion of types of particles follows.

2.5.1 Basic Form Categories

The lexical word in Burmese is regarded as a unitary type of grammatical form with two members, Noun and Verb. The cognitive semantic primitives underlying these two members are those of proto-typical 'Thing' and proto-typical 'Relation'. Distributionally, a third form class is posited for Particle. The function of the Particle form class could as well have been abstracted to Relation, and while this is the preferred analysis, nevertheless for the sake of connecting to previous grammatical analyses of Burmese and in order to limit the risk of misunderstanding, a concession is elected here to preserve a three categories of word level forms: Noun, Verb and Particle and not to conflate Verb and Particle.

Cognitive Class:	Thing	Relation	
Ontological and Grammatical Forms:	Noun	Verb	Particle

Table 19. Burmese Abstract Word Level Form Classes

As there are two types of Words, Thing and Relation, there are also two levels of Words distinguished in Burmese. There are *basic* words, in contrast to *derived* words, following the traditional distinction between inflection and derivation, as in the latter some operation switches the form class.

The Relation that is a Verb is a lexical verb, whereas the Particle is a type of grammatical verb. The Verb functions both externally (from Thing to higher levels) and internally (from itself to Thing) in its construction. There are two classes of verbs, stative and dynamic. Many verbs fall somewhere along a spectrum of state to dynamic — highly active verbs involving kinetic contact and a path of motion. The role of transitivity as a property of verbs is minimal, being a byproduct of sentence construction. Transitivity is indicated by explicit postposition particles of source and goal on nominal sentential arguments, whose inclusion signals a trajectory of motion or tension between the poles, or by other verbs with meanings such as 'put' or 'hit' whose scope of predication is higher than the 'main' verb. Transitivity is also a feature of text structure in Burmese (see Section 4.1.3.3.2) (Hopper and Thompson 1980; DeLancey 1987).

Burmese has been characterized as ambi-transitive (Matisoff 1976) since the nature and behavior of verbs does not conform to typical transitivity systems.

For instance, proto-typically transitive verbs such as 'hit' or 'kill' in Burmese may be used in such a way that there is nothing distinctive about the verb itself that syntactically requires specific nominals or 'case role marking' different from proto-typical intransitive verbs such as 'sleep' or 'remain'. Neither highly active, kinetic verbs nor highly inactive, non-contact verbs require overt manifestation of sentential subject or object nominals. In fact, it is rather common for subjects to be null after first mention in text until a significant discourse juncture. Objects may be null as well. The verb and what has been called the verb phrase are the somewhat more 'obligatory' parts of a clause, but as we shall see the Burmese sentence or utterance need not have a verb, nor little else that one could call a completed final clause. That apparent sentence fragments can be grammatical supports the notion of higher order nominals in an abstract nominal template, or an ontological structure.

The Particle in Burmese functions on multiple levels in the grammatical hierarchy. It acts context-sensitively depending upon the type and level of constituent it is relating from phrase to textual functions. It also functions internally to the unit of which it is the head. One of the most important external functions of the Particle in the current analysis is the function of Particles in creating 'Things', that is reified textual objects — nominalization, no matter what the other local grammatical or semantic function of the particle. A recent publication by Okell and Allott (2001) describes the grammatical functions of hundreds of Burmese particles at local levels (word, phrase, clause, sentence). While these unique functions inform this analysis, it is not specifically the concern here to specify the semantic and grammatical functions of individual particles.

The Verb function is constrained to a more local relationship, internal to the construction of which it is a constituent. The Verb is regarded as a basic level

category within the Relation proto-type, together with the Particle. The principle distinction between the two kinds of Relations are that the open class Verb a) is registered as a main entry in the mental lexicon, b) can fill the main verb position of a clause, c) combines to form lexical compounds of various types, and d) predicates in the classical sense. The closed class Particle a) is not found in the mental lexicon, b) is normally dependent upon the presence of an open class form or rarely another Particle, and c) predicates as a grammatical operator. The Verb category can be sub-classified into types such as stative, active, motion, process and so forth, all of which may be useful for delimiting co-occurrence restrictions and specifying semantic content, but for the purposes of this study the generic Verb will be all that is necessary to demonstrate the basic framework of Burmese grammatical organization and text structure.

Noun is the grammatical category manifesting the proto-typical cognitive category of Thing. Semantically, Thing may be the most basic and underived semantic component, not derived by external grammatical processes. That is, there are certain words in Burmese that are recognized as Things apart from how they are used in larger constructions. The first example of these would be physical objects (လူ **lu** person, အိမ်: **im:** house, လယ် **lai** paddy field, စာအုပ် **ca up** book), pronouns (သူ **su** he, ဦး: **u:** Uncle, ငါ **nga** I, ကျွန်တော် **kywa nau** royal–slave), foreign abstract nouns (မေတ္တာ **metta** love, တရာ: **tara:** law, စိတ် **cit** mind). Nouns are named and implicitly predicated as existing. The nouns in Burmese are in their underived form much less ambiguous than those in English. When used in constructions, categoriality may change due to the grammatical nature of the construction, rather than to an explicit particle or prefix. A word form that occurs in the position of a verb, with verbal particles following it is being used as a verb. The same verb when followed by particles that characteristically follow prototypi-

cal nominals has presumably undergone "silent" zero derivation and is more likely to be regarded as a nominal use. At the basic level of underived forms, categoriality is fixed and forms the entry in the mental lexicon. As the constructional process of grammar proceeds, categoriality becomes constructional as successive levels of constituency combine into larger structures within the sentence or text.

A consequence of recursive embedding is that the Noun or Verb word frequently fills roles in super-ordinate constructions, such as a complex word, and in what others have referred to as a phrase or clause in Burmese. Adjectives and adverbs as categories that exhibiting characteristics of nouns and verbs are analyzed at a constructional level rather than as basic units of speech.

2.5.2 Adjectives as Nominals

A discussion of adjectives is important for three reasons. First, it is important to demonstrate how what others have classified as an adjective is dealt with in this approach. Second, a discussion of adjectives demonstrates and reinforces the strong underlying grammatical process of *headedness*. Third, an apparent aberration of non-final heads for one pattern of 'adjective' is accounted for by different means.

Adjectives in traditional Burmese grammar are word classes that precede the head nominal and are marked with the particle ေသာ **sau:** (Myanma Language Commission 1999:29).

Traditionally, adjectives are of the type : ရဲ့ရင့်ေသာ **rai: rang. sau:** (brave + mature+ Att/N)= 'brave'; ေကာင်းေသာ **kaung: sau:** 'good' ; ေြဖာင့်တန်းေသာ **[hpraung. tan:] sau:** (straight + in a straight line + Att/N)= 'straight'. These 'ad-

jectives' are actually constructions with a postpositional particle that nominalizes the verb, producing a structure of a compound verb [V] or [V+V] which is nominalized by ေသာ **sau:** resulting in a deverbal noun N. The ေသာ **sau:** construction is a dependent nominal structure (see Section 3.3.4 for the သည် **sany** template, and 3.3.4.5 for the functions of ေသာ **sau:**) and usually precedes a head nominal as a modifier. The modified structure of the deverbal noun juxtaposed to the head nominal produces the N+N structure of a *compound noun* with the first N being the deverbal noun and the second the head of the compound N. This structure is often referred to as a noun phrase in other grammars; it is Myint Soe's Attributive$_1$ + NP Head in Table 15. To make the distinction between these two interpretations of the structure the example of the phrase 'brave solider' is used. The prenominal modifier constructions ရဲရင့်ေသာ **rai: rang. sau:** ' brave' with a head nominal of စစ်သား: **cac sa:** (war + son)= 'soldier', produces the phrase ရဲရင့်ေသာ စစ်သာ **rai: rang. sau: cac sa:** 'brave solider'.

Myint Soe	
Noun Phrase	
Attributive$_1$	HEAD
Active V NOM.V$_{stative}$	NP
brave+ mature Nom	solider
'brave solider'	

Hopple		
Compound Nominal		
N		N
V+ V	Att/Nominal	N +N
brave +mature	sau:	war+ son = soldier
'brave solider'		

Table 20. Noun Phrase versus Compound Nominal Analysis

The difference between the two analyses is of constructional level, in one there is a new type of construction and in the preferred analysis what we have is another manifestation of a complex word. The relationship of modifier and head is present within simple nominal compounds, so this is not something that is

unique to the phrase level in Burmese. In the two- and three-member nominal compounds presented in Table 7 and Table 8 above, the head of the compounds is the second element and the first functions usually as some type of modifier. The notion of grammatical constituency versus semantic constituency was presented in Chapter 1, Figure 15. In the above example, conceptual blending as a process active in compounds[8] could transform this compound into blended whole concept, but such as derivation is inhibited by the presence of the particle ေသာ **sau:**. Intervening 'bulk', especially grammatical bulk, delimits the blending operation and making it less likely that semantic constituents will differ from the grammatical.

That the particle ေသာ **sau:** is an allomorphic variant of the sentence final particle သည် **sany** is well recognized by Burmese grammarians (Judson[9] 1945:40; U Pe Maung Tin 1956:196; Stewart 1936:191; Lonsdale 1899:223). In its attributive role, it also retains the nominalizing function of သည် **sany**. It manifests the same patterned propensity of Burmese to form verbal and nominal modifiers (adjectives and adverbs) by the derivational process of nominalization. "The equivalents of adjectives and adverbs are obtained by subordinated uses of nouns and verbs" (Stewart 1955:10) (see Section 3.2.3.3.1.1).

The second means of overtly forming adjective-like modifiers of nominals is via the nominalizing prefix အ– **a-** attached to stative verbs. The result is a nominal modifier that follows the nominal: အိမ်အဖြူ **im a-hpru** (house + Nom+

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[8] Some have taken exception to conceptual blends becoming lexicalized. The view presented here is that blending is not compositional, but constructional. "Blending is a general cognitive process that runs across cognitive operations. It is not limited to conceptual structures expressed by two-word juxtapositions any more than it is to conceptual structures expressed in metaphors..." (Turner and Fauconnier 1995).

[9] Judson's grammar was first published in 1866 and subsequently reissued under different revisions noted only by the date.

white) = 'a white house', လူအကောင်း **lu a-kaung:** (person + Nom + good)= 'a good person'. Verbs used like this as nouns are abstractions used in a concrete sense. The verb ရှူး **ru:** 'crazy' when nominalized with အ– **a-** becomes အရှူး **a-ru:** 'madness', but when combined with the 'head' noun for person the result is a compound noun, as in လူ အရှူး **lu a-ru:** (person + Nom + mad) = 'person who is mad' (referential). It is also possible to form an adjectival sense with သော **sau:** but the sense has a slightly different profile of the situation with ရှူးသောလူး **ru: sau: lu** (mad + Att/N + person) = 'crazy person' (non-referential). The sense here is that the quality of madness or craziness is being asserted as a property of the person, whereas the အ– **a-** nominalization attributes the quality more concretely and therefore with a greater sense of referentiality. Extending this discussion a bit further, it is also possible to reduce the အ– **a-** nominalized form to လူ ရှူး **lu ru:** (person + crazy) = 'crazy person'. This form appears to come full circle in the derivational process of nominalization by returning to a reduced clausal predication, a form of N+V. Rather than being broadly predicative (to say something about something else) the sense here is clearly nominal as a concrete whole or referential as a unit. It therefore, as a nominal, *infers* rather than predicates. This inferentiality of the nominal is what contributes to the sense of referentiality. Since all clauses eventually are factored as nominal units (to be discussed below), it is not strange that a clause so derived is nominal.

Deletion of the nominalizing particle also may occur with သော **sau:** nominals. When this occurs the iconic principle of reduced grammatical distance (no intervening particle) reduces the predicative property and allows a semantic profile with 'closer' blending of the property to the head nominal. This form does not occur with ရှူး **ru:** 'crazy' but is found with ရေခဲ **re hkai:** (water + hard) = 'ice', which has derived from ရေ အခဲ **re a-hkai:** (water + Nom + hard) = 'ice'. Again this

differs from the ေသာ **sau:** derivation of a predicated property ခဲေသာေရ **hkai: sau: re** ([hard+Att/N] water) = 'congealed water'.

Various attributive patterns with nominals using the stative verb မျာ: **mya:** 'many' and ေရ **re** 'water' are displayed in (18). The base form as a simple predication is given in (18a), followed by the form with ေသာ **sau:** as a subordinate clause in (18b), although it is treated as a nominalized verb as modifier in this study. The other forms (18c-e) demonstrate other constructions and the slight semantic differences between the different constructions. In each case the analysis indicates either nominal compounding or clause predication

(18) 'much water'

	Burmese	Transliteration	Gloss	Meaning	Structural Form
a)	ေရ မျာ: သည်	**re mya: sany**	water + many + Nom	'much water' or ' There is alot of water'	predication
b)	မျာ:ေသာေရ	**mya: sau: re**	[many + Nom] + water	'much water' or 'water characterized by being much'	subordinate clause as modifier noun
c)	ေရအမျာ:	**re a-mya:**	water + [Nom + many]	'much water'	compound noun
d)	ေရအမျာ: မျာ:	**re a-mya: mya:**	[water + Nom + many] + many	'(very) much water'	predication of compound noun
e)	ေရမျာ: မျာ:	**re mya: mya:**	water + [many+ many] [N [V V]]	'much water (all over)'	predication with reduplicated verb

One of the distinctive differences between stative and dynamic / action verbs is manifest in the attributive construction of nominals. Stative verbs can occur pre- or post- nominally to the head of the modified construction. More dynamic verbs retain the properties of predication which when attributed to the

head nominal results in a form much like a relative clause. The predicative properties are still prominent even when nominalized. Therefore, the attributive clause as modifier is always pre-nominal and not immediately compounded — compounding takes place after a number of cycles of constituency. Dynamic verbs being predicated as properties of the nominal normally take the nominalizer သော **sau:**. If the dynamic verb is being predicated as an action of the head nominal it may take other allomorphic variants of the nominalizer သည် **sany** (သည့် **sany.** or သ **sa.**) and be realized in the form also called a relative clause. Both သော **sau:** and သည့် **sany.** clauses as modifiers of nominals have been referred to a relative clauses (Okell 1994d:228). In (19) the dynamic verbs 'waken, inform, cause' together with the presence of an explicit object increases the sense of transitivity, the head nominal being the semantic agent, even though သော **sau:** is used. The agent can also be expressed in the modifier clause (20).

(19) မျိုးချစ်စိတ်နှိုးကြားစေခဲ့သော အမျိုးသားနေ့

myui:hkyac cit nui: kra: ce hkai.sau: a-myui:Sa:ne.
kind love mind wake inform Cs Pr Att/N kind son day
'National Day which caused the awakening of our sense of patriotism'.

(20) ကျောင်းသားများ ဘွိုင်းကောက်လုပ်သောနေ့

kyaung:sa: mya:bwuing:- kauk lup   sau: ne.
school son   many   boycott   do   Att/N day
[students   ]
'the day on which the students held a boycott'

This 'relative clause' construction may seem out of place in a discussion of adjectives, but this is not the case. The function of the whole clause is attributive, as displayed by the use of သော **sau:** and not သည် **sany.** As we have seen above, သော **sau:** distinguishes the sense of modifier or attribute. This is to say,

the subordinate clause is being attributed as a property of the head nominal rather than as an action of that nominal. The use of သည် **sany** with dynamic verbs (21-22) makes the predication more definitive or declarative in relation to the head nominal.

(21) ပါလာသည့်ဆေးပေါ့လိပ်

pa	la	sany.	hce:	pau.	lip
include	come	Nom (Pos)	medicine	include (Pos)	roll up
	brought		[	cheroot	]

'the cheroots brought with him' or 'the cheroots which he brought with him'

(22) လက်စသတ် လုပ်ပေးနေရသည့်အတွက်

lak	ca.	sat	lup	pe:	Ne	ra.	sany.	a-twak
hand	begin	kill/stop	,work	give	Be	De	Nom	Pur
[finish	something	]	[have to	work for	someone	]	that	for

'the purpose of *working for him to completion*'

Stative verbs are found with သော **sau:**, as described above, but also following the nominal as in: ရေနွေး **re nwe:** water + warm 'hot water'; အရောင် ရင့် **a-raung yang.** (color+ dark) 'dark color'; တိုက်ကြီး **tuik kri:** (building + big) 'big building'; ဆရာကြီး **hcara kri:** (teacher + big) 'great teacher'. These same N+V[stative] forms can appear with the အ– **a-** nominalized counterpart with basically the same meaning တိုက်အကြီး **tuik a-kri:** (building + Nom + big) 'big building' making the construction a compound noun N+N. As noted earlier, the same general meaning can be framed with သော **sau:** - ကြီးသောတိုက် **kri: sau: tuik** (big + Nom/Atr + building) 'big building'.

It appears at first glance that the head-final typology is violated in this construction, and while there are three ways to formulate the attributive relation, the regular N+V construction is, in fact, a reduced clause pragmatically conventionalized into a whole concept. Without the clause final marker သည် **sany**, or one of

its variants, the attributive relation is not highly predicational[10]. Stative verbs are not strongly predicational or assertive even when they are the main verb in a sentence. The three constructions form a cline of attribution with varying degrees of nominality or predicability.

Nominal	←		→	Verbal/ Predicable
N အ– a- + $V_{[stative]}$	N $V_{[stative]}$	$V_{[stative]}$ + သော sau N	$V_{[stative]}$ + သည်. Sany. N	N $V_{[stative]}$ + သည် sany (or variants)
တိုက်အကြီး tuik a-kri: building + big 'big building'	တိုက်ကြီး tuik kri: building + big 'main building'	ကြီးသောတိုက် kri: sau tuik big + Nom + building 'big building' (quality of the building)	ကြီးသည်.တိုက် kri: sany. tuik big + Nom + building 'building which is big' (predication of the building)	တိုက်ကြီးသည် tuik kri: sany building + big + Nom 'the building is big' (statement about the building)

Table 21. The Spectrum of Nominality of Attributive Constructions

2.5.3 Adverbs as Nominals

Adverbs typically demonstrate a mixed categoriality unlike other lexical classes and universally tend to be *derived* from other noun, verb or adjective words (Givón 1984:77). The derivational path often determines their semantic

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[10] At first glance, to say the sentence final nominalizer သည် **sany** marks a construction as more predicational seems like a contradiction of function. Yet, by the presence of သည် **sany** the construction is elongated (not iconically reduced) and therefore blending of the concepts into one whole concept is less likely. Also, the presence of သည် **sany** indicates a boundary of a unit of perception, which though that unit is a nominal, when it separates the stative verb unit from the head N, then it does not immediately bind to the head nominal but separates it and invokes a sense of predicating the verb of the nominal unit.

and morphological characteristics. Such is the case with Burmese 'adverbs'. What has been characterized in other grammars of Burmese as adverbs are analyzable as double-verb modifiers to the matrix head verb or as derived nominals in a nominal compound, each depending on the derivational process used in the construction.

Adverbial concepts are normally formed from a base verb, which is reduplicated (e.g. မြန်မြန် **mran mran** fast + fast = 'quickly') and situated in the modifier position immediately preceding the matrix verb, or from a verb stem that is nominalized with the အ– **a-** nominalizing prefix (e.g. အမြန် **a-mran** Nom + fast= 'quickly'). Another variant, though less common, is with the nominalization process of the တ– **ta-** prefix (e.g. တမြန် **ta- mran** 'quickly') (see 2.2 above). The overt nominalization process operating in adverbials must be accounted for. The current analysis acknowledges 1) the extensive process of nominalization and the way in which this process is consistently reflected in the wider patterns in the language as a whole and 2) does not need to posit a separate form class for adverbials. It is the construction and the semantic profile that contributes the sense of manner, which is the basic semantic function for what have been classified as lexical adverbs.

Adverbials are shaped on the structure of a basic clause (23a) by the addition of the features just described and exemplified in (23b–e).

(23)   a. **unmodified action clause**
မောင်လှဝင်း   သည်   ကျောင်း   သို့   သွား   သည်။

maung hla. wang:	**sany**	**kyaung:**	**sui.**	**swa:**	**sany**
Maung Hla Win	Nom/Top	school	O	go	Nom/Sf

'Maung Hla Win went to school.'

b. မြန် **mran** as a doubled verb of manner

မောင်လှဝင်း သည် ကျောင်း သို့ မြန် မြန် သွား သည်။

maung hla. wang:	sany	kyaung:	sui.	mran	mran·	swa:	Sany
Maung Hla Win	Nom/Top	school	O	fast	fast	go	Nom/Sf

'Maung Hla Win quickly went to school.'

c. မြန် **mran** as a nominal complement of manner

မောင်လှဝင်း သည် ကျောင်း သို့ အမြန် သွား သည်။

maung hla. wang:	sany	kyaung:	sui.	a-mran	Swa:	sany
Maung Hla Win	Nom/Top	school	O	fast	Go	Nom/Sf

'Maung Hla Win quickly went to school.' [Literally: MHW goes fast to school.]

*d. မြန် **mran** not as a verb chain, or sequence. (ungrammatical)

မောင်လှဝင်း သည် ကျောင်း သို့ မြန် သွား သည်။

maung hla. wang:	sany	kyaung:	sui.	mran	swa:	sany
Maung Hla Win	Nom/Top	school	O	fast	go	Nom/Sf

*'Maung Hla Win quickly went to school.'

e. မြန် **mran** as the main verb, **swa:** as subordinate clause

မောင်လှဝင်း သည် ကျောင်း သွား သော အခါ မြန် သည်။

maung hla. wang:	sany	kyaung:	swa:	sau:	a-hka	mran	sany
Maung Hla Win	Nom/Top	school	go	Nom	Nom-time	fast	Nom/Sf

'Maung Hla Win went quickly to school.' [Literally: When MHW went to school, (he) quick.]

The structural difference between the (23a) and (23b) is the addition of a doubled verb of manner, မြန် **mran** 'fast', which functions to qualify the action of the matrix verb 'go'. It does this in the same way as compounding or doubling, similar to that found in nominal forms. In (23b) the 'adverb' functions as the first pair of a compound — in this case, [VV]+V. The normal, balanced form of a compound is V+V or VV+VV. The first member (or set) of the doubled compound functions in a kind of qualifier or temporal antecedent relation to the final verb. This is due to the head-final nature of Burmese. The final, matrix verb typically

has greater scope and focus in the sentence as a whole, whereas the preceding verb or verb compound has a sense of prior temporality in a logical or chrono-logical sequence in reference to the matrix verb, rather than to the sentence. The preceding verb generally has a less focal part of the overall action. Its sense of qualifying the verb tends to be a part of the semantics of the situation.

It is also true that the doubled verbs can appear as the main verb of the clause: ကြီးကြီး�’ **kri: kri: bhai:** (big +big of course) "It's really big!"; ပြည်းပြည်း ေနဲ့ **prany: prany: nau:** (slow+slow ok?) "Slowly, ok?" They also appear in the imperative mood: မြန်မြန်လိုက် **mran mran luik** (fast+fast Rev) "Get out of here fast!" This data happens to be Colloquial Burmese as such use of stative verbs is less formal.

The structure as the 'adverb' as verb is demonstrated in the following fig-ure.
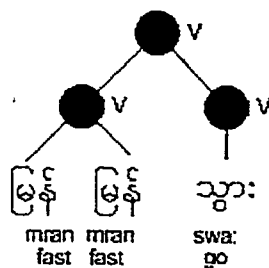
Figure 19. Adverb Analyzed as a Verbal Compound Construction.

Stative verbs are more restricted to manner and cannot combine as a verb sequence (23d). There are also typical frozen expressions used in the preverbal position, such as အမြဲတမ်: **a-mrai tam:** N+V: (always + continue) = 'always'.

The nominalized form of the adverbial is accounted for by compounding with the previous nominal (N+N) or as a reduced clause (N+V). The interpretation as derived nominals is supported by the fact that these forms often retain the ability to take complements: ဗုဒ္ဓဟူးနေ့အလွတ် ချိန်: **buddhahu: ne. a-lut hkyin:** (Wednesday + avoidance+ make an appointment) 'make an appointment avoiding Wednesday'; ဝအဝ စား: **wa. a-wa. ca:** (be complete + Nom-complete + eat) 'eat until full';. The interpretation of the N + V constituency of the 'adverbial' with the nominal rather than with the verb occurs when the verb is not reduplicated: လက်တွေ့သင် **lak twe. sang** ([hand + meet] $_N$ + study) 'learn by experience'; ရေလုံပြုတ် **re lum prut** ([water + be covered] $_N$ + boil) 'boil covered with water'; သယ်ပြန်ညာပြန်ရိုက် **bhai pran nya pran ruik** ([[right+turn]$_N$ + [left+ turn] $_N$]$_N$ + hit) 'hit with the left and then the right in turn'. ;

The N+N interpretation is represented in Figure 20.

buddhahu: ne.   a-lut   hkyin:

Wednesday   day   avoidance   make-an-appointment

'make an appointment avoiding Wednesday'
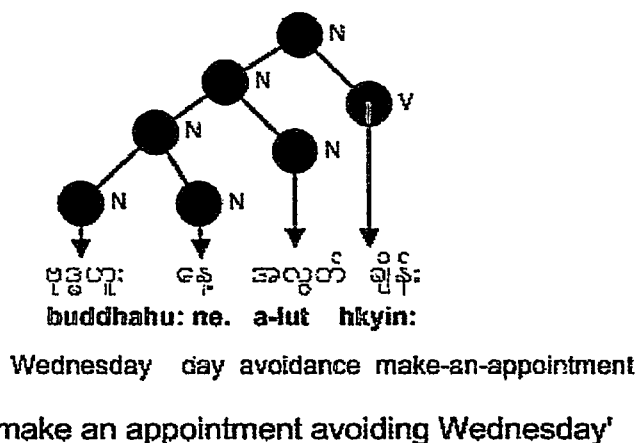
Figure 20. Adverb as Nominal Compound Construction

The analysis presented in Section 2.5.2 and 2.5.3 demonstrates how it may be possible to reduce the number of basic word categories. The constructions establish a frame work from which the semantic component interprets both adjectival and adverbial senses, though this is more a problem for westerners than for Burmese. The above discussion has demonstrated the systematic underlying processes of a) compounding and b) reduced clauses as constituents which structure Burmese complex words. The intuition of numerous linguists that underlyingly only Nouns and Verbs structure Burmese grammar has been shown to be plausible, and that it is the structural rules that contribute the distinctive sense or usage of a particular nominal or verbal as it is constructed within the rules of grammar. What has been shown is that the same principles that structure grammar may contribute to the structure of semantic meaning. In the following sections we shall see that the same principles also structure larger grammatical units. Burmese grammar is structured by a common set of underlying units that combine iteratively in a regular system throughout the grammar. The functional load of grammar is reduced to a few basic patterns and constructions, shifting the bulk of the complexity to semantic and conceptual processes.

2.5.4 Types of Particles

There is a wide variety of particles in Burmese. Stewart remarked that "The Grammar of Burmese is almost entirely a matter of the correct use of particles" (Stewart 1956:xi). How one understands the role of the particles is probably a matter of one's purpose. For the second language learner, a grammatical description that best facilitates acquisition is necessary. For a Burman understanding his own language's system of organization, a rather different kind of classifi-

cation can well be imagined. One aim of linguistic description is to approximate native speaker categorization and linguistic processes. While it is not claimed that the current approach represents Burmese mental categories and processes, it is the aim to approach such a goal will suffice to provide a basis for future research, particularly with regard to the central role of nominalization.

The same particle may appear in combination with different kinds of structures and may fulfill the same or different functions depending on the construction, the lexical, or the discoursal context. Generally, the function of the same particle is similar no matter what structure it is applied to.

Linear ordering is highly significant in particle function. If a particle or grammatical form precedes a head, then its function is typically distinct from the same particle that follows the head. Such differences reflect the strong typological tendencies of Burmese requiring the interpretation of pre-head forms as modifiers at every level of constituency, whether a simple compound–word–form or a highly complex sentence. Similarly, post-posed particles are interpreted to be functional heads at a higher level of structure and thus they have a different scope. Principally, it is verbs, called by Matisoff (1969) 'versatile' verbs, where the pre- and post- head interpretation differ radically in scope. The distinctions in verbs are not handled in this dissertation, but their role in the overall sentence structure is well documented in the text analysis section.

Particle functions have often been classified in a two-part distinction of the *general function* performed and the *kinds of constructions* on which they operate. Recently, Okell and Allott (2001) have produced an extensive dictionary of grammatical forms, which discusses approximately 800 particles and other grammatical forms. This glossary is the most comprehensive listing to date of this important class of word forms. These are classified functionally and by the construc-

tional level on which they are active. Nineteen functions were recognized and have been summarized along with their distributional environments in Table 22, which is adapted from Okell and Allott (2001:291-302).

	General Functions	Grammatical Distribution	
		Pre-	Post-
1.	Clause and verb attributes		Sentence, Phrase
2.	Common elements in compound nouns		Noun, Verb
3.	Common elements in compound verbs		Verb
4.	Common numeratives		Number
5.	Pre-Verbs [pre-head versatile verbs]	Verb	
6.	Coordinate markers		Noun -- Noun
7.	Location nouns		
8.	Noun attribute markers		Noun – Noun
9.	Noun markers		Noun
10.	Noun modifiers		Noun
11.	Selectives [deictic, interrogative]	Noun, Suffix	
12.	Sentence final phrase particles		Sentence
13.	Sentence markers		Verb, Noun
14.	Sentence medial phrase particles		Phrase
15.	Special head nouns		Verb
16.	Subordinate clause markers		Verb, Noun
17.	Subordinate sentence markers		Verb Attribute [Nominalized clause with သည် **sany** variants]
18.	Verb attribute markers		V — N [Nominalized clause as in #17 or other functional head]
19.	Verb modifiers [post-head versatile verbs]		Verb

Table 22. Types of Grammatical Particle Functions

The relevant generalized structures for grammatical forms utilized by Okell and Allott are Noun, Verb, Phrase and Sentence. Generalizing across the types of functions are a) *modifiers* (attribute and modifier, deixis), b) special *semantic head* nouns or verbs (nominalizers, spatial and temporal location nouns, numeral

classifiers), c) final particles that relate *attitude of speaker* (phrase, sentence, and d) *grammatical orientation* (markers).

Particles can be said to vary along a continuum between more lexico-semantic or more grammatical. For some particles, semantic 'bleaching' of the original lexical sense is evident where few, if any, properties remain from the full lexical form. In other cases, the sources are unknown and only the function(s) remain.

While some particles are more semantic and others have little except grammatical function, most particles have both elements. For instance, the parti-cle ကြောင့် **kraung.** 'because' bears a strong semantic association with the nominal အကြောင်း **a-kraung:** 'reason or purpose, cause' while the particle ချက် **hkyak** functioning as a grammatical nominalizer, as in ဆုံးဖြတ်ချက် **hcum: hprat hkyak** (come to end + cut + Nom)= 'decision', has more grammaticalized force than ကြောင့် **kraung.** 'because'. Although highly grammaticalized, ချက် **hkyak** re-tains, even in its nominalization, something of the semantics of the source noun ချက် **hkyak** 'a central point'. Nominalizations with ချက် **hkyak** employ the underly-ing semantics of some sort of enumerative or persuasive point in the nominalized verb — ရွေးယူချက် **rwe: yu hkyak** (select + take + Nom)= 'choice', ဝေဖန်ချက် **we hpan hkyak** (distribute + create + Nom)= 'criticism'. Other particles are entirely (or almost so) grammatical such as the nominalizer သည် **sany**, about which much has been and will be said here. It also functions grammatically as a sen-tence final particle, declarative, realis mood, with evidential force from speaker's direct knowledge. All such functions are more grammatical than semantic. There are functions it performs resembling a pro-form for 'people' or 'person' in the nominal ဤသည် **i: sany** (demonstrative-proximal + demonstrative-neutral/ pro-form) = 'this person', and as in the professionalizer (*nomenagentis*) function

ကုန်သည် **kun sany** (trade+ pro-form) = 'trader' (see further examples in Section 3.2.3.3.1.2).

In summary so far, particles have been classified according to their distribution within grammatical constructions, and there is a wide spectrum of particle function between highly semantic to wholly grammatical.

2.6   Basic Principles of Grammatical Organization

The principles for the approach toward grammar employed here are now laid out to establish a basis for the types of processes and structures posited for Burmese.

It is assumed that the grammatical and semantic components are separate with different kinds of classifications and operations between them. It is also assumed that ontological structure establishes a basic framework for both grammatical and semantic processes. The degree to which previous grammars utilized semantic (and phonological) criteria have contributed to the different classificatory schemes between grammatical form classes and the types of grammatical constructions. This is of course in addition to the other reasons stated earlier of a European language bias in the 19th century and also the ever-present needs of second language learners.

The most recent grammars of Burmese have been doctoral dissertations by linguists (Wheatley 1982; Myint Soe 1999). Their linguistic analyses fortunately have employed a classical descriptive model and attempted to be comprehensive in scope and moderate in detail. Perhaps because of the bias of modern linguistics toward universal categories and standard descriptions of grammars, even with a greater emphasis toward 'the language as it is' within the

functional–typological framework, these modern studies have used form catego-

ries which approximate natural Burmese grammar, but which speak the language

of linguistics, much as the grammars for second language learners respond to

the requirements of learners.

2.6.1 Grammatical Units

Using the insights of Stewart (1936, 1955), Cornyn (1944) and Okell

(1969) of form classes and basic construction classes, two lexical, open-class

forms and one grammatical, closed-class form — noun, verb, and particle are

sufficient to adequately catalogue the basic-level distinctions between a Thing

and a Relation.

Only three levels of construction are needed to adequately describe Bur-

mese grammatical structures – the Word, Expression, and the Sentence.

Constructional Forms	Accommodates Traditional Constructions	Basic Structural Description
Word	Simple word, Compound Word, Phrase, Modifier Clauses	(N) + N → N
Expression	Clause	N + V → N N / V+ P → N
Sentence	Sentence, Paragraph, Text	N + Obs → N

Table 23. Constructional Forms and Structural Descriptions

The Word, is a structure which describes the simple and complex (com-

pound) lexical class, the phrasal type of Modifier and Head, and the attributive/

modifier clause relations of nominals to a head. The constructional category of

Expression describes the clause and is the unit of predication. The Sentence de-

scribes the linguistic unit (N) and includes the Observer (speaker) as head of the construction[11]. The same organization of the sentence holds true for paragraph and text. These forms are not semantic but grammatical forms. As such they establish an organizing framework for information. They do not 'contain' that information but structure it.

The kinds of structural units that are theorized are linguistic. They have a linguistic 'reality' and also a grammatical 'reality' as ordered sets. The consistency of process and naturalness of the rules of ordering account for the simplicity of Burmese grammar.

2.6.2 Grammatical Processes

The grammatical processes operating in Burmese at all constructional levels are 1) *Juxtaposition* and 2) *Operation*. Underlying both operations is the notion of 3) *Headedness*.

Juxtaposition is the association of two lexical form classes immediately contiguous to each other, either nouns or verbs. Juxtaposition occurs in compounding and is the basis for increasingly larger types of constituents within the Burmese sentence. It is also the framework within which conceptual blends take place.

Operation refers to the process of predication. The view assumed here is that of natural language predication, a pre-Fregean view, rather than the approach of contemporary logico-philosophical theories. The perspective is that of natural language predication somewhat more in line with the Aristotle's view in

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[11] Inclusion of the Observer is not just a philosophical or a cognitive linguistic consideration but is manifest grammatically in Burmese as particles.

Metaphysics for Being, namely λέγεται πολλαχῶσ "it is said in many ways". The polysemy of predication has a long classical tradition of investigation. Normally what is said can be grammatically reduced to the noun and verb combination. The noun-verb notion of predicate has a natural language tradition in linguistics and corresponds to what is often labeled as the clause versus a different type of assertion of the sentence. Aristotle says in *De Interpretatione* (17a9) "the structure *noun-verb* [ὄνομα - ῥῆμα] is supposed to be the necessary ingredient not of sentences (λόγος) but rather of statements (ἀπόφανσις or λόγος ἀποφαντιὸς) which are defined as truth-bearing sentences" (Lenci 1998). Aristotle made a distinction between types of predications of a) subject – predicate (ὑποκείμενον - κατηγορούμενον) where the role of subject (ὑποκείμενον) is reserved for primary substances only in the semantico-ontological predication, and b) the noun-verb (ὄνομα - ῥῆμα) predication of the sentence (λόγος). In both these relations it is the act of "saying something about something else" that is focal. What is different between the two predicational types is the inference, particularly the truth-bearing nature of sentences. For Aristotle temporality or tense was the distinctive difference between the truth-bearing relation of subject and predicate.

The term *operation* is used here both generically and specifically. Generically it refers to the notions of both a) lexical predication in the sense of 'sentence' (λόγος) above, and b) to the notion of grammatical predication. The category of noun, the 'name' (ὄνομα) and the category of verb (ῥῆμα), 'what is said, the saying, the event or happening' establishes the basic relation of predication which is figured in the notion of *operand* and *operation*, [[operand] operator]. The nominal is prototypical operand and the verb is the prototypical operator. Used specifically, operator refers to the functional relationship of grammatical operators which underlyingly specify predicates such as location (the act of locating

something in space), time (the act of locating something in time), manner (the act of designating how something was done), states (the act of stating the relation of an object to an action), logical operations (the act of asserting a relationship such as cause, result, intention, purpose) and so forth. The operator in Burmese is the particle. Its function is to 'state something about something else' which in essence is what predication *does*. The operation may be lexical predication or grammatical, with a particle as the operator. The specific form, the grammatical form, is mostly referred to in this dissertation though at times predication and operation are used interchangeably.

Headedness refers to the relation of modifier to the thing modified, the head. As a head-final language, Burmese is quite consistent with this typology. Some units may seem to be coordinate structures but for most of these there is an underlying preference for right-headed constructions at all levels of construction. The notion of *cognitive ground* in relation to *profile* or *cognitive figure* may underlie our sense of grammatical headedness. Postposition particles ground the constructions in which they occur; this cognitive asymmetrical relation allows us to say something (profile) about something else (ground).

Unit	Connection Process	Structural Process	Headedness
Word	Blending	Juxtaposition	Lexical heads
Expression & Sentence	Predicating	Operation	Functional and Lexical heads

Table 24. Grammatical Processes of Grammatical Units

2.6.3 Ontological Units

The ontological nominal is a unit that is abstract and grammatically derived through a series of (potentially zero) derivational processes. In a sense, a whole text as an abstract whole is an ontological nominal derived through systematic grammatical – ontological processes of combination. The tacit process of creating an abstract world as one speaks and within which utterances are to be interpreted is part of what is referred to as an ontological nominal. That a systematic application of a limited set of rules to those utterances yields a structurally consistent representation of the whole text as similar to the Burmese sentence lends credence to the 'existence' of the ontological process itself. In Burmese, the particles map abstract units onto whole objects. These larger whole objects are nominal, but not as concrete as morphological nominalization. The objects within the various levels Word, Expression and Sentence are regarded as ontological objects, that is, nominals. They exist as a meaning structure that allows text to have a linguistic sense of 'being'.

In Burmese a particular class of particles, though a process of expansive nominalization, has been hypothesized to underlie the structure of each of the construction types — Word, Expression, and Sentence. The following types of Ontological units and processes listed in Table 25 are judged to be the basis for expansive nominalization in Burmese.

Ontological unit	N
Ontological processes	N +V → N
	N+ P → N
Ontological structures	N +N → N
Ontological heads	Modifier + Head → N / V

Table 25. Ontological Units and Processes

The above chart claims:

a) that Nominals are ontological units,

b) that the basic clausal unit of expression (N+V) is a Nominal,

c) that particles functioning as grammatical operators analo-
    gous to grammatical predicates produce Nominals,

d) that juxtaposition of Nominals generates a higher order
    Nominal,

e) that Modifier + Head structures produce whole units, either
    of a Nominal or a Verbal.

2.7   Word

The Word in the model of Burmese grammar presented here consists of
forms traditionally called – the *simple word*, the *compound word*, the *phrase*, and
clausal complements.

The preceding discussion (Section 2.4) of the parts of speech and simple
and complex nominal forms described a type of word form in Burmese that is
highly expandable by a strategy of compounding. The components of the com-
pound are lexical word forms, either nouns or verbs. Compound nominals can be

composed of both nouns and verbs in a variety of combinations (cf. Tables 7 and 8), briefly, the patterns of NN, NV, VN, VV, [NN]N, [NV]N, [VN]N, [NN]V, [NV]V, and [VN]V.

The significance of this observation to a consideration of a separate type of noun phrase must be examined more closely. If the basic feature of the phrase constructionally is modification of a head constituent, and if there are only nouns and verbs which are the fillers of those roles of head and modifier, and if compound word forms account for all the basic relations that would be found within a Burmese noun phrase, then there is little need for a separate construction. The fact that verbs, both dynamic and stative, are found as modifiers, or performing the function of modification in relation to nominal heads, and that a verb can head a nominal compound demonstrates the power of Burmese to derive complex words. Should there be any doubt about the categoriality of the complex word forms — whether, for instance, verb headed nominals are not nominal, there are a number of empirical tests of nominality. These are tests that only nouns can accept — deixis, possession, enumeration, the co-occurrence with postpositional particles that also occur with nominals, and distribution within clause-like predications.

The Nominal or Noun here corresponds notionally to Thing, perceptible by speakers as possessing the properties of thingness, dimensions such as locations in space, volume, surface features, mobility or movability, materiality, resistance, qualities of boundedness or expanded center without a fixed external limit. Particles operating on nominals select the features of nominality which they Relate or map onto higher levels.

2.7.1 Complex Noun

The *complex noun* classified and illustrated in Section 2.4 and extensively in Section 2.4.5 displays the structure of N + N, where the final N functions as a head, and the initial N is either a modifier or coordinate, in rare cases. The initial position may be filled by a noun form or a number of types of constructions.

	Initial Nominal	Final Nominal	Transliteration	Gloss	Structure
1	သူ	အိမ်	**su. im** 3p (Pos) house	his house	[N+N]$_N$
2	သစ်သား:	အိမ်	**[sac sa:] im** wood offspring house	wooden house	[[N+N]$_N$ + N]$_N$
3	ဖြူသော	အိမ်	**[hpru sau:] im** white Att/N house	white house	[[V + P]$_N$ + N]$_N$
4	လူကြီး၏	အိမ်	**[[lu kri:] e.] im** person big Pos house	head-man's house	[[N +V]$_N$ + P]$_N$ + N]$_N$
5	အိပ်ပျော်နေသည့်	အိမ်	**[[[ip pyau:] ne] sany.] im** sleep enjoy be Att/N	sleeping house	[[[[V +V]$_V$ + V]$_V$ + P]$_N$+ N]$_N$

Table 26. Modifier Position of Nominal Compounds

The above examples demonstrate both the role of the modifier by word order position in relation to the head nominal and the fact that various types of constructions — nouns, pronouns, phrases, clauses — may all cooccur in the modifier position.

The whole nominalized construction as a modifier refers to a higher order nominal, an ontological nominal, in relation to the head nominal. The resulting form is an abstract nominal compound N + N. The rules of construction (Table

23) assume a complex process of nominalization shown in the 'structure' column of Table 26.

2.7.2 Complex Verb

Although the task at hand is not to describe the verb, yet for the sake of demonstrating parallelism regarding the structure of nominalization and the role of some basic underlying patterns present, not only in nominal units and constructions but also in the verbal portion of the grammar, a basic outline of the verb and its modifier constructions is presented particularly to contrast it to the linear structure of the verb phrase. It should be pointed out that while some low-level vertical structuring has been analyzed for nominals (Okell 1994d:235), nothing has been proposed for verbal constructions. Myint Soe's categories are used to discuss the verb phrase structure below. No attempt is made to subclassify verb types, least of all the semantics of the verbs. Just as verbs also compound [V + V], as nominals do, so there is also a head in verbal compounds. Headedness in verbs displays different semantics from their nominal counterparts. Some types of actions, processes, or process-action sequence can be taken as a trajectory between the initial and the final verb in compounds, such as in ကျ ရောက် **kya. rauk** (fall + arrive) 'came to' or 'came under' (ND 4)[12] to describe the experience of coming under the power of someone else. Other verbs manifest something similar to a coordinate structure, particularly with doublets as in ဖိ နှိပ် ချုပ် ချယ် **hpi. hnip hkyap hkyai** (press + press + restrict + (rhyming)) 'oppress and restrict' (ND 5) These verbs function in pairs of [V+V]$_v$ + [V+V]$_v$ so that while it is common to have two verbs in any one expression, a variant of the pattern is to

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[12] ND4 refers to National Day text, sentence number 4 found in the appendices.

double the doublet. This pattern produces a sense of completeness phonologically in the rocking rhythm of the syllables, semantically in expanding the action or 'scene' created with the verbs, and grammatically by employing the preferred underlying process of compounding and twice performing it. This types of structure is widespread in Asian languages under the name of *four-syllable elaborate expression*. Semantic repetition is preferable as in စီစဉ် **ci cany** (line up + line up) 'arrange' but exact repetition is also common, especially in the modifier position, which others label as an adverbial word form, as in ပျော်ပျော်နေသေခဲ **pyau pyau ne se hkai:** (enjoy + enjoy + be + die + hard) "If one lives happily, he dies hard." In this case, the relation between the verbs is three verbs followed by a set of two. The reduplicated set forms the modifier to the head verb 'be'. The rhythm of this set also produces the phonological rhythm of a conditional clause. The final two verbs are a result pair to the first verb set of three. These two are themselves in a condition-result relationship internally with the result expressed in the final verb. The structure of this proverb is [[[V+V]$_v$ V]$_v$ + [V+V]$_v$]$_v$.

Verb chaining is also common in Burmese. An example reported by Pe Maung Tin (1956:195) fully characterizes the action between verbs. The circumstance of this verb chain was an instruction from the compiler of the University Burmese Dictionary to that author on work to be done. He wrote:

(24)

ကြည့်	ရှု။	လေ့	လာ	၊	ပယ်	နှုတ်	၊	ဖြည့်	ဆွက်	၊	ပြု	ပြင်
krany.	hru	le.	la		pai	hnut		hprany.	swak		pru	prang.
look	search	study	come		reject	word		fill up	drag		do	beautify
'look though'		'think over'			'put away (faults)'			'fill in'			'touch up'	

The relation between the chain of verbs is one of a trajectory of action and refers to a null object (the manuscript), uses a null mood (imperative or suggestive) to the null subject.

Returning to Myint Soe's verb phrase categories and looking at the of 'Pre-Head Auxiliaries' of Table 16, the analysis here considers this category as the modifier in relation to the compound verb. The construction as a whole compounded unit of two parts, consists of Modifier + Head relations within the compound verb.

'Post-Head Auxiliaries' are analyzed as a different level of constituency from the modifier-head verb construction. The successive movement toward the end of the sentence is manifest by a series of stacked particles, each of which is the head of a different nominal, the scope of which is usually the entire contents of the preceding part of the sentence. Many particles occur after the verb and are not part of the verb phrase, but relate to the whole utterance, the whole sentence.

The type of tree structure best suited to represent the highly complex structure of successive levels of constituency. is seen in Figure 21 and Appendix E . The following display of the final portion of a much longer sentence (ND 16.2) shows how the sentence final particles are not analyzed linearly, but as particle operators at successively higher levels.

sat	hmat	hkai.	kra.	pa	sany
demark	mark	Pr	Pi-S	Pit	Nom
[designate	]				

Figure 21. Constituency of Verb Final Particles

The 'Independent Clause' particles displayed in Table 17 are likewise treated as constituents of previously constituted nominals of the sentence. The particular role of the particles is not directly relevant to this approach toward nominalization and its role in structuring text.

In summary, some of the generalizations regarding the complex nominal appear to be true of the complex verbal — a) modifiers precede their heads, b) there is a preference for pairwise compounding, c) what appear to be post-head modifiers are heads belonging to a different level of construction, d) conceptual blending occurs in a different way than with nominals, being something much closer to the original model of conceptual blending framed by Fauconnier and Turner (2002) with each verb setting up a separate Input Space (discussed in Section 1.2.1).

This discussion fails to capture the semantic elegance of the verb and all its fascinating accompaniments in Burmese, but it does serve the purpose here to focus on the role of nominalization in structuring the grammatical skeleton upon which the lexicon and other functions are built. The complex verb is classified as part of the Word level of construction. It serves as the counterpart of the complex nominal.

2.8 Expression

Expression is the name given to the class of constructions that function to predicate lexically using lexical word forms, forming what is often called a simple clause. Expression also names the functions that operate grammatically (particle operations) as counterparts to lexical predication.

The simplest Expression is the unit of the Noun + Verb. This unit basically corresponds to the minimal clause in other grammatical systems. In this description there is nothing unusual as it follows common linguistic expectation. The simple Expression is demonstrated in the following N+V examples. These lack the sentence final particles which would normally complete an utterance as grammatical.

(25)

ေခွး   ကိုက်

hkwe: kuik

dog   bite

(26)

ရေ လောင်:
re laung.
water pour

While the expressions in (25) and (26) refer to the simplest Expression, more complex Expressions are formed by expansive nominalization processes whereby complex nominals adjoin complex verbs as in (27) with the configuration of Figure 22 (SB 6).

(27)

သေ မှု သေ ခင်:
se hmu. Se hkang:
die Nom Die arrange
'arrangements about death'
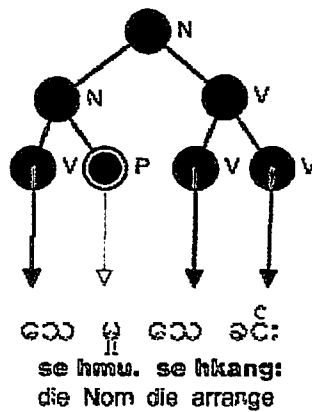
Figure 22. Constituency Relations for (27)

The level of Expression in Figure 22 is of a nominal N generated by a process in which the initial nominal is formed from a nominalized verb and the second element V formed from a compound verb. The Expression NV is an ontological nominal formed by the rule N + V → N (see Table 23). This Expression which forms a superordinate nominal is different from the V + P→ N Word nominal ေသ မှု **se hmu.** 'death' which is formed by a semantic nominalizer မှု **hmu.** . This nominalizer contributes semantic properties referring to a legal case as well as grammatically nominalizing. (See 3.2.3.2.1.2 for semantic nominalization.) The ontological nominal is a higher level Expression in this case, similar to the clause-like simple Expression of (25) and (26) but with a slightly more abstract type of constituents.

Expressions are also formed via grammatical particle P operation on verbs or nouns as the operand. The Expression that results from this operation, like that of the verbal predication, is a nominal. N + P → N and V + P → N. Particles, no matter the role, distribution, semantic or grammatical properties, generate conceptually bounded units which are oriented and related by the particles to other units (nominals) in the text. Figure 23 is an example of particle nominalization of the unit meaning 'from the station'.
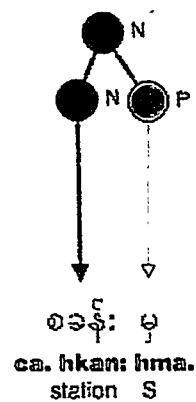
Figure 23. Constituency with a Particle Operator

The unit in Figure 23 is a single Expression and becomes a constituent of other constructions. As an Expression, it has a boundary grammatically and a reference which can be expressed by native speakers, particularly in queries concerning the head particle, such as a question like "from who/ what?" in Burmese. The response would be the single Expression in Figure 23, or possibly a response that referred to the larger nominal of which Figure 23 is the head. This structure is displayed in Figure 24.

se hmu. se hkang: a-ra.
die Nom die arrange matter
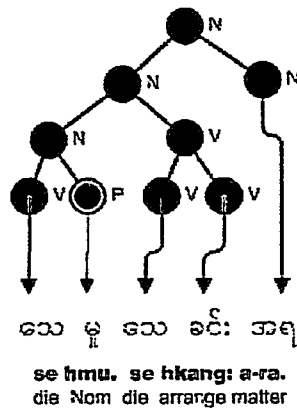
Figure 25. Constituents of 'matter of death'

The introduction by juxtaposition of a subsequent nominal implies structurally that the following nominal has the strong possibility of being a grammatical head at a higher level of constituency. These examples display both the Word (noun and verb) as simple and complex forms, the Expression (both lexical and grammatical) and the process of ontological nominal structuring via a few rules of nominal constituency.

2.9 Sentence

The Sentence is the name given to the class of constructions which include the Observer (see Table 23). This constructional level includes the type of units found in sentences, paragraphs, sections of text, and the text as a whole structure. The Sentence as a construction type differs in two ways from Expression:

1)   The Sentence as a class displays initial nominal units which function to link the unit to preceding units. This function is similar to a 'setting' linkage intra-textually.

2)   The Sentence as a class displays particles that function to nominalize whole units — whether of sentence, paragraph or text. These are semantically external to the text. They are speech acts in a projected speech situation.

These two differences are not necessarily internal to the structuring process of a sentence but both are aspects of how the Sentence is contextualized, by the linguistic and pragmatic context. As such, this constructional form differs significantly from the type of distinctions that separate the other two constructional forms — Word and Expression. It may be that a separate constructional form for Sentence is not, in fact, significant for the description of the structure of nominalization since the roles established for Word and Expression are essentially comprehensive for all particles, verbs and nouns. Those rules will capture distinctions sufficient to process even the sentence final particles. What is not captured by the existing two constructional forms are constituents across sentences. The discourse use of nominals in information structure is not captured.

For the present, the Sentence level of constructional form is posited and may prove helpful in paragraph and text analysis presented in Chapter 4. For the broader textual framework, a different sort of categorization using notional structure will be employed.

2.10 Summary

This chapter has reviewed the nature and number of form categories proposed for Burmese by other scholars. In particular, the nominal compound has been the focus of this investigation, as this form at the word level establishes the pattern and process for juxtaposed ontological nominal units at a higher level of constituency. The current approach to word form categories was detailed with particular reference to the modifier role of so-called adjectives and adverbials.

The basic principles of grammatical organization in Burmese were laid out, establishing three constructional forms: Word, Expression and Sentence, together with their rules of formation. Three grammatical processes of juxtaposition, operation and headedness were given as structuring processes for Burmese. Ontological units were defined.

Chapter 3 examines in detail the nature of nominalization from three perspectives and combines those viewpoints to launch a discussion of nominalization in Burmese. A nominalizing template is proposed as the key concept to unlock the role of nominalization.

CHAPTER 3
APPROACHES TO NOMINALIZATION

In any field, find the strangest thing and then explore it.
- John Archibald Wheeler.

3.1 Introduction

Nominalization as a subject of linguistic investigation has been approached over the last thirty years from different theoretical perspectives with varying objectives and formalisms. Each tradition asks different questions of the data and gives results employing divergent classifications, generalizations, rules, formulas, configurations and argumentation.

The transformational approach observed generalizations in the generation of the surface form, asking questions about what underlying representation and rules could account for the patterns of nominalization and the implications for universal grammar (Chomsky 1957, 1970, Lees 1960). The philosophical-linguistic approach to nominalization embodied by the work of Vendler (1968, 1970) asked how and where nominalization is used. By examining the linguistic context of nominalized clauses he determined a generalized set of semantico-grammatical frames from which a further set of types and constraints on nominals were determined. Typological studies inquired about the implicational universals inferable from cross-linguistic studies of surface nominalizations (Comrie 1976, Comrie and Thompson 1985, Koptjevskaja-Tamm 1993). Textual typologists contemplated the role of nominaliza-

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tion across spans of text, within thematic grids (Hoekstra 1986) or within textual units and functions (Longacre 1977, 1996; Hopper and Thompson 1980, 1984).

3.2   Approaches to Nominalization

3.2.1   Generative Approach

Since the early 1960's generative grammarians have been concerned with the problem of nominalization, particularly how to capture the generalization that deverbal nouns appear to share with their verbal counterparts. Native speakers of English sense that the noun *eating* in (28a) seems to bear the same relationship as the verb does to the other constituents *Jean* and *the cake* in (28b).

(28)   a. Jean's eating of the cake   (gerund)

b. Jean ate the cake.

Similar to the gerund nominal above, native speakers sense complex or derived nominals have an underlying and related verbal proposition illustrated in the pair (29a-b).

(29)   a. Jane's examination of the papers.   (derived nominal)

b. Jane examined the papers.

Another type of nominal pair that required explanation was the relationship between two nominals, one the derived form and the other the base form. Native speakers likewise regarded the set represented in (30a-b) as sharing common se-

mantic and lexical material, yet despite this shared identity, they differ with respect to productivity and syntactic properties.

(30) a. the examination   (complex nominal)

      b. the exam   (simple nominal)

The issue of the relationship between deverbal nouns and their corresponding clausal forms has also been the subject of early generative studies. Lees (1960) assumed semantic similarity was due to a common underlying kernel clause from which the deverbal noun was derived by a series of transformational rules. The resulting differences between the two forms were attributable to nominalization transformations. In the early stages of generative theoretical development (Chomsky's *Syntactic Structures* (1957)), there was no lexical component. Subsequently, it became possible to capture the relationship between these two forms not as a different of structure but as two independent lexical entities. Chomsky (1970) takes this lexicalist position with respect to deverbal nouns. The lexical representations of *exam* and *examination* share semantic properties, accounting for the similarity, but they are inserted into the syntactic component with differing subcategorization, thus accounting for their syntactic and productivity differences.

More recent studies in the 1980's concerned establishing clear principles by which to distinguish nouns from verbs. The sense at the time was that nouns and verbs differed particularly in their argument structures and their θ roles. It was asserted that nouns, unlike verbs, only optionally take arguments (Higginbotham 1983, Dowty 1989).

What Grimshaw (1990) demonstrated in her pivotal study was that the argument structure depended upon the type of noun. She distinguished two types of

nouns: *event* nouns, which express an event (terminative) or a process (durative), and *result* nouns, which name the output of an event or an entity related to it.

(31)   a. the examination of the papers   (event)

   b. the exam   (result)

Event nominals have an argument structure, like verbs, and assign specific θ roles — that is, they take internal arguments obligatorily, which are also assigned the preposition *of* in English. In contrast, result nouns lack an argument structure and specific θ roles but have loosely associated kinds of participants (31a-b). Another distinction is that event nominals may take an agent modifier (usually in the form of a possessor) while the result nominal form cannot.

(32)   a. the supervisor's deliberate examination of the papers

   b. *the supervisor's deliberate exam of the papers

Like Vendler (1968), who also found a bipartite distinction in English nominals that he called 'propositional' (event) and those that 'denote eventualities' (result), Grimshaw noted that aspectual modifiers of temporal duration, such as *frequent*, were only associated only with event nominals and never with result nominals.

(33)   a. the examination of the papers for two hours

   b. *the exam for two hours

Such modifiers thus served as a diagnostic for establishing eventhood. If using this criteria, a noun was found not to be an event, it could be assumed also not to have arguments with specific θ roles.

The complex event nominal may be ambiguous as to whether it takes an event/process or a result interpretation. The noun *examination* could take arguments and be interpreted as eventive, or be read with a result interpretation, in which case it would not take arguments. In example (34a) the referent *Jane* is associated with the nominal *examination* in a fairly ambiguous manner. Jane can be an owner, a supervisor, a thinker, a habitual visitor, or a creator of that referent. In this case, *Jane* is not a real argument of *construction*, as she does not bear a clear θ role. The possessor grammatical marking indicates a generalized relationship rather than a θ role. By introducing *frequent* in (34b) the interpretation of *examination* as an event is imposed, and consequently a θ role is assigned just as in the verbal form of (34c).

(34) a. Jane's examination surprised us.

b. Jane's frequent examining (of costumes) surprised us.

c. Jane examines (costumes).

More recent studies (Silioni 1997, Alexiadou 2001) take the view that the distinctive split between *event* and *result* nominals invites a return to the syntactic approach. By regarding event nominals (with argument structure) to be at base verbs rather than as nouns, it is possible to posit the raising of the verb and incorporation of a nominal head during the course of the syntactic derivation. This approach reprises Lees' (1960) preference for the syntactic rule-based derivation, but imbues it with far more explanatory power than in the early 1960's. Now, for instance, it is possible to posit event nouns having an argument structure because they contain a

verbal projection in syntax. This insight of nominal heads and the projection of verbs will be revisited later as a part of confronting these ideas with data from Burmese, though under a significantly different model of constituency.

The third type of nominal treated in generative grammar is the *gerund*. In English, and in its related universal syntactic category, the gerund shares with event nominals the taking of nominal arguments and a genitive subject (35a). Gerunds however, contra event and result nominals, are highly productive with every verb theoretically having a gerund form. Their semantic interpretation is transparent from the base form of the verb. One argument against a nominal interpretation of the gerund in English is that they cannot be modified by adjectives (35b) or take an article (35c). Also typically, the gerund takes an accusative argument like a verb.

(35)   a. Jane's examining costumes surprised us.
        b. *Jane's rapid examining costumes surprised us.
        c. *The examining costumes surprised us.

Seeking an explanation for the similarities of the event nominal and the gerund, Chomsky (1970) suggested that event nominals are the result of lexical nominalization while gerunds are the product of syntactic nominalization.

The debate continues over whether it is the lexical or syntactic component where nominalization occurs. A recent view, using Distributed Morphology (Alexiadou 2001) takes the position that all nominalization occurs in the syntactic component and that all word categories are the result of combining abstract roots with functional properties. That is, functional properties determine the lexical category and all roots are lexically unspecified as to whether they are noun or verb. Such a radical approach of functional heads has relevance to the approach toward nominalization in Burmese presented here. While the method and argumentation diverge, the ob-

servation of the structuring and classificatory role of functional heads (particles in Burmese) is applicable.

From the early days of generative grammar, noun phrases were taken to be the natural maximal projection of N:
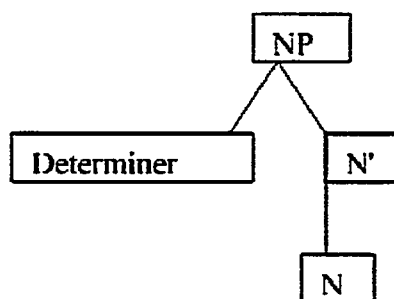
Figure 26. NP as the Maximal Projection of N

Developments in generative theory during the 1980's in the nominal system led to the extension of X-bar schema to the sentential functional elements and to the movement of heads. Building on those observations, the structure of noun phrases was altered so as to view the noun phrase as the maximal projection of the determiner, with the determiner being the head (Abney 1987). Correspondingly, NP (noun phrase) was rechristened DP (determiner phrase).

```
        ┌──────┐
        │  DP  │
        └──────┘
            │
        ┌──────┐
        │  D'  │
        └──────┘
          ╱    ╲
    ┌──────┐  ┌──────┐
    │  D   │  │  NP  │
    └──────┘  └──────┘
```
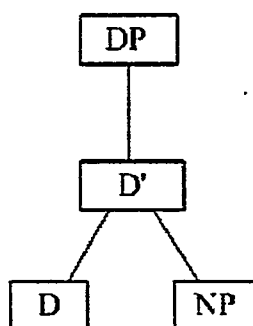
Figure 27. DPs the Maximal Projection of the Determiner

During the 1990's some cross-linguistic studies unearthed support for this view of heads in the Hebrew, Semitic, Scandinavian, Romance, English and German languages. Other studies have attempted to explain why the nominal expression is the projection (Szabolcsi 1987, 1989, Stowell 1989, 1991).

> D is the element that:
> converts the nominal expression into a referential phrase, which can subsequently serve as an argument. In that way, it can be argued, that the D parallels the complementizer of sentential complements: each turns its complement (NP and IP, respectively) into an expression that is able to appear in an argument position, that is, to bear a θ role (Szabolcsi 1987:175)

This brief summary of generative approaches to nominalization establishes a background of research in one tradition that this study will reflect upon but not mirror in its assumptions the nature of phrase structure or their derivation.

3.2.2 Cognitive Approach

The cognitive approach represents a movement away from generative grammar's Platonic traditions toward real world experience of categories and relations. The grammar of Langacker, though highly schematic, depicts grammatical relationships as relations between objects in space and time using a primitive set of concepts similar to a force-dynamic view of action and energy – a Newtonian experience of the world.
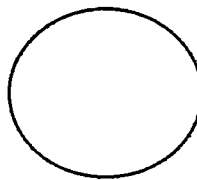
Figure 28. An object viewed subjectively: *circle* or *round*

Langacker (1987a, 1991b) views semantic structures as predications, characterized relative to some cognitive domain. Nouns and verbs are both predications which differ, not in their intrinsic content, but in how the content is construed. Therefore, a perceiver or observer is always implied by a linguistic category. There is no abstract, transcendent category apart from human experience. For example, the experience of the object depicted in Figure 28 can be described variously as 'circle' and 'round', or 'explosion' and 'explode' depending upon the perceptions of an observer.

More than any other cognitive linguist Langacker has developed his own explicit formulation and schematic system for representation of linguistic relationships. He views major grammatical categories (count and mass nouns, perfective and imperfective processes) as all definable in the same notional or semantic terms. The

difference between these categories is how the interconnections of the content are construed by the cognitivizer.

A noun is defined by what it does, "a noun profiles (i.e. designates) a region in some domain, where a region is defined abstractly as a set of interconnected entities." (Langacker 1991b:15) Any physical object qualifies as a noun because of its "extensionality" of its material substance continuously over a region. It should be noticed how different these categories are from most other types of grammar; they are perceptual, cognitive, construed, and "immanent" rather than transcendent, abstract notions. An object can be construed nominally or verbally as in Figure 28. Nouns and verbs are not a fixed grammatical categories for a set of roots, but are mutably related to how a perceiver construes the event or scene. Thus, within a cognitive framework, the difference between a nominalization and a verbalization (a predication) is a matter of construal by an observer. The notion of syntactic derivation is an entirely foreign.

Nominal predications *presuppose* interconnections among a set of conceived entities and *profile* that cognitive region. Relational (verbal) predications, on the other hand, *presuppose* a set of entities, and *profile* the interconnections among those entities. Figure 29 illustrates Langackerian profiles for the relationship between two terms 'together' and 'group'.
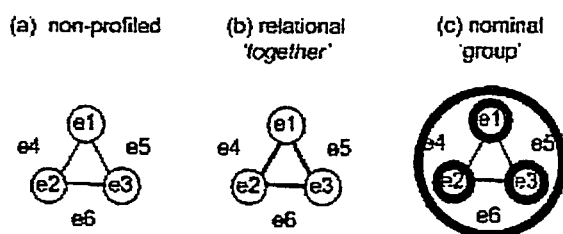
Figure 29. *Together* and *group* (Langacker 1991a:75)

One of the figures in Figure 29 is the more verbal form while the other is the nominal of the same situation, each just construed differently. The entities are labeled [e1], [e2], and [e3], symbolize three individuals whose togetherness or groupness is base on a similarity such as spatial proximity, indicated by the interconnecting lines [e4 –6].

Assuming the conceptual content is the same between the relational (verbal) predication '*together*' and the nominal predication '*group*' and that the major grammatical difference is one of a noun and the other a relational predication, then the contrast between the various forms of the same set of data becomes manifest by means of profiling. Since the conceptual content of the two predications is the same, i.e. the same membership and same relations between members, then the profiles for each is represented in Figure 29. Conceptualization (a) represents the non-profiled assemblage of conceptual contents (circles) with relations between them (lines). This represents a variety of predications possible or thought without profiling anyone content or relation itself. Where profiling occurs it is indicated by a high-lighted line. Configuration (b) represents the relational predication 'together' with the interconnections highlighted, and (c) pictures a region where the entities are profiled as a 'group'. The nominal notion is typically of a bounded set of some form.

This type of formulation provides a systematic cognitive basis for the similarities and the differences, relations and entities posited between different types of grammatical categories. Langacker claims it has the great benefit of being 'natural', iconic, and intuitive and can be extended to the relations observed in other languages. These observations also extend to languages in which nominalization carries a heavy load. The role of the perceiver, the observer is stressed in this model. Terms are not fundamentally nominal or verbal, but are dependent upon construal for their grammatical categorization. Categorization itself is viewed as a cognitive byproduct of perception, rather than an autonomous abstract entity.

The cognitive approach views nominals in relation to their verbal counterpart as essentially the same construction, configuration, or representation but profiling different relations or entities. Since the definition of a nominal is some region in bounded space, a fairly simple cognitive operation of 'bounding' can be hypothesized to account for these differences lexically. Sentential nominalization is essentially the same process as lexical nominalization, differing not in kind but in scope since a sentential nominal is presumed to bound more entities with greater complexity of relationships between entities than simple lexical nominalizations. (36) demonstrates an English example of the various types of nominals found in Burmese. The difference in complexity of the nominals (36b-e) is one of scope between (36e) and (36b), not of profile.

(36)

    a) exist

    b) existence

    c) experience of existence

    d) the being-under-someone's-hand-undergoing existence

    e) the experience of an existence of being under someone's (oppressive) hand

The cognitive view of nominalization according to Langacker's model is that of merely changing profile of the same or similar semantic contents for the purpose of the cognitivizer.

Nominalization involves a conceptual reification of experience. The characterization of this is explained with the same notions of definitions for noun and verb classes. Since — unlike in transformational grammar — there is no distinction between lexicon and syntax, there is no problem of where derivation arises.

This cognitive approach is closer in some respects to Asher's (1993) view of immanence (see below), to conceptual naturalness, and ontological immediacy. The ontological immediacy of conceptual transformations between verbal and nominal will be important to the study of nominalization in Burmese. While construal of the entities is manifest by the semantic role of the particle, the ontological result is always the same – the creation of a linguistic object with a sense of linguistic being. This ontological unit that results from the nominalization process establishes a grounded basis or a stage for further expansion of sentential or discourse units.

3.2.3 Philosophical – Creation of Ontological Objects.

3.2.3.1 Language as Representation

The very act of language is observational. Language represents the deed. It is always in the 'about' position, talking *about* something, rather than the direct relationship of *with* or *to*. The difference between the observer stance and that of the experiencer is similar to the difference between knowing someone and knowing *about* them, knowing a sense or experience versus knowing a fact. The difference is a degree of immediacy, of contact, of intimacy, of experience. The *about* relationship is one of distance, removal, separateness. The *about* stance is that of the observer of the phenomena; it is the point of view of the narrator, the describer, the languager. It is external to the object or process it seeks to represent and thus is able to perceive it.

Language is the act of the observer. It is separate from the phenomena. Language is not the thing itself but an attempt to represent it. By imitation (mimesis) language is a system that functions observationally in relation to something else. That something else can be one's own thoughts, as when one writes his own thoughts. The words are not the thoughts, but represent them. The words on the page are a more distant representation of the words used to represent those thoughts. Thus an intricate system of self-same representation operates, both in the oral and literate processes of languaging. The thing that language represents or replicates may also be an external (to the speaker) process, or a physical object, or even the objects of languaging process itself, which we call words, or utterances, or sentences.

Language is an external representation; it is not the item or the process it represents. It is a model of thought which can be represented by action.

3.2.3.2 Role of the Observer

The person using language is in the role of the observer. As a speaker he uses a model of his thoughts and perceptions, which may include his physical, emotional, mental and social state of being. The report that he issues about something is always his perception and formulation, even if conventionalized by social norms. His perceptions are *about* something.

It is this *about* relationship that is here called 'observational' and is at the core of what language does ontologically. Language both represents and imitates something else. As this writer places words on the page, she believes her thoughts to be the same as, or almost so, as the lexical and syntactic frame she employs. The reader, presumably believes (and who should speak for him or her here but the author who controls the discourse — postmodernism aside) that these words represent the thought of the author, and that even the lexical selection, the syntactic turn and innuendo represent most accurately her perceptions. What other means of communication have we, if our words do not reflect our thoughts? Indeed, that dilemma is at the forefront of all international political negotiation, as well as interpersonal and domestic relations.

Language and its *about* relationship is normally presumed to be representational. What it represents is the problem dealt with by spouses, by negotiators, by courts of law, by theologians. That it represents *something else* is not in question. It is already presumed by those who ask the question 'what' does it mean. It is that *other* aspect of being that is commonplace in human languages, if not all languages. That *otherness* aspect is ontologically present in consciousness yet usually out of sight – that is, out of conscious attention. For this reason, humans normally are not alert to the representational system that language is.

3.2.3.3 Nominalization as Observational Act

The grammaticalization of language as an observational act is nominalization. When a speaker formulates his thought into one sentence or even one word, he is grammaticalizing them. Thoughts, perceptions, concepts take on a representation in language which entails a grammatical category normally.[1]

The act of observing is signaled linguistically by epistemic devices, such as verbs or adverbs that comment on the act. In English, these are recognizable as the matrix clause with psychological or sensory perception verbs such as *think*, *said*, *seems*, *hope*, *dream*.

(37)   a. He <u>seems</u> distracted.

    b. I <u>thought</u> he was coming today.

The function of the matrix clause in (37a) is to inform or make explicit the fact that the observer/speaker is present in the linguistic scene. Other pragmatic functions may relate to the degree of certainty on behalf of the speaker about the assertion and therefore the degree of responsibility he bears for the utterance. The attitude of the speaker to the assertion may also be implicit.

Modern theories of propositions have suffered the Platonic fate of a mind-independent status without the benefit of a perceiver. Traditional theories of propositions presuppose a functional relation between sentences of natural language and propositions. The Russellian tradition takes propositions to be "structured entities whose constituents are individuals and relations, plus perhaps some logical opera-

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[1] Expressives and sounds of various types that are clearly communicative and representational are often excluded from linguistic description, unfortunately.

tions" (Asher 1993:9). The Fregean tradition, found in many modern linguistic theories of semantics, views propositions as "sets of possible worlds" for which Montague (1963; Thomason 1974) is chiefly responsible (Asher 1993:9). The problem with the latter view is that natural language has been excluded.

3.2.3.4 Philosophical Approach to Objects

Asher (1993) explores natural language abstract objects in discourse and their anaphora. He attempts to establish a firm ontological basis, a metaphysics that is 'real'. Following upon the natural language studies of Vendler. Davidson, and others, Asher built a semantic model called Discourse Representational Theory of abstract nominals. This theory is representational and conceptualist together with a "natural language metaphysics", he credits to Emmon Bach (1981). It should be noted that natural language distinguishes many types of abstract objects, whose ontology is presupposed. These abstract objects include propositions, properties, states of affairs and facts, and all belong to the broad class of semantic expressions called nominals.

Saturated Abstract Objects

Eventualities

States

activities achievements
accomplishment
processes

Purely Abstract

Fact-like Objects

possibilities facts
situations
states of affairs?

Proposition-like Objects

Pure Propositions Projective Propositions

commands

questions

Spectrum of Abstractness
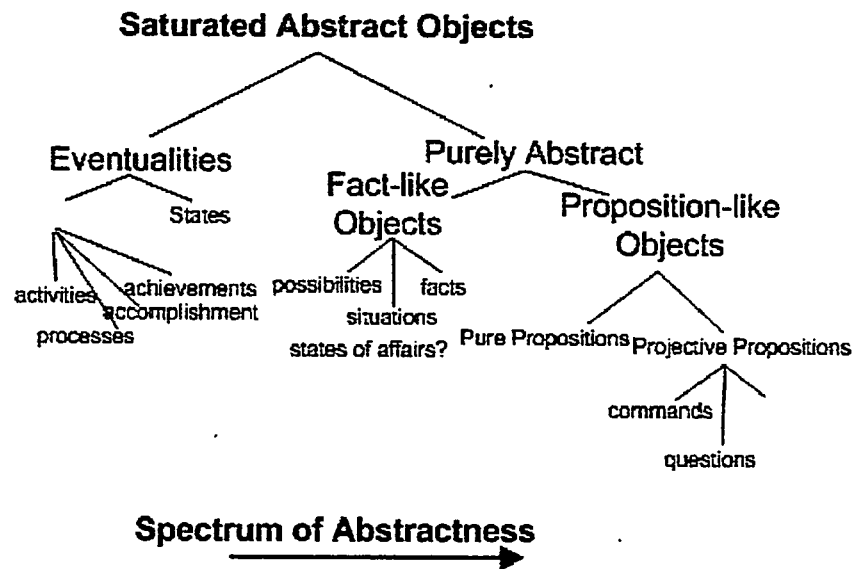
Figure 30. Spectrum of Abstractness (Asher 1993:57)

Like Vendler (1967), Asher distinguishes two types of sentential nominals but contributes his philosophical observations that there are 1) world immanent objects – events and states, with causal, temporal and spatial properties, and 2) purely abstract objects like propositions and thoughts which lack temporal, spatial and causal properties. These correspond respectively to event and result nominals. Though Vendler did distinguish fact nominals, an inclusive model was not developed between those two basic types and the fact nominals. Asher proposed a much broader spectrum of nominals with fact nominals in between the two basic classes of event and result, because they can have causal efficacy (like events) but do not take spatial or temporal properties (like results). He proposes a schema of *world immanence* to capture the similarities and differences between these three types of nominal abstract objects. He labels events as 'eventualities' and results as 'propositions'. Sub-

categorizing each type into component forms, he proposes a spectrum of more concrete entities (on the left) to more abstract (on the right).

3.2.4 Spectrum of Noun and Verb Categoriality

Hopper and Thompson (1984) argue that linguistic forms are "in principle to be considered as lacking categoriality completely unless nounhood or verbhood is forced on them from their discourse functions" (1984:747). Discourse functions of 'discourse-manipulable participant' (noun) or 'reported event' (verb) account for the properties associated with categoriality. Categoriality therefore appears to be a continuum based upon notions of whether that category is more prototypical of a participant, or of an actual event. Underlying notions of thingness versus eventness appear strategically primitive to conceptualization and to broader patterns of lexical-semantic and discourse-pragmatic functions. The cross-linguistic characterization of nominality and predication while varying considerably appear to have prototypical characteristics.

3.2.5 Summary of Approaches to Nominalization

Comparing the spectrum of abstractness proposed by Asher with the framework of categoriality of nounhood and verbhood proposed by Hopper and Thompson, with the cognitive typology of noun versus verb by Langacker, with the categories of result versus event nominal constructions of Vendler (1968), and Grimshaw (1990), with the functional heads determining the category of a lexical head (Alexiadou 2001), results in the following observations of noun and verbness:

- an apparent binary system of opposition where the opposing poles of nounness and eventness are most prominent

- a fuzziness of the distinctive terminal points, resulting in a spectral sense of gradience, e.g. some members being more or less nouns or verbs – that is, prototypical categories

- context shapes categoriality – such as the "container" clause, the functional head, the discourse function

- conceptual organization is manifest in linguistic encoding of categories

- natural language metaphysics operating in a basic level ontology of thing and event

- systematic organization of constituents into ontologically perceptive linguistic units.

These observations are relevant to the study of Burmese nominalization in that what is being proposed is a binary system of categoriality with two principle categories *nominal* and *verbal* (noun and verb), together with an intermediate category of *particle*, which shares operational characteristics with the verbal.

3.3 Structure of Burmese Nominalization

3.3.1 Overview

Nominalization is a dominant grammatical pattern within the Burmese language, and is manifest at multiple levels from Word, Expression and Sentence (Section 2.5), which include the discourse as a whole. This study examines within a cognitive grammar framework the role of nominalization in Burmese as cognitive text

structuring. It is hypothesized that nominalization functions extensively to focus attention toward the logical semantic *result* or terminus of an action sequence chains. The logical argument structure of Burmese text unfolds through a process creating linguistic, reified objects and iteratively embedding them within other linguistic objects. The status of objects in linguistic space conforms to the notion of iconicity to the speech situation. Grammatical objects created via a grammatical system of nominalization function at multiple levels serving to cross index cognitive information. Information marking (theme-rheme, given vs. new), deictic referencing, and the iconic progressing of the textual scene integrates the semantico-grammatical functions of nominalization.

3.3.2 Nature of Burmese Nominalization

Nominalization appears at various grammatical levels in differing constructions appropriate to each grammatical level. Burmese makes ample use of postpositions to orient a construction's relationship to other constituents within the sentence. In fact, the postposition particles form the skeleton of the sentence and the text, serving to structure and orient the lexical content spatially, temporally and logically. As postposition particles function to structure information they become the backbone of the text upon which the flesh of the text hangs. One viewing text will normally not look at the body and perceive the skeleton, but this study undertakes to do just that. As the particles function like skeletal joints so nominalization functions in relation to those joints as ligaments and tendons to bind the flesh and organs of the whole text into one cohesive structure of meaning. Thus, our particular discussion of nominalization will begin with the discussion of particles.

3.3.3 Particles

3.3.3.1 Network of Postpositional Particles

The postpositional particles perform a separate type of analytical and cohesive role for the reader and hearer than other linguistic systems. Analogous to different physiological systems within the body such as the lymphatic system, nervous system, digestive system, and endocrine system which all perform separate specialist roles and functions, the postpositional particles manifest a network of functions that facilitate memory and comprehension by chunking text into groups and relations. These units are ordered following expected sequences within cultural scenes, sets, or behavioral scripts. They provide cohesion according to cultural expectations of the order of natural events, and thereby become 'grammatical' speech habits.

This section examines some of the more unusual functions of textual relations signaled by postpositionals. Postpositionals serve as pivots which ground text into a basic metaphor of logic or action from which meaningful extensions of action sequences can be expected. By serving as a pivot to semantically ground information within its scope the particle is structurally the most important element in the text. It makes explicit the logical relationship between informational units and thereby binds those units of information into a whole. This binding function is a type of reification in that it structures whole units of lexical information into a point, a set, a unit, and as such is a type of nominalization.

The observation within X-bar theory that DP (determiner phrase) is the maximal projection of D (determiner) is very similar to what is proposed here for the particles of Burmese. The grammatical function (not the semantic role) of the particle is to operate on its operand, its 'object' or grammatical construction, thereby ontologi-

cally nominalizing it. So also, another insight of Distributed Morphology is that "D

is the element that converts the nominal expression into a referential phrase" (Alex-

iadou 2001:7) which in turn can be used as a sentential argument. Interestingly, the

argument structure of the nominal in that model of syntax is what differentiates two

types of nominalization (e.g. event nominals from result nominals). Although argu-

ment structure is not particularly relevant to this study, the interplay between deter-

miner and argument structure, and nominalization and argument structure is. The

key nominalizing particle in Burmese is သည် **sany**, which also designates Sentence

arguments, variously called subject or topic (Section 4.2.1.3).

The configurational form of the particle as head to the nominal as modifier is

displayed in Figure 31. While 'particle phrase' is not a constructional unit proposed

here, on analogy with X-bar syntax, it is shown as a functional level of construction.

In the representational system employed in this study (Figure 32), the configurational

form implies two things: 1) that the right-most constituent is the Head, and 2) that the

result of the process of nominalization is an N represented as a higher node. There

is no intervening unit of construction.

Unlike the projection constraints of X-Bar syntax and other generative syntac-

tic models that stipulate that the clausal projection IP (Chomsky 1986) is the largest

'extended projection' of V or Abney's (1987) DP is the largest 'extended projection' of

N (Edmonds 2002:237), the approach developed here is that the maximal projection

of the P is not P or PP, but N. Were a constructional unit of E (Expression) as sen-

tence or clause necessary in the ontological derivational construction, it would ap-

proximate the function of N here. All clauses are nominals on the basis of the func-

tion of သည် **sany** (see Section 3.3.4), therefore it is unnecessary to propose an in-

tervening level of derivation between the mother node *PP and N. The major differ-

ence in the ontological approach is that headedness is but one factor in the construction. The derivational process of operator-to-operand is the other. The derived nominal N resulting from the operation of the particle is a construction at the level of Word. As such, it is analogous to constructions where inflection is assumed to be the head of sentences and projects to an IP, another type of constructional unit different in form, though named for its head. In Burmese, sentences are nominal units not phrases, so while the ontological approach is not syntax, and there are some similarities to both syntax and morphological processes in word formation, there are also significant differences.
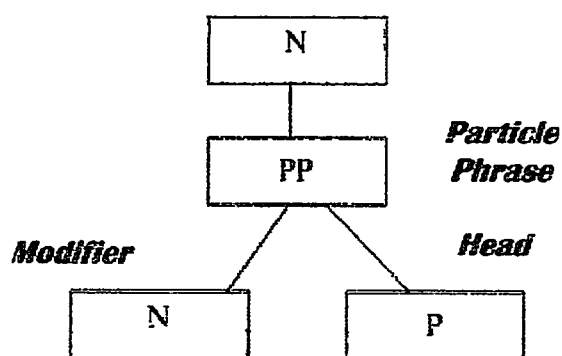
Figure 31. Particle as Head of the 'Particle Phrase'
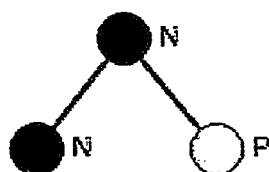
Figure 32. Particle as Head in Burmese Model

Particles parse the text grammatically, semantically, visually (in ortho-graphic text) and phonologically into chunked units for easy cognitive processing. Particles serve to:

- Chunk the text into series of units that link the cognitive scene with the arguments of the matrix predication.

- Chunk the text into grammaticalized nominal units that organizes a macro system of expectation (nominal hierarchy).

- Chunk information into embedded kinds of structures that can demote or subordinate information into the background so that other informa-tion can be foregrounded and made more prominent at any one mo-ment in the dynamic process of information processing.

3.3.3.2 Particles as Nominalizers

Particles as 'nominalizers' bear multiple functions in addition to nominaliza-tion, particularly that which is most obvious in the immediate context, while also manifesting a unique phonological and orthographic shape. Nominalization occurs at multiple levels of grammatical analysis from what is commonly called the word, phrase, clause, sentence, paragraph,[2] up to the discourse level. The nominalizing unit varies with each level, type of constituent, and meaning or function.

Another type of nominalization occurring at interclausal boundaries and at the sentence final post-verbal position is viewed here from a nominalizing perspective, as well as the more traditional grammatical view of marking logical, spatial or tempo-

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[2] The constructional forms of Word (word, compound, phrase, modifier clauses), Expression (clause) and Sentence (sentence, paragraph, text) are proposed as the only units of construction required to describe nominalization in Burmese. To 'translate' into other systems of linguistics, the normal defini-tions for these terms must be used to ensure communication.

ral subordinated relationships. Though the nominal function of specific postpositions locally and across clausal spans as sentential complements has been described previously (Okell 1969, 1994d; Wheatley 1982; Myint Soe 1999), the distribution of this phenomenon has not been integrated systematically into a unified view of nominals with particles functioning at levels higher than commonly recognized nominalized clauses. The propensity for extensive nominalization has been noted for other Tibeto-Burman languages, Lahu and Jinghpaw, as well as for Mandarin and even Japanese (Matisoff 1972). Matisoff does not make the generalization that the same particle which functions in Lahu to relativize, genitivize, and nominalize are all nominalization. It should be noted in passing that this same Lahu particle also functions as the regular sentence final marker. DeLancey (1986) has noted a similar distribution of nominalization as the underlying form of relativization in Newari and Tibetan. Genitivization appeared to have diverged somewhat. He concludes that nominalization was historically prior and that relativization is a form of nominalization.

In Burmese, the clue to nominalization processes operating beyond the clause is the postposition particle သည် **sany**. (Section 3.2.4)

3.3.3.2.1 Postposition Particles recognized as nominalizers in Burmese

Specific postposition particles have been classified as nominalizing particles in Burmese. These particles typically have no other semantic function and thus the grammatical role of nominalizing is much clearer. Where other functions, especially semantic ones are also borne by a single particle, then the functions of nominalization are less prominent to the more salient semantic role. The following discussion introduces first the particles which are seemingly mono-functional grammatical

nominalizers according to their various scope of relevance. Subsequently, the function of particles that carry semantic and logical meaning to sentential units are discussed.

3.3.3.2.1.1 Grammatical Nominalizing Particles

Nominalization occurs with the following sample of particles, which are listed according to the domain or scope of grammatical constituency, which they dominate – word, phrase, clause, sentence. This selected list is not exhaustive but represents some of the more relevant particles for the purpose of demonstrating how nominalization functions in Burmese.

The following table shows each particle classified as to its function with examples. The purpose of these lists, (Table 27 and Table 28) long though they may be, is to provide a broad sense of particle functions within the context of natural language. Many of these examples come from Okell and Allott (2001), Judson (1893), U Tun Nyein (1971), U Mya Aung (1971) and various other sources. The analysis of usage tends to follow that of Okell and Allott (2001).

Particle	Grammatical Function & Examples	Grammatical Distribution
		Meaning of Examples
PREFIX		
အ– **ă-**	အ– **Nominalizer prefix; deverbalizer,**	-V; -N; productive prefix with any verb (OK 2001:254)
(38)	အပိုင် **ă-puing** a + possess	'possession'
(39)	အသင်. **ă-sang.** a + be suitable	'appropriate'
(40)	အမျိုး **ă-myui:** a + kind/race	'a kind of (something) / 'race'
တ– **tă-**	တ– **Nominalizer prefix; deverbalizer**	-V; -N
(41)	တလွဲ **tă-lwai:** ta+ 'swing; miss, be in error' (verb)	'wrongly' or 'a wrong'
(42)	တကယ် **tă-kai** ta+ 'rescue' (verb)	'really' or 'a reality'
(43)	တအား: **tă-a:** ta+ 'strength' (noun)	'strength' (definite)
WORD		
သည် **sany**	သည် **that which is V-ed; thing that was V-ed; doer, possessor, person involved with N.**	V- (FB) (realis) *See Clause below.*
တာ **ta**	တာ **that which is V-ed; something that is V-ed, V-ing.**	V- (CB) this is the counterpart to သည် *sany* in CB *See Clause below*
သည် **sany**	သည် **doer, possessor, person involved with N.**	N-
(44) a. b. c, d.	ရေသည် – **re sany** water+ Nom; ဈေး:သည်– **jhe sany** market+Nom ခရီး:သည် - **hka. ri: sany** journey+ Nom ကုန်သည်– **kun sany** merchandise+Nom	water seller market trader traveler merchant

Table 27 – Continued

Particle	Grammatical Function & Examples	Grammatical Distribution
မည် **many**	မည် *many,* that which will be V-ed; thing that must be V-ed;	V- (FB) (irrealis) *See Clause below.*
မှာ **hma**	မှာ that which will be V-ed; thing that is to be V-ed, V-ing	V- (FB) (irrealis) See *Clause below*
မှု **hmu.**	မှု act or deed of V-ing	V- (FB) Abstract Nouns
(45)	သေ မှု -se hmu. die + Nom	'death'
(46)	နား:လည်မှု - na: lany hmu ear + turn+Nom	'understanding'
(47)	လူမှု ဆက်ဆံရေး: lu hmu hcak hcam re: people Nom connect common Nom	'social relations'
(48)	လွတ်မြောက်ရေး: လုပ်ရှား:မှု lwat mrauk re: hlap hra: hmu. free overturn Nom shake expensive Nom	'liberation movement'
ချက် **hkyak**	ချက် nouns from verbs (V+Nom)	V- (FB) abstract ('blow, strike, shot, point')
49)	စမ်:သပ်ချက် [sam: sap] hkyak [search grope] Nom	'science'
(50)	ထင်မြင်ချက် [htang mrang] hkyak [think see] Nom	'opinion'
(51)	ဆုံ:ပြတ်ချက် [hcum: prat] hkyak [terminate cut] Nom	'decision'
ချက် **hkyak**	ချက် compound nouns (N+Nom)	N- (FB) abstract
(52)	လှံ ချက် hlam hkyak spear Nom	'spear wound'
(53)	လက်ချက် lak hkyak hand Nom	'handiwork'

Particle	Grammatical Function & Examples	Grammatical Distribution
(54)	ဒဏ်ချက် **dan hkyak** injury Nom	'injury'
ြခင်း **hkrang:**	ြခင်း **Ving, the act of Ving**	**(N) V- (FB)**
(55)	ခရီးသွားြခင်း **hka.-ri: swa: hkrang:** trip go Nom	travelling
(56)	ချစ်ခင်ြခင်း **hkyac hkang hkrang:** love fond Nom	being affectionate; affection
(57)	ယဉ်ေက်းြခင်း **yany kye: hkrang:** culture Int Nom	being civilized, behaving politely
ေရး **re:**	ေရး **Abstract Nominalizer -Ving, matter or affair**	**V- (FB)**
(58)	လွတ် လပ်ေရး **ywat lap re:** free vacant Nom	independence
(59)	စီးပွားေရး **ci: pwa: re:** flow increase Nom	economy
ေစရာ **cara**	ေစရာ **thing that can be Ved,**	**V- (FB) (CB)**
(60)	စားေစရာ ရှိ **ca: cara hri.** eat Nom be	there's food
(62)	ထိုင်ေစရာ ေနရာ **htuing cara ne ra** sit Nom stay place	a place to sit
(63)	ချစ် ေစရာ ေကာင်းသည် **hkrac cara kaung: sany** love Nom good Nom	(she's) lovable

Particle	Grammatical Function & Examples	Grammatical Distribution
PHRASE		
(64)	စပါးသည် ပြည်ထောင်စု၏ အသက် ဖြစ်၏ **[[[[[[sapa: sany] [[prany taung] su.]]e] a-sak] hprac] e]** rice **Nom** country-bound-together Pos life happen Sf-Nom	'Rice (topic) is the life of the Union (of Burma).'
(65)	ထိုနေ့သည်ကား သူ့ ကို ရှင်ပြုပေးသည်။ **[[htui ne.] sany] ka: su. kui hrang pru pe: sany** Dm-d day **Nom** Adv 3p O novice do Ben Nom	'That day (topic) was the day he was made a novice monk.'
(66)	ဆရာကြီး ဦးလှန်သည် ၁၂၃၇ ခုနှစ်တွင် ဖွား မြင်သည်။ **[[[hsa.ra kri:] u:lun] sany] 1237 hku. hnac twang hpwa: mrang sany** teacher-big U Lun **Nom** 1237 Clf year in born see Nom	'Sayagyi U Lun (topic) was born in 1237BE.'
(67)	ပြည်မြို့ရှိ ဗိုလ်ချုပ်လမ်းမသည် မြို့လယ် လမ်းမ တစ်ခု ဖြစ်ပါသည်။ **[[[[prany mrui.] hri.][[[buil-hkyup] lam:] ma.]]sany] mrui. lai lam: ma. tac hku. hprac pa sany** [Prome city be Bo-gyo road main **Nom**] city middle road main one-Clf happen PI sany	'Bogyo is the main street in the city of Prome.
CLAUSE		
သည် **sany**	သည် **that which is V-ed; thing that was V-ed; V-ing**	V- (FB)~ Cl-
(68)	စိတ်ပျက်သည်တို့ကို ဖွင့်ချလိုက်ချင်သည်။ **cit pyak sany tui. kui hpwang. hkya. luik hkyang sany** mind destroy **Nom** PI O open drop follow want Nom/Sf	'I just want to enlighten her about the *things I was unhappy about*.'

Table 27 – Continued

Particle	Grammatical Function & Examples	Grammatical Distribution
(69)	နားမလည်သည်တစ်ခု မေးပါရစေ။ **na:-ma.-lany sany tac hku. me: pa ra. ce** ear -Ng-turn **Nom** one Clf ask Pl De Cs	'May I ask one *thing I don't understand?*'
(70)	မလိုအပ်သည် များကို ပယ်ဖျက်ရန်။ **ma. lui ap sany mya: kui pai hpak ran** Ng want necessary **Nom** Pl O shove destroy Pur	'Please delete *that which is not required.*'
တာ **ta**	တာ **that which is V-ed; something that is V-ed, V-ing.**	**V- (CB)** this is the counterpart to သည် **sany** in CB
(71)	လိုက်တာ **luik ta** follow+Nom	'happened..'
(72)	ဆိုတာ – **hcui ta** say+Nom	'all that said...'; 'in that case..'
မည် **many**	မည် *many,* **that which will be V-ed; thing that must be V-ed;**	**V- (FB) (irrealis)**
(73)	ရေသောက်ပါမည်လား‌ဟု ယဉ်ကျေးစွာ မေးပြီးလျှင်။ **re sauk pa many la: hu. yany kye: cwa me: pri: hlyang** water drink Pl **Nom/Irrl** I say culture Int ask Cp Tm	'After he had asked politely 'Would you like a drink of water?' ...
(74)	ရွေးကောက်ပွဲ ပြုလုပ်မည်ဟု ကြေညာထား၏။ **rwe: kauk pwai: pru lup many hu. kre-nya hta: e** select collect festival do work **Nom/Irrl** say announce put Nom/Sf	'They announced they will hold elections.'
(75)	လူ့�‌ဘောင်သစ်ကြီးသည် ပေါ်ပေါက် လာမည် ဖြစ်သည်။ **lu. bhaung sac kyi: sany pau pauk la many hprac sany** people's framework new big Nom/Topic appear pop-out come **Nom/Irrl** happen sany	'A great society would emerge.'

Table 27 – Continued

Particle	Grammatical Function & Examples	Grammatical Distribution
မှာ **hma**	မှာ **that which will be V-ed; thing that is to be V-ed, V-ing**	**V- (CB) (irrealis) corresponds to FB** မည် *many* **and is the counterpart of CB** တာ *ta* **(realis)**
(76)	သူတို့ ပြောမှာ တွေကို ကြိုတင်ပြီး **sui tui. prau hma twe kui krui tang pri:** 3p Pl say Nom Pl O advance submit Cp	'they submitted what they were going to say'
(77)	ည့်သည် မနက်ဖန်လာမှာမို့ ... **eny. sany manak-hpan la hma mui.** visit -Nom/person tomorrow come Nom/Irl because	'The visitors who will come tomorrow...'
(78)	ပန်းနည်းတော့ စောစောကုန်မှာ သေ ချာသည်။ **pan: nany: tau. cau cau kun hma se kya sany** flower few Adv early early exhaust Nom/Irl die+poor-=sure sany	'Since she has few flowers it's certain she'll run out early.'
ရာ **ra**	ရာ **thing, matter, item that V-s**	**V- /Cl-(FB and CB) General Reading**
(79)	သူတို့ဝါဒ ထောင်ခံရာ ရောက်မှာပေါ့ **su tui. wada. htaung hkam ra rauk hma pau.** 3p Pl policy support Ug Nom arrive Loc silly	'That would be like *supporting* their policy!'
(80)	တောင်သူလယ်သမားများ ရရာမှ ငွေချေးကြရသည်။ **taung su lai sa.-ma: mya: ra. ra hma.** mountain person field worker Pl De Nom Tm **ngwe hkye: kra. ra. sany** borrow money Pl De Nom/Sf	' The peasants had to borrow money *wherever they could get if from.*
ရာ **ra**	ရာ **thing, matter, item that V-s**	**V- / Cl- (FB and CB) Temporal Reading**
(81)	သွားကြည့်ရာ **swa: krany. ra** go look Nom	*'going* to see'

Table 27 – Continued

Particle	Grammatical Function & Examples	Grammatical Distribution
(82)	ဓာတ် မီးထိုး၍ လိုက်လံ **dhat mi: htui: rwe luik lam** element fire shine Tm follow 2-yards ရှာဖွေရာ **hra hpwe ra** search investigate Nom	*'investigating* by shining a flashlight that illuminated 2 yards"
ရာ **ra**	ရာ **thing, matter, item that V-s**	**V- / N- /Cl- (FB and CB) Locative Reading**
(83)	နေ့ရာ **ne ra** live **Nom**	'a place to live/ stay'
(84)	အိမ်ရာ **im ra** house **Nom**	'place of a house'
(85)	ဒဏ် ရာ **dan ra** injury **Nom**	'place of injury'/ 'injury'
(86)	အစွယ်ရာ **a-cwai ra** fang **Nom**	'fang mark'
(87)	ခြစ်ရာထွင်ရာ **hkrac ra htwang ra** scratch **Nom** drill **Nom**	'scratch marks'
ချက် **hkyak**	ချက် **nominalized clause**	**Cl- (abstract)**
(88)	ရေးသားထားချက် **[[[re: sa:] hta:]**$_{cl}$ **hkyak]** [[[write + matter] + put] $_{cl}$ + Nom]	'what was written'
(89)	အားနည်းချက် **[[a: nany:] hkyak]** [[strength less] Nom]	'weakness'
(90)	ကျမတို့ ဒုက္ခ ရောက်ချက် (ကတော့ ...) **[[[kya.ma tui.] dukka rauk] hkyak] (ka. tau.)** 1p F Pl trouble arrive Nom S Ad	('As for) the trouble that happened to us....

Table 27 – Continued

Particle	Grammatical Function & Examples	Grammatical Distribution
SENTENCE		
သည် sany	သည် that which is V-ed; fact	**Final Cl - (FB) (realis)**
(91)	သူ့ကို နေ့စဉ် နွား နို့ တိုက်ပါသည်။ **sui. kui ne. cany nwa: nui. tuik pa sany** 3p O day Tm cow milk feed(liquid) Pl **Nom/Sf**	'I give her cow's milk to drink every day.'
(92)	.... ဖြစ် ပွား ကြောင်း သတင်းရရှိသည်။ **.... hprac pwa: kraung: sa.tang: ra. hri. sany** .... happen arice Nom news De be **Nom/Sf**	' (I) head the news that that happened .... (clauses)'
(93)	မရိ အလွန် နှစ်သက်ပါသည်။ **ma. ri a-lwan hnac sak pa sany** Ma Yi a-exceed immerse fall Pl **Nom/Sf**	'Ma Yi likes it very much.'
(94)	၁၀ ရက်နေ့သည် အမျိုးသားနေ့ဖြစ်ပါသည်။ **10 rak ne. sany a-myui: sa: ne. hprac pa sany** 10 Clf day Nom/Top kind-son day happen Pl **Nom/Sf**	'The 10th is National Day.
(95)	ပထမဆု ရသော ကျောင်းသားသည် မော- ၚ်ထွေး ဖြစ်ပါသည်။ **pa.hta.ma. hcu. ra. sau: kyaung: sa: sany maung htwe hprac pa sany** first prize De Nom/Atr school son Nom/Top Maung Htwe happen Pl **Nom/Sf**	'The pupil who won first prize was Maung Htwe.
မည် many	မည် *many,* will be V-ed; thing that must be V-ed;	**Final Clause - (FB) (ir-realis)**
(96)	နက်ဖြန် ပြန်လာမည်။ **nak-hpran pran la many** tomorrow again come **Nom/Irrl**	'Tomorrow I will return.'
(97)	မျိုးချစ်စိတ်ဓာတ် ထာဝစဉ်ရှင်သန်အောင် ကြိုးပမ်းရမည် ။ **myui: huyac cit dhat hta wa. cany hrang san aung: krui: pam: ra. many** kind love mind element always Tm live strong Pur strive win De **Nom/Irrl**	'We will have to eagerly strive to keep alive for-ever our spirit of patriot-ism."

Table 27 – Continued

Particle	Grammatical Function & Examples	Grammatical Distribution
(98)	ကျောင်းပိုင်ပစ္စည်းများကိုလည်း ကိုယ် ပိုင် ပစ္စည်းကဲ့သို့ ရှိသေရပါမည်။ **kyaung: puing paccany: mya: kui lany: kuiai puing paccany: kai. sui. hri. se ra. pa many** school own property Pl O Ad self own property Pos Pth be still De Pl **Nom/Irrl**	'(We) should respect school property as we do our own.
၏ **e.**	၏ **that which is V-ed, fact and more salient or pointed than** သည် **sany**	**Final Clause - (FB) (re-alis)**
(99)	မကြာခင်ပင် အလုပ်ရလေ၏ **ma. kra hkang pang a-lup ra. le e.** Ng long Tm Emp work De Eu **Nom/Sf**	'He soon got a job.'
(100)	..တွေ့ရှိသည်ဆို၏။ **..twe. hri. sany hcui e.** meet be **Nom/Sf** say **Nom/Sf**	'He said he encoun-tered...' (reported speech)
(101)	ယနေ့ ရာသီဥတု သာယာ၏။ **ya.-ne. ya-si-u.-tu. sa ya e.** today weather pleasant Redp **Nom/Sf**	'Today the weather is pleasant.'

Table 27. Grammatical Nominalizing Particles

The above examples demonstrate a variety of functions for the same particle within the more common types of constructions. Because of the problem of what a word is in Burmese, these particles appear if they are 'bounding' at higher construc-tional levels, such as clauses or sentences. This follows the traditional categoriza-tion. What is proposed here is that the particle only relates to simple units, a N or a V. When it appears in relation to a whole sentence, for instance, it is functioning to bound a highly complex structure of ontological objects but which at the level of the particle is actually one single unit, perhaps of many levels of nominalized units, but

one whole form at the level of the particle itself. This can be symbolized in the form of the operator-to-operand as: **[Word] Expression → Word**. using the definitions of Table 23.

3.3.3.2.1.2 Semantic Nominalizing Particles

The particles which retain a semantic aspect of their meaning as well as taking on a grammatical role as nominalizer are numerous. Okell and Allott (2001) list hundreds of these. The following list is indicative of the types that are found in the texts analyzed here or are used in examples elsewhere. These particles function by providing a nominal head, much as the grammatical particles do, but also contributing something of the content of the independent lexical form. On the whole, the degree of grammaticalization is constructional and pragmatic rather than lexical. The same semantic nominalizing particle may have different selectional properties specified in different constructions. For instance ေကြာင်း **kraung:** combined with nouns will contribute the sense of 'a line of N' or 'by means of' if the N is agentive, or of 'via' if N is a location or place name. With a verb ေကြာင်း **kraung:** may select a reading of 'the content of perception' with verbs such as ask, tell, know, or the 'content' of a newspaper article if in those types of collocations. It may also expand toward a marker of reading of reported speech. As a form in which ေကြာင်း **kraung:** itself is nominalized by the prefix အ– **a-**, အေကြာင်း **a-kraung:** as the head nominal of a phrase will take the reading of circumstantial cause in relation to the rest of the sentential predications. Alternatively, a reading is possible of a simple background listing of relevant facts without necessarily implying a strong sense of causality. Interpretation of this nominalizer is thus highly semantic, akin in fact to lexical forms in the range of meanings possible centered around a semantic core or prototypical center

of a 'relevant fact or factor'. The grammatical function of ကြောင်: **kraung:** as a

particle is found in its regular function as a postposition and nominalizing operator of

the noun, phrase or clause which it nominalizes.

The following list of postpositions demonstrates nominalized constructions

with various semantic functions. These are organized by the general grammatical

level relevant or commonly associated with the particle. While the organization of

this table of examples follows a more traditional grammatical hierarchy, it should be

noted that particles can usually expand their scope to include large chunks of nested

nominal compounds. They need not be limited necessarily to any particular modifier

of which they are the head.

Particle	Grammatical Function & Examples	Grammatical Distribution	Particle Sense
Word			
ka	ကာ **while Ving; V-ing**	**V-**	**Process**
(102)	စဉ်းစားကာ ထိုင်စောင့်၏ **[cany: ca:] ka htuing caung e** [pile eat] Nom sit wait P [think] while	'Thinking, he sat and waited.	
(103)	အဆက်မပြတ်ဆင့်နှဲကာ **[[a-hcak ma. prat] [hcang hnwai:]] ka** [connection Ng break] assemble participate Tm [without stopping]	celebrated without stopping	
hmu.	မှု **legal case of V-ing / of N**	**V-/ N-(FB)**	**principle or policy**
(104)	ပြစ်မှု shoot + Nom	crime, charge	
(105)	မုဒိမ်းမှု decoits +Nom	rape (case)	
(106)	ခိုး မှု steal + Nom	theft	

Table 28 – Continued

Particle	Grammatical Function & Examples	Grammatical Distribution	Particle Sense
Phrase			
ကား **ka:**	ကား **as for Phr; however, but**	**Phr-**	**topic marker re-sumption**
(107)	ဤသည်ကား ရောမစစ်သား [[i sany ka:] rau-ma. cac sa:] [[Dm-p Nom] Nom] Roman war son	these Roman solidiers....	
(108)	အရိုက်ကိုကား ... [a-ruik kui] ka: ..... [Nom- beat O] Nom]	about the beating ..	
ေကာ **kau**	ေကာ **and how about Phr, and what of Phr?**	**Phr- / Clause**	**Topic fo-cus**
(109)	အေမေကာ လာေသးသလား a-me ka: la se: sa. la: Nom- mother Nom] come yet Nom Int	your mother - did she come yet?	
Clause			
ka	ကာ **while Ving; V-ing**	**Cl-**	**Process**
(110)	နှစ်စဉ် ကျင်းပကာ [[hnac cany] kyang: pa.]] ka [[year line-up] [spread outward]] Nom [annual] [celebrate] while	'celebrating annually...'	
(111)	အဆက်မပြတ်ဆင်နွှဲကာ [[a-hcak ma. prat] [hcang hnwai:]] ka [connection Ng break] assemble participate Nom [without stopping] Tm	celebrated without stop-ping	
(112)	ရုတ်တရက်ထေအာ်သဖြင့် အိမ်သားများ လန့်နိုးကာ ေမာင်ေအာင်သ္ဲအား rut ta. rak hta. au tha. hprang. im sudden one swift arise shout Nom In house tha: mya: lan. nui: ka son many startle wake TM	'.. with a sud-den shout when/as the household was awak-ened ...'	

Table 28 – Continued

Particle	Grammatical Function & Examples	Grammatical Distribution	Particle Sense
(113)	အိမ်သား:များ:ကလည်:ကြောင်ကိုက်သည် ထင်မှတ်ကာ ... **im tha: mya: ka. lany: kraung kuik thany** house son many S Add cat bite Top **htang hmat ka** think mark Tm	'As for the householders, thinking that a cat had bitten...	
hkyang:	ချင်: **as soon as, immediately upon** Ving,	**CI**	**Temporal Succession**
(114)	စာ:ပြီး ပြီးချင်: သူတို့အိမ်ထဲက တွက် သွာ: တယ်။ **ca: pri: pri: hkrang: su tui. im htai: twak swa: tai** eat Cp Cp **Nom** 3p Pl house Loc S exit go Nom/Sf	*'As soon as they finished eating* thy left the house.'	
(115)	၍အလုပ် လုပ်ပြီး:လျှင်ပြီး:ချင်: ဌာန်မှူကို အကြောင်: ကြာ:ပါ။ **i: a-lup lup pri: hlyang pri: hkrang:** Dm-p work work Cp Tm Cp **Nom** **htan hmu kui a-kraung: kra: pa** department head O fact inform Pl	'When you finish this work inform the Department Head.'	
kraung:	ကြောင်: **V- that (circumstance, content)**		**N- /V- / CI- Preception Thought**
(116)	.... ဖြစ် ပွာ:ကြောင်: သတင်:ရရှိသည်။ **.... hprac pwa: kraung: sa.tang: ra. hri. sany** .... happen arise Nom news De be Nom	' (I) heard the news *that* that happened .... (clauses)'	Content of perception (news),

Particle	Grammatical Function & Examples	Grammatical Distribution	Particle Sense
(117)	ြမွ ကိုက် ခဲ့ ရ ေသာ ဒဏ် ရာ များ: **mrwe kuik hkam ra. sau: dan ra mya:** snake bite Ug De Atr injury place many ြဖစ် ေြကာင်: သိ ရှိ ြပီ: **hprac kraung: si. hri. pri:** happen Nom know be Cp	'He knew *that* the injury was from a snake bite.'	Content of thought

Table 28. Semantic Nominalizing Particles

Further examples of the structure of grammatical and semantic nominalization can be found in Section 3.2.6 and in the texts in Appendix E.

3.3.4 သည် sany Templates

The post-verbal sentence final marker သည် **sany** which has been labeled in some grammars as past/present tense (Judson 1866; Lonsdale 1899; Stewart 1939; Ballard 1961) and more recently as realis mood (Allot 1965; Okell 1969). This sentence final marker has a paired sense with another marker မည် **many** which has been labeled as the contrasting sense, either of tense (future) or of mood (irrealis). Both particles have phonological variants which function at clause boundaries with additional functional components of meaning. The view proposed here is that these two markers, သည် **sany** and မည် **many**, are two variants of the *same conceptual category* of ontological nominalization. Each of the two particles bear multiple functions –

a)   nominalizing, reifying, or objectifying of the whole event encap-
       sulated in the sentence,

b)   identifying the evidential status of the information,

c)   specifying the deictic functions of 'pointing' appropriate to each
       mood and construction type, and

d)   personalizing the nominal construction of which it is a part as a spe-
       cialized subset of nominalizer functions.

Nominalize

Deixis   Personalize
     Evidentiality
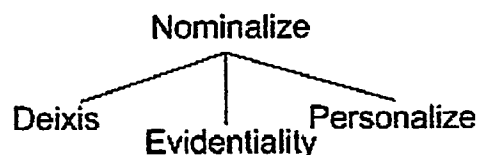
Figure 33. Range of Functions of the Nominal Prototype

Though there is fairly regular phonological difference of these particles be-
tween Colloquial and Formal Burmese, the fact that they maintain a systematic simi-
larity phonologically and functionally further contributes to the argument that they are
the *same prototypical* particle with allomorphic variants.

Each of these functions Nominalization, Deixis, Evidentiality and Personalize
will be discussed separately below. The bulk of discussion concerns nominalization,
which is presumably the original function.

3.3.4.1 Nominalization Template သည် **sany**

Burmese demonstrates a consistent set of grammatically determined allomorphs for the particle သည် **sany.** This patterned set of allomorphs provide one of the keys to understanding the functions of nominalization underlying Burmese grammatical structure. Both Formal and Colloquial Burmese demonstrate grammatically determined allomorphs of the underlying morpheme သည် **sany.** While it has generally been recognized that variant forms were derived from သည် **sany,** it has not be previously integrated into a coherent system. The following discussion of the relationships between the variant grammatical forms and functions of သည် **sany** are formulated best in relation to nominalization.

The allomorphic variants of သည် **sany** are distributed within a basic template of functions of nominalization of a) sentence, b) relative clause, c) attributive clause, and d) topic. As a prototype, sentence nominalization functions as the central member of the category, with the other members derivative and more peripheral.
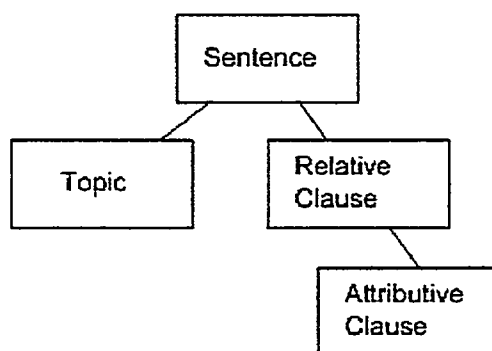
Figure 34. The Basic Functions of သည် **sany** Nominalization

The same configurational pattern of allomorphic relations are found both within Literary and Colloquial Burmese. The following two figures portray the surface realizations of သည် **sany** in those same Literary Burmese functions Figure 35 and for Colloquial Burmese Figure 36.
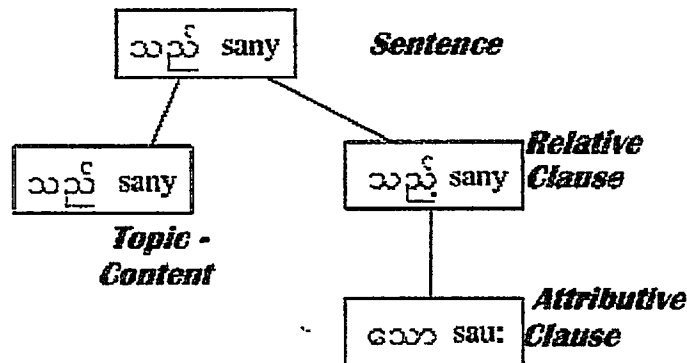
Figure 35. Allomorphic Variants of Literary Burmese သည် **sany**

The following examples briefly demonstrate each of these nominalizations.

(118) Sentence nominalization

သူ့ကို နေ့စဉ် နွား နို့ တိုက်ပါသည်။
sui. kui ne. cany nwa: nui. tuik pa sany
3p O day Tm cow milk feed(liquid) Pl Nom/Sf
'I give her cow's milk to drink every day.'

(119) Relative clause nominalization
သေသည့် အထိ ချစ်ပါမည်။

se   sany. a-hti. hkac pa many
die   Nom   until   love Plt Nom/IrRl
          (Pos)
'I will love her until death.'

(120) Attributive clause nominalization

က‌လေး   များ   ကို   ဆုံမ   သော   ဆရာ
ka.le: **mya:**   **kui**   **hcum-ra.**   **sau:**   **hca.ra**
child   PI   O   scold   **Att/N**   teacher
'a teacher which scolded the children'

(121) Topic nominalization

နား‌မလည်‌သည်‌တစ်ခု   မေး‌ပါရ‌စေ॥
na:-ma.-lany sany tac hku. me: pa ra. ce
ear -Ng-turn **Nom** one Clf   ask PI De Cs
[understand]
'May I ask one thing I don't understand?'

Colloquial Burmese realizes the postposition သည် **sany** with a modern set of forms commonly recognized as colloquial counter-parts to the same grammatical functions in Formal Burmese (e.g. CB တယ် **tai** for FB သည် **sany**). A native speaker or writer would easily switch the particles to shift into a different style without much thought. What is not at the level of conscious awareness for most native speakers is that the sentence final postposition သည် **sany** is related to the topic marker သည် **sany**, or the other functions of relative and attributive clause — or even as a particle marking putative adjectives. The differences of function blocks awareness of form similarity for the naive speaker. Awareness of derived functions from the same underlying form is something that both Burmese linguists and foreign linguists are to some degree aware of. Interestingly, the question of the relationship between sentence final particle and relativization has been raised for Lahu (Matisoff 1972) and for relativization and nominalization for Tibetan (DeLancey 1986), where those languages utilize the same post-position particle for these particular grammatical functions. Other Tibeto-Burman languages also manifest functions from the same set prototype functions proposed here, although only fragments remain to be pieced to-

gether. Nominalization as a process of substantivization is probably a very old resource in Tibeto-Burman for organizing information.

Figure 36 shows a split in the category of Topic in Colloquial Burmese. The regular marker is တ **ta** for topic as a clause nominalizer (derived from သည် **sany** + ဟ **ha** 'thing'), and ဟ **ha** for nouns, but is also used for clause nominalization of sentence topic. The usage of the two topic markers is Colloquial Burmese has been the perplexing for many linguists. The difference between these must be sought in textual studies, for the notion of 'topic' is textual and not principally limited to the scope of reference within a sentence. Unfortunately, most studies of the problem are limited to sentential examples.
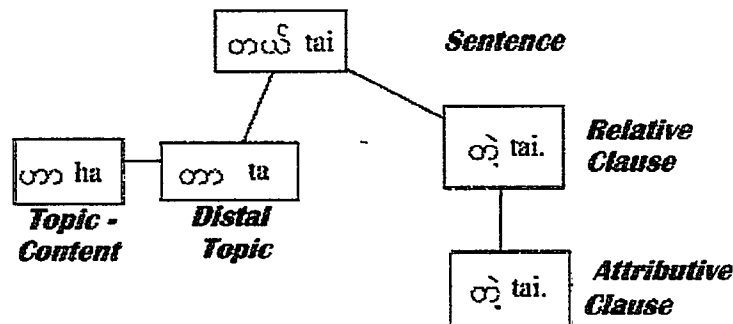
Figure 36. Allomorphic Variants of Colloquial Burmese သည် sany

3.3.4.1.1 Irrealis Template မည် many

The *nominalization template* is not limited to realis mood. The irrealis manifestation follows the same basic template pattern, thus confirming the nature and categories of the template across diachronic development and demonstrating that the template is not subject to mood functions of realis versus irrealis.
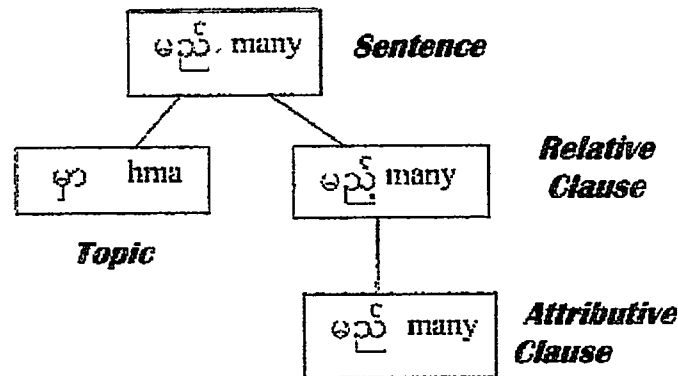
Figure 37. Allomorphic Variants of Formal Burmese မည် many

A similar set of irrealis patterns for Colloquial Burmese follows the template pattern, but with phonological changes in irrealis that mirror the sound changes that occur in Colloquial Burmese realis. Compare the phonological rhymes of Figure 35 and Figure 37. The consistency of template function across time provides further evidence for the underlying unity of the postpositional roles of sentence final markers, relative clause markers, topic markers and possessive markers as the same underlying morpheme with variant functions. Compare Colloquial Burmese realis (Figure 36) with irrealis (Figure 38).
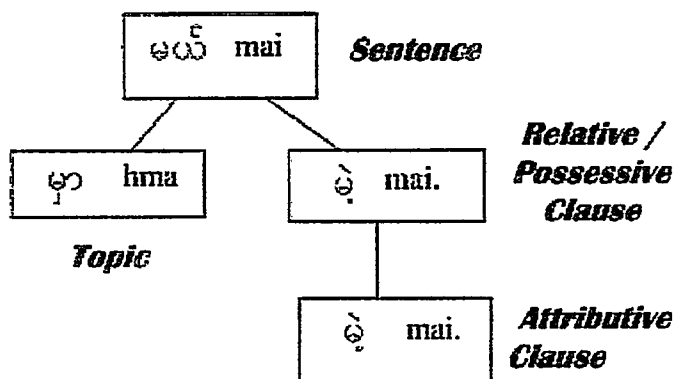
Figure 38. Allomorphic Variants of Colloquial Burmese ᴜ၌ many

The phonological similarities of the Colloquial Burmese set, realis and irrealis, mirrors a similar pattern in Formal Burmese. These templates can be generalized for the phonological difference between the realis and irrealis templates in Formal Burmese, Figure 39.

Formal Burmese Nominal Functions
In Relation to Realis/Irrealis Mode
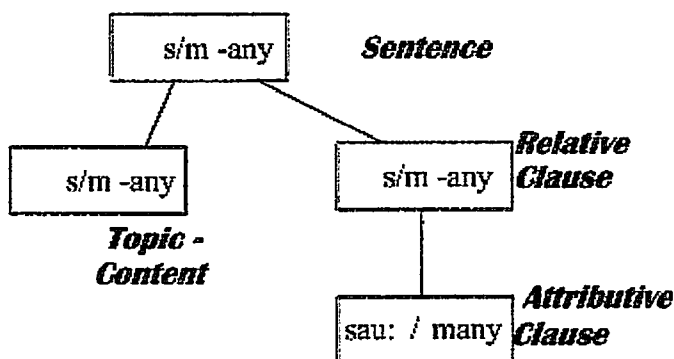
Figure 39. Abstract Difference Realis -Irrealis Template

In summary, an exact parallel exists between the two sets of realis and ir-
realis postpositions. They both function in the same environments, with approxi-
mately the same functions appropriate to realis-irrealis modality. This evidence and
the fact that Colloquial Burmese maintains a similar template argues that such a
template actually exists, for a presence in much earlier stages of Burmese develop-
ment, and for an enduring stability over a long history of language contact and
change. Formal Burmese represents 16th century Burmese and Colloquial Burmese
represents something older than the modern spoken language. Since some of the
template patterns are attested in other parts of Tibeto-Burman, it suggests a system
of nominalization that is distinctive of the language family itself. On the other hand,
Matisoff (1972) indicated something similar in Japanese. Partially similar patterns in
languages of the Americas have been observed by the author. What is distinctive
about Burmese is that the template is so consistent internally and diachronically.

Matisoff identified three functions in Lahu that appeared to be related: nomi-
nalization, genitivization and relativization. It should be noted that the genitival parti-
cle in Burmese is a variant of the deictic template to be discussed below.

3.3.4.2 Deictic Template သၫ် sany

Deictic reference interplays with the prototypical nominalization templates in
Burmese as a particular type of realis. As with the nominalization template, there are
separate realizations for deictic functions in both FB and modern CB. The mor-
pheme သၫ် sany in FB functions as a deictic specifier of the neutral distance from
the deictic center, which cannot shift from the speaker's location as it can in English.
The speaker must spatially refer to objects in relation to his true bodily location and

cannot shift to a projected center or to the center of the hearer, as is done in English. Thus one cannot say 'I will come to you tomorrow', taking the hearer's deictic center, but must keep the same linguistic deixis as his physical body and say 'I will go to you tomorrow.' Because the Burmese speaker is the deictic center and is situated at the actual physical location at the time of speaking or writing, deixis also serves as a kind of evidential function. That is to say, the hearer can exegete truth conditions based upon the deictic apparatus of the language. The use of သည် **sany** embodies a sense of location which can roughly be translated into English as 'that' or 'this'. The distance referred to is close to the speaker, but need not be in physical reach. Being within eyesight is sufficient.

The most overt deictic constructional use of သည် **sany** is not its postpositional form but rather as a modifier, a pre-positional, in relation to a nominal unit of some sort, a concrete or abstract noun, a particle or series of particles, or even a nominalized clause. Four functions of demonstratives that appear to be universally attested in languages:
- Situational use
- Discourse deictic use
- Tracking use
- Recognitional use

(122) Examples of Deictic Use of သည် **sany**

a) သည် အရာ **sany a-ra** (Nom Nom-thing) = 'this matter'

b) သည် စာအုပ် **sany ca?up** (Nom paper+ to cover) = 'this book'

c) သည်ကဲ့သို့ **sany kai. sui.** (Nom Pr+Pth) = 'this manner'

d) သည် နှယ် **sany hnai** (Nom kind) = 'this manner'

e) သည် ကြောင်. **sany kraung.** (Nom reason) = 'that reason'

f) သည်မှာ **sany hma** (Nom+Loc) = 'here' ·

In these cases, သည် **sany** occupies the non-head position, unlike its role in most other constructions. In this way, the deictic function is marked semantically and grammatically as distinct from the other functions of the nominalization template.

3.3.4.2.1.1 Close Proximal Deixis ဤ i

There is also another deictic specifier in FB which is often translated into English also as 'this'. The sense of this specifier is that the object is within reach of the speaker, who is at the deictic center at the time of speaking, and therefore the object and the speaker are assumed to occupy the same general physical space. This morpheme, in its pre-positional form, is represented in FB as a single grapheme ဤ i. This symbol represents a series of sounds – that of a glottal stop plus a vowel [ʔi], which is written in the Burmese orthography as belonging to the class of having an initial vowel series, for which there are a whole series of graphic variants (rather than writing the symbol, for example, as a glottal stop consonant together with the dependent vowel). Other independent vowel symbols are occasionally used to signal grammatical function, such as the postpositional variant of this deictic particle described below. By using somewhat rare symbols for grammatical functions the reader is able to rapidly identify a 'whole word' function. It serves the purpose of rapid textual chunking and segmenting of meaning during the reading process.

(123) Examples of Deictic Use of ဤ i

    a) ဤအရာ **i a-ra** 'this matter'

    b) ဤစာအုပ် **i caʔup** 'this book'

    c) ဤကဲ့သို့ **i kai. sui.** 'this manner'

    d) ဤနည်း **i nang:** 'this manner'

    e) ဤအကြောင်း ကြောင်. **i a-kraung: kraung.** 'for this reason'

    f) ဤအရပ်၌ **i a-rap hnai.** ' here' / 'at this place'

    g) ဤကဗျာများ **i ka.bhya mra:** 'these poems'

The above data demonstrates that the deictic specifier can be used with a variety of concrete or abstract nouns. The selection and translation of both deictic variants appears the same in their English translations. Okell and Allott (2001:261) attributes the difference between the two to a difference in formality, with ဤ i being the more formal. He relates the latter form to a historical process whereby Burmese emulated and translated Pali texts word-for-word. And, where a stylistic form was lacking, one was created or imported for use within a specific context to serve as that specific Pali grammatical function (Okell 1965). Both Okell and U Hoke Sein, in his Burmese-English-Pali Dictionary (1978:1044) draw the relative equivalence of Burmese ဤ i to Pali *ayam*.

While the historical process is undeniable, what is of interest here is the resources Burmese brought to that solution, and how the system adapted, adopted, and accommodated its own underlying structure, or structuring processes. It is beyond the scope of this dissertation to examine the extent of historical borrowing of structure, but what will be examined is the systematic nature of the use of deictic

particles in regard to nominalization. Where we can look is at the usage in Formal Burmese and at the structure as it is represented in modern Colloquial Burmese.

Having established the use of သည် **sany** for deixis of nominals, and the similarity in distribution and function of ၌ **i,** the discussion now turns to an examination of the system to which each of these specifiers belong and the implications for nominalization in Burmese.

3.3.4.2.1.2 Degrees of Deixis

Deixis in Formal Burmese lexically relates to three degrees of distance, one distal and two proximal. The proximal differ in the degree of immediacy. All three are realis (declarative) mood. The irrealis deixis which also exists shifts the mood into an interrogative sense (see 2.3.7). The normal sense of the deictic center is represented by သည် **sany** as 'this / here'. The closer proximal ၌ **i** is even closer than a general 'here'; it is more immediate spatially and temporally.

3.3.4.2.1.3 The Deictic- Possessive- Sentence Proximal Template

The counterpart of realis သည် **sany** as a deictic particle is not irrealis မည် **many,** but ၌ **i.** These two proximal deictic markers both have allomorphs which occur in sentence final position. The သည် **sany** variant is of the same phonological and orthographic shape, whereas the counterpart of ၌ **i** is ၏ **e.** .This sentence final marker[3] indicates realis, but with more assertion and emphasis. It is punctiliar, more pointed, more emphatic in temporal space. If sentence final သည် **sany** were to

---

[3] The modern spoken form of both ၌ **i** allomorphs are almost the same as the sentence final form except for creaky tone ၏ [i.].

have a deictic function in that terminal position, it would be rendered 'that's it', whereas sentence final ၏ e. would express the idea of 'so there!', 'that's it!', or 'so here!'
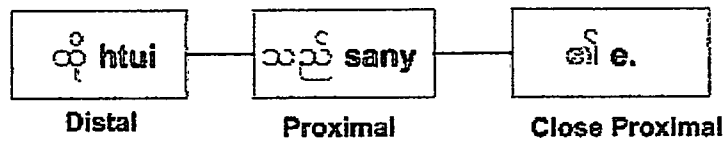
Figure 40. Three Degrees of Realis Deixis

Furthermore, it can be observed that the close proximal deictic particle ၏ e. occurs as the possessive postposition in Formal Burmese, and contrasts with the regular proximal သည် sany possessive reading in the same phrase position. The difference between normal realis သည် sany possession and the more marked close proximal ၏ e. possession is of a more intense sense of possession, or a 'closer' or a clearer role of possession being referenced rather than the possibility of possession as relative clause. Examples of deictic ၍ i are shown in (123) above. Examples of clause and phrase level use of this mega-morpheme are shown below.

124.) Example with Final ၏ e.

a)

တ	ယောက်	ပြီး	တ	ယောက်	ချိုး	စေ	၏။
ta	yauk	pri:	ta	yauk	hkyui:	se	e.
one	Clf-person	Cp	one	Clf-person	break	Cs	Nom/Sf

'.. one by one they tried to break it.'

b)

မ	ကြာ	ခင်	ပင်	အလုပ်	ရ	လေ	၏ ||
ma.	kra	hkang	pang	a-lup	ra.	le	e.
Ng	long time	Tm	Emp	work	De	Att-easy	Nom/Sf

In no time, he got a job.

125.) Example of Possessive ၏ e.

a)

ထို	ကြောင်	ကလေး	၏	အမည်	မှာ	ရွှေ	ဝါ	ဖြစ်	ပါ	သည်
htui	kraung	ka-le:	e.	a-many	hma	hrwe	wa	hprac	pa	sany
Dm-d	cat	little	Pos	name	Top	gold	yellow	happen	Pl	Nom/Sf

That kitten's name is 'Golden Yellow'.

b)

အင်္ဂလိပ်	တို့	၏	လက်	အောက်	ခံ	ဘဝ
ingalip	tui.	e.	lak	auk	hkam	bhawa.
English	Pl	Pos ~	hand ~	under	Ug	existence

'An existence of being under the hand of the British'

The use of deixis for proximal purposes provides a sense of temporal and spatial immediacy. As such, it is based on numerous metaphors structuring the meaning of the text and the experience of the speech act participants, as well as discourse referents and topics as physical objects within mental spaces. Textually deictic reference shifts or adjusts the attention of the topical frame (Section 4.2).

Considering sentence-final သည် **sany**, some deictic aspects are retained, although not focal. The deictic sense of 'that' or 'that-ness' is accentuated in the declarative statement regarding the entire preceding sentence-as-an-object, as a nominal unit. The preceding nominal unit is being pointed out deictically, as well as the operation of terminal bounding of the Nominal+ Particle expression itself as a completed construction. The 'that-ness' of an object infers its existence as some

type of linguistic object. It is that sense of inference and the nominalizing character of particle itself that contributes the nominal character to the unit as a whole.

This variety of nominalization while derivational to some degree, retains predicational characteristics that lend themselves to the kinds of distinctions made by Vendler (1967) and Grimshaw (1990) regarding event and result nominalizations. Event nominals are extendable, modifiable with adverbials, due to the fact that the verb is 'still alive' even though the verbal profile is cognitively bounded (Figure 5 and Figure 29). With regard to sentence final nominalizations using သည် **sany**, the verbal sense is highly active and somewhat analogous to event nominals. The contrasting case is with အ- **a-** nominalization which displays a more hearty boundary profile of the verb, which in turn produces a nominal closer in effect to result nominals. The event or process is more fixed in those cases. Compare မြင့် သည် **mrang. sany** (high + Nom) 'It's high." [Event] with အမြင့် **a-mrang.** (Nom + high) ='height' or 'highness' [Result]. ̄ ̆

The ability to refer deictically may be a matter completely separate from the profile of a verb, but it would appear that eventive senses are less deictic than those that are more result-like. While sentence-final သည် **sany** exhibits some character of deixis, it is not prominent.

3.3.4.2.2 Deictic Template - Irrealis မည် **many**

Unlike realis with three degrees of deixis (Figure 35), irrealis has only one, which is here called proximal (Figure 41). It appears in constructions as the prenominal modifier of a nominal or a particle with the function of an interrogative designator. The meaning of မည် **many** in its designator role is close to 'what' as an inter-

rogative, or interrogative force (just WH- in English). The head of the compound

with ဟည် **many** determines the sense of the whole, as in (126 a-c).

```
┌──────────┐    ┌──────────────┐    ┌──────────┐
│          │────│  ဟည် many    │────│          │
└──────────┘    └──────────────┘    └──────────┘
   Distal          Proximal          Close Proximal
```
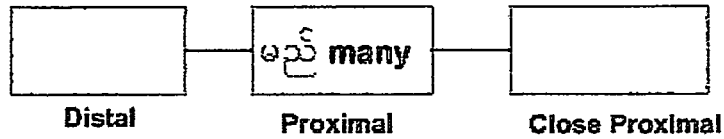
Figure 41. One Degree of Irrealis Deixis with ဟည်many

(126) a.

ဟည်   သူ
many   su
Nom/IrRl person
    'Who?'

b.

ဟည်   သို့
many   sui.
Nom/IrRl Pth
'How?'

c.

များ:	စွာ	ေသာ	မြို့	တို့	သည်	မြို့	ဟည်	က	၍
mya	cwa	sau:	mrui.	tui.	sany	mrui.	many	ka	hmya.
many	Q	Att/Nom	city	Pl	Nom/Topic	city	Nom	Tm	RNg

သာ	ဖြစ်	ကြ	သည်
sa	phrac	kra.	sany
only	be	Pl-S	Nom/Sf

'Most towns are name-only towns.' (in name only)

The last example (126c) demonstrates another component of meaning for

ဟည် **many**, the sense of 'name'. Name within the irrealis mood is not definite, but in-

definite and is questionable. The sense of the *restrictive negative* မှ **hmya.** together with a further restriction သာ **sa** contributes a greater restriction to something already doubtful. It is interesting that English has the same sense of 'name', both as something definite and positive ('name your price') and in the indefinite and tending toward the pejorative 'in name only'.

3.3.4.3 Evidential Functions of သည် **sany**

Nominalization and deixis function together with notions of evidentiality to specify the relation of the speaker to the information presented in the sentence, i.e. how it came to be known (reported information, here-say, guessing from facts, observed it himself) and how much validity the speaker feels towards that information, the degree of assertion or force the speaker intends (valid or known versus unknown or probabilistic). The two-termed opposition in sentence final position (သည် **sany** and မည် **many**), *realis* and *irrealis* respectively, corresponds to oppositions within the deictic and evidential systems.

System	Unrealized	Realized	Immediate
	ဗ္မည် **many**	သ္မည် **sany**	ကျ **i:**
Evidential	indirect or no experience	direct experience (implied but assumption can be 'turned off')	direct experiencing
Objectivity	non-concrete	concrete	concrete
Referential	non-referential	referential	referential
Knownness	indefinite	definite	definite
Deictic –space/ time	distal	distal	proximate
Discourse Gestalt	foreground	background	foreground

Table 29. Matrix of Function Dimensions of သ္မည် **sany** and ဗ္မည် **many**

Multiple systems of information structuring in Burmese follow iconic scenes, which are manifest in the grammatical bounding of clause and phrase nominalizations. These systems are interdependent, and allow the speaker to construct his view of the discourse scene in creative and informative ways. Nominalization and other systems (semantic roles, mood, aspect, causality, purpose, intentionality, evidentiality, referentiality, deixis, salience of participant roles, nominal incorporation, semantics of the verb) indicate a 'default setting' in the grammar and the minds of speakers toward resultant state. It is this predisposition that is 'co-articulated' with extensive nominalization

3.3.4.4 Person Template သ္မ **sany**

The postposition သ္မည် **sany** also is used to mark persons or professions, though traditional ones where the knowledge is acquired by skill or natural ability. It

combines with a noun as a nominal compound, the postposition adopting a strengthened interpretation of a substantive, in this case as 'the person who does' the noun. It is interesting to note that if this class of nouns like 'war' or 'trade' were interpreted as verbs, syntactically they would represent a simple clause.

(127)

a) ကုန်သည် **kun sany** 'trader' (trade+ သည်)

b) စစ်သည် **cac sany** 'soldier' (war + သည်)

c) ဧည့်သည် **ai. sany** 'visitor/guest ' (alien? + သည်)

d) ပညာသည် **panya sany** 'craftsman'/ 'witch' (knowledge +သည်)

e) လက်သည်**lak sany** 'mid-wife' / 'dealer in a deck of cards'/ 'perpetrator' (hand + သည်)

f) ရောဂါသည် **rau:-ga sany** 'sickly person' (disease +သည်)

3.3.4.4.1 Distribution of သည် sany Pre-Nominally and Post-Nominally

The whole complex of functions of both a pre-nominal သည် **sany** (topic) together with a set of other morphophonemic variants establishes the scope of a wider network of သည် **sany** nominalization, using this designation as the prototype.

The သည် **sany**, together with its variants establishes the breath and scope of functions of သည် **sany** nominalization in Burmese. Table 30 displays the different functions pre- and post-nominally for the realis set and the one irrealis member `in four different environments. The weight of evidence from the intersecting internal systems argues for a common set of relationships as represented by the rows and a common strategy for those functions distributionally, represented by the columns. That a common set of particles are used in this way and that these roles are nomi-

nalizing provides the most substantial evidence for the extensive role of nominalization that is proposed in this dissertation.

Pre- and Post- Nominal Particle Function Relating to သည် *sany*				
		Pre-Nominal		**Post-Nominal**	
	General Sense of Particle Meaning	*Demonstrative/ Deixis* **P+N**	Non-Final **[N+P] N**	Sentential Argument **N+P**	Sentence Final **N+P**
Realis	Substantive, Fixed, Fact, bounded, New Information	သည် **sany** That (neutral distance)	သည့် **sany.** relative clause, fact	သည် **sany** Topic, fact	သည် **sany** Declarative mood - neutral
	Possessive Close, Immediate, Tight, Abrupt	၍ **i** /i/ This (close to speaker)	*I. I* (creaky tone) possessive relation	၏ **e** /i./ Possessor	၏ **e** /i./ Declarative mood, abrupt point
	Extensible Qualitative, Value, Assumed Information		ေသာ **sau:** extensible quality, adjectival relation	ေသာ် **sau** when/ if	ေသာ **sau:** Optative mood, wishes or hopes
	Far away	ထို **htui** That (farther from speaker)			

Table 28 – Continued

Pre- and Post- Nominal Particle Function Relating to သ ည် *sany*				
Irrealis	Substantive, Not factual, Possibility, Unknown,	ဘ ည် **many** What (inter-rogative)	ဘ ည့် **many.** relative clause, possibility	မှာ **hma** Topic, non-fact	ဘ ည် **many** Subjunctive mood

Table 30. Pre- and Post- Nominal functions of သ ည် **sany.** and other Particles

In summary, the role of the post-nominal position is to relate the nominal:

a) N+V – establishes a lexical relation which predicates the whole N,

b) N+P – establishes a grammatical relation which orients the whole N.

3.3.4.5 The Functions of ေသာ sau:

The functions of ေသာ **sau:** are discussed in terms of its use in various functions. The purpose is to further expand and support the statements made in Table 30. This particle functions a) attributively, often classified as an adjectivizer, b) terminating an indirect quote, c) indicating a string of alternatives, d) forming an attributive clause, and e) as an optative mood particle.

One question for this overview is to answer whether ေသာ **sau:** indicates a nonrestrictive relative clause, or whether that English distinction has anything to do with Burmese categories. Nonrestrictives typically designate old information, and proper nouns.

3.3.4.5.1 Adjective status (Attributive of a Nominal)

According to Okell & Allott (2001) သော **sau:** is used in an elevated Formal Burmese style, apparently originating in *nissaya* translations, where သော **sau:** was used to show the adjectival status of a numeral and other adjectives. The following examples are from Okell & Allott (2001: 240).

(127)
a)

တစ်	ခု	သော	နံနက်
tac	**hku.**	**sau:**	**nam-nak**
one	Clf-thing	**Nom**	morning

'one morning'

b)

အမျိုး	မျိုး	သော	လူ
a-myui:	**Myui:**	**sau:**	**lu**
variety	various	Nom	person

'all sorts of people' (=CB လူအမျိုးမျိုး)

d)

မြတ်	သော	လူ
mrat	**Sau:**	**lu**
excell	Nom	person

'the excelling man' or 'the man who excels'

These examples demonstrate that the head nominal may be a proper noun and known or commonly known information. This might suggest a nonrestrictive relative clause.

A comparison of the adjective-like quality with other forms of the verb demonstrates different senses in relation to the verb. Indication is made where the nominalizer is with a more semantic nominalizing particle:

(128)

a)	မြင့်ေသာ	**mrang. sau:**	'high'	(quality)	V+Nom_{grammatical}
b)	မြင့်သည်	**mrang. sany**	'It's high." (predication)		V+Nom_{grammatical}
c)	အမြင့်	**a-mrang.**	'height' or 'highness'		Nom+V_{grammatical}
d)	မြင့်ြြင်း	**mrang. hkrang:**	'the condition of being high'		V+Nom_{abstract noun}

Different profiling of the verb, using Langacker's concepts about nominalization, is indicated by the different nominalizing particles. The different profiles are indicated in the third column. ေသာ **sau:** contrasts with all the other nominalizers.

3.3.4.5.2 Final Sentence Particle before Verb of Reported Speech (Indirect Quote) ဟု **hu**

(129)

ရှင်	ဘို့	မယ်	က	ကျွန်	ေစာ်	နံ	သည်	ဟု
hrang	bui.	mai	ka.	kywan	cau	hnam	sany	hu.
Shin	Bo:	May	S	slave	smell	smell	Nom	DQ

ပမာမခန့်	ေြပာ	ေသာ	ဟု	၏။
pa.ma- ma.hkan.	prau:	<u>sau:</u>	hu	i
disrespectful	speak	Nom	**IndQ**	SF/immediate

'Shin BM spoke disrespectfully, saying "this smells like slavery", so it is said.'

This example demonstrates a contrastive use of သည် **sany** and ေသာ **sau:** indirectly contrasting environments. Here သည် **sany** is the nominalizer (complementizer) for a direct quote, whereas ေသာ **sau:** is the nominalizer for the indirect quote. The definiteness of a direct quote is indicated by သည် **sany**, as is the evidentially of factual information vouched for by the speaker. Contrasting to the definiteness is the less assertive use of ေသာ **sau:** for the indirect quote, being more general and less precise about the reported information.

3.3.4.5.3 Marks a V ေသာ sau: or a N ေသာ sau: as an alternative string within a larger matrix clause.

(130)

ဘယ်	မှ	ကူး	ေသာ	သန်:	ေသာ	သွာ:	ေသာ	လာ	ေသာ
bhai	hma.	ku:	sau:	san:	sau:	swa:	sau:	la	sau:
which	RNg	cross	**Nom**	travel	**Nom**	go	**Nom**	come	**Nom**

မ	လုပ်	နှင့်	ေတာ့။
ma.	lup	hnang.	tau.
Neg	do	Imp	Rev

'From now on don't go trading or traveling anywhere.'

(131)

မှာ	ေသာ	မှန်	ေသာ	နာ	မ	လည်:	ဘူ:။
hma	sau:	hman	sau:	na	ma.	lany:	bhu:
wrong	**Nom**	correct	**Nom**	ear	Neg	circle	Neg
wrong aspect		correct aspect		not understand			

'He couldn't tell whether it was true or false.'

The effect of ေသာ sau: in these examples is to indicate an aspect of something, a quality or attribute of something else. In (130) and (131) the head nominal of the attributive clause is null. The effect of this is to allow something to be open ended, yet somewhat closed off as well, and then to finally seal it off as a nominal clause. It is perfect for presenting alternatives.

3.3.4.5.4 Attributive Clause to a Nominal (V ေသာ N similar to V သည်. N)

(132)

လူ	ကြီ:	မိ-�‌ဘ	ဆရာ	သမာ:	တို့	နှင့်	စကာ:	ေြပာ	ေသာ	အခါ
lu	kri:	mi.-ba	hca.ra	sa.ma:	tui.	hnang.	sa.ka:	prau:	sau:	a-hka
person	big	parent	teacher	worker	Pl	Acc	word	speak	Nom	time

'When you speak with important people, parents, teachers or workers ...

(133)

က‌လေ:	မျာ:	ကို	ဆုံမ	‌သော	ဆရာ
ka.le:	mya:	kui	hcum-ra.	sau:	hca.ra
child	Pl	O	scold	Att/N	teacher

'The teacher who scolded the children..'

(134)

‌တောင်	သူ	လယ်	သ‌မာ:	စ	‌သော	မြန်မာ	ပြည်	သူ	လူ	ထု
taung	su	lai	sa.ma:	sa.	sau:	mranma	prany	su	lu	htu.
mountain	per-son	paddy field	worker	begin	Nom	Burma	country	per-son	people	mass
		peasants					the people		masses	

"...the masses and the people of Burma *who were* peasants ...' or ' the masses and
the people of Burmese *such as* the peasants..'

The ‌သော **sau:** nominalized clause occurs with both proper and regular nouns.
While it could be argued that the head noun 'time' in (132) is old/ known information,
still the head-final typology holds. There is another perspective which fits Burmese
better, which is that old information is less assertive, less marked, more a quality
that is assumed to be a part of an object, whereas new information is typically pro-
filed more sharply, with greater focus and definiteness. The latter is just what သည်
sany does by profiling a predication. The former is what ‌သော **sau:** does by inferring
an attribute.

3.3.4.5.5 Sentence Final marker indicating 'wish' optative mood. Performative.

(135) (V ‌စ‌သော) May you V... [v + cause + realis attribute]

The agent of the causative is unspecified, as is the patient (assumed to be
the hearer) the result is the verb and its complement(s). The syntax is: null (I
speaker as agent at some level) null (to you hearer as patient) Result (verb) + cause
particle + Nominalizer Attributive.

(136)

သွား: ပါ စေ သော

Swa: pa ce sau:
Go Pt Cs Nom
'May he go.'

(137)

ကျန်: မာ ပါ စေ သော

kyan: ma pa ce sau:
health well Pt Cs Nom
'May you be healthy.'

The attributive nominalized clause is headed by unspecified 'you'. Although there never is a pronoun in statements as wishes, 2nd person is implied. If this construction were to have a pronoun, it would be placed grammatically at the end of the phrase as the head noun. Though this type of construction is common with an overt nominal head, it would never be uttered with a speech act participant as the head, although third person would be acceptable. Should 2nd person be the null head, the structure would be:

(138)

V စေသော [နှင့်] V ce sau: [nang]

Verb+ Causative + Attributive Nominal + [2nd person pronoun]

Hypothesizing this as the underlying structure, (137) would then be a comment or a name attached to 'you', the addressee; it would then be a relative clause with a null head nominal. This construction would imply that သော **sau:** is not a final particle, but a modifier, a second position to the end of the sentence.

This analysis identified သော **sau:** as a nominal whose grammatical properties include a less fixed boundary (Figure 5). It indicates a quality or attributed as-

pect that is dependent on something else and inferable as given or old information. That element of openness and lack of finality is communicated in its use for the optative mood.

3.3.4.6 Paragraph Functions of သည် sany

A brief comment is in order about the role of သည် **sany** at paragraph and discourse levels to round out the discussion. Text analysis demonstrates a nominalizing role of chunks of text above the sentence. Interestingly these occur not in the sentence final position but elsewhere in the sentence. Formal Burmese သည်**sany** nominalization contrasts with another sentence final particle ၏ **e..** The orientation of both particles သည်**sany** and ၏ **e.** is nominal and deictic. သည်**sany** functions as *distal* deixis (or less proximal) and thus within the logic of the text 'points' to the argument or 'refers' to the argument in the thematic structure. It established the matter, the reality, the factuality as the text develops. ၏ **e.** functions as a closer proximal deixis bringing the argument it 'points to' close to speaker and hearer together, creates textual notions of *prominence* based upon the metaphor of 'close is important' and *immediacy*, based upon the metaphorical analog of space as time.

3.4 Summary

Nominalization, is an operation on two sets of categories, noun and verb, that yeilds a form that is of intermediate categoriality reflecting the sources. This categorical mixture that nominalization displays has caused problems and opportunities in linguistics — problems in analysis and advanced degree opportunities. It became a landmark case that fixed the lexicalist position within generative grammar; it has

ironically provided an opportunity for others to take exactly the opposite position and to attempt a syntactic coup; it has also puzzled philosophers and mathematicians – even Aristotle began his *Categories* with a discussion about predicates and substances; it has challenged linguists like Langacker to develop an image schema approach to categories and relations; it will probably continue to challenge generations of scholars as a unit incorporating opposites.

Nominalization as a process refers to a continuum of types and degrees of boundedness conditions. One interesting feature of nominalization is the extensibility of the center (as with mass nouns versus concrete nouns) or extensibility of an action or process (as with event or process versus result nominals). As a process, nominalization is implicitly somewhat abstract since reification is a kind of cognitive attribution of Thing(-ness) to a Relation. The level of abstractness may vary as may the level of concreteness. It is possible to profile those relations as a series of continua in three domains : Abstract - Concrete, Nominal - Verbal, Result - Event - Action.
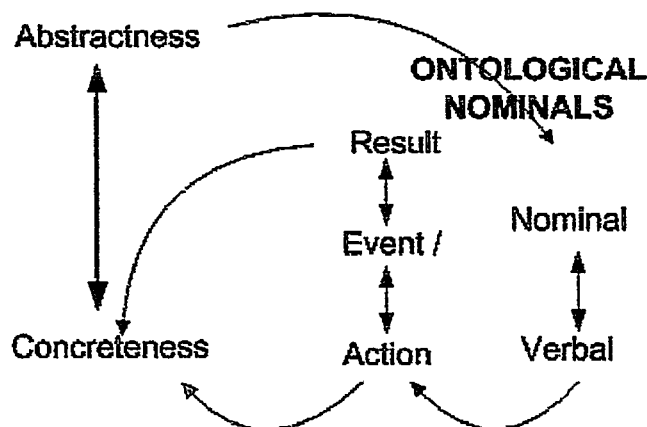
Figure 42. Abstractness in Relation to Ontological Nominals

This figure relates to Asher's (1993) spectrum of abstractness in terms of the types of events and verbs being more concrete (Figure 30). The relation of result nominal to fact seems very alike in many respects, except fact is an outsider's viewpoint and result is more verbal and subjective, more experienced. The purpose of this figure is to demonstrate the area where ontological nominals fit in relation to types of verbs and regular derivational nominalizations.

It is preferable to conceive of ontological nominals as more abstract than derived nominals, which are in turn more abstract than nominals, or mere 'names' of things. It is also preferable to consider levels of abstractness in derived nominalizations and levels of abstractness in ontological nominalizations. The set of two types of nominalizations given above exemplify those distinctions:

| Abstract ↕ Concrete | အမြင့် **a-mrang.** (Nom + high) ='height' or 'highness' [Result]. |
| | မြင့် သည် **mrang. sany** (high + Nom) 'It's high." [Event] |

Figure 43. Abstractness of Event and Result Nominals

In relation to sentential nominalization by သည် **sany,** though it bounds much information and a complex structure and would, for that reason, seem highly abstract, it actually is less abstract than အမြင့် a-mrang. (Nom + high) ='height' or

'highness'. This is because it retains a heightened action or event quality. To pre-figure the work of the next chapter on text nominal structure in relation to the ab-stractness issue, one might wish to say that a nominal that 'ate' (to use a very good Burmese idiom) ten ontological nominals within a sentence would be for that reason ʼhighly abstract. However, this is not the case, if abstractness is the opposite of even-tive.

Figure 44 demonstrates the level of complexity of ontological nominals in rela-tion to the သည် sany sentence-final nominalization. From the final particle there are ten ontological nominals, counting from the top-most and following the tree down-ward like a slide, counting only black nodes, then counting back to capture the main nodes horizontally across the mid-section of the sentence.

'Beginning from that time on, the English government oppressed and restricted the Burmese people.'
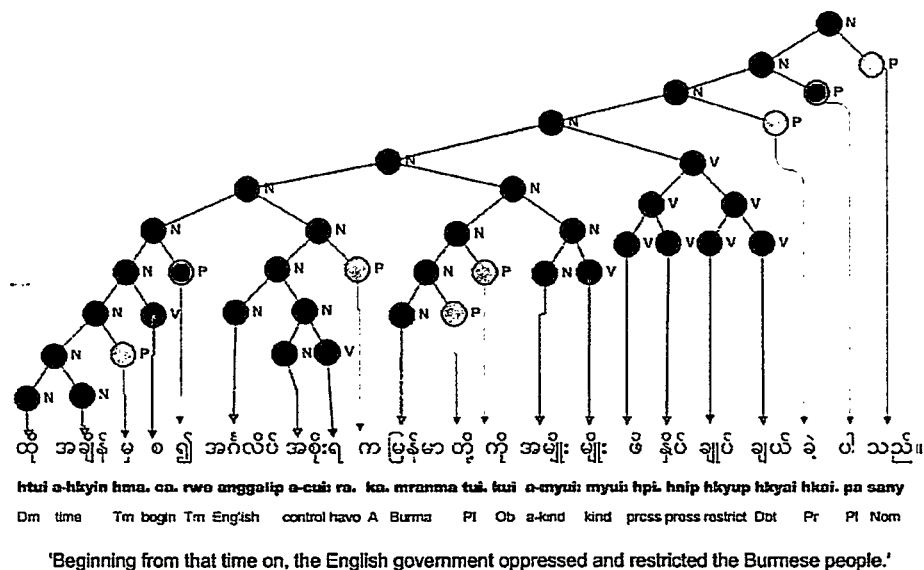
Figure 44. Abstractness or Complexity

An empirical test for resulthood in nominals was the inability to be extended as in 'further' or 'more' or 'frequently'. Such a test does apply for a sentence like "Be-

ginning from that time on, the English government oppressed and restricted the Burmese people". The modification to the sentence is possible via sentential adverbials... "more and more:" (in English) either before the sentence or after provides an interpretation of the qualification to the whole sentence, though it is can be ambiguously as both to the sentence and to the main verb.

In this chapter a model of nominalization via postpositional particles was presented, basically through a discussion of the *nominalization template* for the prototype nominializer သည် **sany**. This template carries numerous functions in addition to nominalization. The multi-functionality of nominalization has perhaps been one of the reasons it has been overlooked in the past, since most grammars looked at semantic function of the particles more than grammatical organization of Word, Expression, and Sentence. The next chapter examines Burmese nominals in relation to text structure.

CHAPTER 4:

DISCOURSE ANALYSIS OF TWO TEXTS

Paradigms gain their status because they are more successful than their competitors in solving a few problems that the group of practitioners has come to recognize as acute. To be more successful is not, however, to be either completely successful with a single problem or notably successful with any large number. The success of a paradigm is at the start largely a promise of success discoverable in selected and still incomplete examples.

Thomas Kuhn (1970:23)

4.1 Introduction

Nominalization has been demonstrated in the preceding chapters to be a dominant grammatical pattern within Burmese grammatical constructions. It appears to be manifest at multiple levels of structure. The task at hand is to employ the proposed rules of constructional forms (Section 2.5) to whole texts in order to examine the limits and role of ontological nominalization within a text analysis framework. One expository text and one narrative text were selected for this purpose. Expository is the text genre of explanation or discussion of a discourse topic and is typically characterized by logical linkage. The patterns of convergence between the ontological nominal structure and the textual rhetorical structure is presumed to be more likely with this genre. Narrative is a genre characterized by agents rather than themes and by temporal action rather than logical sequence, so that topicalization is unlikely as a predominant pattern.

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This chapter will explore two principle questions:

1) do the principles for formation of grammatical form at the local level extend to larger domains? If problems arise, what might they reveal about Burmese or about the methodological assumptions?

2) does grammatical form, as shaped by nominalization at the Word and Expression level, extend insightfully to the text as a whole? Can Longacre's (1996) model of text structure be correlated with the ontological forms generated by nominalization processes?

4.2 Ontological Nominalization

4.2.1 The Texts

Two texts were selected for inclusion from the many analyzed. It was determined that the rules of constructional form generation would be rigorously applied to every level of text. The rules are repeated here for convenience sake.

Constructional Forms	Accommodates Traditional Constructions	Basic Structural Description
Word	Simple word, Compound Word, Phrase, Modifier Clauses	$(N) + N \rightarrow N$
Expression	Clause	$N + V \rightarrow N$ $N / V + P \rightarrow N$
Sentence	Sentence, Paragraph, Text	$N + Obs \rightarrow N$

Table 23 (repeated). Constructional Forms and Structural Descriptions

Only three levels of construction were proposed to adequately describe Burmese grammatical structures – the Word, Expression, and the Sentence. There was some doubt expressed about the latter category. It is probable that only two levels account for Burmese forms and that superordinate forms do not process with the same structural assumptions.

The texts that were selected are from different social situations, one is a text that has amazingly succeeded through generations of policy changes. It has remained as the third standard (grade) reading primer since the early 1950's. The story is about how National Day got its name. As a text, it has many purposes but in overall structure it is an expository text. The second text is a brief newspaper article about a boy who was bitten by a snake. The structure of this text overall belongs to the narrative genre. These are referred to here as National Day and ND and as Snake Bite and SB. The full text can be found in the appendices, in English, an interlinear version, and also the full analytical display for each part and portion of each text. National Day consists of 480 words in 18 sentences, and 7 paragraphs. Snake Bite consists of 415 words in 6 sentences, and 5 paragraphs. National Day was written in the 1950's and Snake Bite was written in 1995. Both are in standard Formal Burmese. The intended audiences are quite different, one is for schoolchildren learning to read but also learning about the history of their own country. The other is written for adults and tells about something that happened to a boy. In both texts the author is not a participant in nor an immediate observer of the events explained.

4.2.2 Methodology

The methodology employed was simply to start at the beginning of the text, the title or byline, identify the form class, role and structural relations of each word. As noted in Chapter 1, the structure of Burmese is bifurcating, with a strong role for (zero derivational) juxtaposition in organizing structure. Higher level nominals resulting from the structural descriptions were then adjoined on the basis of two different criteria: 1) ontological structural assumptions and 2) logical rhetorical roles of information. A machine could not precisely do this process, but it could come quite close, given a detailed lexicon and some sense about what the sentence was meaning as it proceeded in identifying constituents. Particles were usually boundary markers for higher level ontological nominals. In fact, anything that was farther to the right, moving toward the verb followed a pathway of being a constituent of an increasingly higher level. This produced a prominent structure with left branching trees. (See Appendix E.)

The simplicity of the rules and the ordering results in two kinds of text structures — ontological and logical rhetorical — that make sense of post-verbal particle roles, which identify the strategies of an argument's composition. These structures, most of all, make some ordered clarity from the complexity described in Chapter 1. It is assumed that anyone with a moderate knowledge of Burmese does something like this cognitively, particularly as a reading strategy.

Since the approach suggested here for specifying grammatical forms of an Asian language is fairly innovative, it may be helpful to provide more detail on methodology and where the system faltered in the application of the above rules to written Formal Burmese texts.

The first place it faltered was where the author, a non-native speaker, was unfamiliar with a word. The method as currently defined requires that there be a lexical meaning or a grammatical function for every syllable. The particular circumstances where this is not the case were described in Chapter 1 — loan words or accretion and depletion for which an independent sense is now lost. A Burman would object to her language being ripped asunder into small pieces. Each syllable having a function or lexical meaning does not make sense for a non-analyst because that is not how the language is used. Observing this method of segmentation, she might vaguely sense the meaning elements in a lexical compound, but the process of identifying them could be difficult. This may be due to conceptual blending, or formal semantic blending, or mere conventional use that reinforces the conceptual boundary of the compound. To force it apart is to be regarded as an ignorant outlander. This inoperability may be one reason why Min Latt (1959) classified word forms as 'minimal primary' and 'primary', the minimal primary being the level used in this methodology, but the primary level that which is most perceptible and manipulable

Another troublesome aspect was occasionally encountered when determining the basic lexical category. The question for Burmese was whether to list the primary category for the form or to take a Burman point of view which would say, for instance, of the verb in မြို့သစ် **mrou. sac** (city+new) = 'new part of the city' (referential) or again, in a form like ကျောင်းကလေး **kyaung: ka.le:** (school+little)= 'pupils' that the verbs are nouns because the whole is an inseparable noun.

Another ambiguity was in constituency. It may be recalled that in Chapter 1, a rather unusual statement was made about directionality of constituency —

grammatical constituency moves toward the right, toward the verbal, semantic constituency flows back the other direction much like a tide. This particular problem arose quite often where, without the subsequent string, constituency was clear until introduction of the following noun or verb. The added element would trigger a shifting weight that shook the tree structure. This reverse flow is due to the headedness factor. It is due to semantics and not grammar. It is the 'pull' of the head toward semantic constituency, probably the result of the propensity for blending of some type when likely nominals are juxtaposed.

An example of this process from the National Day text ND8.2:

(139)   မြန်မာ တ မျိုး:

mranma ta.myui:
Burma   1   kind

Burma one kind = would mean "Burmese or Burma, they're something else!" The constituency rule fits perfectly. The first noun **mranma** is followed by a numeral and its classifer. The compound numeral word 'one-kind' is conjoined as the head with modifier **mranma**. The result is 'one kind of Burma'. This fits the normal grammatical pattern for numerals – 'two houses', 'four books' and so forth, will have this type of construction [N [Numeral + Classifier]]. (Just as particles are generally heads, so are classifiers in these constructions.) All was well until the next word was added သာ: **sa:** 'son' or 'offspring'. The semantics began to realign the constituency structure because **myui: sa:** (kind+son) is a compound that means 'national', 'citizen', 'one who belongs to the race'. So, the problem was not just the local semantic pull of a semantic head, but to the nature of the text itself. The text is about National Day, which in Burmese is called မျိုး:သာ: **myui: sa:** (kind + son) day. This compound is tightly blended semantically and

pragmatically. Thus, what was a regular, left-branching structure grammatically was reconfigured semantically into right-branching. Another case is in the Snake Bite text, SB6, which was the example used in Figure 19 and Figure 22.

se hmu. se hkang: a-ra.
die Nom die arrange matter

Figure 45. Grammatical versus Semantic Organization

In Figure 45, the verb 'die' ေသ se is followed by a nominalizing particle မှု hmu., establishing a noun 'death', which is then followed by a repeat of the same verb 'die' ေသ se. This establishes the beginning of a doubling pattern so common and widely used in Burmese, of V₁X V₁X' with an identically repeated first member and a different but related second member set. The second pair forms a compound verb ေသ se ခင်: hkang:, while the first pair forms a noun, and together N+V (a predication) forms a nominal which means something similar to a clause 'death arrange'. This entire nominal is then adjoined to the following nominal (derived by အ– a- prefixation). This derived nominal becomes the head of the compounded Word. The sense of this is regular and meaningful. The last head

means a 'matter' အရာ **a-ra**, so that the meaning is 'a matter of arranging for death, or about a death'. All is well.

Then the following nominal pulls in the last derived noun 'a matter' to its sphere of semantics changing the constituency. The pull is strong because the meaning of the following noun contiguous to 'a matter' is a form that has grammatical, lexical and phonological similarity to 'a matter'. That word အရေး **a-re:** means 'a case' or ' a legal matter'. It is also a derived noun with the အ– **a-** prefix. Phonologically, the initial consonant is identical with the previous nominal 'a matter'. The only difference between the second member phonologically is the vowel and tone. The pairing of these two forms together creates a preferred phonological group (a four syllable rocking sound with the structure $A_1 Y A_1 Y'$) so that the result would be a series of rocking syllables establishing a rhythm of two pairs of four syllables in a row $V_1 X V_1 X' + A_1 Y A_1 Y'$ which is the doubling pattern, and doubling of doubles, so attractive in Burmese. In the end, the conspiracy of the semantic and phonological draw is to take immediate constituents from their normal grammatical structure and move them into patterns of semantic and phonological enablement, in particular semantic compounding and phonological doubling.

Now, regarding the methodology, it is clear and easy to apply. After the grammatical ordering is established, other subsystems operate to alter the initial grammatical constituency relations. The grammatical form yields to the semantic and phonological reanalysis of constituents, which is a further example of why categoriality has been such a problem in this language (see the discussion in 2.4). Although it is difficult to construct a grammar that excludes semantic roles, this is what has been attempted here. Simple though it may be, it is helpful in ap-

preciating grammatical and ontological structuring processes in Burmese and keeping separate the grammatical form from the semantic operations and roles. Nominalization is the principle key to understanding grammatical formation as a separate process from the semantic.

Now to address the second question:

2) does grammatical form, as shaped by nominalization at the Word and Expression level, extend insightfully to the text as a whole? Can Longacre's (1996) model of text structure be correlated with the ontological forms generated by nominalization processes?

4.2.3 Text Analysis

The method of discourse analysis proposed by Robert Longacre has a long history of success in 'exotic' languages of the world, particularly where 'pesky' particles abound such as in Latin America and parts of Southeast Asia. While Longacre (1996:13) separates the notional and the surface features, it has been difficult to maintain separate categories logically unless one already knows what the emic structures and roles are in a particular language. Longacre's view on this seems to be one that regards the empirical data as surface features versus the intentions of the author as notional structures.

> Notional structures of discourse relate more clearly to the overall purpose of the discourse, while surface structures have to do more with a discourse's formal characteristics. (Longacre1996:8)

He further distinguishes an emic and an etic notional structure. This is intuitive since the 'insider' (emic view) would most certainly have different motives

and reasons for acts or categories of thought and purpose. It would appear that the best we can expect as outsiders with an implicit etic view, is to establish an etic notional structure and to describe an etic surface structure. Admittedly, Longacre's early work on *Grammar Discovery Procedures* (1964) is a classic in how to distinguish whether an analysis is etic or moving toward emic categories.

The question is not merely theoretical since the preceding chapters have proposed an approach that attempts to move toward categories of grammar and structures that are more Burmese-like. When it comes to text structure, there is a contradiction immediately in the task at hand. These are:

1)   The task undertaken is to examine the role of nominalization not as a semantic process, but as a grammatical structuring process, although nominalization in Burmese definitely has a broad semantic aspect. The more this has been done, the stronger the belief that grammar and semantics in Burmese are quite different. Grammar is the weaker of the two, but is a separate formative process.

2)   The application of Longacre's model assumes a notional base. While this is a good and profitable assumption and discovery procedure, it is not what the current structures analyzed for Burmese text 'are'. So, the contradiction potentially is to use notional structures to arrive at surface generalizations about the grammar from an etic point of view hoping that it will become an emic one over time. As a trained tagmemicist these goals actually make sense, but not with the approach and assumptions to text taken here.

3) The analysis of ontological nominalized structures and the discourse analysis using Longacre's notional model have both been applied. They each produce units of different substance, different types of entities, and different structures.

To resolve this problem of category mismatch, the analyses are separated into a) the process, structures and insights from the ontological nominal analysis of the two texts, and b) a separate view using Longacre's approach, which reveals some interesting functions, but which does not correlate necessarily with the ontological nominal conclusions.

4.2.4 Ontological Nominal and Rhetorical Structures

4.2.4.1 National Day Text

Basically the story is a discourse about how National Day came to be celebrated on the 10th day of the waning moon of the month of Tazaungmon. The exposition is a history lesson by someone older and whose identity is not revealed to his audience but 'he' — Burmese speakers report in a cloze test that the writer is male, well educated, and a preacher — writes in the plural, including himself as a participant with the students who are the primary audience of the text. The plural reinforces the 'us' versus 'them' conflict that is in essence what the text is about. The history described concerns a seed of rebellion which successfully took root and eventually overthrew the British colonial government. The

demands for freedom came from schoolchildren, who like the target audience, were challenged to advance toward patriotism. .

4.2.4.1.1 The Process.

As described above, the text was parsed according to the structural rules. The types of structures that were generated were trees looking like Figure 46 which is a structural description of sentence one of the text.

The representation is composed of nodes which are Words and patterns which are Expressions (See Section 2.5.2). The model has a color component. Particles are orange nodes with orange association lines to the Burmese word. Verbs are black nodes, like Nouns, but have a blue association line. The difference in association line color aids in seeing pattern, the black node for both N (Noun) and V (Verb) relates to their similarity as lexical categories which may change to become a nominal. The pattern is for verbs to become nominalized, not vice-versa. Higher nodes are presumably more abstract, but this has not been empirically tested. The test for abstractness and what it would signify has not been developed. Observing the tree below, a pattern of orange nodes of particles can be seen in their structuring role of large portions of text The higher the node and the farther right in Burmese indicates more grammatical 'being' or power to operate, if a particle and predicate, if a verb.
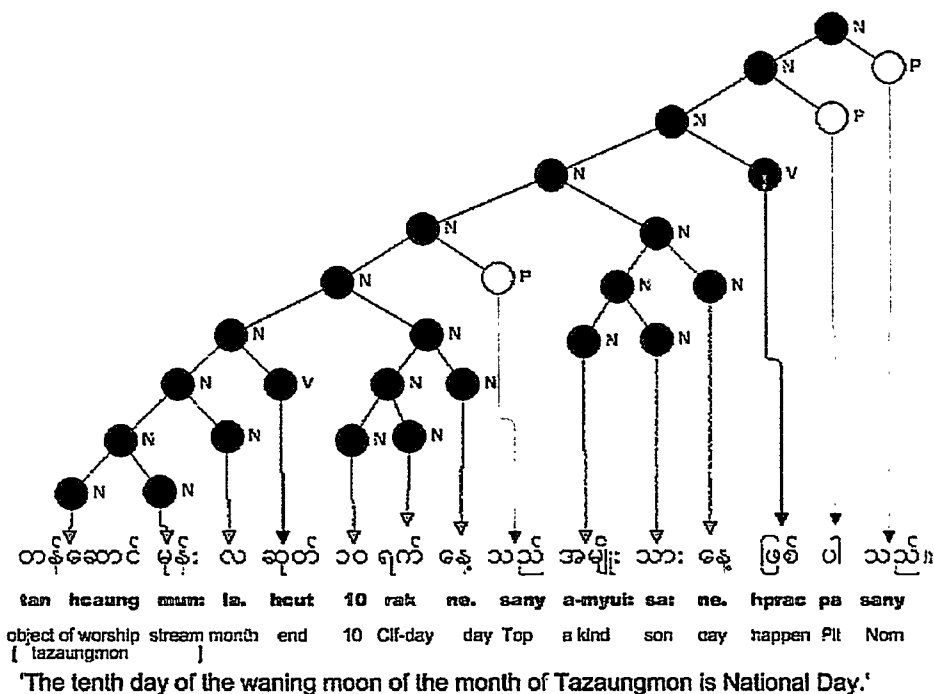
Figure 46. Structural Tree of ND1

Verbs which are located to the left such as the verb ဆုတ် hcut 'end' are nominalized early in the sentence and 'buried' by ontological nominalization. These predicates are usually scene setting, or stage placement functions, and are easily dispensed with once they have established the spatial or temporal ground for the more important relations nearer to the verb. Observe the bifurcation pattern this pattern develops from the constituency pattern in grammar, particularly the way in which the process of structural composition operates one-word-at-a-time. At times there is a break in the panoply of regular, left-branching nominals. A new branching structure is established with its own set of constitu-

ents, all of which eventually are joined to the previous set by high-level com-
pounding:

4.2.4.1.2 Nominal Types

The pattern usually develops for the balanced double structure of juxta-
position. It is commonly known to Burmese that if you have one **N**, you are likely
to have two. There is a sense of incompleteness of an utterance or written com-
munication unless it is balanced with words, syllable weight, and semantic con-
tent. So with that pattern preference, it should be noted that there is a repeated
configuration.
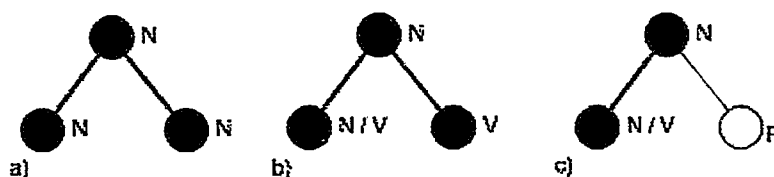
Figure 47. Configuration that Result in Nominals

The basic structural configuration is the *compound*, the N + N relation of
balanced harmony. The next is that of the *Verb–headed construction*, which can
have an N or a V in the non-head position, in which case it is a clause, or a
predication of some sort. The next structure is *P (particle) headed* with a N or a
V in the non-head position. It is an operational structure, the grammatical coun-
terpart of the verbal predication. The other form that results in V is the verbal
compound. These descriptions are for the lowest levels or the highest alike. They
can describe a single verb and a single noun, a complex verb with a dense, mul-

tiple layered nominal, or any arrangement or level of complexity. Figure 48 below displays the four basic types of structural description with the two constructional forms Word and Expression.
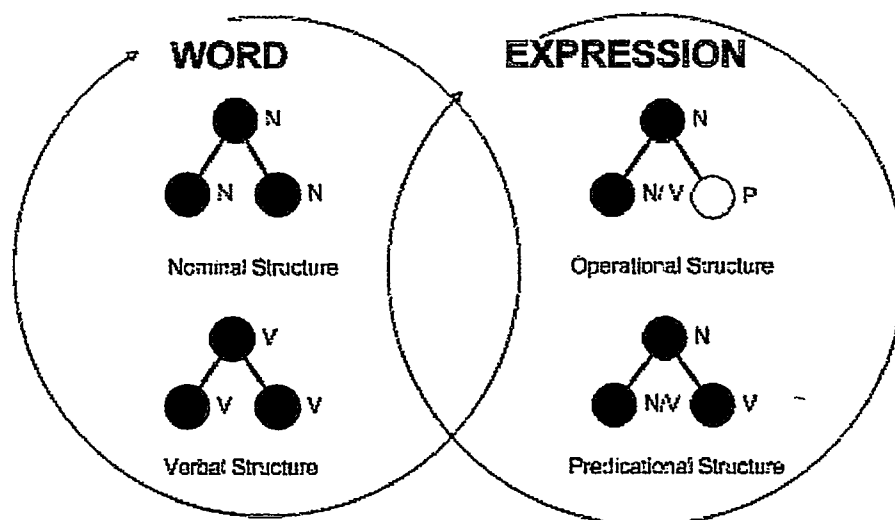
Figure 48. Word and Expression with Four Structural Descriptions

The basic constructional patterns of Burmese are the three types of nominals and one verbal. The structural Word configurations are those where all the nodes possess elements of the same category. This is the juxtaposed compound word. Word as a constructional form describes the simple word, the compound word, the phrase, and modifier clauses (attributive clause relations). The Expression as a constructional form describes the clause.

Figure 49 displays the structural tree of ND3. Although the sentences in the ND text are fairly short, manageable sentences, yet they are not without a typical level of complexity. Beginning at the top of the structure, it will be noticed

that there is a series of three postpositions after the verb whose scope is successively the entire preceding structure. These particles are 'outside' the propositional content of the utterance and relate the observer perspective to the entire preceding Expression. Specifically the innermost of these final particles relates to the plurality of the agent, but also includes potentially the speaker and his audience. In this text the plural [ကြ] **kra.** only refers to the Burmese people and never to other participants in the text. Pragmatically this marker builds solidarity with the audience. Via this particle, the speaker, although unmentioned in the text, is obliquely marking his presence.

The verb in ND3 is a complex structural compound consisting of a set of two compounded verbs, which also happens to be a four-syllable elaborate expression. This preference for compounding is seen in the structure [[V+V]$_V$ + [V+V]$_V$]$_V$.

The highest level nominal realized as N + V is the top-most verbal predication. The nominal which composes that N is itself composed of a N + P relation in which the scope of the P is the entire preceding nominal compounded unit. That N is itself a compounded structure of the first N unit of the sentence, which functionally is a kind of setting to the sentence. The verbs in this unit are all nominalized with the အ– a- prefix. The effect of this nominalization is two-fold. The first effect is to 'bound' the action as an event, a thing. Bounding as a nominal is to infer it or to refer to it. The deverbal noun then functions as presupposed[1] infor-

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[1] *Presupposition* is used pretheoretically as 'postulate beforehand' and therefore as 'taken for granted' or 'assumed to exist as either a preceding condition or as a belief to suppose beforehand.' While this relates to the Strawson' s (1950) definition of presupposition between two propositions whereby 'if *a* presupposes *b*, if, for *a* to have truth-value, *b* must be true", the usage of the term here does not rest on formal explication. Semantic presupposition, rather than pragmatic presupposition, is in focus with regard to Burmese information structure.

mation within the sentence, since the very act of nominalizing it gives existence

or occurrence, unless it is a larger nominal complex with ဖြင့် **many** nominaliza-

tion. An added presuppositional, or background, effect is the placement of these

action nominals in the most inactive section of the sentence. The left pole of the

sentence is the most nominal, the least active, the most presupposed area of in-

formation (see Section 4.2.2.1 below). This pole aspect of the sentence causes

the sentence in Burmese to resemble the structure of a text, with sentence initial

devices serving as setting or scene construction of a frame of reference within

which the rest of the action takes place. These frames may be temporal, loca-

tional, logical, link to previous of sentence acts and infer them. Nominalization of

sentence initial devices or information serves the same textual function of linkage

to previous material that is presupposed but mentioned as the immediate frame

for subsequent matrix predications. Nominalization builds the framework of pre-

supposition and background information to the foregrounded predications, which

themselves are eventually nominalized and backgrounded as the sentence or

text proceeds.

အမျိုး	သား	နေ့	အထိမ်း	အမှတ်	အဖြစ်	ဟော	ပြော	ပွဲ	များ	နှင့်	ပြ	ပွဲ	ပြိုင်	ပွဲ	များ	ကို	ပြ	လုပ်	ကျင်း	ပ	ကြ	ပါ	သည်။
a-myui:	sa:	ne.	a-htim:	a-hmat	a-hprac	hau:	pau:	pwal:	mya:	hsang.	pra.	pwal:	pruing	pwal:	mya:	kui	pru.	lup	kyang:	pa.	kra.	pa	sany
a-kind	son	day	shape	mark	occurrence	preach	say	show	many	Acc	display	show	compare	show	many	GI	do	work	spread	outward	PI-S	PL	Nom

'To commemorate National Day, there are various activities and celebrations of preaching, exhibitions and competitions. ·

Figure 49. Structural Description of ND3

A more detailed inspection of the full text is in the appendices where one
can see from the structural rules that it is possible to generate structures that, in
fact, resemble Burmese organization and preference.

4.2.4.1.3 Ontological Structure of ND

The National Day text demonstrates a symmetrical bifurcation organiza-
tion, a pattern of balance that runs throughout Burmese from the word to com-
plex textual structures. The distribution of nominalized units marked by a topical-
izing သည် sany is significant as a textual boundary marker. The spans of text
marked by topical သည် sany divides the text into four basic units: 1) ND1-3, 2)
ND4-9, 3) ND10-13, 4) ND14-16. The fifth section of the text 5) ND 17-18 be-

longs a different section manifest by non-realis final particles, particular imperative and irrealis of an embedded hortatory text.

Perhaps because the structures generated by the ontological rules are ontological nominals, they do not display the sorts of discourse features expected in other types of discourse analysis. As ontological structures, they function to give form and body to other types of grammatical and semantic functions. Figure 50 displays the structural form resulting from an ontological approach to ND using topic သာည် **sany** as the structuring unit of higher level textual units.

The text divides into four sections, each marked at the beginning of the section with a topicalized သာည် **sany** nominal serving as both the topic of the immediate sentence and the topic of the textual spans. The structure of four topics is analyzed as two compounded nominal units balancing the text as a whole.
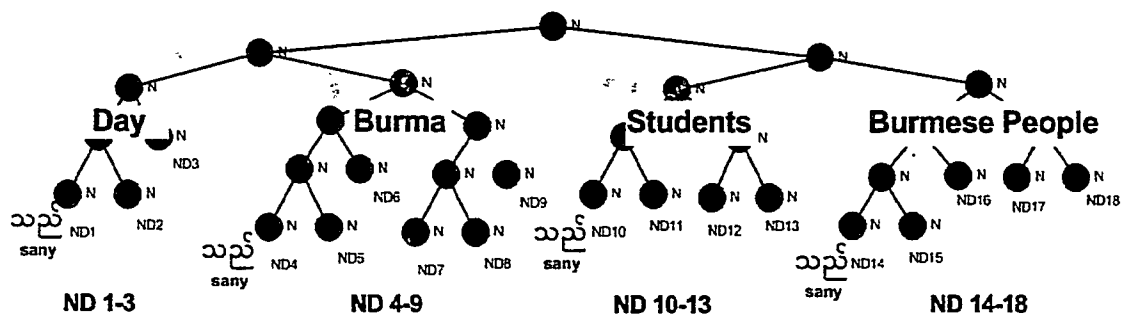
Figure 50. Topical Structure of ND Text

The topic that is marked by သာည် **sany** is shown in Figure 50 is the topic of the textual span. In this case, unlike other units, the text sections indicating topic are in the modifier position in relation to the other material of the text which is in a

head-like position. An analysis of this structure, consistent with the approach taken with regard to the sentence-level structures, analyzes the သၣ် **sany** sentential unit as the onset of a nominal unit, as in Figure 51.
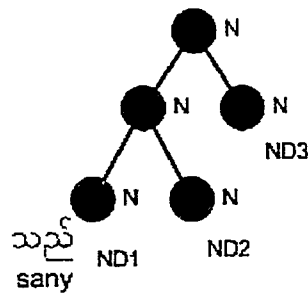
Figure 51. Structure of သၣ် **sany** Topicalized Section

Subsequent sections analyzed in the manner of Figure 51 result in structures consistent with the rest of the text in that they display nominal bifurcation, juxtaposed nominals, compounded-like structures, a right-headedness and symmetrical balance of the overall structure, as displayed in Figure 52.
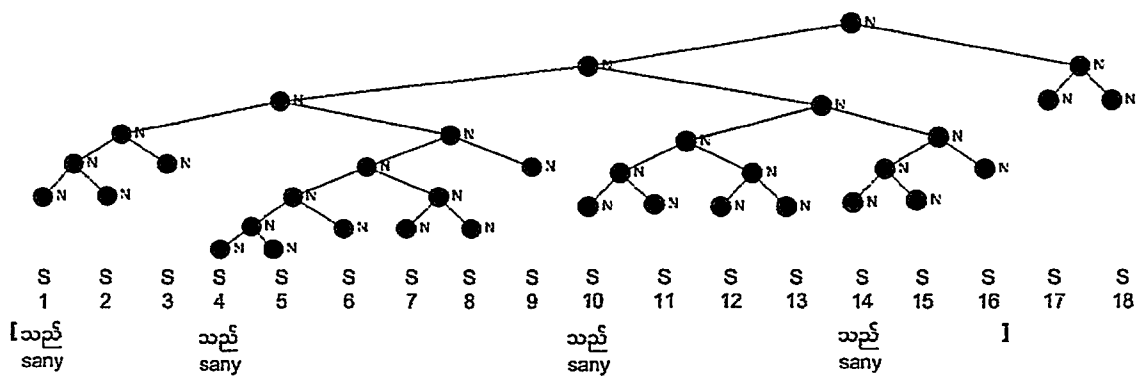
Figure 52. Ontological Structural Display of ND

The ontological structure of the whole National Day text provides a consistent view of the text as ontological units and demonstrates the same principles of organization that are displayed in Word formation. At the whole text level there is no Expression since V and P as functions have already been nominalized. From the sentence to text there are only nominal units. Although on the basis of သည် sany sections, it would appear that sentence and text formation are minimally different from Word structure, such that a separate unit of Sentence is unnecessary (Section 2.8), yet, due to the lack of sentence final realis သည် sany postposition in ND 17 and 18 (except as an add–on to close the entire text) the role of this final text element is an observer exhortation to the reader. This final segment of the text then appears to possess sentence structure, in terms of left–pole right–pole principles. The left–pole is the domain of textual content (analogous to propositional content for the sentence), while the right–pole is external to the text content; it is the pragmatic domain relating to the speech act participants.

4.2.4.1.4 Rhetorical Structures of National Day

An alternative, rhetorical organization of the National Day text approaches textual categories not from ontological patterns or rules of combination but as an intuitive or logical analysis, closer to what Longacre would call 'etic' and 'notional'.

The type of categories found useful for expository text in this approach are: Problem - Solution and Evaluation as basic textual moves (Hoey 1994; Labov 1972) of the macrostructure. These types of relations, presented in Figure 53, are observed in the ND text as rhetorical moves of the textual argument structure. Again the themes of the သည် **sany** sections divide the text into units, but this structure သည် **sany**-marked sentences do not divide the text into basic ontological nominals as in Figure 52, but as smaller units that function as *local setting* to a major textual move: 1) temporal setting to a manner in the first functional unit defining the Theme of the text (ND1); 2) the action setting of the functional unit establishing the Problem (ND4); 3) the initial cause of the Result functional unit (ND10); 4) the initial action of the Solution functional unit (ND14). Local setting as a textual function is to establish a 'scene', a temporal or locational horizon within which the text is framed. This is particularly true in Narrative genre. In Expository genre the role of setting is more to establish the textual ground or basis of argument. A bifurcating structure is also proposed for the textual logic.
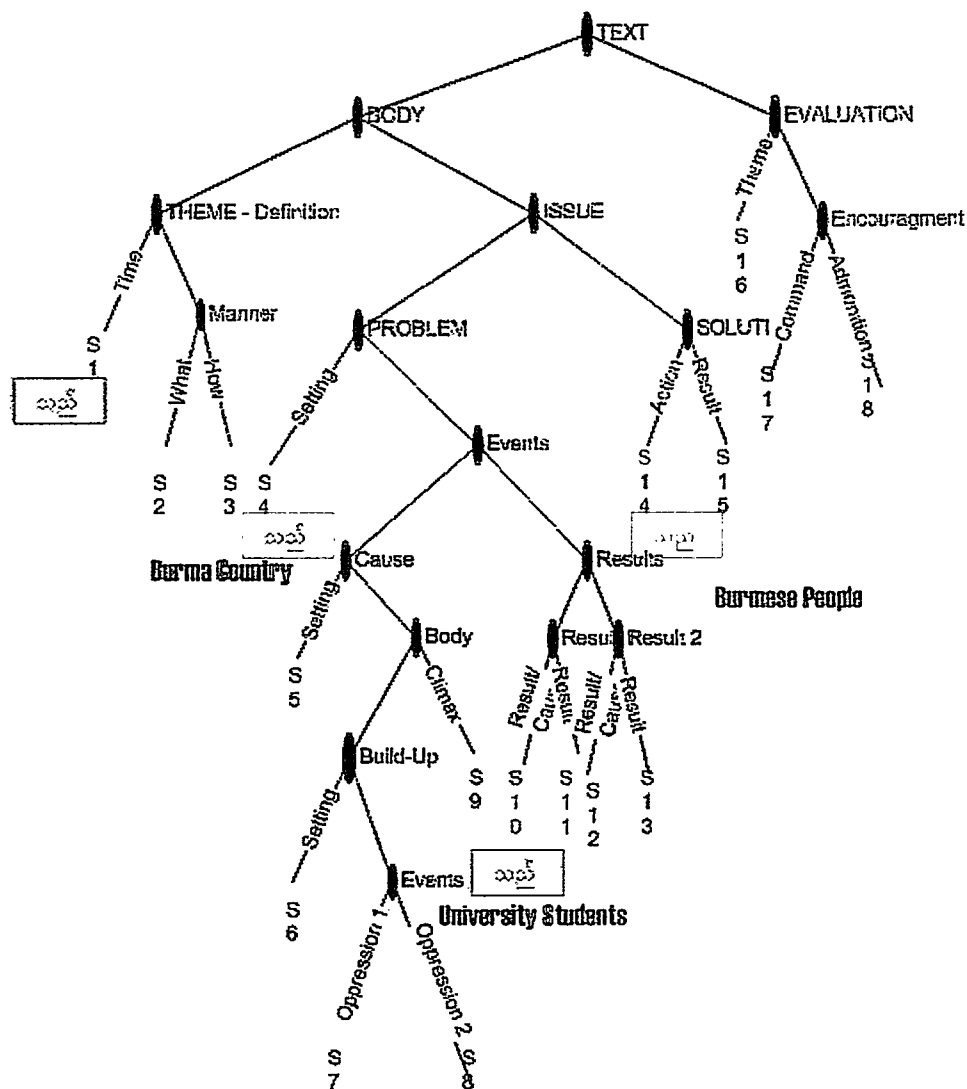
Figure 53. Rhetorical Structure of National Day Text

A pattern of balanced bifurcation is found throughout Burmese construc-

tions, from the low-level word construction to complex textual structures. The

above figure indicates the textual distribution of topicalizing သည် sany, shown

only in Burmese script. Marked on this text structure, the letters in blue are sen-

tence numbers and the heavy black words are the lexical themes profiled by သည် **sany.** More detail about the discourse role of that particle will be given in the after changing analytical models (Section 4.2.4).

4.2.4.1.5 Representational Issues of Text Analysis

In line with the rhetorical structure of the text presented in Figure 53, and in order to demonstrate the complexity of structure along with the simplicity of analysis, the following representations of the text present each of the sentence nodes with the fully analyzed sentence. Rather than to choose a label like S1 to represent one node, what is presented is the exact sentence in Burmese and Roman transcription with its analytical constituents.
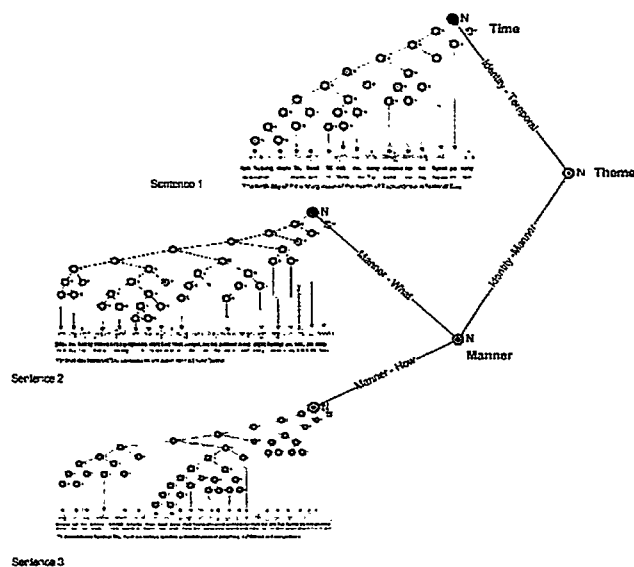
Figure 54. The Thematic structure for Sentence 1-3 ND

The purpose of this is to present a model of text structure that allows a 'burrowing down' movement to the details of the lowest level structures of the text or, alternatively, to view it as a whole at the highest levels. While this type of structure in a printed book is not as elegant as the digital model where one could move levels of analysis with a click of the mouse, it is still worth presenting a form in which the whole text structure is recoverable as text, the words and constructions together. Representation of the text is not a label or a new 'name', but the actual data. Figure 55 presents ND 5-9 as the textual function of Cause. (See Figure 53 for overall reference.)
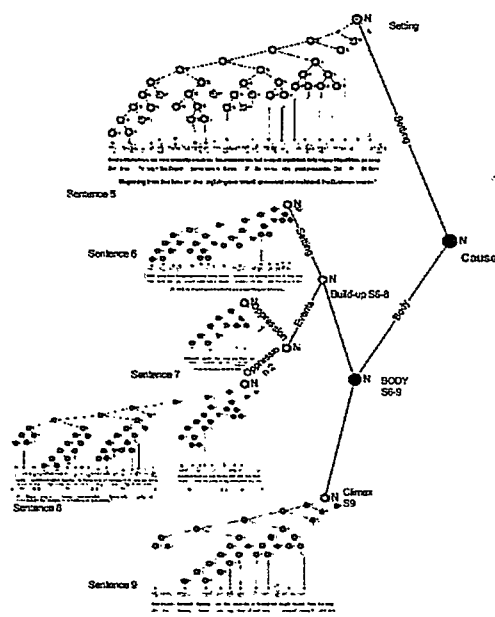
Figure 55 The Cause – National Day Text Sentences 5-9

It is possible to observe density of information in structures like Figure 55 since every node represents actual data. In general, note that the onset of units are typically less compacted than the middle where more detail and depth of embedding occurs. The details of Sentence 6 – 8 have been reduced because of being 'lower' node relations on the rhetorical structure tree of Figure 53.

Figure 56 presents the full text in one diagram with each nominalization as a black node in the tree structure. This is not so different from verbal generalization, but in this case it is pictorial. The only misrepresentation of the data is in profile, in that the viewpoint is as an analytical whole, and not the experience of the text as a hearer or reader, moving linearly into and out of the text.

The advantage of this style of representation is that in digital format one could move inside the text at ever finer levels of detail, moving inside the text from level to level with the same units of organization from the top-most level down to the lexical form of the most embedded structure. The representation in two–dimensional media appears quite messy, particularly where in ND 4-15, the text is the most dense. Another solution in two–dimensional media would be to exclude the branch labels which have remained prominent. Each of the sub-branches of the tree in Figure 56 can be found in closer detail in Appendix E.
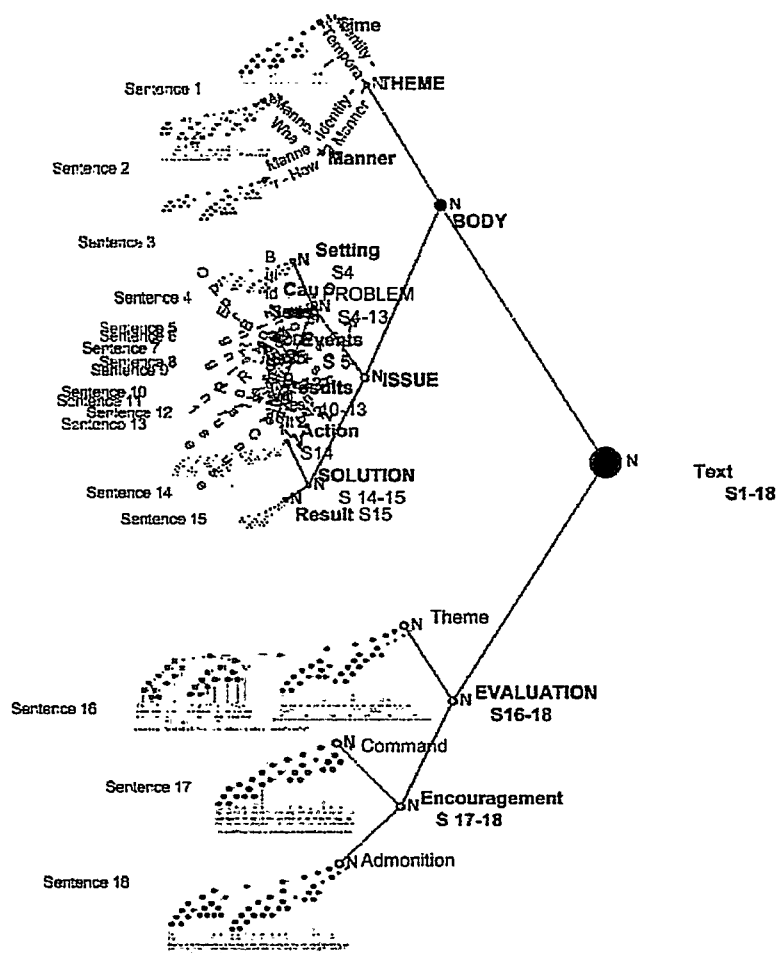
Figure 56. Rhetorical Structure of Entire National Day Text

All of the images for combined rhetorical structure trees for both National Day and Snake Bite texts are in Appendix E.

4.2.4.2 Snake Bite Text

4.2.4.2.1 The Story.

The Snake Bite text is a newspaper article about a young nine-year old boy who awoke in the middle of the night crying out because he thought the cat had bitten him. He was under the mosquito net with most of his family when this happened. Preparing to send him to get medical attention, he suddenly died.

Being a newspaper article, the basic outline of the story is summarized in the headline. The headline is what van Dijk (1977) called an abstract of the text, the human summary not the machine derived or the type of exact representation as Figure 53. The main reason for including this text is the information structure and as an example of the kind of complexity that has driven this study. It also represents the Narrative genre in Burmese.

The details of the text are in the appendices. A brief overview of the highlights will be presented. Again both text models will be presented, the ontological structures and the rhetorical structures.

4.2.4.2.2 Ontological Structures of SB

Utilizing the same set of assumptions that generated ontological text structures for ND expository text and examining the types of topicalizing roles of သည် **sany**, it was observed that narrative text SB did not have a single instance of topicalizing သည် **sany.** What it did demonstrate was active use of another particle that is also glossed as 'subject' (Okell and Allott 2001:1), and as the semantic source. The particle က **ka.** marks temporal and spatial source and agency when occurring with an animate nominal. Of the particles that mark the subject-like role

in the six sentences of this text , four are with ന **ka.**, one with မှာ **hma**, irrealis topic (see Section 3.2.4.1.1 and Figure 37) and one with မှ **hma.**, the restrictive negative, and also used to mark temporal, spatial or animate source of action.

On the basis of the functions of ന **ka.**, and the very similar functions of the other two particles the following ontological structure results in Figure 57. The first four action units marked by are along the more transitive action line of the text, also known as the event line. S1 establishes the temporal setting. S2 establishes the key protagonist, Maung Aung Thu, the boy who died. S3 introduces the household members as agents. S4 introduces the boy's grandfather by name U Tin Aung who killed the snake. The action at S4 is discourse peak. Thereafter, the narrative ceases as an action line and falls to comments by the author about people.
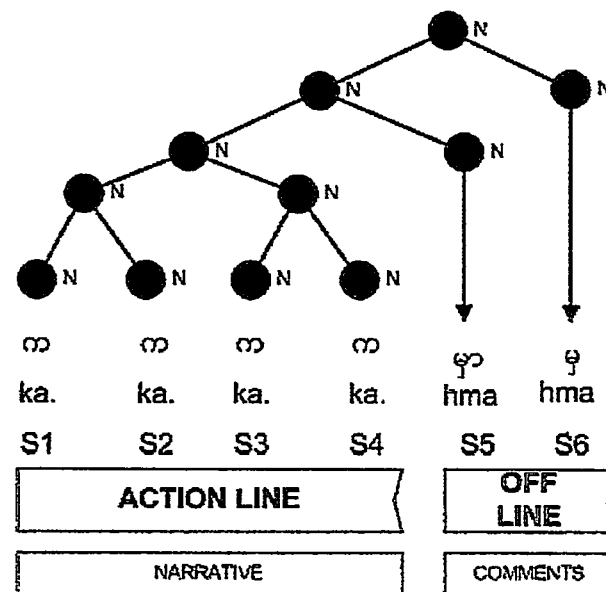
Figure 57. Ontological Text Structure of SB

The first comment in S5 is about Maung Aung Thu, now referred to as *topic* with the irrealis topic marker မှာ **hma**. rather than agent with က **ka.**. The action line of the text is stopped and a further comment in S6 marks another participant, the Dalla Police Force, who is off the main action line as a type of agent-topic.

The structure of this narrative text as a whole recapitulates the basic structure of a sentence with left and right pole functions (Section 1.2.1 and 2.4.13.1) and . The left pole is highly informative and deals with the content extensively, while the right pole signals aspects of the speech event or the comments or view points of the speaker. The left pole is the domain of the text event; the right pole the domain of external culture 'events' or mood.

Narrative text structure imitates the world of the sentence and lends credence to the distinction make in Section 2.5.2 regarding Sentence as a valid separate unit of constructional form in Burmese.

Figure 58 presents the ontological analysis of Snake Bite in terms of the each of the six sentence constructions themselves. The first four sentences belong to the main structure by the sentence final realis particle သည် **sany** tracking the factive, realis nature of the text. There is an exception in SB2 in that although it terminates သည် **sany**, an additional layer of speaker involvement is added by the comment ဆို ၍ **hcui e.** 'say + termination with realis proximate, immediate, punctiliar sentence final particle, disclaiming responsibility for the truth value of the statement. The epistemic nature of both ဆို **hcui** and ၍ **e.** is to distance the speaker from the subject matter by reported speech and at the same time to draw the reader's attention to the transitory nature of the statement.
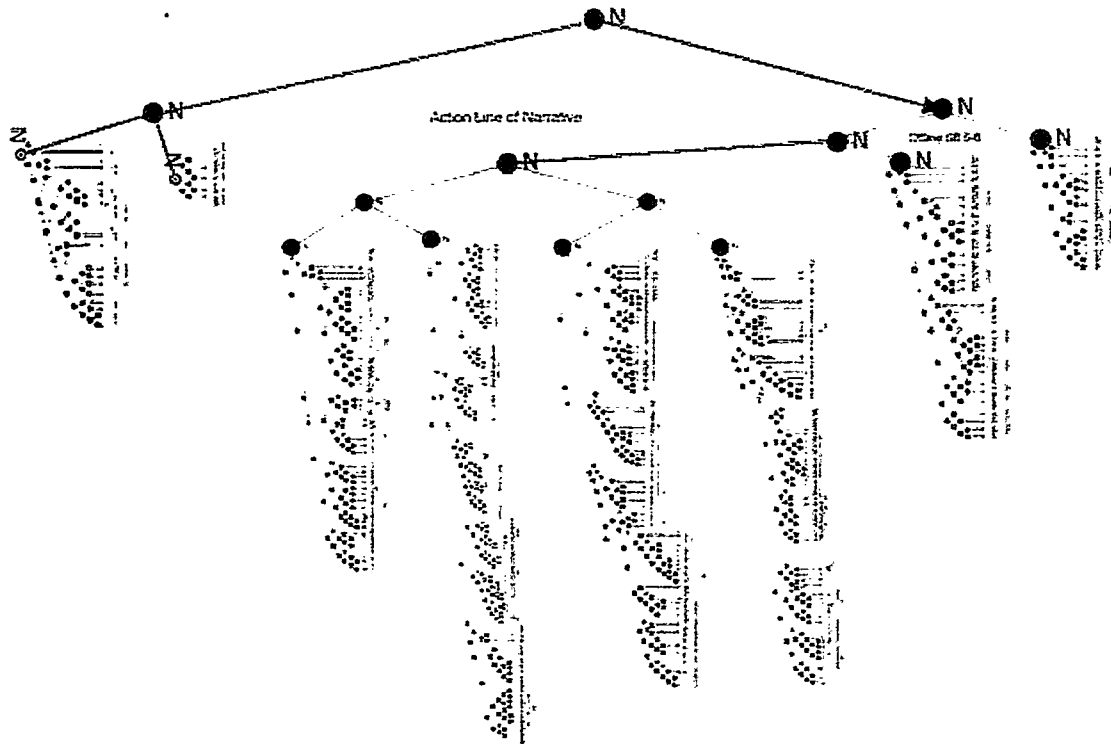
Figure 58. Ontological Trees of Snake Bite Text

The final two comments in SB5 -6 also are in realis mood. SB5 demonstrates the author's disclaimer of veracity of the statement terminated with သည် sany by an additional layer of a direct quote verb and then a comment that the author 'had come to learn' what he reported. The overt inclusion of the author's comments introduces the subjectivity and interpersonal relational aspects to this text. His comments are further noted in the aperture segment of the title (shown as the left-most node) in which the final pragmatic particle of pity ရှာ **hra** is included as the final marker of the sentence.

4.2.4.2.3 Rhetorical Structures of SB

The following figure demonstrates a rhetorical overview of the SB text from an etic notional perspective.

Snake Bite Overview
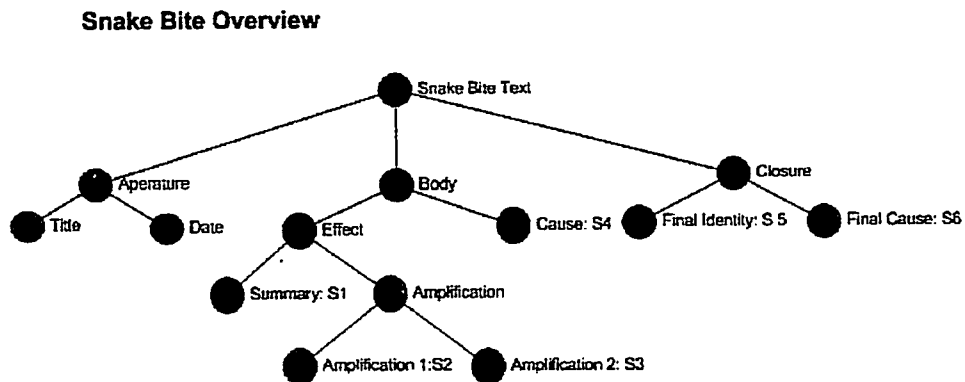
Figure 59. Rhetorical Structure of Snake Bite Text

The Snake Bite sentences are so long that displaying them would require more than two pages. One sentence (SB2) needed five pages to display all the nominalization structures (see Appendix E).

The diagrams present a systematic analysis of each word and demonstrate systematically the application of four simple rules with three classifications of word forms. The various levels constituency generate complex structures such as Figure 60 which is the structural representation of the first half of SB1.
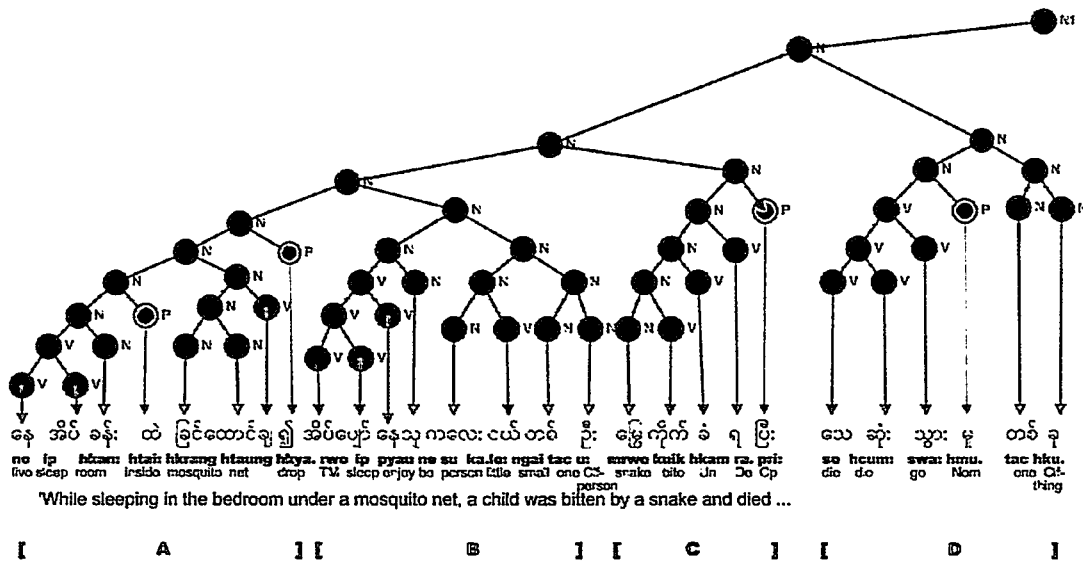
Figure 60. Snake Bite Text Sentence 1a

The density of information is indicated by the clumps or chunks that gather and coalesce. It appears as if there is an embedded sentence in the second half of Sentence 1. The unity of structure makes reading and processing such dense information packages possible, even as the ordinary rules of Burmese grammar assist the reader in attending quickly to what he needs to hear, and knowing how to both encode and decode structures. A rhythmic constituency in Sentence 1 is also noticeable. The structures of Snake Bite and those of National Day are basically alike but also are reminiscent of New Testament Greek writers who packed their expository text
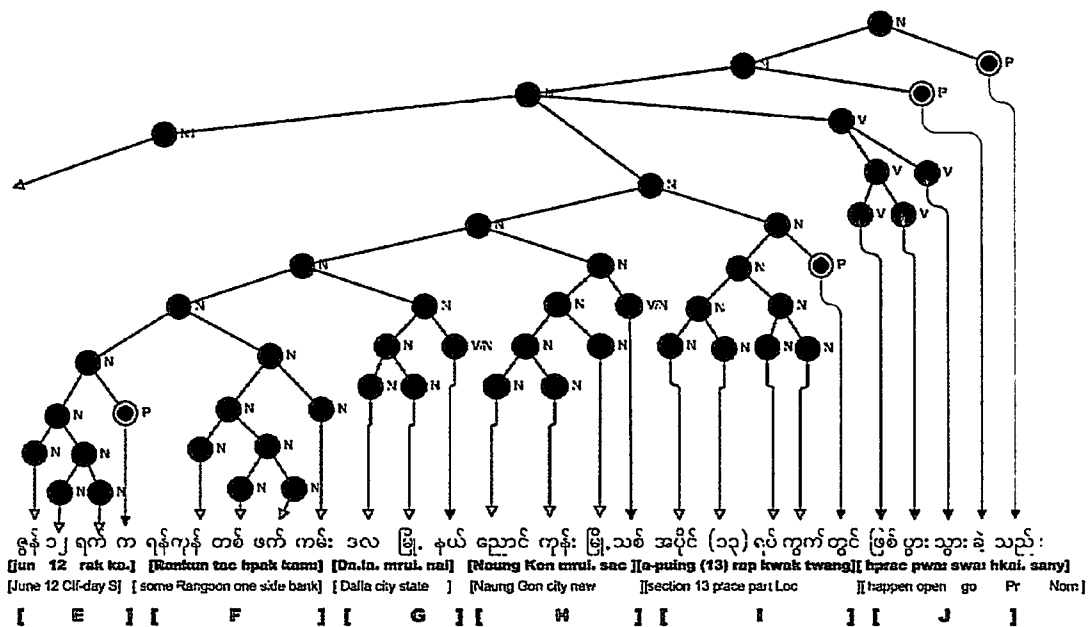
ဇွန် ၁၂ ရက် က ရန်ကုန် တစ် ဖက် ကမ်း ဒလ မြို့ နယ် ညောင် ကုန်း မြို့.သစ် အပိုင် (၁၃) ရပ် ကွက် တွင် ဖြစ် ပွား သွား ခဲ့ သည် ：
[jun 12 rak ka.] [Rankun tac hpak kamn] [Da.la. mrui. nai] [Naung Kon mrui. sac][a-puing (13) rap kwak twang][hprac pwa: swa: hkai. sany]
[June 12 Clf-day S] [some Rangoon one side bank] [Dalla city state] [Naung Gon city new][section 13 place part Loc][happen open go Pr Nom]

[E] [F] [G] [H] [I] [J]

this occurred on June 12 at the 13th ward, in the new settlement of Nyaunggon, Dalla Township, just across the river from Rangoon.'

Figure 61. Snake Bite Sentence 1b of Snake Bite

One of the features of such long and detailed sentences is that information seems to hang like long willow tree branches. The combination of all six very long sentences produced the type of structure in Figure 62.
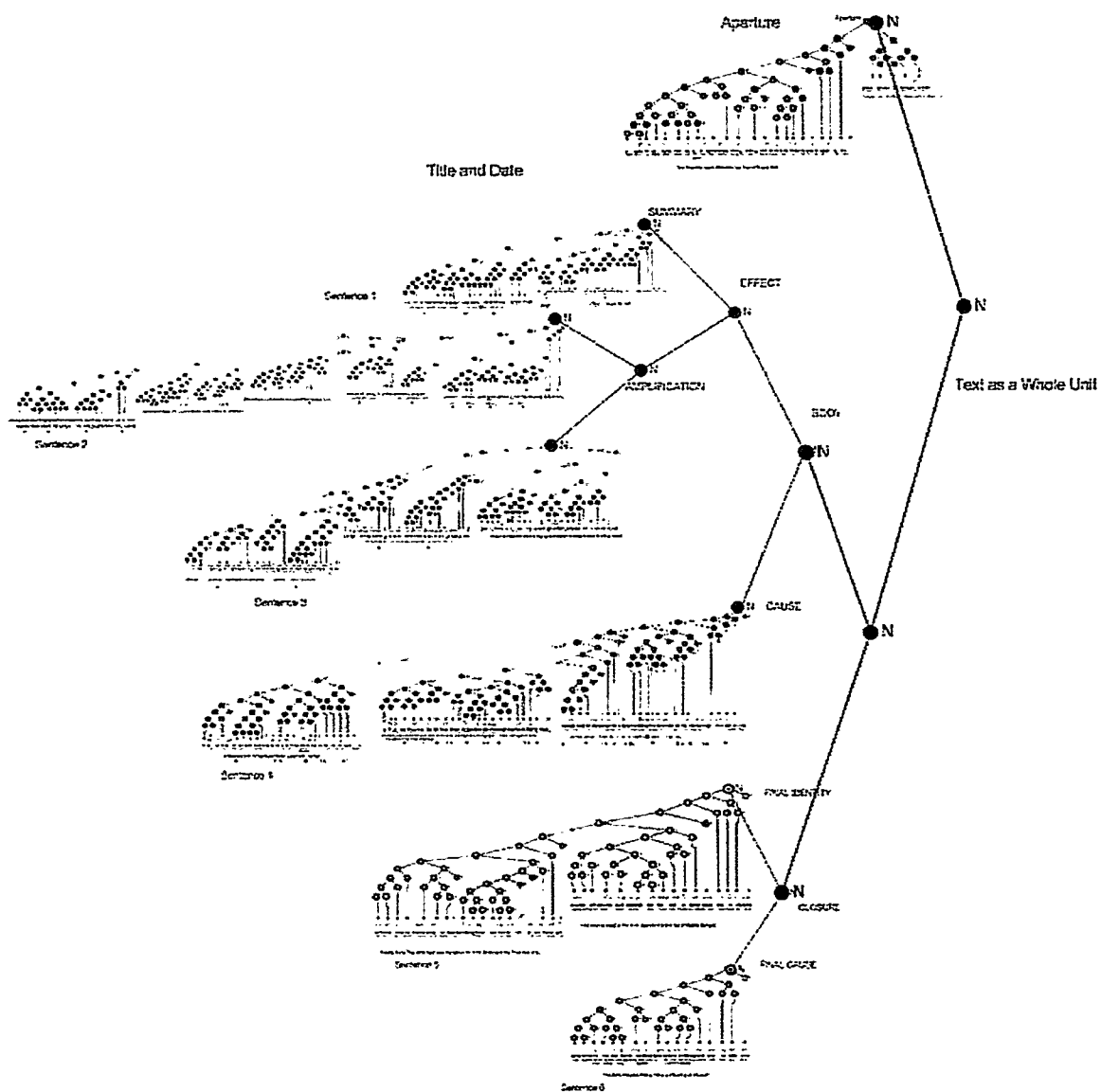
Figure 62. Rhetorical Structure Trees of Snake Bite

The following section discusses the nature of information in Burmese text, the role of the postposition particle သည် **sany** and a few other particles in the discourse structure of National Day Text.

4.2.5 Summary of Ontological Structures of Text

The ontological structures of National Day and Snake Bite texts are contrastive as textual genre in their ontological structures. They both demonstrate the patterns observed in structural formation. National Day displayed structures of nominal compounding such that the whole text appeared like a compound nominal Word. Snake Bite on the other hand as a text appeared to have the left-right pole distinctions of typical of the sentence. So on the basis of the narrative text the three levels of grammatical construction (Section 2.5.2) stand: Word, Expression and Sentence.

Expository and Narrative text structure differ in transitivity and thus the kinds of particles utilized in establishing topic သည် **sany** or agent / source က **ka.** These particles were found to be strategic in marking higher level textual sections.

Ontological and rhetorical structural descriptions differ at the text level for both Expository and Narrative text. Ontological structure followed a *left–branching* structure while the rhetorical structure tended to be *right–branching*. (Compare Figures 52 and 53 for ND structures and Figures 58 and 59 for SB.) This difference is accentuated in Expository test as a genre perhaps due to its more logical relations being susceptible to right–branching expansion of logical results versus causes. This tentative generalization would require more data for both text types.

4.3 Topic and Information Status

4.3.1 Topic- Comment Propensity in Burmese

Many Asian languages – Sino-Tibetan, Japanese, Austronesian, Tai-Kadai and Mon-Khmer, have often been regarded as topic-prominent languages which emphasize information structure, rather than subject-prominent languages such as English and other European languages which emphasize morphosyntactic structure. Topic-prominence often takes the sentence form of Topic-Comment rather than Subject-Predicate. What distinguishes Topic-Comment structure is that topic need not be agentive or strongly transitive, in the sense of force dynamics (Talmy, 1985), since the discourse role —topic — is disconnected from the semantic category of agency.

As noted previously, Burmese tends to be weakly transitive, as are some other Tibeto-Burman languages (Matisoff 1976). The 'semantics of transitivity' is understood from a whole-scene viewpoint, with explicit mention of the source and/or goal as key elements within that viewpoint (DeLancey, 1982). Rather than being highly causative, or requiring mention of the source of an action, Burmese sentences and discourses tend to be more focused on the result-end of the transitivity spectrum. Many verbs can be used transitively or intransitively, being based more upon the cognitive viewpoint of the speaker than upon the grammatical requirements of a dichotomous transitivity system.

The Topic-Comment structure of Burmese is also related to the speaker's cognitive point of view with focus on the result-end of the action stream. It appears that the preferred orientation of the language is to take a viewpoint that

leaves out the agent/causer and by inferring that role, it can have stronger pragmatic force when an explicit mention is made. Topic prominence then follows from a generalized propensity to not mention the agent and to focus on the resulting state of affairs.

4.3.1.1 Various definitions of Topic

The notion of topic and the use of this term has been fraught with confusion in the linguistic literature. Part of this confusion has been terminological, part related to scope differences in topicalization, part related to the notion of topic as a grammatical role within the sentence similar to that of the notion of 'subject'. Another part of the confusion has been the role of sentence constituent ordering and the weight allotted to that important feature of topicalization. The informational status and introduction process of referents is another aspect to the notion of topic, particularly new versus old information. Another part of the confusion has been the scope of topicalization — either a more local sense of topic within the sentence, or a much wider sense of topicalization spanning larger textual units or even the discourse itself.

A binary distinction has been observed between at least two types of status of referents in a text. The difference between referents in the text 'on stage', and those being brought 'onto the stage' is recognized under various terminological sets such as: Old/New, Known/New, Given/ New (Halliday, 1967a; 1967b), Activated/Previously activated (Chafe, 1987), and Presupposition/Focus (Lambrecht, 1996, 2000). A yet more complex analysis of the initial binary distinction was made by Prince (1981) who categorized the speaker's assumptions

of the hearer's familiarity into three types of information with various subtypes –
New (Brand-new (anchored and non-anchored), Unused), Inferrable (Noncon-
taining Inferrable, Containing Inferrable), and Evoked (Textually Evoked, Situa-
tionally Evoked). Such finely–tuned pragmatics, while helpful in classifying
speaker assumptions, is linear and fails to account for the hierarchical structure
of textual information across spans of text, which are themselves embedded
within other texts and assumption spans.

Givón (1983) proposed a system for tracking discourse referents across
the textual span of clauses in which the same referents tend to be evoked re-
peatedly. The quantifiable measurement for *continuous topics* (old information or
presupposed reference) and for *discontinuous topics* (new information) lends an
empirical basis to the confusion. This notion of topicality refers more to discourse
theme and of profiling information across a span of text. Highly continuous refer-
ents are assumed to be more topical. Yet continuity tracking fails to net salient
topics in languages such as those in Southeast Asia where indirectness, under-
statement, and the absence of overt mention may be used to indicate a topic.
Strategic points in a text may therefore appear non-topical regarding referents,
particularly where metaphor or analogy is used, yet be pragmatically effective for
an audience's awareness of the topic.

Figure-Ground organization is the most probable cognitive basis for the
binary distinction that linguists have sensed in examining the notion of topic-
comment or presupposed-focused nature of information structuring. Figure-
Ground relations account for the *asymmetry* felt to exist between two points of
information in a sentence. Usually one is topic and the other comment. One is
more focal or salient while the other more background and less prominent. One

is more mobile or active in relation to the other as field of reference or target of action. The asymmetrical relation between the two (or more) constituents is probably psychological and cognitively hard-wired. Talmy characterizes the Figure-Ground relationship in language as:

> The Figure is a moving or conceptually movable entity whose path, site, or orientation is conceived as a variable, the particular value of which is the relevant issue.
> The Ground is a referenced entity, one that has a stationary setting relative to a reference frame, with respect to which the Figure's path, site or orientation is characterized (Talmy, 2000a:312).

Talmy's insights into cognitive semantics are based principally on the dynamics of motion. Thus for him, and most other linguists using Figure-Ground relations to describe the asymmetrical relations of the sentence, Figure (F) is topical, the most salient, and is typically correlated with the semantic agent, the mover, or causer, and thus with grammatical subject. Ground (G) is a reference entity possessing known properties that characterize the Figure. This schema, following Talmy (2000b) can be applied as follows to the underlying event structure:

(140)   a. Bill (F) is behind the garage (G).

        b. She (F) resembles him (G).

        c. Her going home (F) was after stopping at the store (G).

While this schema works well for the underlying cognitive semantics of highly transitive sentences with motion verbs and complex spatial relations of objects, it can be observed that for reduced transitivity the situation flips and the Figure shifts to the 'right' toward the new information, toward the grammatical object. Figure changes position to become what the sentence says, the comment,

not the reference anchor of the continuing topic. Focus is upon the rightmost element, which gains in saliency and topicality.

The shift of the gestalt Figure-Ground with reduced transitivity begins to look more like the binary structure of Presupposed (P)/Focus (F) of Lambert (1996).

(141)   a. Q: Who saw the mechanic?

A: The mechanic (P) was seen by the principal (F)

b. Q: When is Mac leaving?

A: Mac (P) is leaving tomorrow (F).

The effect of providing the context to the response above gives the status of 'activated' information to the Presupposed elements. When elements become known, old, or given information in this context, they also become Ground, the known, the given, the referenced entity, in the sense of Talmy above.

4.3.1.2 Burmese Topicalizing Postpositions

Burmese postposition particles mark grammatical relations of the argument Noun Phrases of the verb and parse various levels of pragmatic information within the Burmese sentence and text. Some of these particles have been identified as marking topic and others as marking subject, with some marking both in the Burmese sentence (Okell and Allott, 2001).

Particles that have been labeled topic in Burmese by other scholars are:

- သည် **sany** marks the noun as **subject or topic of sentence** in Formal Burmese only according to Okell and Allott (2001: 245).

- ၁ **ka.** marks the noun as **subject of the sentence;** in Colloquial and in Formal Burmese usually for emphasis or contrast, or to distinguish the agent from the patient (the latter often marked by ကို **kui** or အား **a:**); often indicates the speaker when reporting speech. In Formal Burmese, some writers use မှ **hma.** to serve the same function (Okell and Allott 2001:1).

- ၁ **ka.** marks a phrase as **topic of discourse**, whether subject or not, used in both Colloquial and Formal Burmese (Okell and Allott, 2001:2).

- ၁ **ka:** marks a phrase with the sense of 'however' or 'but', **highlighting the subject or topic of a sentence.** (Okell and Allott, 2001: 5).

- မှာ **hma** marks a phrase, and indicates **topic of sentence**, usually the subject in Formal Burmese and sometimes in Colloquial Burmese. (Okell and Allott, 2000:171).

- မှ **hma.** marks a noun as **subject of sentence**, when the subject is a personal agent or an inanimate noun standing for a personal agent. It is more common in Formal Burmese but can occur in Colloquial Burmese. In this usage it is equivalent to Formal Burmese ၁ **ka.**, but in Colloquial Burmese ၁ **ka.** has more contrastive force (Okell and Allott, 2001:165).

- မူ **mu** marks a phrase as slightly contrastive with some other phrase in Formal Burmese (Okell and Allott, 2001:154).

- ၏ **ta** marks a verb as nominalized and as the **topic of the sentence** in Colloquial Burmese only (Okell and Allott, 2001:74).

These various particles are well illustrated in Okell and Allott (2001), but what is far from clear is why they are used, how they function in specific contexts, and what kind of information the notion of topicalization encompasses in Burmese. By examining whole texts the extensive linguistic context by which such notions as 'given', 'new', 'recoverable', etc. can be factored into the function of the particles. Discourse analysis also lays out the hierarchical structural units by which textual information is organized. Particles have been found to signal information function on multiple levels from clause, sentence, paragraph, section, and the discourse macrostructure as a whole. Many previously inexplicable particles have been found to function in tightly organized and beautiful ways through discourse analysis (Longacre, 1996; Longacre and Woods, 1976-1977; Person, 2000).

Assuming the notion of topic applies to both sentence and discourse levels, and assuming topic is both informational and grammatical, the present study examines the role of topic as it relates to three particles သည် **sany,** က **ka.** and ကို **kui** found in one particular text. By restricting the analysis to one text, it is possible to examine more fully the inter-relationships and dependencies across higher level structures, which may not be present in other texts where these particles appear. The basis of generalization of particle function then is restricted in scope to specific texts or text types and structural contexts. What is gained is greater explanatory power regarding why a particular particle is used in a particular linguistic situation.

4.3.2 Types of Information relating to Topic

There are three distinctions important with regard to the notion of topic in Burmese. The first of these is **Information Status**, which is whether the information is regarded as 'new' or 'old' information. This distinction is what some analysts have referred to as a cognitive operation analogous to the reader opening a new file for new information, or for old or already known information noting whether the file which already exists for this information is open and active, or is open but not active (not in immediate awareness). A more contemporary, computer analogy might be where a file/window exists and is open (old information) in a window. If it is visible from the desktop, it may require just a mild reference in the text (zero or pronominal). On the other hand, if it is buried or actually closed, somewhat more effort is require to retrieve and bring that file (information) into focal view.

Information status has to do with the amount of cognitive effort required to activate information. This effort is mapped iconically to grammatical constructions that serve to stimulate those cognitive operations. It is assumed that a more overt grammatical apparatus is required for information that is specific and stored away. That is, old information that is inactive.

Burmese follows the universal tendency of most languages in that old information linearly precedes new information. Typically, in Burmese, new information occupies a position immediately preceding the verb phrase that is to the far right. In a discourse, what is new and what is old information is normally recoverable from the immediately preceding text. In spoken discourse, what is old is most often recoverable in the social and speech context. While this generalization is a function of the difference between written text and oral discourse, it is

nonetheless a tendency of text to map greater referential detail due to the presumed loss of information from the social and physical situation of a speech event. The unsaid, inferred knowledge on the part of the writer to the reader can evoke a pleasant sense of satisfaction, humor, deeper relevance which brings a peculiar joy in reading creative writing. This same inferential function can leave second-language readers of Burmese perplexed. While much that is inferred comes from a shared experience of the world and the expectations of cultural norms, the relation of sentence arguments and adjuncts in Burmese is marked by postposition particles, most of which have multiple or generalized functions. Understanding the functions of these particles opens up the world of Burmese grammar, particularly for the second-language learner. While it may seem miniscule in relation to the number of particles, it is hoped that this study paves the way for future discourse studies, particularly concerning topic.

The following example from the National Day text illustrates the role of informational status across two sentences. New information in S1 is old information in S3.

(142) Information Status between National Day Sentences 1 and 3

S1

တန်ဆောင်မုန်း လ ဆုတ် ၁၀ ရက် နေ့ သည် အမျိုး သား နေ့ ဖြစ် ပါ သည်

[tan-hcaung-mun:	la.	hcut]	[10	rak	ne.	sany]	[a-myui:	sa:	ne.	hprac	pa	sany]
tazaungmon	month	end	10	Clf-day	day	Nom	a- kind	son	day	happen	Plt	Nom
							[national]					

'The tenth day of the waning moon of the month of Tazaungmon is National Day[new].'

S3.

အမျိုး သား နေ့ အထိမ်း အမှတ် အဖြစ် , ဟော ပြော ပွဲ

a-myui:	sa:	ne.	a-htim:	a-hmat	a-hprac	hau:	prau:	pwai:
a-kind	son	day	shape	mark	occurrence	preach	say	show
[national]			[commemoration]			[	preaching	]

များ နှင့် ပြ ပွဲ ပြိုင် ပွဲ , များ ကို ပြ လုပ်

mya:	hnang.	pra.	pwai:	pruing	pwai:	mya:	kui	pru.	lup
many	Acc	display	show	compete	show	many	Ob	do	work
		[exhibit	]	[competition	]				

ကျင်း ပ ကြ ပါ သည်

kyang:	pa.	kra.	pa	sany
spread	outward	Pl-S	Plt	Nom
[celebrate	]			

'To commemorate National Day[old] there are various activities and celebrations of preaching, exhibitions and competitions.'

The second type of distinction necessary for topicalization in Burmese is **Information Focus**. There are two types of information focus, the first is *positional* and the second is *grammatical role*.

Positional information relates to the linear, sentence initial position or slot of the principal arguments of the verb. Sentence initial devices such as temporal or locative linkage are excluded in information focus, since these devices relate to textual cohesion and background rather than focus. The following example demonstrates these positions, labeled Pos 1, Pos 2, Pos 3, in the sentence. The head of the Burmese sentence is not the beginning but the end, not to the left but to the right. Thus, the numbered positions begin right and proceed left, following a rather different sense of focus order than is expected in European languages. Burmese as head-final is left-branching and is felt by Burmese speakers to 'face' toward the predicate. Greater Informational Focus is given to the elements placed in Pos 1.

(143) Example of Informational Focus.

Temp-oral	POS 3	POS 2	POS 1	Predicate
၁၉၂၀ ပြည့်နှစ် တွင်	ဤဂ်လိပ်အစိုးရ က	ရန်ကုန်တက္ကသိုလ် ကို	ဖွင့်လှစ် ရန်	စီစဉ် သည်။
1920 prany. hnac twang	**anggalip a-cui: ra. ka.**	**rankun takka-suil kui**	**hpwan g. hlac ran**	**ci cany sany**
1920 be-full year Loc	English control have A	· Rangoon university Ob	open open Pur	line-up line-up [arrange] Nom

'In 1920, the English government arranged to open Rangoon University.' ·

Grammatical role is a parameter of Informational Focus in a Burmese sentence. Information Focus follows the animacy/empathy hierarchy (Silverstein, 1976; Kuno, 1976) and directly correlates with semantic and grammatical roles within the sentence. While each of these three aspects interrelate, and although the semantic aspect of this parameter is more salient in Burmese, the choice is made here to focus on the grammatical in order to build on Relational Grammar's insights regarding promotion and demotion of grammatical roles in the sentence.

Animacy/ Empathy Hierarchy	Human > Animal > Instrument > ...
Semantic Role	Agent > Patient > Benefactor > Purpose / Reason > Result
Grammatical Role	Subject > Object > Indirect Object > Adjunct > ...

Table 31. Hierarchy of Animacy in relation to Grammatical and Semantic Roles

Because Burmese normative word order is SOV, a natural prominence is accorded sentence arguments with the subject grammatical role. The problem of what is subject in Burmese is beyond our scope at present, but will be regarded for the purposes here as the specified or unmentioned agent (in a type of passive construction), the overt left-most, non-oblique and non-object argument in a sentence. The casual observer may notice that subject is more a default role in relation to the other more overtly marked grammatical roles.

If an argument of the verb in Burmese is promoted or demoted from its principal grammatical role, e.g. a subject being demoted to an oblique as it does in the English passive construction, it is also thereby raised or lowered in focal prominence by grammatical promotion or demotion. Because agents are often unmentioned, default prominence tends to fall on the patient. Un-demoted agents are mentioned for pragmatic purposes as we shall see in the following text analysis.

(144). Example of Promotion and Demotion in English.

      Active: The man hit the cat.

      Passive: The cat was hit [by the man] [oblique demotion].

(145). Example of Promotion and Demotion in Burmese ND 4.

Patient	Temp	Oblique -Agent	Instrument	Predicate
မြန်မာနိုင်ငံသ ည်	၁၈၈၅ ခုနှစ်တွင်	အင်္ဂလိပ်တို့၏	လက်အောက်ခံ ဘဝသို့	ကျရောက်ခဲ့ပါ သည်။
mranma nu-ing-ngam sany	1885 hku. hnac twang	anggalip tui. e	lak auk hkam bawa. sui.	kya. rauk hkai. pa sany
Burma country Nom/Top · Burma	1885 Clf-gen year Loc-in · in 1885	England Pl Pos English people's	hand under UG existence Pth came under subjugation	fall arrive Pr Plt Nom/Sf became.

'In 1885, Burma underwent the experience of effectively coming under English rule'.

In Sentence 6, the Patient is promoted to the grammatical pivot or in Relational Grammar terms, to a 1. It is subject-like and is moderately prominent because of the demotion of the Agent to oblique. We shall see in the following sections that this example is also salient for focus as we add further detail to how topical focus is manifest and used in this sample Burmese text.

The relative weight of focus or prominence in any one sentence in Burmese is a matter of the operation of all three parameters. In Sentence 5, the relative focal prominence of the arguments is as follows: a) informational status – the new information in Pos 1 is most salient, and then in informational focus – b) positional focus gives Pos 1 focus and c) grammatical role of the patient in Pos 3^2 is focal.

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[2] Pos 3 here is being used to refer to the farthest left position of a sentential argument, even though an individual sentence may have up to Pos 7 or 8. (145) demonstrates an embedded nominalized clause which contains the demoted actant and thus increases the surface number of positions from the verb.

4.3.2.1 Summary of Informational Devices

In summary, the three dimensions of focus in Burmese operate with regard to Informational Status (new and old) and two types of Information Focus – positional and grammatical role. These are graphically summarized in the following chart with the asterisk representing the position with the highest salience in each dimension. Note that in an overall sense the grammatical role of Agent balances the other two weights.

	POS 3	POS 2	POS 1	Predicate
Information Status	old information		new information *	
Informational Focus				
Positional	Low focus		High focus*	
grammatical role	Agent ** >	Patient >	...Purpose >	

Table 32. Summary of Informational Devices

The value of factoring out different types of focus aids in understanding how different postposition particles in Burmese can each be labeled as topic yet function in relation to different types of informational prominence. Such a schema also validates the natural, intuitive sense of prominence for different sentential arguments particularly in the more complex structures of expository text argumentation.

4.3.3 Figure-Ground in Relation to Information Devices

The gestalt Figure-Ground configuration relates to the above informational device schema in two ways. One type of configuration of Figure-Ground correlates old information as topic. That is, as theme of the discourse topic is conceived as figure in relation to the new information that is additive, always changing across the discourse span in relation to the steadiness of the topic which thereby attains a kind of textual focus by repetition. This is the typical form found with more transitive, narrative sentence relations. Such a Figure-Ground arrangement is represented in Table 33.

Figure	Ground
topic (of discourse)	focus
old information	new information
theme	rheme

Table 33. The Highly Transitive Sentence Gestalt

A second type of informational gestalt occurs where old information is regarded as the Ground, the basis, the known, the background, the drone instrument, against a focally figured block of new information as the item of interest. In this type of conceptualization new information is more salient, and is the Figure. This reversal configuration is characterized in Table 34.

Ground	Figure
known	salient
old information	new information
steady reference frame	variable
anchor	focus

Table 34. The Absolutive Sentence Gestalt

Lambrecht (2000) refers to these two configurations in terms of presuppositional characteristics. The former construct of Table 33, he labels Argument Focus. It is the more marked in that this construction adds a new argument to a given predicate. The latter construct of Ground-Figure, which he labels Predicate Focus, is regarded as the normal construct of subject-predicate or topic-comment constructions with the predicate adding a new assertion to a given argument.

Graphically, a summary of focus using weight-to-position (indicated by an asterisk) of these various parameters would look like the following figure of relative weight for the unmarked Burmese sentence.

	POS 3	POS 2	POS 1	Predicate
	Ground		Figure	
Focus	*		**	

Table 35. Focus Positions by Relative Weight for Unmarked Sentence

However, Sentence 6 above, being more transitive with an overtly marked agent as source of the action and with an overt patient, results in a balanced weight of focus and a shift of Figure-Ground to that of the transitive gestalt.

	POS 3	POS 2	POS 1	Predicate
	Figure		Ground	
Focus	**		**	

Table 36. Focus Positional Weight of Sentence 6 – Highly Transitive Gestalt

The notion of topic in discourse is related to the sense of 1) local focus within the sentence, 2) to information structure (both status and focus), and 3) to the wider notion of focus or figure to the background gestalt of the discourse. How these notions are played out in Burmese relates to the larger discourse chunks, particularly what we might naively regard as an orthographic paragraph.

4.3.3.1 Expository Text - National Day

The National Day text comes from the Third Standard Burmese Primer and was selected as an example of a well-crafted, literary Burmese expository

text. This text has been used for generations of students to teach not only Burmese but to make a particular point about the role of schoolchildren in the history of Burmese independence and to encourage patriotism. As an expository text genre, it is exemplified by explanation and/or persuasion. It stands in contrast to Narrative genre, which tells a story and is characterized linguistically by chronological linkage and by its agent orientation. It also contrasts with Procedural genre, which tells how to do something and is characterized by chronological linkage and by being activity oriented rather than agent oriented. Expository text is typically characterized by more logical, non-chronological linkage (although certain narrative elements are often found embedded within expository text) and topic orientation rather than agent orientation. The textual genre distinctions typically result in different types of clause, sentence, paragraph and discourse structures within the macro structure of each genre.

4.3.3.1.1 Discourse Units of the text

The macrostructure of the text follows the typical peak structure for Expository text (Longacre, 1996:36). Each Peak structure unit is marked by boundary features, and lexical cohesion internal to the unit. Tail-head linkage is manifest across structural boundary marking units (S15-16). Space does not allow detail of these structures. The macrostructure shows two peaks, the thematic peak and the didactic peak. It should be noted that the overall discourse structure of the text is Expository, with the typical Problem-Solution form followed by an Evaluation unit. One movement within the Problem unit is manifest by a brief embedded Narrative discourse. Another embedded discourse is found in the

Evaluation unit — a Hortatory discourse with its own internal structure and characteristics of command and admonition.

Discourse Type & Structure	Role of Discourse Unit	Embedded Discourse	Discourse Macro structure	Themes	Transitivity	Sections	Section Beginning Sentence and Paragraph	Sentence	Peak Structure-Thematic	Peak Structure-Didactic
			National Day Text Discourse, Sections, Paragraphs, Logic							
Expository			Title	Statement of discourse	none	none		0	Aperture: Definition	Aperture: Definition
Theme	Definition		Introduction	theme: national day	stative & reduced	Day	S 1 P 1 & 2	S1		
			Expansion of Definition					S2-3		Didactic peak
Problem Background	Supporting Arguments: a) Causes	Narrative Discourse	Setting		increased	Burma	S 4 P 3 & 4	S4	Pre Peak: Argument Build-up	
			Inciting Moment					S5 -7		
			Developing Conflict					S8		Thematic peak
			Climax					S9		
	b) Results		Expanded setting		reduced	University Strike	S 10-13 P 5	S10		
			New cause					S11		
			Result					S 12		
			Expanded result					S 13		
Solution	Thematic Result		Solution		reduced	Burmese People	S 14-18 P 6 & 7	S14	Peak: Solution	
			Summary					S15		
Evaluation	Admonition	Hortatory Discourse	Theme	Restatement of result New theme: patriotism	reduced via: irrealis mood			S 16	Post Peak: Evaluation	Pre-Peak
			Command					S17		Peak: Main Point of Discourse
			Admonition					S18		

Figure 63. Macro-Structures of National Day Text

The types of surface features that support the notional boundaries are presented in relation to Peak structure in Table 37.

Peak Structure	Sentences	Surface Features	Notional Structure
Theme: Definition	S1-3	Introduction via Presentational Sentence. Plural, polite	Aperture
Pre-Peak: Problem: a) Causes	S4-9	unmarked plural, polite changed, negative mood,	Exposition
b) Results	S10-13	increasing complication of S structure, mixed with light S.	Developing conflict
Thematic Peak: Solution	S14-15	density of props/ participants, verbs of saying, complexity of structure, speed up information, peak S agentless, quote	Climax
Post Peak: Evaluation:	S16	slow down information, equational clause, repeat quote structure of S15	Final resolution
	S17	no plural, Imperative mood	
Finis: Admonition **(Didactic Peak)**	S18	no plural, irrealis mood embedded in existence clause	Conclusion

Table 37. Peak Structure of National Day Text

4.3.4 Textual Role of Topic in Burmese

4.3.4.1 Discourse Units with သ၌ sany

The non-final use of သ၌ **sany** occurs in four sentences in the National Day text these are listed in the Table 38 table below.

Sent	Clause	Role in Sentence	Role in Text
S1	တန်ဆောင်မုန်းလဆုတ်၁၀ ရက်နေ့သည်...	Old (known) Information	Introduction of Text Theme, serves as Ground
	[tan-hcaung-mun: la. hcut] [10 rak ne. sany]		
	tazaungmon month end 10 Clf-day day Nom		
	'The tenth day of the waning moon of the month of Tazaung-mon...'		
S4	မြန်မာနိုင်ငံသည်...	Old (previously intro-duced -Sent 2) Infor-mation	Introduction of paragraph theme
	mranma nuing-ngam sany		
	Burma country Nom/Top		
	'Burma ...'		
S10	ရန်ကုန်တက္ကသိုလ် ကျောင်းသားများသပိတ်သည်...	Old (previously intro-duced - Sent 6,8,9) Information	Introduction of Sec-tion
	rankun takkasuil kyaung: sa: mya: sa.pit sany		
	Rangoon university school son many alms-bowl Top		
	'The Rangoon University student strikers ...'		
S14	မြန်မာအမျိုးသားတို့သည်...	Old (previously intro-duced)	Re-establish the discourse theme as Ground
	mranma a-myui: sa: tui. sany		
	Burma a-kind son Pl Top		
	'the Burmese people...'		

Table 38. Distribution of သည် sany in National Day Text

The distribution of non-final သည် sany marks the beginning sentence of each of four main sections of the discourse, which also correspond to the major divisions of the peak structure. As such, non-final သည် sany functions as an initial topic marker of the old information that establishes the Ground, the anchor,

the reference point upon which the rest of the new information is built within that particular section, as displayed in Table39 below.

Distribution of သည် (non-final)		Peak Structure	
Sent	**Clause**	**Peak Structure**	**Sentences**
S1	တန်ဆောင်မုန်းလဆုတ်၁၀ ရက်နေ့သည်...	*Theme:* Definition	S1-3
	[tan-hcaung-mun: la. hcut] [10 rak ne. sany]		
	tazaungmon month end 10 Clf-day day Nom		
	'The tenth day of the waning moon of the month of Tazaungmon...'		
S4	မြန်မာနိုင်ငံသည်...	*Pre-Peak:* Arguments: Problem Causes	S4-9
	mranma nuing-ngam sany		
	Burma country Nom/Top		
	'Burma ...'		
S10	ရန်ကုန်တက္ကသိုလ် ကျောင်းသားများသပိတ်သည်...	*Pre-Peak:* Arguments: Problem Results	S10-13
	rankun takkasuil kyaung: sa: mya: sa.pit sany		
	Rangoon university school son many alms-bowl Top		
	'The Rangoon University student strikers ...'		
S14	မြန်မာအမျိုးသားတို့သည်...	*Peak:* Solution	S14-15
	mranma a-myui: sa: tui. sany		
	Burma a-kind son Pl Top		
	'the Burmese people...'		

Table 39. Non-final သည် **sany** Distribution with Peak Structure

The sentence level function of non-final သည် **sany** in the National Day text is to establish information assumed by the speaker as known to the hearer.

This type of information is called old, or established information. The linear order of information presentation in Burmese is first old information followed by new information. The presentational Sentence 1 of this text sets the topic of the whole discourse (National Day) as the second element, the new information, in relation to the first element, the month and date. It is the first element, the date, that is marked by သည် **sany**. This exemplifies information the author assumed resident in the general cultural knowledge of the audience. The same assumption does not follow for the second element. The second element is the new information; it is what is salient in Sentence 1. For this equative sentence to have been reversed would violate the rules of information structure. Despite being an equational clause, it could not be reordered in Burmese, as it can in English, to read 'National Day' first, then 'is the 10th of Tazaungmon', as this ordering reverses the topic-comment structure, and changes the assumptions about what is known to the audience, i.e. it assumes everyone knows what National Day is. This is not the case, as the whole discourse explains what National Day is and why it is to be honored and celebrated.

At the sentence level, non-final သည် **sany** sets the Ground for the sentence. Whereas at the text level, the function of non-final သည် **sany** is to establish the discourse Ground upon which the general development and processing of focused information takes place across a textual section, where a series of new informational chunks may be introduced and developed over a series of sentences or paragraphs. The known entity or quality of Ground/background serves to establish a basis upon which newly introduced information can be understood following the Ground-Figure, Absolutive Gestalt. Thus, the very same non-final

သည် **sany** may simultaneously perform different functions at different textual levels.

The Ground themes of non-final သည် **sany** which serve to introduce Figure topics, using the Absolutive Gestalt of Table 34, in the National Day text are presented in Table 40.

Sent	Theme / Ground	Burmese	Transcription
S1	Day	နေ့သည်	ne. sany
S4	Burma	မြန်မာနိုင်ငံသည်	mranma ning ngam sany
S10	University student strike	တက္ကသိုလ် ကျောင်းသား များသပိတ်သည်	takkasuil ky-aung: sa: mya: sa.pit sany
S14	Burmese People	မြန်မာအမျိုးသားတို့သည်	mranma a-myui: sa: tui. sany

Table 40. Themes (Ground) Marked by non-final သည် **sany**

The process of establishing the ground could be viewed as 'putting it on the table', of opening a general topic file during that section of the text. Within the four spans of text begun by the non-final သည် **sany**, new Foci are introduced as the Figure. The most immediate Foci for each of these non-final သည် **sany** themes in each section is shown in Table 41.

Sent	Topic / Figure	Burmese	Transcription
S1	National Day	အမျိုးသားနေ့	a-myui: sa: ne.
S4	English subjugation	အင်္ဂလိပ်တို့၏ လက်အောက်ခံဘဝ	anggalip tui. e lak auk hkam bawa. sui.
S10	District school children	နယ်ကျောင်းများ	nai kyaung: mya:
S14	Independence	လွတ်လပ်ရေး	lwat lap re:

Table 41. New Information (Figure) Introduced by သည် **sany**

Combining the Ground and Figure roles of section theme and section focus into a paired set establishes a framework of the textual informational moves. These are shown in Table 42. One of the textual functions of non-final သည် **sany** is to establish a new textual ground, creating an informational unit of a thematic section. These bounded units correlation to a span found to be relevant in Burmese expository text.

Sent	Section Theme / Ground	Section Focus / Figure
S1		
	Day	National Day
S4		
	Burma	English subjugation
S10		
	University student strike	District school children
S14		
	Burmese People	Independence

Table 42. Framework for Information Structure for National Day Text

4.3.4.2 Discourse Units with က ka.

Another postposition commonly labeled as topic is က **ka.**. Sentences in the National Day text where က **ka.** is used to explicitly mark the agent or the topic are listed in Table 43. The first four occurrences of က **ka.** are in the discourse textural unit Problem: Causes. This unit of the expository text from ND 4-9 is actually an embedded narrative discourse. Each of the က **ka.** marked nominals function as semantic agents. These sentences are high in transitivity, particularly Sentences 5 and 6 which are overtly marked with both agent and patient arguments. The pair of postpositional particles က **ka.** (agent) and ကို **kui** (patient) raises transitivity, heightens drama, and produces the type of prominence that is characterized by what is here labeled as a type of informational focus based on grammatical role. (See Table 31.) The grammatical role of agent as subject is

expected in narrative genre, but is not necessary to specify after first mention as long as the agent is continuing in that semantic role.

The agent in the first two successive sentences is the English government (Sentence 5 and 6). This sequence is striking first for its explicit, full mention (rather than pronominal or reduced reference) following the introduction of this participant in Sentence 4 via an oblique possessor semantic role. Secondly, the explicit က **ka.** marking as an agent is not technically necessary, given that the semantic patient is marked by ကို **kui**. Repetition of the same full NP with explicit က **ka.** marking in the following sentence is exceptional for typical participant reference. The norm would be for explicit mentions to fade into some oblique role or into zero anaphora as happens in Sentence 7. The force of this repetition is to mark the English government as the aggressor, the force that was in reality oppressing the people of Burma. The drama of this tension is heightened by the increased transitivity indicated by an overtly ကို **kui** -marked animate patient – the Burmese people. The effect is of the heightened transitivity is to shift the information gestalt to a Figure-Ground relation from the Ground-Figure relations of Sentence 4.

Sent	Burmese text	Peak Segment	Agent	Patient
			က *ka.*	ကို *kui*
S5	အင်္ဂလိပ်အစိုးရက	Pre-Peak - Problem: Causes	English government	Burmese people
	anggalip a-cui: ra. ka.			
	English control have Agent	,		

Table 43 – Continued

S6	အင်္ဂလိပ်အစိုးရက **anggalip a-cui: ra. ka.** English control have Agent	Pre-Peak - Problem: Causes	English government	University
S8	မြန်မာတမျိုးသားလုံးက **mranma ta. myui: sa: lum: ka.** Burma 1 kind son Clf-rnd Source	Pre-Peak - Problem: Causes	Burmese people	(zero)
S9	တက္ကသိုလ်ကျောင်းသား ကြီးများက **takkasuil kyaung: sa: kri: mya: ka.** university school son big many Source	Pre-Peak - Problem: Causes	University student leaders	(strike) [unmarked]
S10	နယ်ကျောင်းများကလည်း **nai kyaung: mya: ka.** district school many Source	Pre-Peak - Problem: Results	District school children	(strike) [unmarked]
S15	အမျိုးသားနေ့က **a-myui: sa: ne. ka.** a-kind son day Source	Peak: Soultion	National Day	Beginning of independ-ence

Table 43. Distribution of က **ka.** Sentences in Relation to Peak Segments

Continuing on with heightened transitivity of the same discourse unit of Pre-Peak- Problem: Causes, both Sentences 8 and 9 repeat the overt က **ka.** marking, but the patient is unmarked and unmentioned. The force of strengthened transitivity iconically imitates the polarization of political forces (agent/patient as oppressor /oppressed) in the grammar. The discourse participant in the က **ka.** role is shown to be in a power position. The ကို **kui** role identi-

fies the semantic undergoers and associates the identities of those opposed to the British together — the Burmese people (8), university student leaders (9) and district schoolchildren (10).

Sentence 8 represents a shift in the power relations of the က ka. role. The Burmese people take over as the overtly marked agent[3]. The presumption here is a power struggle and the winner becomes the sentential agent. The take over of the Burmese people in Sentence 8 is further marked by all three informational devices – information status and both types of informational focus. In the focused chart of relative weight (see Table 32), the agent in Sentence 8 has all four weights by being agent and promoted rightward to the focus position next to the predicate.

The buildup of က ka.-marked Burmese agents in three successive sentences 8, 9, and 10 indicates an increase in power on the Burmese side of the struggle (since Sentence 6). The intensification lexically from general to specific and from all ages narrowed down to very young school children each marked with က ka. reinforces the sense of expansion of power on the side of the Burmese struggle. The use of က ka. reinforces agency and power, and also signals solidarity of the agents thus marked. Interestingly, with Burmese agents there is a noticeable lack of an overt patient. The effect of this is to reduce tension and reduce transitivity. The lack of an overt patient has the effect also of reducing a sense of oppressor marked by က ka., and may also indicate harmlessness, although in the position of power.

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[3] က ka. marks not only semantic agent, but semantic experiencer in Sentence 8. The scope of semantic roles for this postposition ranges from agent, experiencer, instrument, source.

The final sentence with ಌ **ka.** is Sentence 15. Occurring at the Peak of the discourse, this sentence marks the end of the ascent to the Peak, with Sentence 16 beginning a new section as the postpeak moves toward closure. The information in the ಌ **ka.** phrase is not animate, unlike the other ಌ **ka.** phrases, but rather is all the more weighty for returning to the theme of the whole discourse – National Day. Lacking other features of transitivity, ಌ **ka.** functions not as 'from' a person, i.e. the causal agent, but 'from' an inanimate object and thus takes on characteristics of spatial location or movement. This notion is extended to the temporal domain and reinforced by the temporal nominal oblique phrase 'began independence'.

4.3.4.3 Discourse function of ಌ̊ **kui**

Postposition ಌ̊ **kui** as a patient-making postpositional is involved in the marking of topic in two ways, both of which are indirect in this text. The first is positional information focus as the normal occupant of POS 1 (see Table 32), albeit here in embedded clauses. In the last three sentences of the text, ಌ̊ **kui** marks the return of the textual theme 'the day', or specifically, 'national day.' The repeated pattern of ಌ̊ **kui** with the same lexical content or referent reinforces the whole discourse topic at the PostPeak-Evaluation unit of the text. This drumming of the thematic discourse topic of the text over the last three sentences 'day' and 'national day'. This section of the discourse is manifest by an embedded hortatory discourse and at a higher discourse level demonstrates a thematic shifts to a teaching purpose. The compulsion or admonition of this last section is a prominent part of the text marked by the imperative mood, future, and irrealis. The sub-

ject 'you' is inferred, thus the information structure is Ground-Figure, the Absolut-ive Gestalt, and is manifest by a series of overtly ကို **kui** -marked objects, the re-peated discourse topic of national day.

A binary view of information structure has been presented here. When the complement of ကို **kui** , that is က **ka.**, is used to indicate topic as Figure, then ကို **kui** plays a background role in relation to strengthening the distinctness of the opposite side of the gestalt. Depending on which gestalt one uses, Transitive or Absolutive Sentence Gestalt (See 4.2.3), ကို **kui** has a role in topicality.

4.3.5 Summary to Topic and Information Status

The topicalizing and thematic functions of postpositional particles သည် **sany**, က **ka.** and ကို **kui** have been examined from a discourse point of view within one expository text, National Day. These particles were found to function beyond the sentence as discourse stage markers of argument structure: သည် **sany** marking the background theme for discourse sections, က **ka.** and ကို **kui** as dominant versus subordinate social status markers for participants, as signals for role reversals within the textual plot of embedded narrative discourse, and are used to shift transitivity and the Figure–Ground gestalt from Transitive to Absolut-ive. From a sentence perspective of Burmese grammar, particle selection of sen-tential topic and theme initially appeared to be somewhat random. Discourse considerations demonstrate a motivated, cognitively perceptive, and language-learner accessible role of what has been labeled topic in Burmese.

4.4 Summary of Discourse Analysis

Ontological structure of both National Day and Snake Bite texts were found to structure differently from rhetorical structure. The direction of branching differs, with ontological structure being left–branching and rhetorical structure demonstrating a propensity for right–branching trees.

Also, Expository and Narrative text as a whole demonstrate different information structures of Figure–Ground relations. At the whole text level, Expository text displays an Absolutive Ground–Figure relation (see Section 4.3.3) as shown in Figure 64 below for the National Day text.
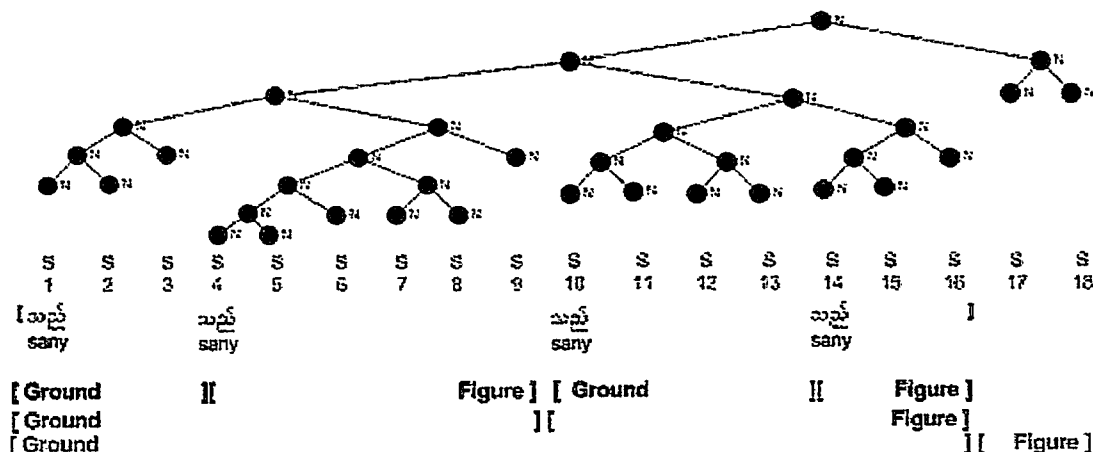
Figure 64. Absolutive Ground–Figure Relations of ND Text

Successive layers of ontological nominals demonstrate different *Figure–Ground relations*. Section one (S1-3) is in a Ground relation to Figure of section two (S4-9). Likewise section three (S10-13) is Ground to section four (S14-16) as Figure. Together section one and two are conjoined as a higher order ontological nominal and stand in relation to the subsequent conjoined nominal of sections

three and four as Ground–Figure. Finally the whole text repeats the structure of Ground–Figure with the entire သည် **sany** –marked section serving as Ground in relation to the final section of exhortation (S17-18) which serves as the Figure in relation to the text as a whole. The whole Expository text demonstrates an Absolutive organization of information with Figure being structurally final.

Narrative text, on the other hand, marks information structure in a Transitive Figure-Ground pattern for the text as a whole. Figure 65 below demonstrates the relations of Figure–Ground to the various sections of that text.
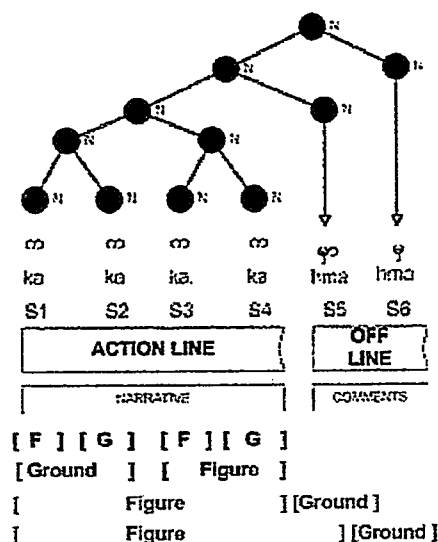
Figure 65. Transitive Figure–Ground Relations of SB Text

Oddly, the relation of Figure to Ground is reverse between the two halves of the narrative action line. The only explanation for this is that despite the attention to the *source of action* with increased transitivity (∽ **ka.** marking) the end purpose of the text is to move toward statements of resolution with the goal of action (ကို **kui** marking). The final off-line section of the text demonstrates a return focus toward the action line as Figure.

It should be noted that the structure of both the Expository and the Narrative texts images a similar structure to the Burmese sentence. The major portion of the text is the propositional content and the final portion is speaker or observer comment about the content or the speech situation/ action situation. Thus the

structure of the ontological Sentence (both sentence and text) is represented in Figure 66 as two-part: Propositional Content and Observer Comment.
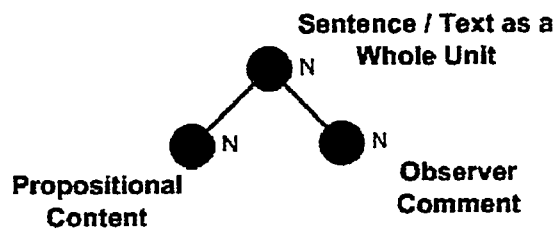
Figure 66. Ontological Structure of Sentence (Sentence and Text)

CHAPTER 5:

CONCLUSION

...this issue of paradigm choice can never be unequivocally settled by logic and experiment alone.

Thomas Kuhn (1970:93)

5.1 Summary

Nominalization is a dominant grammatical pattern within Burmese, and manifests at multiple levels from word, phrase, clause, sentence, and paragraph and extending to the discourse as a whole. Three types of nominalization were hypothesized: 1)semantic nominalization, 2)grammatical nominalization and 3)ontological nominalization. This study views the role of nominalization in Burmese cognitively as an information structuring mechanism for text. The logical argument structure of Burmese text unfolds through a process which creates linguistic, reified objects and iteratively embeds them within other linguistic objects. The nesting patterns of nominalization across clauses are of different grammatical, semantic, and ontological types.

Ontological objects created via a grammatical system of nominalization functioning at multiple levels serve to cross-index cognitive chunks of information operating according to the specific text type structure. Information structure in Burmese conforms iconically to the notion of 'scene' and 'action' within a scene, much as a drama might be staged with different types of stage sets with characters performing their expected roles.

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Progression of the discourse events usually mirrored expected action sequences of body movement and interaction with other props, animate or inanimate, in a type of natural, expectational 'script'. Ontological objects created in linguistic space usually conform iconically to the speech situation. This progression is clearer for narrative genre, which demonstrates a more active event line than expository genre's thematic line.

Sentence structure and text structure mirror each other, both reflecting a propensity for a left-pole of textual content with reference to objects within the text. The right pool emphasizes the speech situation, pragmatic actions and attitudes of the speaker.

Narrative and Expository text differ according to this limited study, by the use of transitivity strengthening particles (က **ka.** and ကို **kui**) to indicate Figure and grammatical nominalization (သည် **sany**) to establish Ground relations in the immediate sentence and the text span. The difference in transitivity relations is manifest in different information structure — Narrative being Figure–Ground and Expository being Ground–Figure. Interestingly, the two particles က **ka.** and သည် **sany** are thought to be reflexes of proto–Tibeto–Burman ergative – absolutive markers (Lehman 1985).

Ontological nominalization structures as a left–branching tree consistently from word, to sentence, to text with regular right–headed constructions of Word, Expression and Sentence.

5.2 Roles of Nominalization

As a grammatical process, as well as a lexical derivational process, nominalization in Burmese produces abstract bounded units of information which by regular rules of construction, both grammatical and lexical in implication — due to the blend-

ing tendency of juxtaposition, — results in highly complex grammatical objects packed with information, one syllable at a time. This information is easily structured and deciphered following the simple rules of organization.

The discourse function of the nominalizing particle သည် **sany** was found to designate a topical 'object' and for that object as paragraph or section continued until another topic was so designated. The particle သည် **sany** was also functions in the realm of deixis, evidentiality, designation of profession names, and as a generalized nominalizer.

5.3 Structure of Nominalization

The structure of nominalization is, quite simply, that of predication. A statement becomes a linguistic object, completed, and packaged into a bundle of arranged meaning by the postpositional set, of which သည် **sany** is the prototype. Even without a postposition, the simple N+V clause is ontologically nominalized by its function in relation to other constituents, as discussed under the section on why there are no adjectives in Burmese (Section 2.4.13.2).

The grammatical counterpart to predication is the function of the particles which operate on the operand much like a verb does on a noun. There are many types of particles, each contributing both grammatical and semantic function to that operator-operand unit. The unit generated by this operation is also an ontological nominal, similar to the verbal predication.

The nominal counterpart to predication is juxtaposition. The simplest predication in Burmese involving a noun is *naming* the noun, which is what a noun means (Latin *nomen*, Old French *nom*, Burmese နာမ် **nam** 'name'). The predication is one of existence or designation. A predication with two nominals and no verb is an equa-

tional predication. If for some reason there is a conceptual blend between the two nominals, then the emergent meaning may reconstruct the two as a whole unit semantically, but grammatically they combine into a compound noun. Thus, the result of nominal predication, like that of the other types is nominal.

On the basis of word form categories and nominalization patterns three constructional forms are proposed to account for Burmese grammar: *Word, Expression,* and *Sentence.* Word is the level of naming; it is the level of construction of nominals. Expression is the level of construction of predication, both verbal and via particles. Sentence is the level of the observer commenting about linguistic objects; it is the level of sentence, paragraph and text (Section 2.5.2). The logical difference between the structures generated by 'what the text is', the ontological , and 'what the text does', the functional, was manifest in different macrostructures. The ontological text structure related more directly to the role of sentence 'subject' in Burmese, particularly in the propositional content part of the sentence/ text. Whereas the rhetorically structured text modeled units according to speaker purposes and communicative organization.

The highest ontological level, Sentence, always reduced to a Word. Text is processed grammatically via rules of structural description of constituent structures into one whole nominal object. The grammatical processes operating in Burmese at all constructional levels are *juxtaposition, operation,* and *headedness.* These together with the rules of the structural description describe the structure of nominalization in Burmese.

5.4 Implications of the Structure of Nominalization

Concerning the debate in the generative tradition as to whether the lexicon is omnipotent or whether all word formation takes place in syntax, particularly with regard to the bimodal nature of deverbal nouns, the results of this study would indicate by far that word formation is syntactic and functional, but word form categoriality is a matter of both components. There are lexical nouns and verbs. After that the process is a non-Western version of rules of combination and grammatical operations.

The role of argument structure as a determinant of the semantic and functional difference between event and result nominals was found to not be significant due most likely to other undetermined semantic differences and, not the least, the heavy role of null arguments in Burmese. It is more likely that arguments are discourse and culturally constrained rather than being a subcategorized property of the type of nominal.

Particle heads manifest features of their previous grammatical or lexical roles by contributing semantic and inferential properties to the derived nominal construction. On the other hand, these properties are not inferable from the prior roles in the lexicon or grammar. They are unique, yet tend to follow analogous patterns or pressures in the language. One such significant pattern is the role of the *nominal template*. This template may be a resilient, organizing principle in all of Tibeto-Burman as it has surfaced in various branches of the family. The description here of that phenomenon may provide a basis for other investigations, particularly within lesser known languages.

5.4.1 Some Implications in Literacy

The nature and form of ontological structures in Burmese have some implications for beginning literacy. A bi-directional approach of *whole word* and *analytical* approach would be best for Burmese. It's possible to introduce meaningful whole segments, ontological nominals, without having to make complete sentences and to build recognition of graphs for the sequenced teaching of sound-symbol correspondences. Since Burmese script is based upon the syllable and it would be impossible to isolate a consonant, vowel or tone, one would first introduce a syllable with the inherent vowel and inherent tone. Teaching simple consonant recognition, each with the same syllable rhyme could be done on the basic pattern of compound nominals [N + N] or compound verbals [V + V]. By utilizing whole ontological units of meaning and introducing new glyphs within such patterns, the acquisition of reading skills would be both a meaningful and productive activity.

Surprisingly, Burmese primers already utilize ontological structure in teaching. The following illustrations come from the government primers. Figure 67 is from the Kindergarten Primer produced by the Myanma Government Education Department (1993a:18).

Figure 67. Kindergarten Primer First Text

A roman transliteration has been overlaid against each Burmese line of text.
Note the repetition of the syllables. The syllable pattern with inherent tone and vowel
was used in this exercise which teaches the consonant symbols as well as reinforc-
ing the syllable tone and vowel, which isn't overtly written. The text is very simple; it's
about a little girl named Ma Ma Wa Wa.

'Ma Ma Wa Wa ('little miss chubby[1]).

Get up!. Get up! Dance!

A dance first.

Dance! Dance!

Sweet Ma Ma.

Night, night, the moon shines and shines.

Nighttime I have to read.

Ma Ma Wa Wa

Get up! Get up! Dance!"

By using imperatives no final particles are required. Thus a whole clause of one syllable with one orthographic letter is possible က **ka.** 'dance'! Similarly Ma and Wa are just a single consonant symbol မ **ma.** and ဝ **wa.**

Another set of short, four–line texts with three or four syllables per line are also found in the Kindergarten Primer. Lessons introduce productive particles along with the consonants and most frequent vowels and tones. The lesson in Figure 68 introduces the *yes-no interrogative particle* လား **la:** in the Kindergarten primer (Myanma Government Education Department 1993a:15). Four stories are found on each page of the primer in that section.

The first story is about children playing at nighttime.

'Nighttime.

Moonshine shines.

Will you play?

Will you rest?'

---

[1] To be 'fat' **wa.** in Burma is to have one of the requisites for beauty. One Burmese saying is ဝတယ် လှတယ်။ **wa. tai hla. tai** 'being fat is being beautiful'.

Figure 68. Kindergarten Primer Short Texts

It can be seen from the two kindergarten primers above that the 'whole language' literacy method is already in use in Burma. The level of 'whole' is the ontological nominal, which has many levels of application. Also the pattern of juxtaposed nominals and verbals is utilized as one of the simplest patterns to model text. The patterns themselves carry the meaning of predication, reducing the necessity of a full sentence with final particles, except with interrogatives. The sense of whole text is obtained with very few words or syllables.

A longer story from the First Grade Primer uses the ontological nominal form as a structuring device for the whole text. It is a story told by an older man to a child

about a rich man's son who had no education. The text is presented in four-word sets on each line, all of which are ontological units in themselves. What is so striking is that the text composed of only two sentences. Figure 69 below is from the First Grade Primer (Myanma Government Education Department 1993b:80).

Figure 69. First Grade Primer Longer Story

Sentences are marked by the Burmese final orthographic marker (॥), analogous to an English orthographic period. The first sentence is two lines long. The second sentence continues for thirty-one lines as the second–half of the text. Apparently, the heavy information load of the Burmese sentence isn't a problem even for young children because each of the ontological units assist the child in both reading

smaller chunks and gaining fluency toward the meaning of the sentence as a whole. One less obvious function of this text may be to teach the ontological nominal pattern. The fact that the last sentence is basically the text lends further weight toward the view that the ontological Sentence exists as both sentence and text.

5.4.2 Textual Fragments

Under the designation 'imperfect clauses' Okell (1969:183) discusses non–standard order of sentence constituents and the use of sentence fragments that are regarded as 'grammatical'. These fragments are actually ontological nominals at various levels of structure, which are complete utterances in the context of situation.

Some examples of these are taken from Okell (1969:183-4).

(146) သိ ချင် လို့
si. hkyang lui.
[[V V] P]
know want because
'Because (I) want to know.'

(147) ကျွန် တော် က
kywan dau ka.
[[N   P] P]
slave - royal S
'I' (male) [agent] = 'I did! (something)' or 'It was me!' or 'It was mine!'

(148) ရ မယ်
ra. mai
[V P]
succeed IrRl
'(I) can do it'

(149) အိမ် ပြန် အုံး မှ
im   pran   um   hma.
[[[N   V]   P]   P]
house return ConA RNg
'Better return home.'

(150) ဝက် သား: ဟင်:

wak sa: hang:
[[N N] N]
pig flesh curry
'(It's) pork curry.'

Ontological nominals function as units of linguistic ontology statements that assume completed existence of a reified object. In (147-150) there is a whole completed sense as a bounded linguistic object, each example differing in grammatical patterns but all forming ontological nominals. The particles in (146) to (149) functions as the *operator* to the *operand*, giving the sense of a completed predication. The juxtaposed nominal compound in (150) provides the reading of a nominal predication of existence of a single object.

5.5 Advantages to Ontological Analysis

The advantages to ontological analysis versus only grammatical or semantic analysis are:

- Consistent and simple method of analysis that describes the organization of word to text, with same conceptual processes and rules of formation.

- Separates ontological from semantic and grammatical and leaves those differences for different constraints.

- Explains the predominance of nominals and why they are used as major constituents.

- Provides base forms for word constituency relations in complex units.

- Recognizes the role of the Observer in:

  o The sentence and text,

  o The nature of nominals themselves,

- Analysis recognizes cultural values
    - o balance and harmony
    - o distance of the observer from the phenomena
    - o Buddhist detachment

5.6 Limitations

This is a study of the structure of nominalization in Burmese; it does not describe the semantics of nouns, verbs or particles. As such, it does not supplant grammars or pedagogical materials which attempt to describe both the grammatical and semantic structures of Burmese. This is a study which presents the underlying processes and units of Burmese linguistic organization.

This study touches on verbs in relation to nouns — no attempt has been made to examine the internal detail of verbals, though the structures and principles presented here appear to hold true regarding the outward structural form of verbs. The semantics of verbs is not dealt with at all.

5.7 Future research

The structure of nominalization presented here has generated numerous questions for further research, some of which are:

If conceptual blending operates within nominal compounding processes at the word level in Burmese, are there constraints on blending operations at levels beyond the word since compounding is an active structural process? One assumption is that blending would be more common in tighter constructions, those reduced or without intervening postpositions, and that blending is 'stopped' by particles. What experimental means could test this model?

The process of translation of English text into Burmese involves issues of naturalness as well as of vocabulary equivalence between the two languages. Vocabulary creation for terms absent or lacking in some sense-dimension is one place to examine strategies for expansion of semantic and grammatical patterns.

Modeling natural text according to the information structures of the genre should produce natural textual templates which can be compared with translated text. Hypotheses for improving or reducing comprehension could be tested within the model described here.

Experiments on the role of postposition particles could test the nominality hypothesis proposed here. Some of these could be in the form of cloze tests. Testing of higher level textual nominals by reanalysis to see if alternative pathways are equally acceptable.

Another question concerns the degree of conscious awareness of differing levels of abstractness of textual nominals. For instance, are there any constraints levels of nominal constituency perceptible within a text? Are nominal units which have more prototypical grammatical functions, say as whole sentential arguments or adjuncts, more easily testable than others which are fragments of constituents?

Expanding this type of analysis to other Tibeto-Burman languages in the region would test and improve the validity of the model. If the nominalization patterns are replicable then what implications might this have for linguistic universals? If these patterns are present in a variety of Asian languages, do they extend to the Americas and to Africa? Is there something about verb-final typology that is correlate of nominalization? If so, why?

A very interesting future study would be to examine the various diachronic pathways of Burmese postpositions and to classify them into synchronic semantic functions and contrast them with those of their origins.

Sadu! Sadu![2]

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[2] A Burmese shout for passing on merit.

APPENDIX A

TRANSCRIPTION OF BURMESE INTO ROMAN SCRIPT

TRANSCRIPTION OF BURMESE INTO ROMAN SCRIPT

This transcription of Formal Burmese accounts for the different graphemic representations of the script, except with the retroflexed series from Pali, as this representation is not distinctive for the purposes here. Okell (1971) reviews the many transcription systems of Burmese and makes his own recommendation. The system used here is a variant of those and the Myanma-English Dictionary (Myanma Language Commission 1993).

Initial Consonants

Burmese	Transcription	Variants
က	k	Variant က္က kk , ကၡ khk:
ခ	hk	
ဂ	g	Variant ဂ္ဂ gg, Variant ဃ ggh
ဃ	gh	
င	ng	Variant: ၚ
စ	c	
ဆ	hc	
ဇ	j	Variant ဇ္ဇ jj
ဈ	jh	
ည	ny	Variants: O ô ç ü
ဋ	t	Variant: ဋ္ဋ tt
ဌ	ht	Variant: ဌ htht

Initial and Medial Consonants – Continued

ဍ	d	Variant ဎ dd:
ဎ	dh	Variant ဏ dhdh:
ဏ	n	
တ	t	
ထ	ht	
ဒ	d	
ဓ	dh	
န	n	Variant: ၎, ၌ nt, ၎ ntr, ၎ nn
ပ	p	
ဖ	hp	
ဗ	b	
ဘ	bh	
မ	m	
ယ	y	
ရ	r	
လ	l	
ဝ	w	
သ	s	သသ ss
ဟ	h	
ဠ	l	
အ	(ʔ)a	
့	am ~ m	

Medial Consonants

ြ	-r-
ျ	-y-
ွ	-w-
ှ	h-

Full Vowel Forms	Combination Vowels	Transcription
အိ	ိ	i.
ဣ	ီ	i:
ဥ	ု / ုု	u.
ဦ	ူ / ူူ	u
ဧ	ေ—	ei:
ဩ	ေ—ာ	au:
ဪ	ေ—ာ် / ေ—ၚ	au

Open Syllables – Vowels and Tones

Burmese	Roman Transcription		
Tones	Level	Heavy	Creaky
—ာ —ာ: — (ကညာမေ့နဲ့)	-a	-a:	-a.
—ာ့ ွာ: ွ	-wa	-wa:	-wa.
—ယ် ဲ ဲ့	-ai	-ai:	- ai.
ေ—ာ် ေ—ာ ေ—ာ့	-au	-au:	-au.
ူ ူ: ု	-u	-u:	-u.
ို ို: ို့	-ui	-ui:	-ui.
ီ ီ: ိ	-i	-i:	-i.
ေ— ေ—: ေ—့	-e	-e:	-e.
ေွ ေွ: ေွ့	-we	-we:	-we.

Stopped Rhymes

Burmese	Transcription
–က်	-ak
◌ုက်	-wak
ေ–ာက်	-auk
◌ိုက်	-uik
–စ်	-ac
–တ်	-at
◌ုတ်	-wat
◌ုတ်	-ut
◌ိတ်	-it
–ပ်	-p
◌ုပ်	-wap
◌ုပ်	-up
◌ိပ်	-ip

Nasal Rhymes

				Tones			
				Level	Heavy	Creaky	
–ိင်	–ိင်:	–ိင့်		-ang	-ang:	-ang.	Variant ${}^{\varepsilon}$-
–ုိင်	–ုိင်:	–ုိင့်		-wang	-wang:	-wang.	
ောင်	ောင်:	ောင့်		-aung	-aung:	-aung.	
–ုိင်	–ုိင်:	–ုိင့်		-uing	-uing:	-uing.	
–ည်	–ည်:	–ည့်		-any	-any:	-any.	
–ေင်	–ေင်:	–ေင့်		-any	-any:	-any.	
–ိန်	–ိန်:	–ိန့်		-an	-an:	-an.	
–ုိန်	–ုိန်:	–ုိန့်		-wan	-wan:	-wan.	
–ုိန်	–ုိန်:	–ုိန့်		-un	-un:	-un.	
–ိန်	–ိန်:	–ိန့်		-in	-in:	—in.	
–ံ	–ံ:	–ံ့		-am	-am:	-am.	
–ိံ	–ိံ:	–ိံ့		-am	-am:	-am.	
–ုံ	–ုံ:	–ုံ့		-wam	-wam:	-wam.	
–ုံ	–ုံ:	–ုံ့		-um	-um:	-um.	
–ိံ	–ိံ:	–ိံ့		-im	-im:	-im.	

Other Rhymes

–ိုယ်	-uiy	

Other Features:

ျ	rwe	
ူး	u:	
ဲ	hnai.	
ြီ	i:	same as full vowel
ေါ်	e	

APPENDIX B

PHONOLOGIAL OVERVIEW

PHONETICS OF MODERN COLLOQUIAL BURMESE

The following table presents the initial consonant phones of Burmese in the International Phonetic Alphabet (IPA) and in a commonly used roman transcription adapted from Myint Soe (1999:10).

	Labial		Dental		Alveolar		Alvelo-palatal		Palatal		Velar		Glottal	
Plosive	hp p b	pʰ p b	ht t d	tʰ t d							hk k g	kʰ k g	? ʔ	
Fricative			th dh	θ ð	hs s z	sʰ s z	hy	ç					h h	
Affricate									hc c j	tʃʰ tʃ dʒ				
Nasal	hm m	m̥ m			hn n	n̥ n			hny ny	ɲ̥ ɲ	hng ng	ŋ ŋ		
Glide	hw w	w̥ w							y	j				
Lateral					hl l	l̥ l								

Table 44. Initial Consonants with Common Roman Transcription and IPA

Aspiration is indicated with an initial /h/ preceding the corresponding consonants; ny, hny, ng, hny, hng, hy, th, dh are not consonant clusters but individual phonemes transcribed as such for convenience in Burmese tradition.

Initial Consonants

Labial Plosives

/pʰ/ as in /hpu:/ 'be swollen'; strongly aspirated
/p/ as in /pu:/ 'be hot (temperature)'; voiceless unaspirated
/b/ as in /bu:/ 'a kind of gourd'; voiced, like English /b/

Alveolar Plosives

/tʰ/ as in /htain/ 'to sit'; strongly aspirated
/t/ as in /tain/ 'pole' ; voiceless unaspirated
/d/ as in /dain/ 'umpire'; voiced

Velar Plosives

/kʰ/ as in /hku./ 'to prop up'; strongly aspirated
/k/ as in /ku./ 'to cure (diseasse); voiceless unaspirated
/g/ as in /gu / 'cave'; voiced

Glottal Stop

/ʔ/ as in /ʔou/ 'old'; glottal stop precedes all syllable initial vowels

Dental Fricative

/θ/ as in /thi:/ 'fruit'; voiceless, like /θ/ in English 'think'
/ð/ as in /mou: dhi:/ 'hail' (sky fruit), is an allophone of /θ/ in
close juncture.

Alveolar Fricative

/sʰ/ as in /shi/ 'oil'; strongly aspirated sibilant
/s / as in /si:/ 'to ride'; voiceless unaspirated
/z/ as in /zi:/ 'plum'

Alveo-palatal Fricative

/ç/ as in /hyi'/ 'eight'; a forceful sibilant like the English in 'sure' but with the tip of the tongue touching the lower teeth and the blade of the tongue flat at the palate.

Glottal Fricative

/h/ as in /hou'/ 'be true'

Palatal Fricative

/tʃʰ/ as in /hcou/ 'sweet'; similar to aspirated /c/ in English 'chew'
/tʃ/ as in /cou/ 'meet someone on arrival'; voiceless unaspirated
/dʒ/ as in /jou/ 'horn (of an animal); voiced like /j/ in the English 'judge'

Nasals

Labial Nasal

/m̥/ as in /hmin/ 'ink'; the breath expelled quietly through the nose before aspiration begins (Okell 1969:9).
/m/ as in /min:/ 'king'

Alveolar Nasal

/n̥/ as in /hnein/ 'to put down (someone)'; aspiration or partial devoicing
/n/ as in /nein./ 'low'

Palatal Nasal

/ɲ̊/ as in /hnyin:/ 'torture; ill treat'; aspiration or partial devoicing
/ɲ/ as in /nyi'/ 'to be dirty'

Velar Nasal

/ŋ̊/ as in /hnga/ 'to borrow'; aspiration or partial devoicing
/ŋ/ as in /nga/ 'I'; unaspirated

Labial Glide

　　　/ẉ/ as in /hwe'/ 'to hide'; aspirated, rare in modern spoken
Burmese
　　　/w/ as in /we'/ 'pig'

Palatal Glide

　　　/y/ as in /ye'/ 'day'

Alveolar Lateral

　　　/hl/ as in /hli'/ 'open'
　　　/l/ as in /li'/ 'to slip away'

Vowels

There are six monophthong vowels and four diphthongs.

/i /　　/i/		/u/　　/u/
/eɪ/　/eii/	/ə/　/a-/	/ou/　/ou/
/ɛ/　/e/	/a/　/a/	/ɔ/　/o/
/aɪ/　/ai/		/au/　/au/

Table 45. Burmese Vowel Chart in IPA and Roman Transcription

/i/　as in *hsi* ဆီ 'oil';

/eɪ/ as in *pei:* ပေး 'give'

/ɛ/　as in *le:* လဲ 'exchange'

/a/　as in *hta:* ထာ 'to keep'

/ə/　as in *a-sa:* အစာ 'food'

/ɔ/　as in *mo:* မော 'to be tired'

/ou/ as in *hkou:* ခိုး 'to steal'

/u/　as in *tu:* တူး 'to dig'

/au/ as in *taun* တောင် 'south'

<u>Tones</u>

Myint Soe (1999) summarized Maran's review (1971:84-89) of various studies of Burmese tone and how each of the tones have been characterized. The following table is further adapted from Myint Soe's adaption. The tones are transcribed here with diacritics: Level tone (zero), Heavy/Breathy tone (colon :), Creaky tone (period .), and Stopped tone (apostrophe ').

Tone	Firth (1933; 1936)	Cornyn (1944)	Stewart (1955)	Becker (1964)	Okell (1969)
Level					
pitch	low	low	low	low	low
contour	level	level	level	level	level
length	long	long		long	
Heavy					
pitch		high start	high start	high start	high start
contour	falling	falling	falling	falling	level
length	long	long		long	
quality	breathy		heavily stressed		breathy
Creaky					
pitch		high		high	
contour	fall	fall	fall	fall	fall sharply
length	medium	short		short	short
quality	weak closure	slow glottal closure	weak closure		glottal constricted
Stop					
pitch		high	high	high	
contour				level or rising	fall sharply
length	very short	very short	abrupt	short	short
quality	abrupt closure	sharp glottal closure	complete glottal closure	glottal stopped	glottal stop

Table 46. Tones in Burmese

The tonal contrasts have been very helpfully laid out by Cornyn and Roop (1968) whose work is adapted in the following tables. Contrast of the four tonal categories is demonstrated with open and closed syllable types. The Burmese syllable has the phonemic shape of C (G) V (N/?) T, where an initial consonant (C) is obligatory, a glide consonant (G) (see chart above) is optional, a vowel (V) is obligatory, a final consonant-nasal (N) or stopped (?) is optional, and tone (T) is obligatory. The minimum syllable is CVT and the maximum syllable is CGVN/?T. While Nasal and Stopped classes have historically come from segments, and are represented in written Burmese as consonants, and they are treated here in the syllable cannon as if they are segments, phonologically they are usually analyzed as either part of the syllable type (Nasal) or as part of the tone (Stopped tone). There two types of syllables – open and nasalized. The vowel phonemes together with the tones are mapped onto the two syllable types in Table 47 which is adapted from Cornyn and Roop (1968:xvi).

	Plain Final				Nasal Final		
Tones Vowels	I (Plain)	II (Breathy or heavy)	III (Creaky)	IV (Stopped)	I (Plain)	II (Breathy)	III (Creaky)
a	la come	la: mule	la. moon	la' bribe	lan turn back	lan: road	lan. startled
	လာ	လာː	လ	လာ်ိ	လန်ိ	လမ်ိː	လန်ိ

Table 47 – Continued

i	thi	thi:	thi.	li'	lin	lin:	lin.
	string beads	bear fruit	know	absent	husband	light	scaffold
	သိ	သိ:	သိ	လစ်	လင်	လင်:	လင့်
u	lu	lu:	lu.	lu'	lun	lun:	lun.
	person	smear	snatch	empty	exceed	yearn	wriggle
	လူ	လူ:	လု	လွတ်	လွန်	လွမ်:	လွန့်
ei	lei	lei:	nei.	lei'	lein	lein:	lein.
	wind	four	day	turtle	twist	smear	roll
	လေ	လေ:	နေ့	လိပ်	လိမ်	လိမ်:	လိမ့်
ou	lou	mou:	nou.	lou' / work	loun	loun:	moun.
	lack	sky	milk		secure	round	cake
	လို	မို:	နို့	လုပ်	လုံ	လုံ:	မုန့်

	Oral Syllable				Nasal Syllable		
Tones / Vowels	I (Plain)	II (Breathy or heavy)	III (Creaky)	IV (Stopped)	I (Plain)	II (Breathy)	III (Creaky)
e	ne	ne:	ne.	ne'			
	state	few	loose	deep			
	နယ်	နည်:	နဲ့	နက်			

o	mo\n\ninsolent	mo:\n\ntired	mo.\n\nlook up				
	မော်	မော	မော့				
au				lau'\n\nsufficient	laun\n\nburn	laun:\n\npour into	daun.\n\ncorner
			.	လောက်	လောင်	လောင်:	ထောင့်
ai				lai'\n\nfollow	nain\n\nwin	wain:\n\nsurround	jain.\n\npothole
				လိုက်	နိုင်	ဝိုင်:	ချိုင့်

Table 47. Tone Contrasts in Burmese by Vowel and Syllable Type

The following table, adapted from Cornyn & Roop (1968: xvii) demonstrates the distribution of vowels and tones in two types of syllables.

Vowels\n\nTones & Syllables	a	i	u	ei	ou	e	o	au	ai
I Oral\n\n*(Plain)*	la\n\ncome	ni\n\nred	lu\n\nperson	lei\n\nwind	lou\n\nlack	le\n\nneck	mo\n\ninsolent		
	လာ	နိ	လူ	လေ	လို	လည်	မော်		

Table 48 – Continued

Nasal	**lan** turned back	**lin** husband	**lun** exceed	**lein** twist	**loun** secure			**laun** burn	**nain** win
	လန်	လင်	လွန်	လိမ်	လုံ			ၜလာင်	နိုင်
II Oral (Breathy)	**la:** mule	**ni:** near	**lu:** smear	**lei:** four	**nou:** sky	**le:** change	**lo:** hurried		
	လာ:	နိ:	လူ:	ေလ:	မို:	လဲ	ေလာ		
Nasal	**lan:** road	**lin:** light	**lun:** yeam	**lein:** smear	**loun:** round			**laun:** pour into	**wain:** surround
	လမ်:	လင်:	လွမ်:	လိမ်:	လုံ:			ေလာင်:	ဝိုင်:
III Oral (Creaky)	**la.** moon	**thi.** know	**nu.** young	**nei.** day	**nou.** milk	**ne.** loose	**no.** immodest		
	လ	သိ	နု	ေန	နို	နဲ့	ေနာ့		
Nasal	**nan.** vain	**nin.** stuffed	**lun.** wriggle	**nein.** low	**noun.** loose			**daun.** corner	**jain.** pothole
	နန့်	နင့်	လွန့်	နိမ့်	နုန့်			ေထာင့်	ချိုင့်
IV Plain (Stopped)	**la'** absent	**lu'** empty	**lei'** turtle	**lou'** work	**le'** hand			**lau'** suffic-ient	**lai'** follow
	လပ်	လစ်	လွတ်	လုပ်	လက်			ေလာက်	လိုက်

Table 48. Vowel Contrasts with Tones in Oral and Nasal Syllables

The following table adapted from Cornyn & Roop (1968: xviii) sorts the distribution of syllable types by tone.

Tone I (plain)		Tone II (breathy)		Tone III (creaky)	
Plain	Nasal	Plain	Nasal	Plain	Nasal
la come လာ	lan turned back လန်	la: mule လာ:	lan: road လမ်:	la. moon လ	lan. startled လန့်
ni red နိ	nin you (fam) နင်	ni: near နီ:	nin tread နင်:	thi. know သိ	thin. suitable သင့်
lu person လူ	lun exceed လွန်	lu: smear လူ:	lun: yearn လွမ်:	lu. snatch လု	lun. wriggle လွန့်
lei wind လေ	lein twist လိမ်	lei: four လေ:	lein: smear လိမ်:	nei. day နေ့	nein. low နိမ့်
lou lack လို	loun secure လုံ	mou: sky မို:	moun: hate မုန်:	nou. milk နို့	noun. loose နုန့်

Table 49. Plain Final Nasal Contrasts with Relevant Tones

APPENDIX C

TEXTS — ENGLISH TRANSLATION

English Translation: National Day Text

1 The tenth day of the waning moon of the month of Tazaungmon is National Day.

2 On that day National Day ceremonies are celebrated all over Burma.

3 To commemorate National Day, there are various activities and celebrations of preaching, exhibitions and competitions.

4 In 1885, Burma underwent the experience of effectively coming under English rule. 5 Beginning from that time on, the English government oppressed and restricted the Burmese people.

6 In 1920, the English government arranged to open Rangoon University. 7 University regulations were also laid down. 8 According to the regulations, each person who wanted to study was not able to get permission to do so, thus the Burmese people as one body were displeased. 9 For that reason the university student leaders led a strike.

10 The Rangoon University student strikers spread out to various districts and wards, and as a result even the district school children went on strike. 11 The national college and the national schools were established. 12 Because of those schools, the sense of national dissatisfaction (with the British) was both awakened and increasingly developed. 13 Also the study of national literature began to flourish.

14 From that time on, the Burmese people held continuous demonstrations of opposition against the English demanding independence. 15 That's why we say "Independence began with National Day."

16 In order to arouse a spirit of patriotism in all the Burmese people, that day which so excites us is designated 'National Day'. 17 We shouldn't forget National Day which caused the awakening of our sense of patriotism. 18 As we annually celebrate National Day, we will have to eagerly strive to keep alive forever our spirit of patriotism.

English Translation: Snake Bite Text

Boy Sleeping under Mosquito Net Dies of Snake Bite

Yangon July 16 1995 (New Light of Myanmar)

An incident occurred on June 12 at the 13th ward, in the new settlement of Nyaunggon, Dalla Township, just across the river from Yangon, in which a child sleeping under a mosquito net was bitten by a snake and died.

U Tin Maung and six members of his family were asleep at 3 a.m. in their house at No 5/650-A of 13th ward of Nyaunggon when they were wakened by the cries of his nine year old grandson, Maung Aung Thu who complained of being bitten by a cat. Maung Aung Thu had been sleeping under a mosquito net in the company of his aunt and elder sisters. Seeing two fang marks on his right forearm, which seemed to have been made by a cat, family members fetched U Hla Tun who was a member of the Red Cross in addition to being a community leader. U Hla Tun identified the wound as a snake bite and as preparations were being made to take the boy to a hospital the boy turned blue and died.

As the ground under the flooring was flooded, a search with flashlights revealed a hooded snake with a girth of nearly five inches and over three cubits long coiled around the cross beam on the center post supporting the ridge pole. The boy's grandfather killed it with a length of bamboo.

Maung Aung Thu was the son of Ko Khin Shwe and Ma Than Aye and had been a student in the third standard in the No 2 Middle School. Police are holding an inquest.

Source: Luzoe (1996:218)

APPENDIX D

INTERLINEAR TEXTS

Interlinear Text: National Day

Sentence 1 - Paragraph 1

တန်ဆောင်မုန်းလဆုတ်	tanhcaungmun: la. hcut
၁၀ ရက်နေ့သည်	10 rak ne. sany
အမျိုးသားနေ့ဖြစ်ပါသည်॥	a-myui: sa: ne. hprac pa sany

[tan-hcaung- la.   hcut] [10 rak   ne. sany] [a-myui: sa: ne. hprac pa sany]
mun:
tazaungmon   month end   10 Clf-day day Nom   a- kind   son day happen Plt Nom

'The tenth day of the waning moon of the month of Tazaungmon is National Day'.

Sentence 2 - Paragraph 2

ထိုနေ့တွင်	htui ne. twang
မြန်မာနိုင်ငံတဝန်းလုံး၌	mranma nui ngam ta. wan: lum: hnai.
အမျိုးသားနေ့အခမ်းအနားများ	a-myui: sa: ne. a-hkam: a-na: mya:
ကျင်းပကြပါသည်॥	kyang: pa. kra. pa sany

htui	ne.	twang	mranma	nuing-ngam	ta.	wan:	lum:	hnai.	a-myui:	sa:	ne.
Dm-d	day	Loc	Burma	country	1	Clf-circle	round	Loc	a-kind	son	day

a-hkam:	a-na:	mya:	kyang:	pa.	kra.	pa	sany
scene ceremony	rest	many Pl	spread celebrate	outward	Pl-S	Plt	Nom

'On that day National Day ceremonies are celebrated all over Burma'.

Sentence 3

အမျိုးသားနေ့အထိမ်းအမှတ်အဖြစ်	a-myui: sa: ne. a-htim: a-hmat a-hprac
ဟောပြောပွဲများနှင့်	hau: prau: pwai: mya: hnang.
ပြပွဲပြိုင်ပွဲများကို	pra. pwai: pruing pwai: mya: kui
ပြုလုပ်ကျင်းပကြပါသည်॥	pru. lup kyang: pa. kra. pa sany

a-myui:	sa:	ne.	a-htim:	a-hmat	a-hprac	hau:	prau:	pwai:
a-kind [nationality]	son	day	shape [commemoration]	mark	occurrence	preach [	say preaching	show]

mya:	**hnang.**	**pra.**	**pwai:**	**pruing**	**pwai:**	**mya:**	**kui**	**pru.**	**lup**
many	Acc	display	show	compete	show	many	Ob	do	work
		[exhibit]		[competition]					

kyang:	**pa.**	**kra.**	**pa**	**sany**
spread	outward	Pl-S	Plt	Nom
[celebrate]				

'To commemorate National Day, there are various activities and celebrations of preaching, exhibitions and competitions'.

Sentence 4 - Paragraph 3

မြန်မာနိုင်ငံသည်	mranma nuing ngam sany
၁၈၈၅ ခုနစ်တွင်	1885 hku. hnac twang
အင်္ဂလိပ်တို့၏	anggalip tui. e
လက်အောက်ခံဘဝသို့	lak auk hkam bawa. sui.
ကျရောက်ခဲ့ပါသည်။	rauk hkai. pa sany

mranma	**nuing-ngam**	**sany**	**1885**	**hku.**	**hnac**	**twang**	**anggalip**	**tui.** **e**
Burma	country	Top	1885	Clf-gen	year	Loc-in	England	Pl Pos

lak	**auk**	**hkam**	**bawa.**	**sui.**	**kya.**	**rauk**	**hkai.**	**pa**	**sany**
hand	under	Ug	existence	Pth	fall	arrive	Pr	Plt	Nom

'In 1885, Burma underwent the experience of effectively coming under English rule'.

Sentence 5

ထိုအချိန်မှစ၍	htui a-hkyin hma. ca. rwe
အင်္ဂလိပ်အစိုးရကမြန်မာတို့ကို	anggalip a-cui: ra. ka. mranma tui. kui
အမျိုးမျိုးဖိနှိပ်ချုပ်ချယ်ခဲ့ပါသည်။	a-myui: myui: hpi. hnip hkyup hkyai hkai. pa sany

htui	**a-hkyin**	**hma.**	**ca.**	**rwe**	**anggalip**	**a-cui:** **ra.**	**ka.** **mranma** **tui.** **kui**
Dm	time	Tm	begin	Tm	English	control have	A Burma Pl Ob

a-myui: **myui:**	**hpi.**	**hnip**	**hkyup**	**hkyai**	**hkai.**	**pa**	**sany**
a-kind kind	press	press	restrict	Dbt	Pr	Plt	Nom
	[oppress]						

'Beginning from that time on, the English government oppressed and restricted the Burmese people'.

Sentence 6 - Paragraph 4

၁၉၂၀ ပြည့်နှစ်တွင်	1920 prany. hnac twang
အင်္ဂလိပ်အစိုးရက	anggalip a-cui: ra. ka.
ရန်ကုန်တက္ကသိုလ်ကိုဖွင့်လှစ်ရန်	rankun takkasuil kui hpwang. hlac ran
စီစဉ်သည်။	ci cany sany

```
1920 prany. hnac twang anggalip a-cui: ra.   ka. rankun  takkasuil kui
1920 be-full year Loc    English    control have A  Rangoon university Ob

hpwang. hlac ran ci       cany sany
open     open Pur line-up line-up Nom
                 [arrange ]
```
'In 1920, the English government arranged to open Rangoon University.'

Sentence 7

တက္ကသိုလ်ဥပဒေကိုလည်း	takkasuil upade kui lany:
ပြဋ္ဌာန်းသည်။	prahtan: sany

```
takkasuil upade     kui lany: pra htan: sany
university  regulations Ob Ad·  show order Nom
                  · [establish ]
```
'University regulations were also established'.

Sentence 8

ဤဥပဒေအရ	i: upade a-ra.
တက္ကသိုလ်ပညာသင်လိုသူတိုင်း	takkasuil panya sang lui su tuing:
သင်ကြားခွင့်မရနိုင်သဖြင့်	sang kra: hkwang. ma. ra. nuing sa. hprang.
မြန်မာတမျိုးသားလုံးက	mranma ta. myui: sa: lum: ka.
မကျေနပ်ကြချေ။	ma. kye nap kra. hkye

```
i:     upade     a-ra.      takkasuil panya    sang lui    su      tuing: sang kra:  hkwang.
Dm    regulation  according  university knowledge study want  person Ds     study hear  permission

ma. ra.    nuing sa. hprang. mranma ta. myui: sa: lum: ka. ma. kye    nap
Ng  De     able  Nom  In      Burma  1   kind  son Clf-rnd S  Ng  settled settled
                                                                     [satisfied ]

kra. hkye
Pl-S rebute
```

'According to the regulations, each person who wanted to study was not able to get permission to do so, thus the Burmese people as one body were displeased.'

Sentence 9

ထို့ကြောင့်	htui. kraung.
တက္ကသိုလ်ကျောင်းသားကြီးများက	takkasuil kyaung: sa: kri: mya: ka.
ဦးဆောင်၍သပိတ်မှောက်ခဲ့ကြသည်။	u: hcaung rwe sa.-pit hmauk hkai. kra. sany

htui.   kraung. takkasuil kyaung: sa: kri: mya: ka. u: hcaung rwe
Dm   Res   university school son big many S head carry   Tm

sa.-pit   hmauk   hkai.   kra.   sany
alms-bowl over-turn Pr   Pl-S   Nom

'For that reason the university student leaders led a strike.'

Sentence 10 - Paragraph 5

ရန်ကုန် တက္ကသိုလ် ကျောင်းသားများသပိတ်သည်	rankun takkasuil kyaung: sa: mya: sa.pit sany
အနယ်နယ်အရပ်ရပ်သို့	a-nai nai a-rap rap sui.
ပျံ့နှံ့သွားပြီး	pyam. hnam. swa: pri:
နယ်ကျောင်းများကလည်း	nai kyaung: mya: ka. lany:
သပိတ်မှောက်ကြပါသည်။	sa.pit hmauk kra. pa sany

rankun takkasuil kyaung: sa: mya: sa.pit   sany a-nai nai   a-rap   rap   sui.
Rangoon university school   son many alms bowl Top district Rdp place Rdp   Pth

pyam.   hnam.   swa: pri: nai kyaung mya: ka.   lany: sa.pit hmauk kra. pa sany
spread spread   go   Cp district school many S   Ad   alms bowl overturn Pl-S Plt Nom

'The Rangoon University student strikers spread out to various districts and
wards, and as a result even the district school children went on strike.'

Sentence 11

အမျိုးသားကောလိပ်နှင့်	a-myui: sa: kau:lip hnang.
အမျိုးသားကျောင်းများကို	a-myui: sa: kyaung: mya: kui
တည်ထောင်ကြပါသည်။	tany htaung kra. pa sany

a-myui: sa: kau:lip hnang. a-myui: sa: kyaung: mya: kui tany htaung kra. pa sany
a-kind son college Acc   a-kind   son school   many Ob build setup Pl-S Plt Nom

'The national college and the national schools were established.'

Sentence 12

ထိုကျောင်းများကြောင့်	htui kyaung: mya: kraung.
အမျိုးသားစိတ်ဓာတ်များလည်း	a-myui: sa: cit dat mya: lany:
ပို မုန်းကြားဖွံ့ဖြိုးလာပါသည်॥	pui mui nui: kra: hpwam. hprui: la pa sany

htui kyaung: mya: kraung. a-myui: sa: cit dhat mya: lany: pui mui nui: kra:
Dm school many Res a-kind son mind element many Add more heap alert hear
[increase] [awaken]

hpwam. hprui: la pa sany
plump Dbt come Plt Nom
[develop]

'Because of those schools the sense of national dissatisfaction (with the British) was both awakened and increasingly developed'.

Sentence 13

အမျိုးသားစာပေလေ့လာမှုလည်း	a-myui: sa: ca pe le. la hmu. lany:
ပွင့်လန်းလာပါသည်॥	pwang. lan: la pa sany

a-myui: sa: ca pe le. la : hmu. lany: pwang. lan: la pa sany
kind son writing palm practice come Nom Ad open fresh come Plt Nom
[literature [study] [flourish]

'Also the study of national literature began to flourish'.

Sentence 14 - Paragraph 6

ထိုအချိန်မှစ၍	htui a-hkyin hma. ca. rwe
မြန်မာအမျိုးသားတို့သည်	mranma a-myui: sa: tui. sany
အင်္ဂလိပ်အစိုးရကို	anggalip a-cui: ra. kui
ဆန့်ကျင်ဆန္ဒပြပွဲများ	hcan. kyang hcanda pra. pwai: mya:
အဆက်မပြတ်ဆင်နွှဲ့ကာ	a-hcak ma. prat hcang hnwai: ka
လွတ်လပ်ရေးကိုတောင်းဆိုခဲ့ကြပါ သည်॥	ka lwat lap re: kui taung: hcui hkai. kra. pa sany

htui a-hkyin hma. ca. rwe mranma a-myui: sa: tui. sany anggalip a-cui: ra. kui
Dm time Tm begin Tm Burma a-kind son Pl Top English control have Ob

hcan. kyang hcanda pra. pwai: mya:a-hcak ma.prat hcang hnwai: ka
extend train wish   display gathering many connection Ng break assemble participate Tm
[oppose] [demonstration   ]   [without stopping]

lwat lap re: kui taung: hcui hkai. kra. pa sany
free vacant Nom Ob ask   say Pr   Pl-S Plt Nom
[independence]   [demand]

'From that time on, the Burmese people held continuous demonstrations of opposition against the English demanding independence'.

Sentence 15

ထို့ကြောင့်	htui. kraung.
လွတ်လပ်ရေးအစ	lwat lap re: a-ca.
အမျိုးသားနေ့ကဟူ၍	a-myui: sa: ne. ka. hu rwe
ဆိုကြပါသည်။	hcui kra. pa sany

htui. kraung. lwat lap   re: a-ca.   a-myui: sa: ne. ka. hu rwe hcui kra. pa sany
Dm Res   free vacant Nom beginning kind   son day S said Tm say Pl-S Plt Nom
'For that reason we say that the beginning of independence was National Day.'
(or) 'That's why we say, "Independence began with National Day".'

Sentence 16 - Paragraph 7

မြန်မာတမျိုးသားလုံးအား	mranma ta. myui: sa: lum: a:
မျိုးချစ်စိတ်ဓာတ်တက်ကြအောင်	myui: hkyac cit dhat tak krwa. aung:
လှုံ့ဆော်ပေးသောထိုနေ့ကို	hlum. hcau pe: sau: htui ne. kui
အမျိုးသားနေ့ဟူ၍	a-myui: sa: ne. hu rwe
သတ်မှတ်ခဲ့ကြပါသည်။	sat hmat hkai. kra. pa sany

mranma ta. myui: sa: lum: a: myui: hkyac cit dhat tak   krwa. aung:
Burma 1   kind son Clf-round IO kind love   mind element increase rise-up Pur

hlum. hcau pe: sau: htui   ne. kui a-myui: sa: ne.   hu   rwe
exhort attack give Atr Dm   day Ob kind   son day   said Tm
[arouse   ]

sat   hmat hkai. kra. pa sany
demark mark Pr   Pl-S Plt Nom
[designate]

"In order to arouse a spirit of patriotism in all the Burmese people, that day which so excites us is designated 'National Day'."

Sentence 17

မျိုးချစ်စိတ်နှိုးကြားစေခဲ့သော	myui: hkyac cit nui: kra: ce hkai. sau:
အမျိုးသားနေ့ကို	a-myui: sa: ne. kui
မမေ့သင့်ပါ။	ma. me. sang. pa

myui:	hkyac	cit	nui:	kra:	ce	hkai.	sau:	a-myui:	sa:	ne.	kui	ma.	me.	sang.	pa
kind	love	mind	wake	inform	Cs	Pr	Att	kind	son	day	Ob	Ng	forget	be-proper	Plt

'We shouldn't forget National Day which caused the awakening of our sense of patriotism'.

Sentence 18

အမျိုးသားနေ့ကို	a-myui: sa: ne. kui
နှစ်စဉ် ကျင်းပကာ	hnac cany kyang: pa. ka
မျိုးချစ်စိတ်ဓာတ်	myui: hkyac cit dhat
ထာဝစဉ်ရှင်သန်အောင်	hta wa. cany hrang san aung:
ကြိုးပမ်းရမည်ဖြစ်ပါသည်။	krui: pam: ra. many hprac pa sany

a-myui:	sa:	ne.	kui	hnac	cany	kyang:	pa.	ka	myui:	hkyac	cit	dhat
a-kind	son	day	Ob	year	Tm	spread	outward	Tm	kind	love	mind	element
[national people]				[annual]		[celebrate]						

hta	wa.	cany	hrang	san	aung:	krui:	pam:	ra.	many	hprac	pa	sany
always	Tm	live	strong	Pur	strive	win	De	IrRl	happen	Plt	Nom	

'As we annually celebrate National Day, we will have to eagerly strive to keep alive forever our spirit of patriotism'.

Interlinear Text: Snake Bite

Place/date/ Newspaper

ရန်ကုန် ဇူလိုင် ၁၆ (မြန်မာ့အလင်း)	rankun ju-luing 16 (mranma. a-lang:)

rankun   ju-luing 16 (mranma.   a-lang:)
Rangoon July   16 Burma (Pos)   light
'Yangon July 16 [1995]   (New Light of Myanmar) '

Title

အိပ်ပျော်နေသူကလေး ငယ် တစ်ဦး၏	ip pyau ne su ka.le: ngai tac u: e
ကံကြမ္မာ ခြင်ထောင်ထဲ	kam kramma hkang htaung htai:
မြွေကိုက်ခံရ၍ သေဆုံးရရှာ	mrwe kuik hkam ra. rwe se hcum: ra. hra

ip   pyau ne su   ka.le: ngai tac u: e
sleep enjoy be person little   small one Clf-person Pos
kam kramma hkang   htaung htai:
fate destiny   mosquito net   inside
mrwe kuik hkam ra. rwe se hcum: ra.   hra
snake   bite   Ug De Tm die die   De   unfortunately
'Boy Sleeping under Mosquito Net Dies of Snake Bite'

Sentence 1

နေအိပ်ခန်းထဲ ခြင်ထောင်ချ၍	ne ip hkan: htai: hkrang htaung hkya. rwe
အိပ်ပျော်နေသူ ကလေးငယ်တစ်ဦး	ip pyau ne su ka.le: ngai tac u:
မြွေကိုက်ခံရပြီး	mrwe kuik hkam ra. pri:
သေဆုံးသွားမှုတစ်ခု ဇွန် ၁၂ရက်က	se hcum: swa: hmu. tac hku. jun 12 rak ka.
ရန်ကုန်တစ်ဖက်ကမ်း ဒလမြို့နယ်	rankun tac hpak kam: da.la. mrui. nai
ညောင်ကုန်း	nyaung kun:
မြို့သစ်အပိုင် (၁၃) ရပ်ကွက်တွင်	mrui. sac a-puing (13) rap kwak twang
ဖြစ်ပွားသွားခဲ့သည်။	hprac pwa: swa: hkai. sany

```
ne ip    hkan: htai: hkrang   htaung hkya. rwe
live sleep room    inside mosquito  net        drop  TM
ip    pyau ne su     ka.le: ngai  tac u:
sleep enjoy  be person little     small one Clf-person
mrwe  kuik hkam ra.  pri:
snake bite  Un   De  Cp
se hcum: swa: hmu. tac hku.     jun 12 rak     ka.
die  die      go    Nom one Clf-thing June 12 Clf-day  S
rankun  tac hpak kam:  da.la.  mrui. nai
Rangoon one side   bank  Dala      city   region
                                                   [township]
nyaung kun: mrui. sac a-puing (13) rap  kwak twang
Naung Koon city   new   section  13 place part  Loc
hprac  pwa:  swa: hkai. sany
happen open  go   Pr    Nom
```

'An incident occurred on June 12 at the 13th ward, in the new settlement of Nyaunggon, Dalla Township, just across the river from Yangon, in which a child sleeping under a mosquito net was bitten by a snake and died.'

Sentence 2

ဖြစ်ပွားပုံမှာ ဒလမြို့နယ် ညောင်ကုန်း	hpac pwa: pum hma da.la. mrui. nai nyaung kun:
မြို့.သစ်အပိုင် (၁၃)ရပ်ကွက် အမတ်	mrui. sac a-puing (13) rap kwak a-mat
(၅/၆၅၀–က) နေအိပ်တွင် အိမ်ရှင်	(5/650 – K) ne ip twang im hrang
ဦးတင်အောင် နှင့် မိသားစုခြောက်ဦး	u: tang aung hnang. mi. sa: cu hkrauk u:
အိပ်ပျော်နေခိုက် နံနက် ၃ နာရီးခန့်တွင်	ip pyau ne hkuik nam nak 3 nari: hkan. twang
နေအိပ်ခန်းအတွင်း ခြင်ထောင်ချ၍	ne ip hkan: a-twang: hkrang htaung hkya. rwe
အဒေါ်၊ အစ်မများနှင့် အတူအိပ်နေသည့်	a-dau | acma. mya: hnang. a-tu ip ne sany.
အသက် (၉)နှစ် အရွယ်ရှိ မောင်အောင်	a-sak (9) hnac a-rwai hri. maung aung
သူက 'ကြောင်ကိုက်တယ်' ဟု	su ka. 'kraung kuik tai' hu.
ရှတ်တရက်ထအော်သဖြင့် အိမ်သားများ	rut ta. rak hta. au sa. hprang. im sa: mya:
လန့်နိုးကာ မောင်အောင်သူအား	lan. nui: ka maung aung su a:
ဝင်းကြည့်ရာ ယာဘက်လက်ဖျံတွင်	wang: krany. ra ya bhak lak hpyam twang
အစွယ်ရာ အပေါက် ကလေး နှစ်ပေါက်ကို	a-cwai ra a-pauk ka.le: hnac pauk kui

တွေ့ရှိသည်ဆို၏။။	twe. hri. sany hcui e

hpac   pwa: pum   hma   da.la.   mrui.   nai   nyaung kun:
happen develop picture Loc   Dala   city   region Naung Koon
mrui.   sac   a-puing (13)   rap   kwak   a-mat
city   new   section (13) place part   number
(5/650 - K)   ne   ip   twang   im   hrang
(5/650 - A)   be sleep Loc   house   lord
u: tang aung hnang. mi.   sa: cu   hkrauk u:
U Tin   Aung Acc   wife son together six   Clf-person
                          [family   ]
ip   pyau   ne   hkuik   nam-nak   3   nari: hkan.   twang
sleep enjoy be Tm   morning   3 o'clock approximate Loc
ne   ip   hkan: a-twang: hkrang   htaung   hkya.   rwe
be sleep room   inside   mosquito net   drop   Tem
a-dau | acma.   mya: hnang.   a-tu   ip   ne   sany.
aunt | older-sister many   Acc   together sleep be Nom (Pos)
a-sak (9)   hnac   a-rwai   hri.   maung   aung
age   9   year   count   exist Maung Aung
su   ka. 'kraung kuik tai' hu.
Thu   S 'cat   bite Nom' said
rut   ta. rak   hta.   au   sa.   hprang.   im   sa: mya:
sudden one swift arise shout Nom In   house son many
lan. nui: ka maung aung su a:
startle wake TM Maung Aung Thu.IO
wang: krany. ra   ya   bhak   lak   hpyam   twang
enter   look   Nom right side hand wing   Loc
                          [forearm]
a-cwai ra a-pauk ka.le: hnac pauk   kui
fang place hole   little   two   Clf-hole Ob
twe. hri. sany hcui e
meet exist Nom say   Sf-p

'U Tin Aung, the head of the house, and six members of his family were asleep at 3 a.m. under their mosquito net in their house at No 5/650-A of 13th ward of Nyaunggon township, when they were wakened by the cries of the nine year old grandson, Maung Aung Thu who complained of being bitten by a cat. Maung Aung Thu had been sleeping under a mosquito net in the company of his aunt and elder sisters. He went and saw that there were two small holes on his right forearm at the place of the fang marks.'

Sentence 3

အိမ်သားများကလည်း ကြောင်ကိုက်သည်	im sa: mya: ka. lany: kraung kuik sany
ထင်မှတ်ကာ အပိုင်ဆယ်အိမ်မူး	htang hmat ka a-puing hcai im hmu:
လည်းဖြစ်၊ ကြက်ခြေနီတပ်ဖွဲ့	lany: hprac	krak hkre ni tap hpwai.

ဝင်တစ်ဦးလည်း	wang tac u: lany:
ဖြစ်သူ ဦးလှထွန်းအား သွားရောက်ခေါ်	hprac su u: hla. htwan: a: swa: rauk hkau
ငင်ပြသတော့မှ မြွေကိုက်ခံရသော	ngang pra. sa. tau. hma. mrwe kuik hkam ra. sau:
ဒဏ်ရာ များဖြစ်ကြောင်း	dan ra mya: hprac kraung:
သိရှိပြီး ဆေးရုံတင်ပို့ရန်	si. hri. pri: hce: rum tang pui. ran
စိစဉ်နေစဉ်မှာပင် ကလေးတစ်ကိုယ်လုံး	ci cany ne cany hma pang ka.le: tac kuiy lum:
ပြာနမ်းလာပြီး သေဆုံးသွားတော့သည်။	pra hnam: la pri: se hcum: swa: tau. sany

im   sa: mya: ka. lany: kraung kuik sany
house son   many S Add cat   bite Top
htang hmat ka a-puing hcai im   hmu:
think   mark Tm section   ten Clf-house official
lany: hprac | krak   hkre ni tap hpwai.
Add   happen chicken foot red troop company
wang   tac u: lany:
member one Clf-person Add
hpac su   u: hla. htwan: a: swa: rauk hkau
happen person U Hla   Tun   IO go   arrive call
ngang pra. sa. tau. hma. mrwe kuik hkam ra. sau:
pull   show Nom Rev Tm   snake bite Ug   De Atr
dan   ra   mya: hprac   kraung:
punishment place many happen reason
[injury   ]
si. hri. pri: hce: rum tang pui. ran
know be Cp medicine office put   send Pur
ci   cany ne cany hma pang ka.le: tac kuiy lum:
line-up line-up be linup Nom Emp   little one Clf-self Clf round
pra hnam: la pri: se hcum: swa: tau. sany
blue tinged come Cp die die   go   Rev Nom

'Seeing two fang marks on his right forearm, which seemed to have been made by a cat, family members fetched U Hla Tun who was a member of the Red Cross in addition to being a community leader. U Hla Tun identified the wound as a snake bite and as preparations were being made to take the boy to a hospital the boy turned blue and died.'

Sentence 4

နေအိမ်အောက်တွင်	ne im auk twang
ရေများပြည့်လျှံနေသဖြင့် နေအိမ်တွင်း	re mya: prany. hlyam ne sa. hprang. ne im twang:

ဓာတ်မီးထိုး၍	dhat mi: htui: rwe
လိုက်လံရှာဖွေရာ နေအိမ်၏	luik lam hra hpwe ra ne im e
အလယ်ခေါင်တိုင် ထုပ်တန်း တွင်	a-lai hkaung tuing htup tan: twang
လုံးပတ်တစ်ကျပ်ခွဲခန့်၊	lum: pat tac kyap hkwai: hkan.
အရှည် သုံးတောင်ကျော်ရှိ	a-hrany sum: taung kyau hri.
မြွေတစ်ကောင် ပါးပျဉ်းခွက်နေသည်ကို	mrwe tac kaung pa: pyan: hkwak ne sany kui
တွေ့ရှိသဖြင့်	twe. hri. sa. hprang.
အဘိုးဖြစ်သူ ဦးတင်အောင်က	a-bhui: hprac su u: tang aung ka.
ဝါးရင်းတုတ်နှင့် ရိုက်သတ်လိုက်ရသည်။	wa: rang: tut hnang. ruik sat luik ra. sany

ne im auk twang
be house under Loc
re   mya: prany. hlyam ne sa. hprang. ne im   twang:
water many full   overflow be Nom In   be house Loc
dhat   mi: htui: rwe
element fire   shine Tm
[flashlight]
luik lam   hra   hpwe   ra ne im e
follow 2-yards   search investigate Nom be house Pos
a-lai hkaung tuing htup tan: twang
center head   pole beam rod Loc
lum: pat tac kyap hkwai: hkan.
body around one Kyat half approximate
a-hrany sum: taung kyau hri.
length   three cubit over exist
mrwe tac kaung   pa:-pyan: hkwak ne sany kui
snake one Clf-animal head-of-cobra bow   be Top Ob
twe. hri. sa. hprang.
meet exist Nom In
a-bhui: hprac su u: tang aung ka.
grandfather happen person U Tin Aung S
wa: -rang: tut hnang. ruik sat luik ra. sany
 bamboo -(kind) stick Acc   hit kill follow De Nom

'As the ground under the flooring was flooded, a search with flashlights revealed a hooded snake with a girth of nearly five inches and over three cubits long coiled around the cross beam on the center post supporting the ridge pole. The boy's grandfather, U Tin Aung, killed it with a length of bamboo.'

Sentence 5

သေဆုံးသွားသူ မောင်အောင်သူမှာ ကိုခင်ရွှေ –	se hcum: swa: su maung aung su hma kui hkang hrwe -
မသန်းအေးတို့၏ သားဖြစ်ပြီး	ma. san: e: tui. e sa: hprac pri:
အလက(၂)	a-la.ka. (2)
တတိယတန်းကျောင်းသားလေးတစ်ဦးဖြစ်သည်ဟု	ta.ti.ya. tan: kyaung: sa: le: tac u: hprac sany hu.
သိရသည်။။	si. ra. sany

se hcum: swa: su   maung aung su   hma kui hkang hrwe -
die die   go person Maung   Aung person Top   Ko Hkin Shwe -
ma. san: e: tui. e sa: hprac pri:
Ma Than Aye   Pl Pos son happen Cp
[1]a-la.ka. (2)
middle-school (2)
ta.ti.ya. tan: kyaung: sa: le: tac u: hprac sany hu.
third :   class school   son   small one Clf-person happen Nom   said
si.   ra. sany
know De Nom

'Maung Aung Thu was the son of Ko Khin Shwe and Ma Than Aye and had been a student in the third standard in the No 2 Middle School.'

Sentence 6

ဒလပြည်သူ့ရဲတပ်ဖွဲ့စခန်းမှ သေမှု	da.la. prany su. rai: tap hpwai. ca. hkan: hma. se hmu.
သေခင်းအရ အရေးယူထားသည်။။	se hkang: a-ra. a-re: yu hta: sany

da.la. prany su.   rai: tap hpwai.   ca. hkan: hma. se hmu.
Dala   country person   police troop gathering begin room S   die Nom
            (Pos) [police   force   ] [station]   [coroner's
se hkang: a-ra.   a-re: yu hta: sany
die arrange matter case take put Nom
   inquest   ]
'The Dala People's Police Force are holding an inquest.'

---

[1] This is an acronym for middle school (အလ္က = အလယ်တန်းကျောင်း) using the letters 'a-l-k' for a-lai-tan:-kyaung: middle-class-school .

APPENDIX E

TEXTS — CONSTITUENT STRUCTURE TREES

National Day Text: Sentence 1
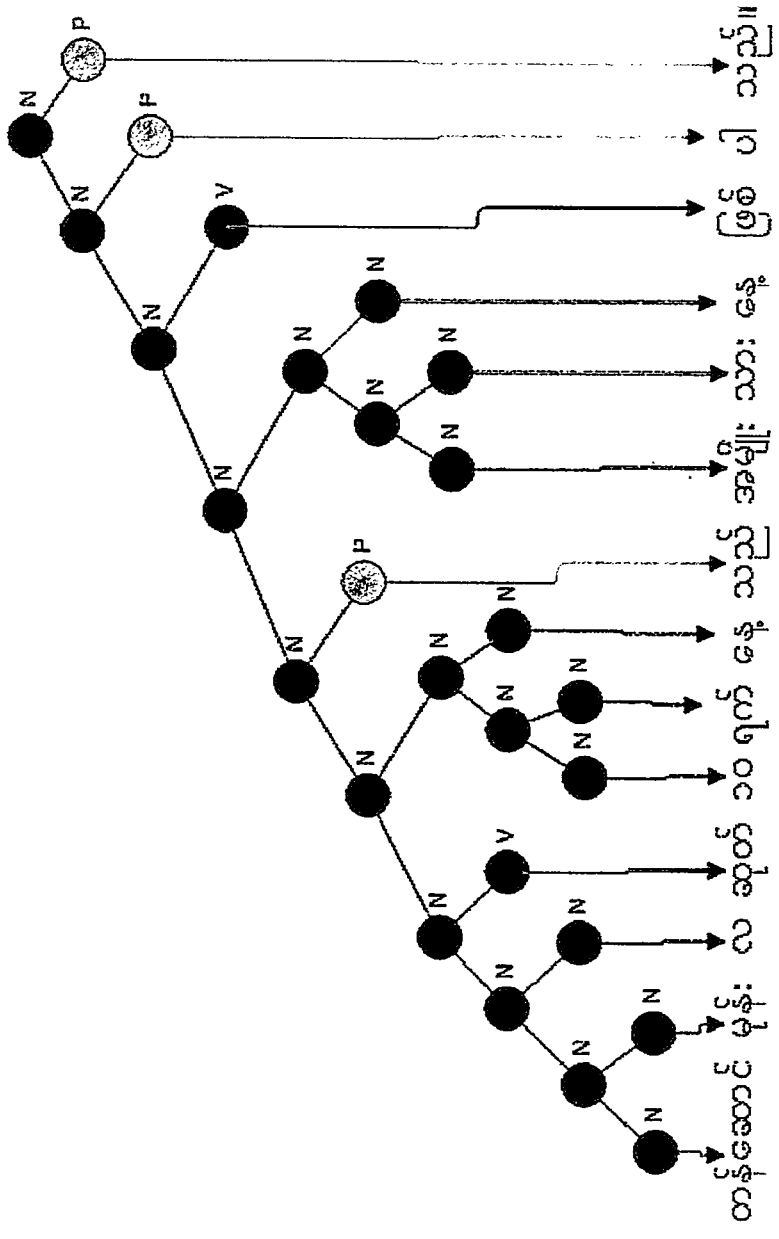
tan hcaung mun: la. hcut 10 rak ne. sany a-myui: sa: ne. hprac pa sany

object of worship stream month end 10 Clf-day day Top a kind son day happen PII Nom

[tazaungmon]

'The tenth day of the waning moon of the month of Tazaungmon is National Day.'

National Day: Sentence 2
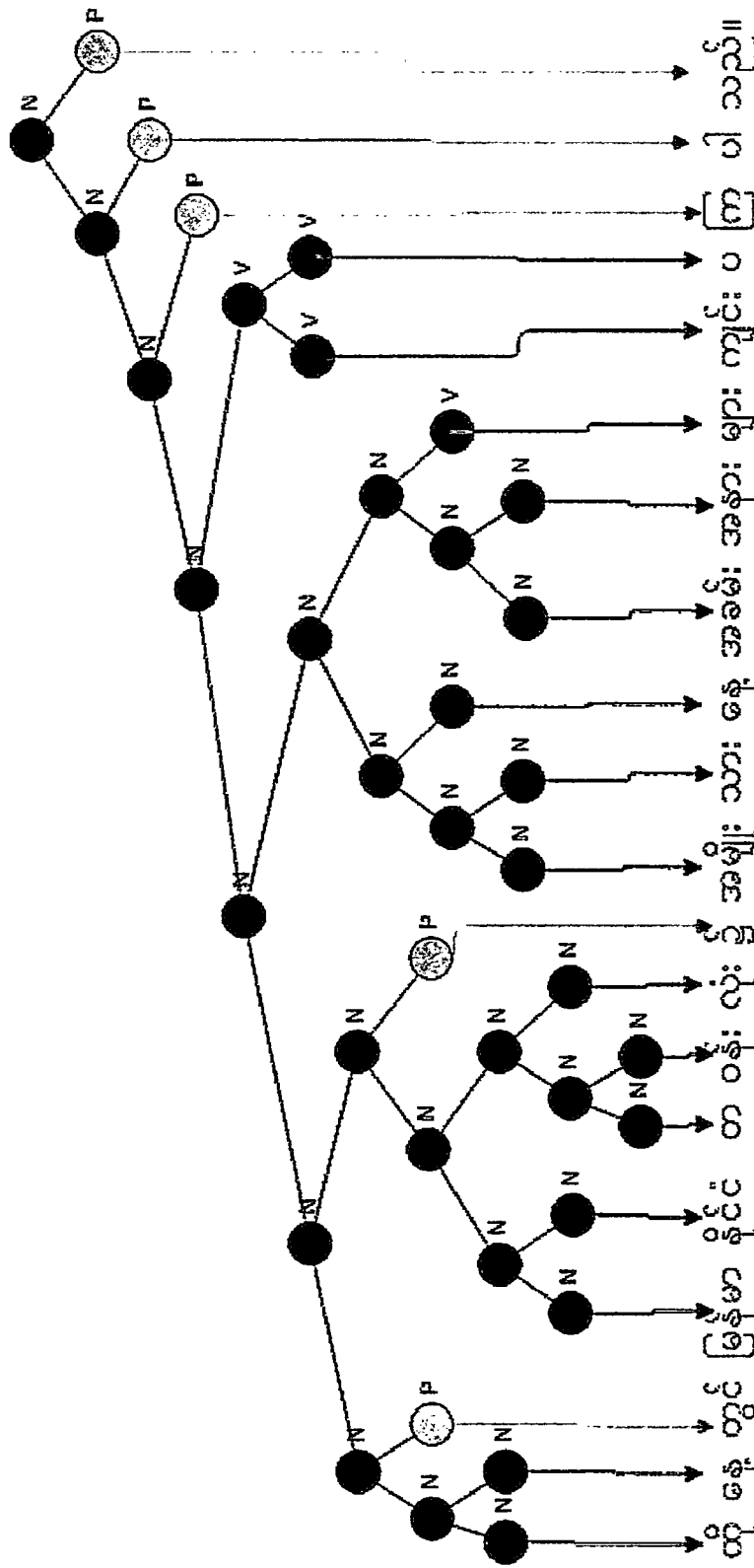
[htui ne. twaang mranma nuiing-ngam ta. wani lum: hmai. a-myui: sa: ne. a-hkam: a-na: mya: kyang: pa. kra. pa samy
Dm-d day Loc day Burma country 1 Clf-circle round Loc a-kind son day scene rest many spread outward Pl-S Pl Nom

'On that day National Day ceremonies are celebrated all over Burma.'

National Day: Sentence 3

a-myui: sa: ne. a-htim: a-hmat a-lzprac hau: pau: pwali mya: hsang: pra. pwali: pruing pwali: mya: kui: prü. lup kyang: pa. kra. pa sany
a-kind son day occurrence mark occurrence preach say show many Acc display show compete show many Gt do work spread outward Pl-S Plt Num

'To commemorate National Day, there are various activities and celebrations of preaching, exhibitions and competitions.'

National Day: Sentence 4

mranma nuing-ngam sany 1885 hku. hnac twang anggalip tui. i. lak auk hkam bawa. sui. kya. rauk hkai. pa sany

burma country Top 1885 Clf-gen year Loc-in england Pl Pos hand under Ug existenco Plh fall arrivo Pr Pt Nom

'In 1885, Burma underwent the experience of effectively coming under English rule.'

National Day: Sentence 5

htui a-hkyin hmal. ca. rwe anggalip a-cui: ra. mranma tui. kui a-myui: myui: hpi. hnip hkyup hkyai hkai. pa sany

Dm time   Tm begin Tm English   control have A   Burma   Pl   Ob   a-kind   kind   press press restrict Dbt   Pr   Pl Nom

'Beginning from that time on, the English government oppressed and restricted the Burmese people.'

National Day: Sentence 6
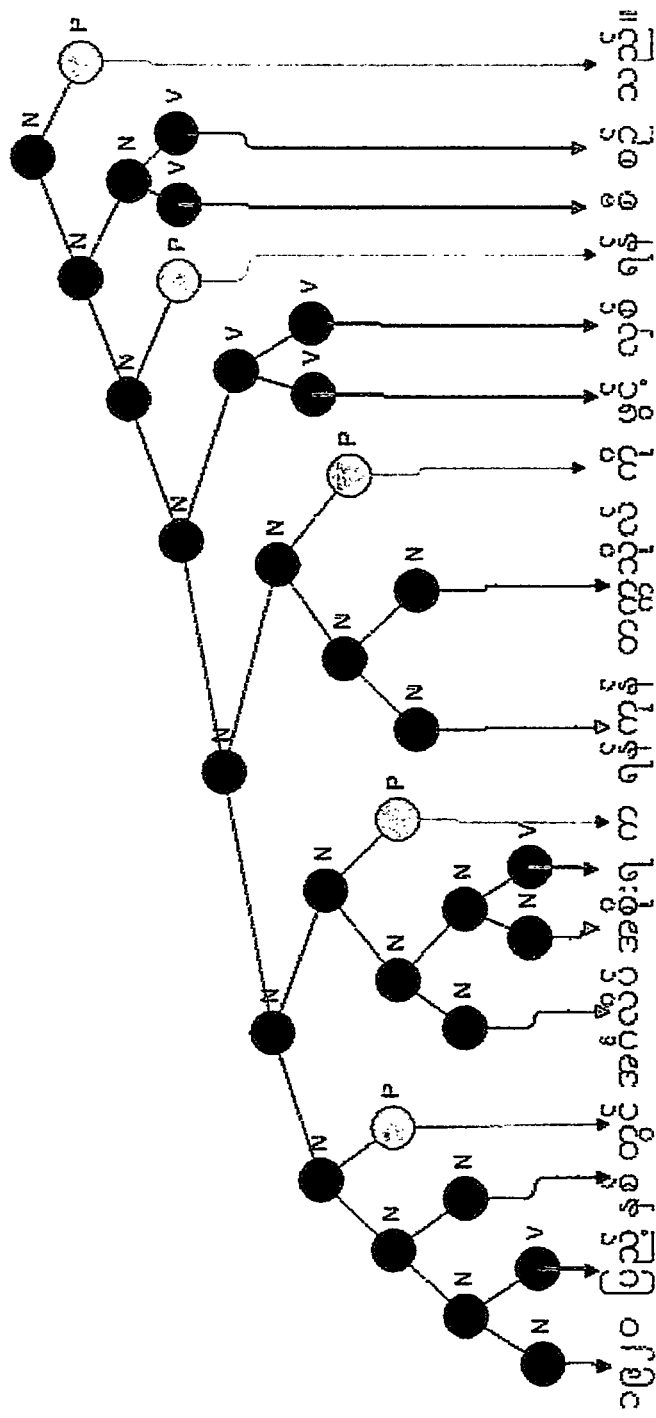
1920 prany. hnac twang anggalip a-cui: ra. ka. rankum takkasuil kui hpwang. hlac ran ci cany sany

1920 be-full year Loc English control have A Rangoon university Ob open Pur line-up Tm Nom

"In 1920, the English government arranged to open Rangoon University.'

National Day: Sentence 7

"University regulations were also established."

National Day: Sentence 8 Overview

[A][B][C [ဝင်]][D][E ခြေ]

[1 According to the regulations, each person who wanted to study was not able to get permission to do so, thus the Burmese people as one body were displeased.]

National Day: Sentence 8 -Part 1

upade	a-ra.	takkasuil	panya	sang	lui	su	tuing:	sang	krai	hkwang.	ma. ra.	muing	sa. hprang.
Dm regulation	according	university	knowledge	study	went	person	Ds	study	hear	permission	Ng	De able	Nom In
[A]		[	B	]	[		C			]			

'According to the regulations, each person who wanted to study was not able to get permission to
do so, thus the Burmese people as one body were displeased.'

National Day: Sentence 8 -Part 2

mranma	ta.	myui:	sa:	lumi	ka.	ma.	kya	nap	kra.	hkye
Burma	1	kind	son	Clf-rnd	S	Ng	settled	settled	Pl-S	rebute
[	D			]	[	E		]	[	]

National Day: Sentence 9

htuii. kraung.	takkasuii	kyaumg:	sa:	kri:	mya:	ftm. u:	hcaung	rwe	sa.-pit	hmauk	hkai.	kra. sany
Dm	Res	university	school	son	big	many	Gtm. u:	S head	carry	Tm	alms-bowl	over-turn	Pr	Pl-S	Nom

'For that reason the university student leaders led a strike.'

National Day: Sentence 10 Overview

[A သတ္တိ] [B ဘုန်း] [C [ဦး]] [D က] [E ကျောင်း] [မြို့]

'The Rangoon University student strikers spread out to various districts and wards, and as a result even the district school children went on strike.'

National Day: Sentence 10 -Part 1

rankum	takkasuil	kyaung:	sai:	myu:	sa.piß	sany	a-mal	nai	a-rap	rap	sui.
Rangoon	university	school	son	many	almsbowl	Top	district	Rdp	district	place	Rdp Pth

[A] [B]

'The Rangoon University student strikers spread out to various districts and wards,
and as a result even the district school children went on strike.'

National Day: Sentence 10 - Part 2

pyam. hnam.	swe:	pric	nal	kyaung:	myo:	ka.	lany:		sa.plt	hmauk	kra.	pa	sony
spread	spread	go	Cp	district	school	many	S	Ad	almsbowl	overturn	Pl-S	Pl	Nom:
I	c	I	[	I	@	[	]		[	]	[	]	]

'The Rangoon University student strikers spread out to various districts and wards, and as a result even the district school children went on strike.'

National Day: Sentence 11

a-myui: sa: kaun:lip hmaung. a-myui: sa: kyaung: mya: kui: tany h:taung kra. pa sany

a-kind son college Acc a-kind son school many Ob build setup Pl-S Pit Nom

'The national college and the national schools were established.'

National Day: Sentence 12

'Because of those schools the sense of national dissatisfaction (with the British) was both awakened and increasingly developed.'

National Day: Sentence 13

e-myo:k	sa:	ca	pe	le.	la	hmu.	lany:	pwang.	lan:	la	pa	sany
kind	son	writing	palm	practice	come	Nom	Add	open	fresh	come	Plt	Nom
		[literature	] [study	]		]		[flourish				

'Also the study of national literature began to flourish.'

National Day: Sentence 14 Overview

'From that time on, the Burmese people held continuous demonstrations of opposition against the English demanding independence.'

National Day: Sentence 14 - Part 1

Dm time begin Tm son Pl Top English control have Ob extend train wish display gathering many
[oppose] [demonstration]

hkui a-hkyin hma. ca. rwo mranma a-myui: sai tui. sany anggalip a-culi ra. kui hcan. kyong hcanda pra. pwai: myat

Dm time begin Tm Burma kind son Pl Top English control have Ob extend train wish display gathering many

[A] [B] [C]

'From that time on, the Burmese people held continuous demonstrations of opposition against the English demanding independence.'

National Day: Sentence 14 – Part 2

'From that time on, the Burmese people held continuous demonstrations of opposition against the English demanding independence.'

National Day: Sentence 15

htéuí. kraung.	lwat	llaip	ve:	a-ca.	a-myuú:	sa:	me.	ka.	hu	rwe	hcuú	krä.	pa	sany
Dm	Res	free	vacant	Nom	beginning	kind	son	day	S	said	Tm	say	Plt	Nom

"That's the reason why we say "Independence began with National Day.""

National Day: Sentence 16 Overview

[A သာ၌] [B ကို့] [C တယ] [D] [E] [E]

'In order to arouse a spirit of patriotism in all the Burmese people, that day which so excites us is designated 'National Day'.'

National Day: Sentence 16 -Part 1

'In order to arouse a spirit of patriotism in all the Burmese people, that day which so excites us is designated 'National Day'.'

National Day: Sentence 16 - Part 2

'In order to arouse a spirit of patriotism in all the Burmese people, that day which so excites us is designated 'National Day'.'

National Day: Sentence 17

"We shouldn't forget National Day which caused the awakening of our sense of patriotism."

National Day: Sentence 18

a-myuḥ saḥ no. kul hmac cany kyangḥ pa. ṅa myuḥ hkyac ciṭ dhat hḍaweḥ cany hvangḥ son aungḥ krvḥ pamḥ ra. many hprac pa sany
kind son day Ob year Tm spread outward Tm kind love mind element always Tm five strong Pur strive will De IrRl happen Plt Rl
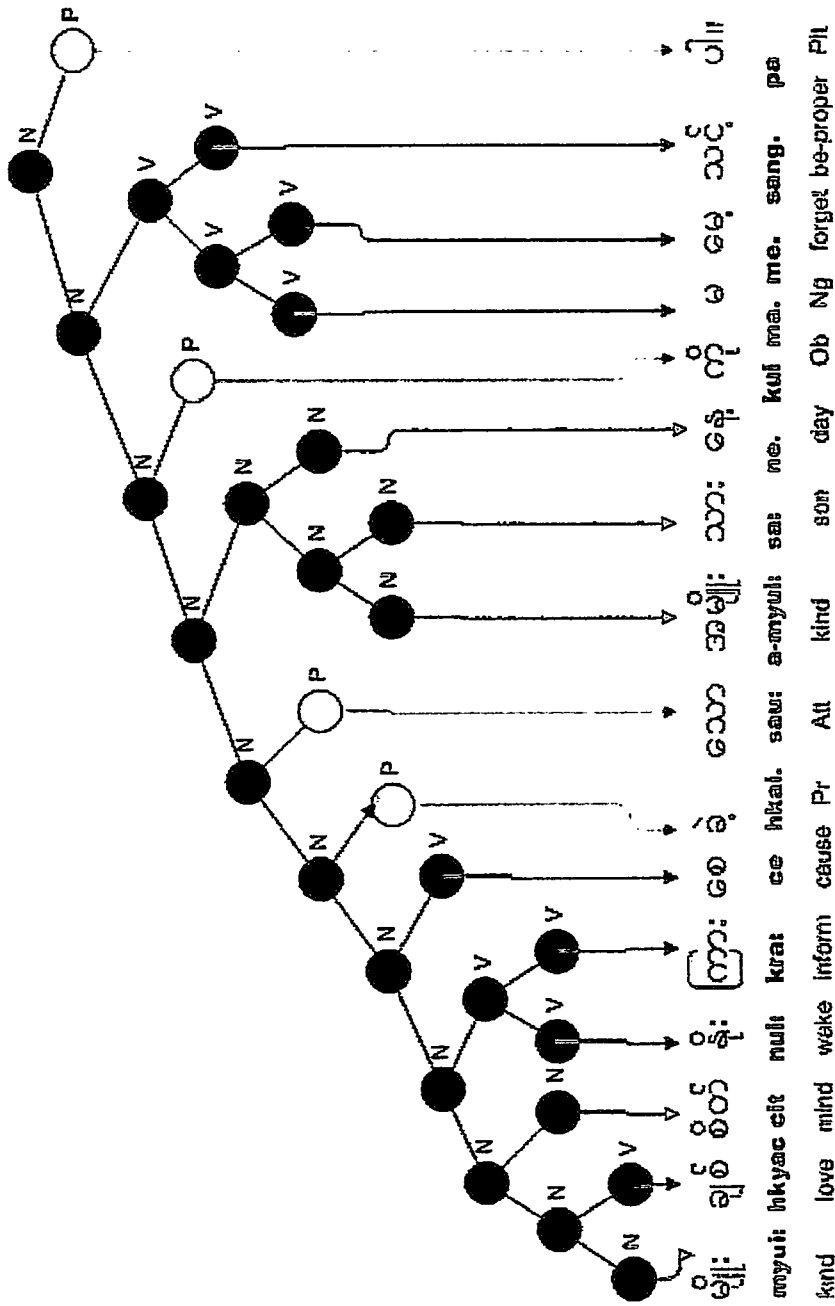
'As we annually celebrate National Day, we will have to eagerly strive to keep alive forever our spirit of patriotism.'

Snake Bite Overview
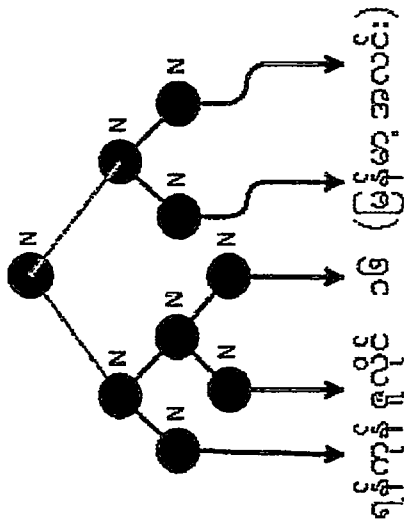
Snake Bite: Title

'Boy Sleeping under Mosquito Net Dies of Snake Bite'

Snake Bite: Date

ranfkun ju-luing 16 (mranma. a-lang:)
Rangoon July 16 Burma (Pos) light

'Yangon July 16 [1995] (New Light of Myanmar)'

Snake Bite: Sentence 1 Overview

Snake Bite: Sentence 1 - Part 1

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Snake Bite: Sentence 1 - Part 2

[... Norm]
[... go Pr]
[happen open]
[hprac pwar swar hkat. sany]
[rap kwak twang][a-guing (13) rap kwak twang][...]
[section 13 place part Loc
[Naung Kon mrui. sac][a-guing (13) ...]
[Naung Gon city new]
[Dala. mrui. nai]
[Dalla city state]
[Rankun tac hpak kam] [Da.la. mrui. nai]
[some Rangoon one side bank] [Dalla city state]
[Jun 12 Clf-day S]
[June 12 Clf-day S]

this occurred on June 12 at the 13th ward, in the new settlement of Nyaunggon, Dalla Township, just across the river from Rangoon.'

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Snake Bite: Sentence 2 Overview

Snake Bite: Sentence 2 - Part 1

hpac-pwa: [pum hma][da.la. mrui. nai nyaung Kun: mrui. sac][a-puing (13) rap kwak a-mat (5/650 - K)] [ne ip twang]
happen-develop image Loc][Dalla city region Naung Gon city new][section (13) place part number (5/650 - A)] [be sleep Loc]

[A] [B] [C] [D]

"It happened in the new settlement of Naunggon in the township of Dalla at house No 5/650-A of 13th ward while sleeping ..."

Snake Bite: Sentence 2 - Part 2

လှရောင်းဦးတင်အောင်မောင်း၊ မယ်၊ သားဥ ဟိုးကောက်ဦး ဟိုးရောက်ဦး ပျောက်နေ ဟိုက်ဦ ပျောင်းနေ ဟိုက်ဦ ဟိုကန်းအတွင်း၌ နေ ဦ ဟိုကန်အတွင်း [နံနက် ၃ နာရီ ဟိုကန်း တွင်း၌ [မျ ခေါက် ၃ ဟိုကရောင်း ဟိုကျ. ရွှေ

Im hnaung ui tang aung hnaung, mi, sai cu hkrauk ui Ip pyau ne hkuik][nam-nak 3 nari: hkan. twang][ne Ip hkan: a-twang][hikrang hkaung hkya. rwe
household U Tin Aung Acc wife son together six Clf- sleep onjoy be Tm][morning 3 o'clock approx. Loc] [be sleep room inside] [mosquito not drop Tm
house-lord U Tin Aung Acc wife son together six Clf- sleep Clf- sleep
-person

| I | E | | | F | | G | | | H | | I |

'while U Tin Maung and six members of his family were asleep at about 3 a.m. under the mosquito net in their sleeping room...

Snake Bite: Sentence 2 - Part 3

a-dau   ac-ma. mya: hnang. atu   ip   ne sany. x[[a-sak   9 hnac a-rwai hri.maung aung   su ka.

Aunt Old-sis many with together sleep be NOM (Pos)][age 9   year count exist Maung Aung Thu S

' Maung Aung Thu, his nine year old grandson, had been sleeping under a mosquito net in the company of his aunt and elder sisters ...

Snake Bite: Sentence 2 - Part 4

[kraung kuik taf' hu,][rut ta. rak lnta. au   sa. hpraung.][[ım sax myax lam. nui: ka]
[cat   bite Nom' said][suddon one swift arise shout arise shout Nom in   [house son many startle wake TM]

'when they were wakened suddenly by the cries of the grandson complaining he was bitten by a cat ...'

Snake Bite: Sentence 2 - Part 5

maung-aung su a: waung: krany, ra ya bhak lak hpyam twang twang a-cwai a-pauk ra a-pauk ka.lei: hnac pauk tui twe. hni. sany hcui e
Maung Aung Thu IO enter look Nom right side hand wing Loc fang place holo fitto two Clf-holo Ob meat exist Nom say Sf-p

'He went in and saw that there were two small holes on his right forearm at the place of the fang marks.'

Snake Bite: Sentence 3 Overview

A သ

B အား:

C �‌သော့ ၄

D ‌မြီး:

E ဟင်

F မြီး:

G ‌ဟော ‌သည်

Snake Bite: Sentence 3 - Part 1

'Thinking that it was a cat bite, family members [went and go!] a member of the Red Cross, who also is a leader of ten houses ...

Snake Bite: Sentence 3 - Part 2

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Snake Bite: Sentence 3 - Part 3

E]   ]]   F   ]]   G   ]

[hcei: num tang pui. ran ci   carny ne carny hma pang][ka.le: tac kuiy lum: pra hnam: la   pri:][se hcum: swa: tau. sany]

[medicine office put send Pur line-up be linup Nom Emp][little   one self round blue tinged come Cp][die die   go   Rev Nom]

'however, as preparations were being made to take the child to a hospital his whole body turned blue and died.'

Snake Bite: Sentence 4 Overview

A သားြဖင့် B ြဒ် C လှ D ဒဏ်ခင့် E ဟုင့် F G H I တို့ J ထြဖင့်K တ L နှင့် M ထ တံ့

Snake Bite: Sentence 4 - Part 1

ne lm | auk twang | re | myat prany. hlyam ne sa. hpreng. ne lm twang: dhat mls htuli rwe luik lam fara hpwe ra

be house | under Loc | water | many full | overflow be Nom in | be house Loc | element fire shine Tm | follow 2-yards search investigate Nam [flashlight]

[| A |] [| B |] [| C |]

'As the ground under the flooring was flooded, a search with a flashlight ...

Snake Bite: Sentence 4 - Part 2

Snake Bite: Sentence 4 - Part 3

Snake Bite: Sentence 4 (Part 3)

pa:pyan: hkwrak ne sany kull[two, hrl. sa. hprang. e-bhul: hprac su u: tang aung ka. wac -rangi tut hnang. ruik sat luik ra. sany
head-of-cobra bow   be Top   Ob meet exist Nom   In   grandfather happen person U Tin Aung   S   bamboo -(kind) stick Acc   hit   kill   follow De   Nom

'with the head hooded. The boy's grandfather killed it with a length of bamboo.'

[   ]   ][   ][   ][J   ][K   ][L   ][   ][M   ]

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Snake Bite: Sentence 5 Overview

Snake Bite: Sentence 5 -Part 1

'Maung Aung Thu, who died, was the son of Ko Khin Shwe and Ma Than Aye and ...

Snake Bite: Sentence 5 - Part 2

သကော (꠷)	သည်သာ	သာ:	ကျောင်း	တန်း	တာ.ti.ya.	(2)	အ.la.ka.
	son	small	school	class	third	(2)	middle-school

' had been a pupil in the third standard in the No 2 Middle School.'

Snake Bite: Sentence 6
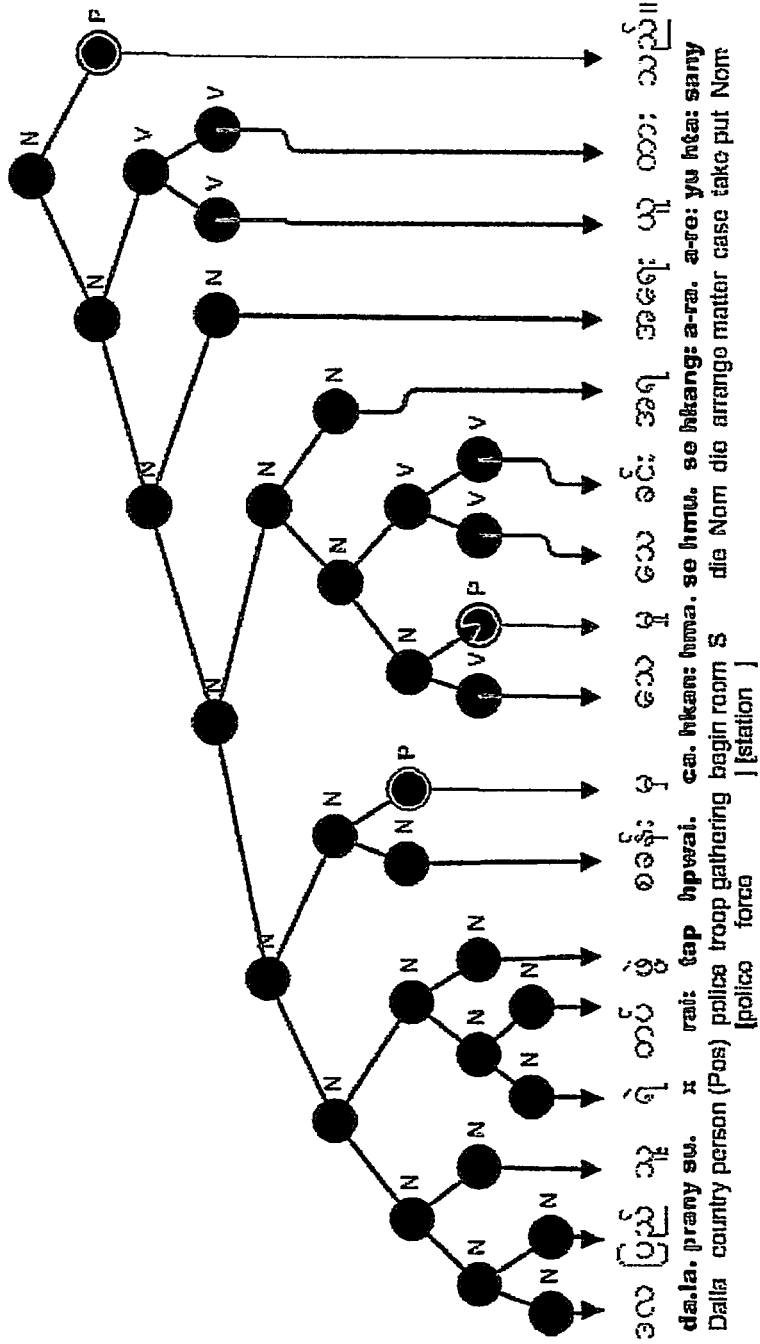
da.la. prany su. x rai: tap hpwai. ca. hkan: hma. se hmu. se hmu. a-ra. a-re: yu hta: sany
Dalla country person (Pos) police troop gathering begin room S die Nom die arrange matter case take put Nom
[police force] [station]
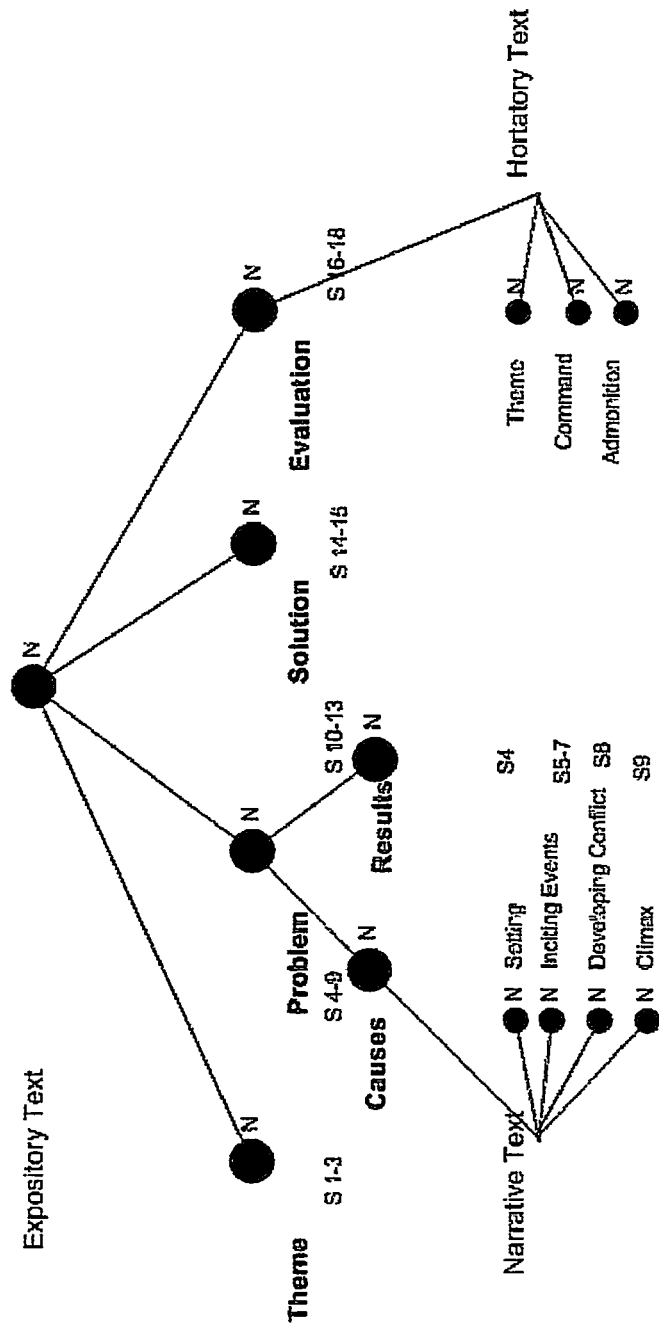
'The Dalla People's Police Force are holding an inquest.'

APPENDIX F

TEXTS — COMBINED CONSTITUENT

STRUCTURE TREES

National Day: Diagrams of Rhetorical Structural Relations of Macro Structure

National Day Text Macro Structure

National Day: Diagrams of Structural Relations of Macro Segments
Levels of Embedding of Natural Units of Discourse

National Day: Text _Theme_ Sentences 1-3

Sentence 1

Sentence 2

Sentence 3

National Day: Body-Issue-Problem-Events-Cause-Body-Build-Up   Sentences 6-8

Build-up

Setting

Events

N

Oppression 1

Oppression 2

N

N

Sentence 6

Sentence 7

Sentence 8

National Day: Body-Issue-Problem-Events-Cause-Body- Sentences 6-9

BODY S6-9

Build-up S6-8

Climax S9

Setting

Events

Oppression 1

Oppression 2

Sentence 6

Sentence 7

Sentence 8

N

National Day: Body-Issue-Problem-Events-Cause- Sentences 5-9

Cause

Setting

Setting

Body

N BODY
S6-9

N Build-up S6-8

N Climax
S9

Setting

Events

Oppression

Sentence 5

Sentence 6

Sentence 7

Sentence 8
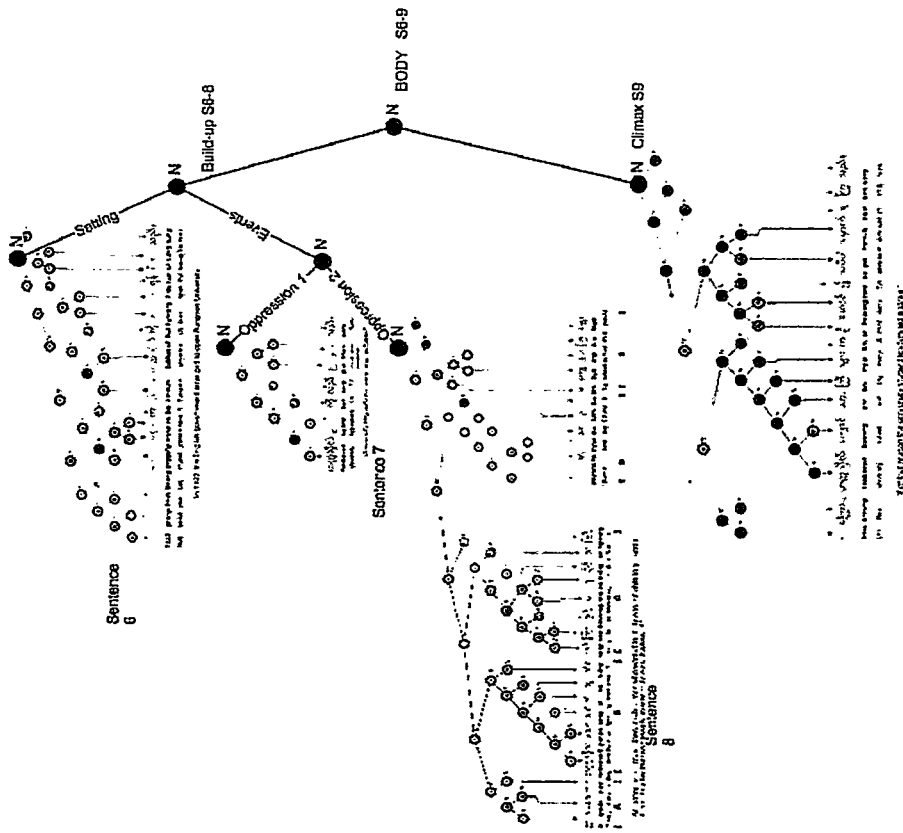
Sentence 9

National Day: Body-Issue-Problem-Events-Results   Sentences 10-13

Results

Result 1

Result 1

Result 2

Result 1 / Cause

Result 2

Result

Sentence 10

Sentence 11

Result 1 / Cause

Result

Sentence 12
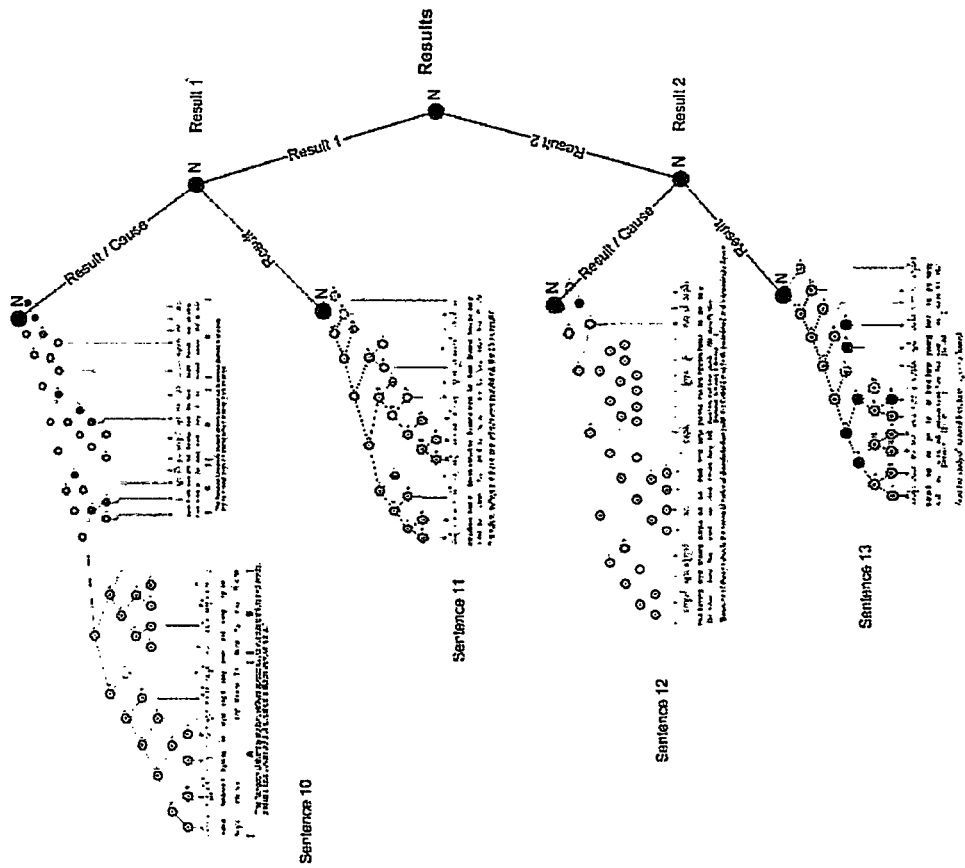
Sentence 13

National Day: Body-Issue-Problem-Events- Sentences 5-13

Events
S 5-13

N

Causes
S5-9

Results
S 10-13

N

N

N Result 1

N

Setting

N Setting

Body

N BODY
S6-9

Climax
S9

Result /
Cause

Result 1

Result 2

N Result 1

N Result 2

Result /
Cause

Result /
Cause

Build-up
S6-8

Settling

N

N

Opposing Events N
(less possible)

N

Sentence 5

Sentence 6

Sentence 7

Sentence 8

Sentence 9

Sentence 10

Sentence 11

Sentence 12
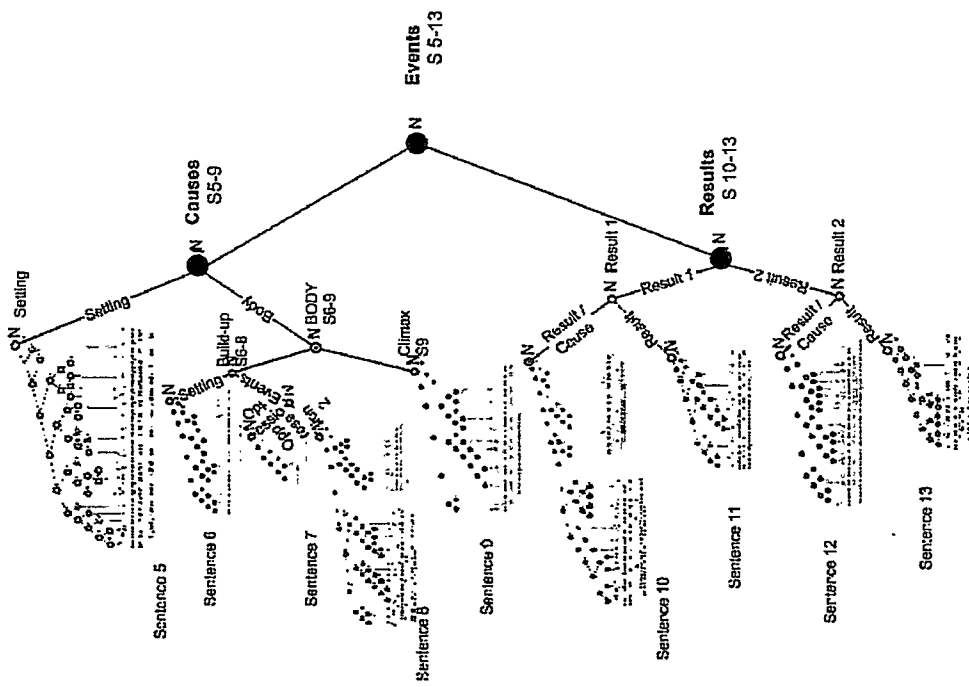
Sentence 13

National Day: Body-Issue-Problem- Sentences 4-13
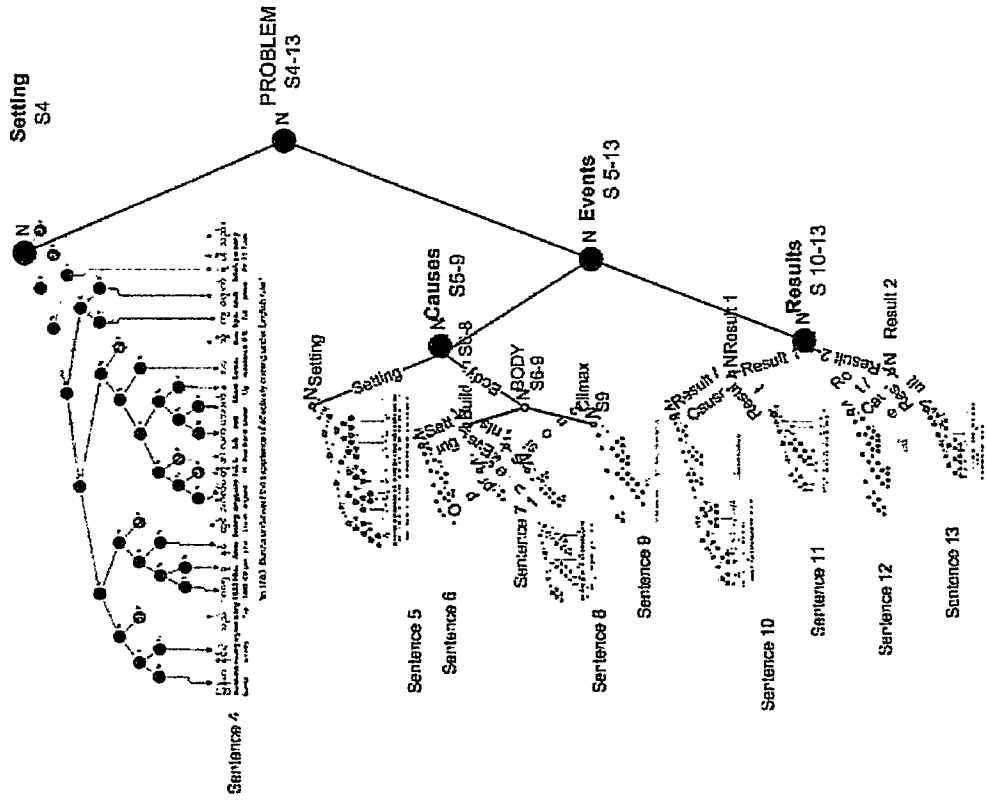
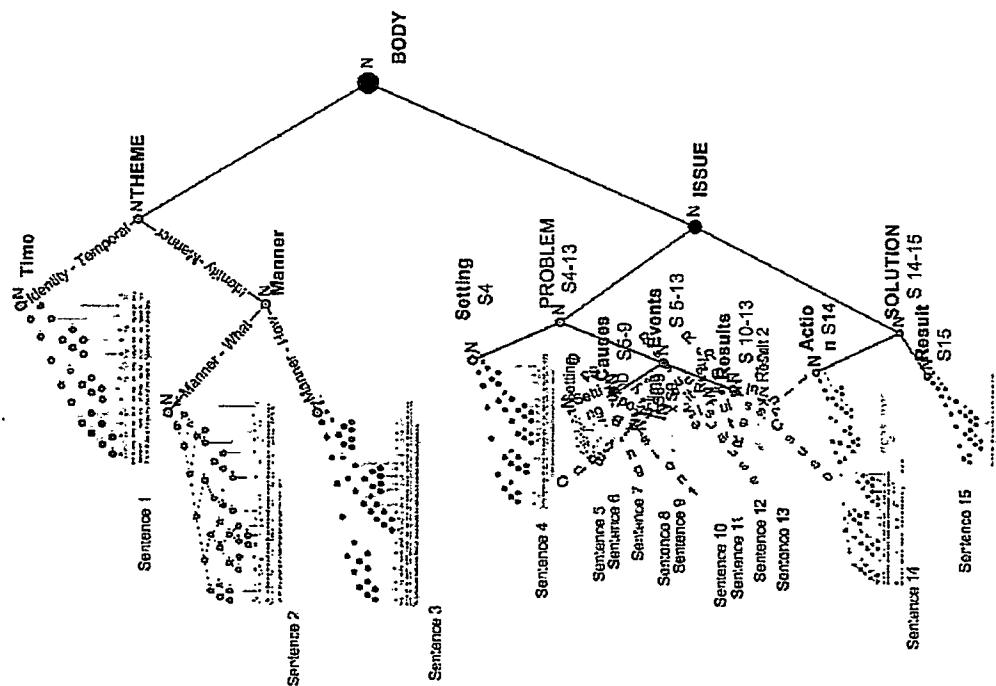National Day: Body-Issue-Solution Sentences 14-13

SOLUTION
S 14-15

Action S14

Result S15
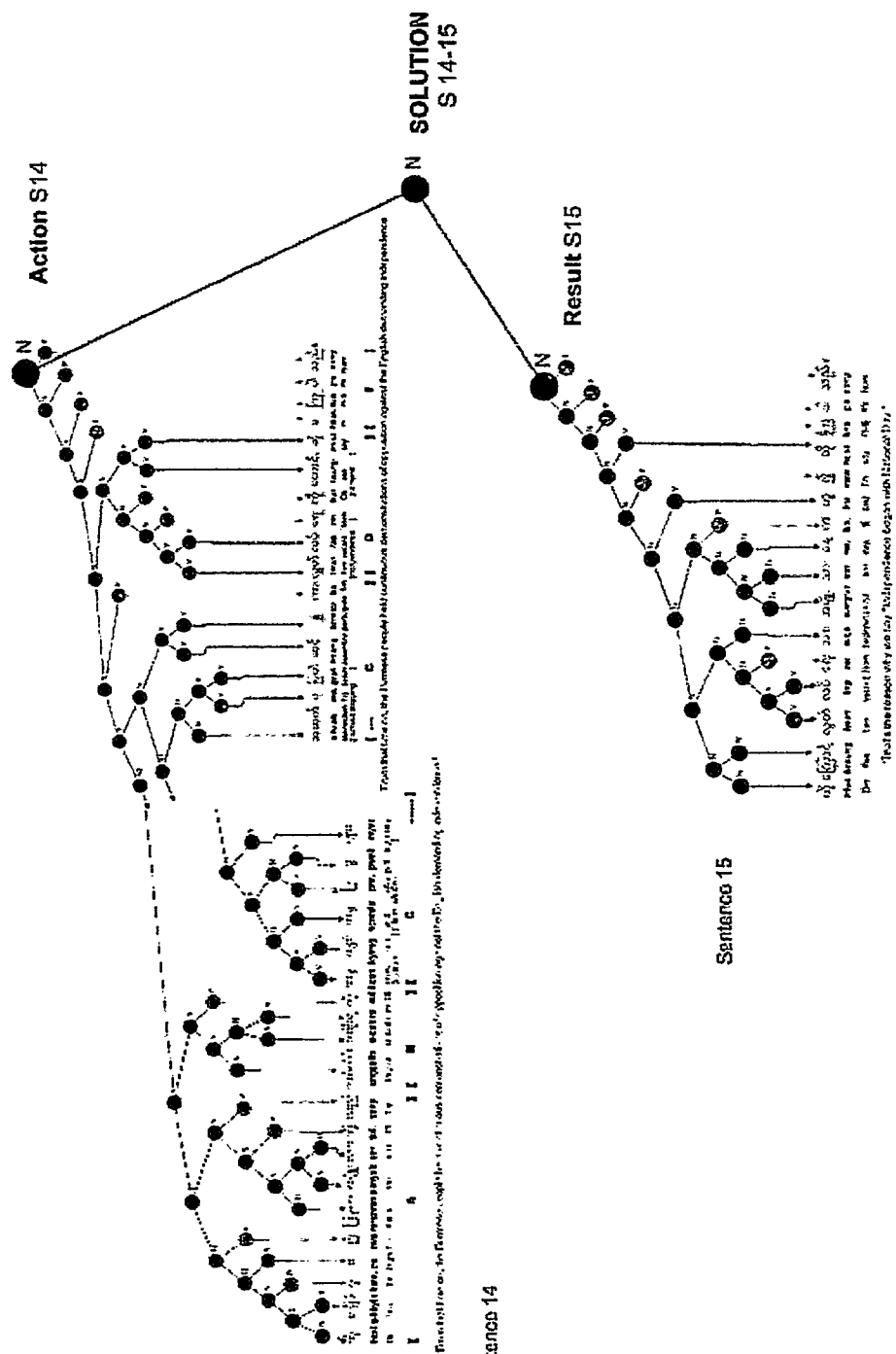
Sentence 14

Sentence 15

National Day: Body-Issue Sentences 4-15

ISSUE

Setting S4

PROBLEM S4-13

SOLUTION S 14-15

Events S 5-13

Causes S5-9

Results S 10-13

Action S14

Result S15

Result 1

Result 2

Setting

Sentence 4

Sentence 5
Sentence 6
Sentence 7
Sentence 8
Sentence 9
Sentence 10
Sentence 11
Sentence 12
Sentence 13

Sentence 14
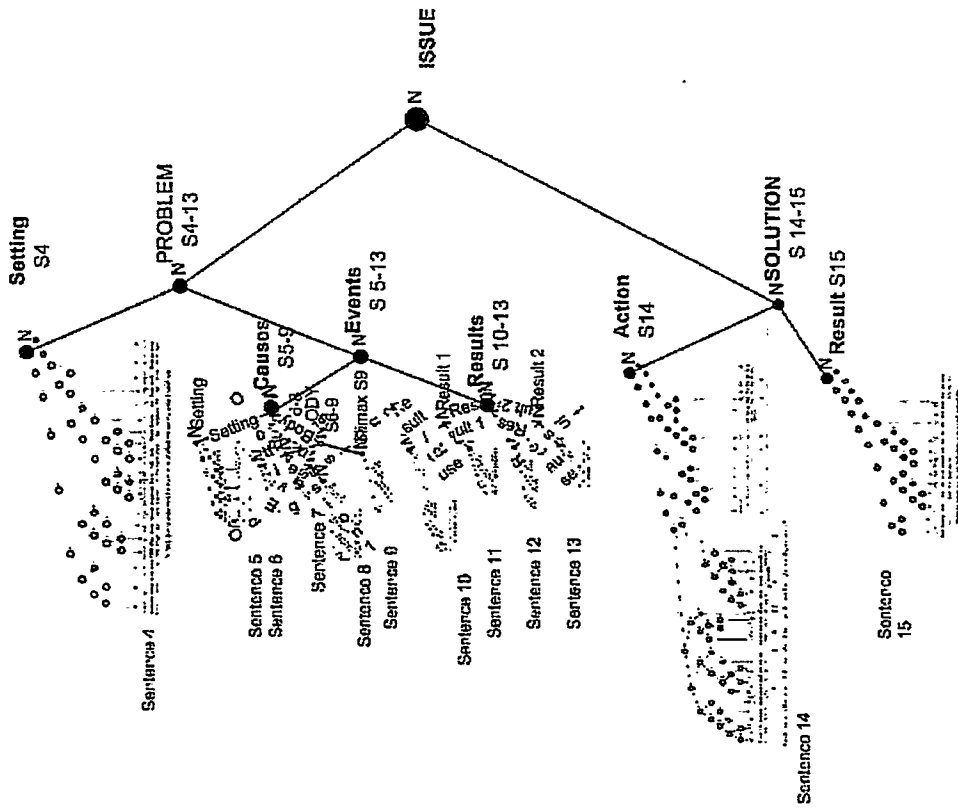
Sentence 15

National Day: Body Sentences 1-15

BODY

THEME

ISSUE

N Time

Identity - Temporal

Manner

Identity-Manner

Manner - What

Manner

Setting
S4

PROBLEM
S4-13

SOLUTION
S 14-15

Setting

Causes
S6-9

Events
S 5-13

Results
S 10-13

Result 2

Action
S14

Result
S15

Sentence 1

Sentence 2

Sentence 3

Sentence 4

Sentence 5

Sentence 6

Sentence 7

Sentence 8

Sentence 9

Sentence 10

Sentence 11

Sentence 12

Sentence 13

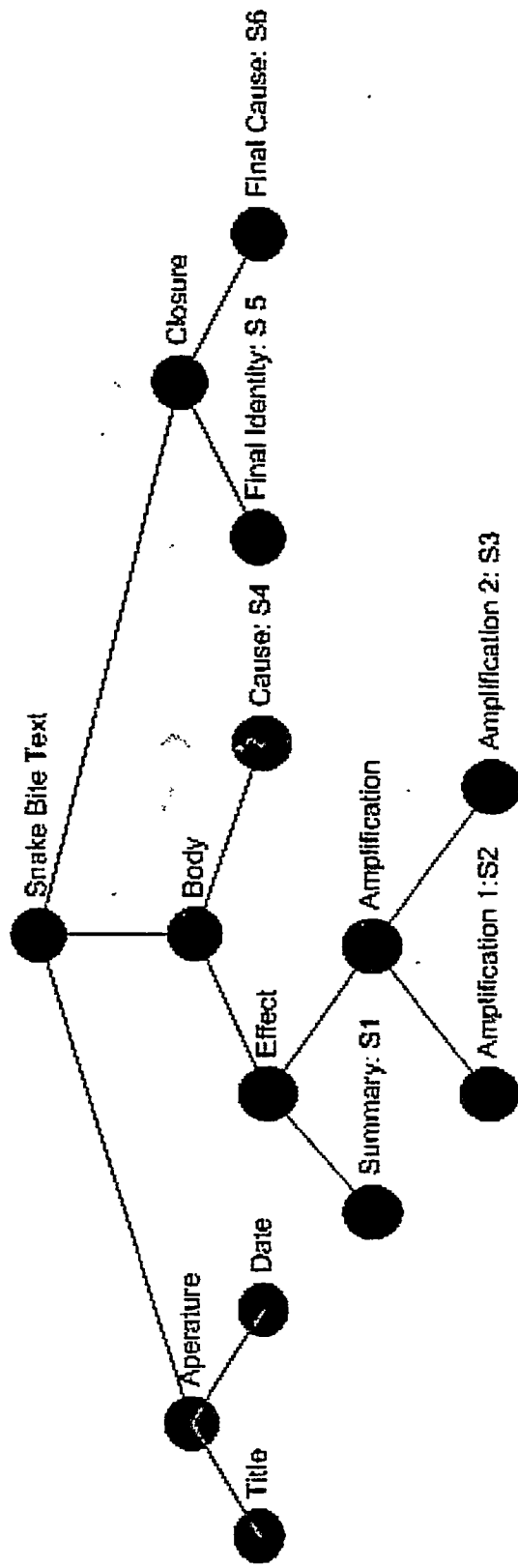Sentence 14

Sentence 15

National Day: Evaluation Sentences 16-18

National Day: Text Sentences 1-18

Overview of Snake Bite Text Rhetorical Structure

Snake Bite Overview

Snake Bite: Aperture - Title and Date

Snake Bite: Body - Effect - Summary — Sentence 1
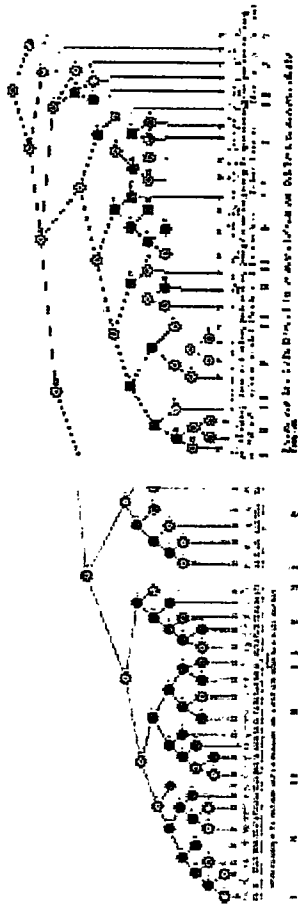
Snake Bite: Body - Effect - Amplification - Amplification 1 — Sentence 2
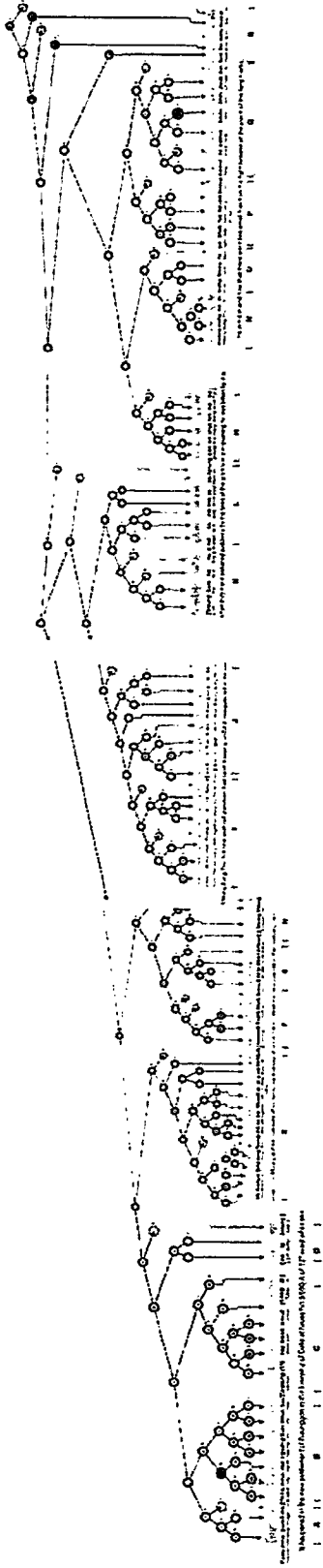
Snake Bite: Body - Effect - Amplification - Amplification 2 — Sentence 3
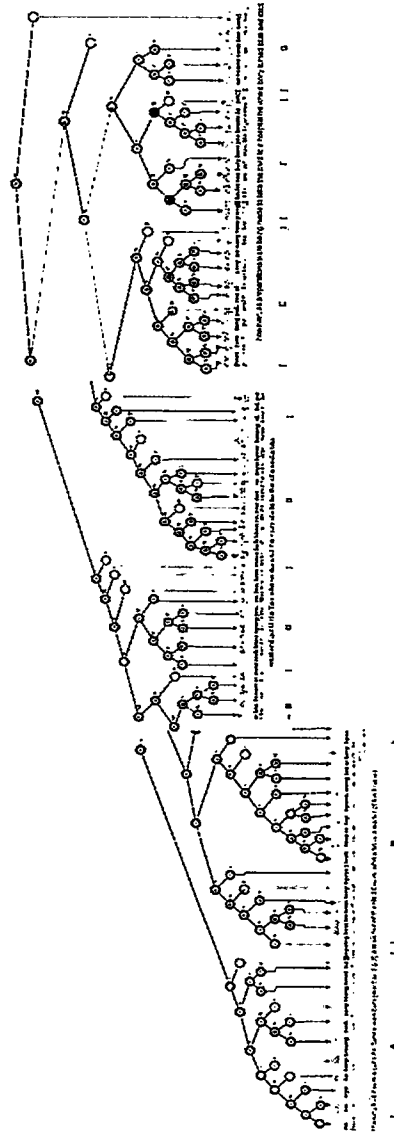
Snake Bite: Body - Effect - Amplification - Display of Sentence 2 and Sentence 3

410
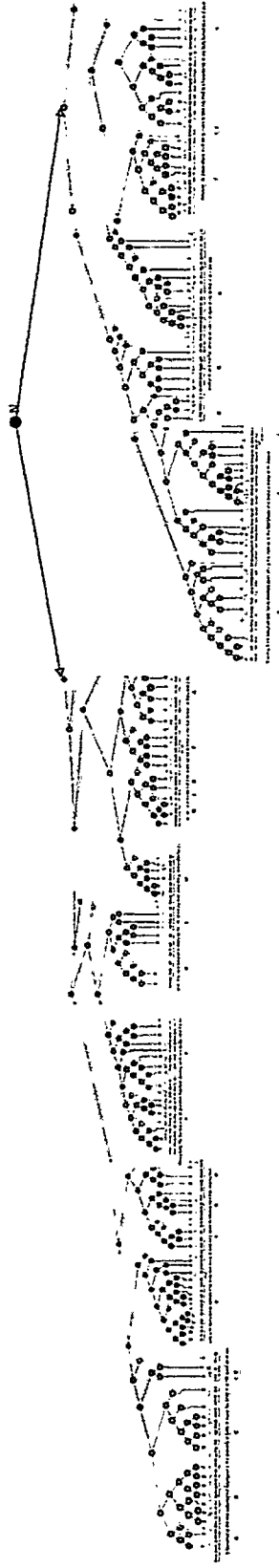
Snake Bite: Body - Effect - Display of Sentence 1-3
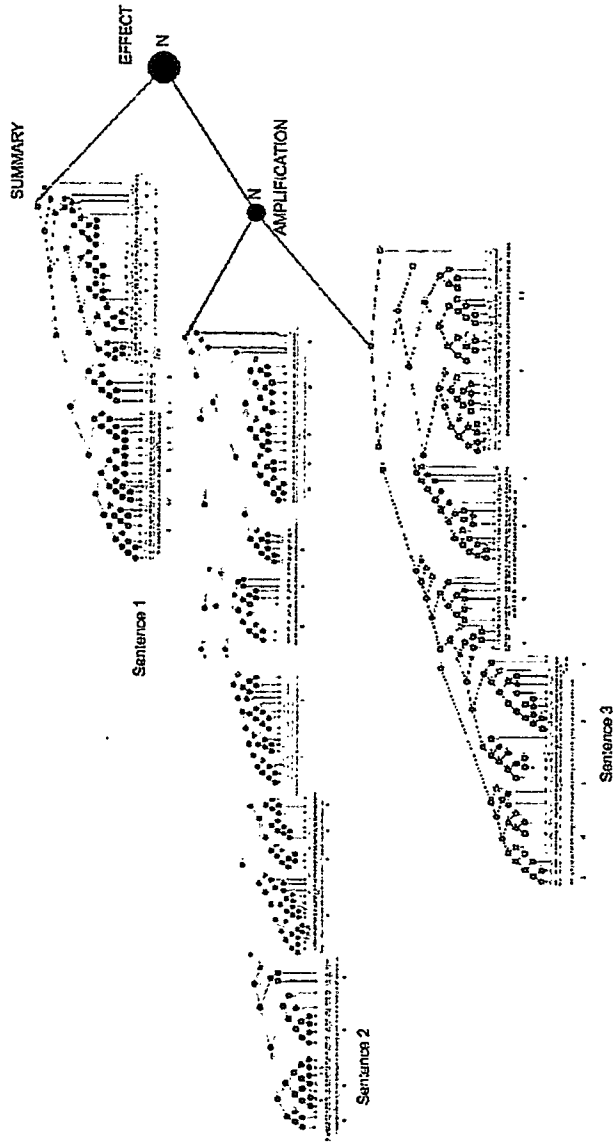
Snake Bite: Body - Cause - Display of Sentence 4
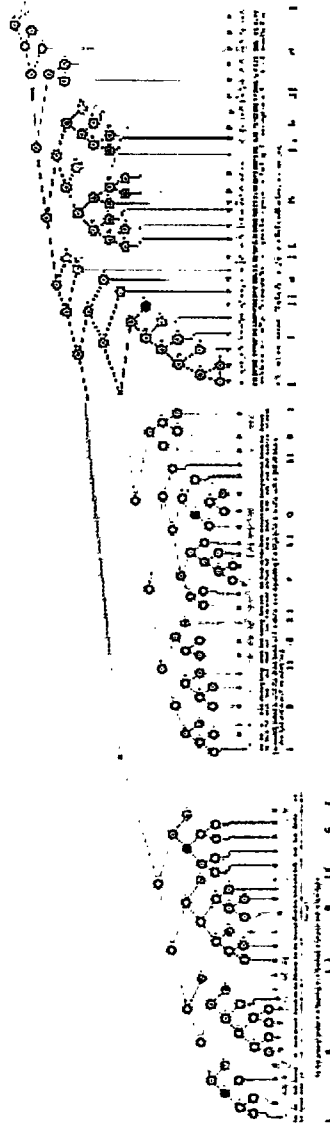
Snake Bite: Body - Effect and Cause - Display of Sentence 1-4

Snake Bite: Closure - Display of Sentence 5-6

FINAL IDENTITY

CLOSURE

FINAL CAUSE

Sentence 5

Sentence 6

414

Snake Bite: Display of Whole Text Structure - Sentence 1-6
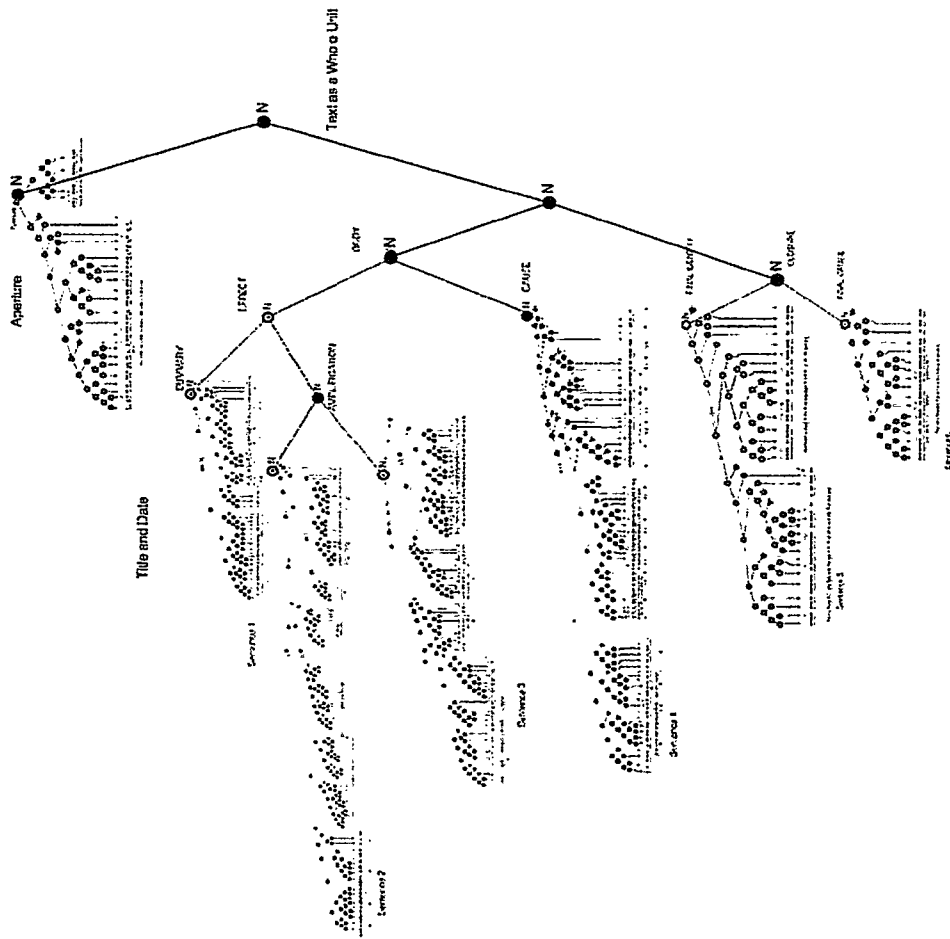
APPENDIX G

ARRAY OF NOMINALIZATIONS

ARRAY OF FUNCTIONAL TYPES OF NOMINALIZATION

The following list outlines types of nominalized constructions which are widely attested cross-linguistically. Burmese has a reduced inventory of patterns which can be summarized as highly predictable and boring were it not for the semantic joy of the Burmese lexicon and delights of particle innuendo.
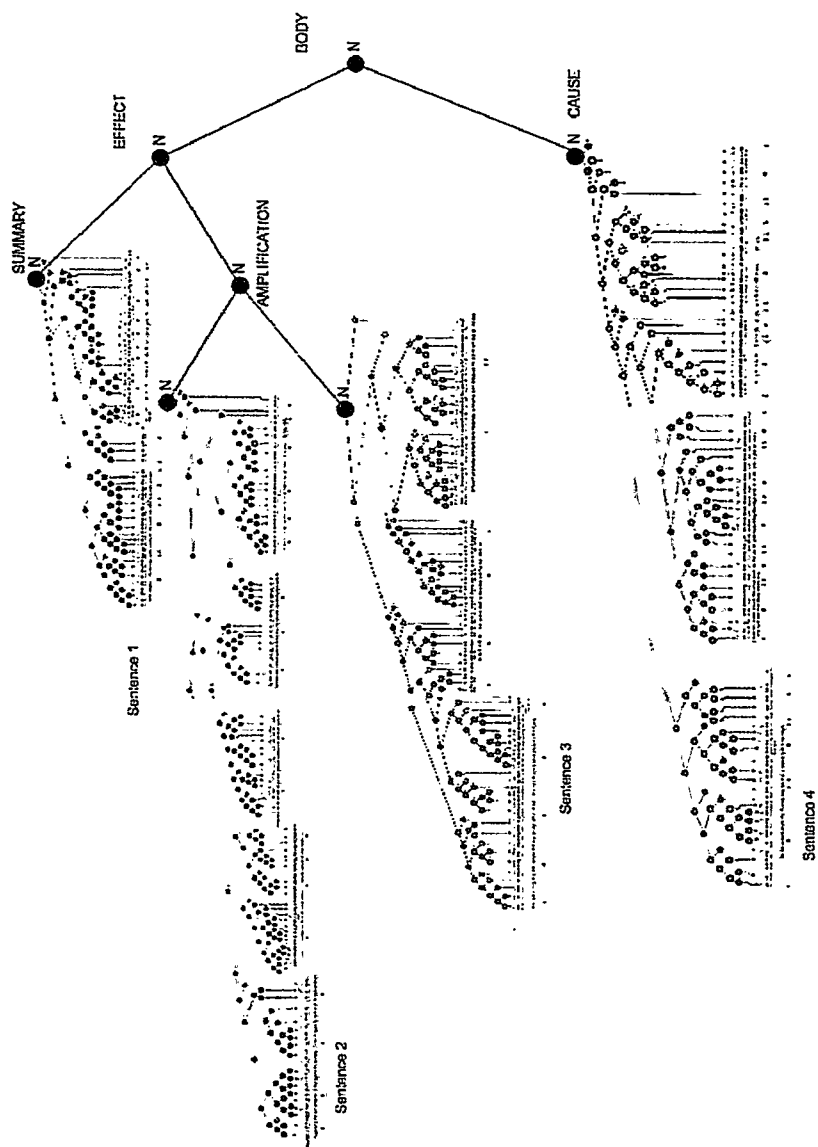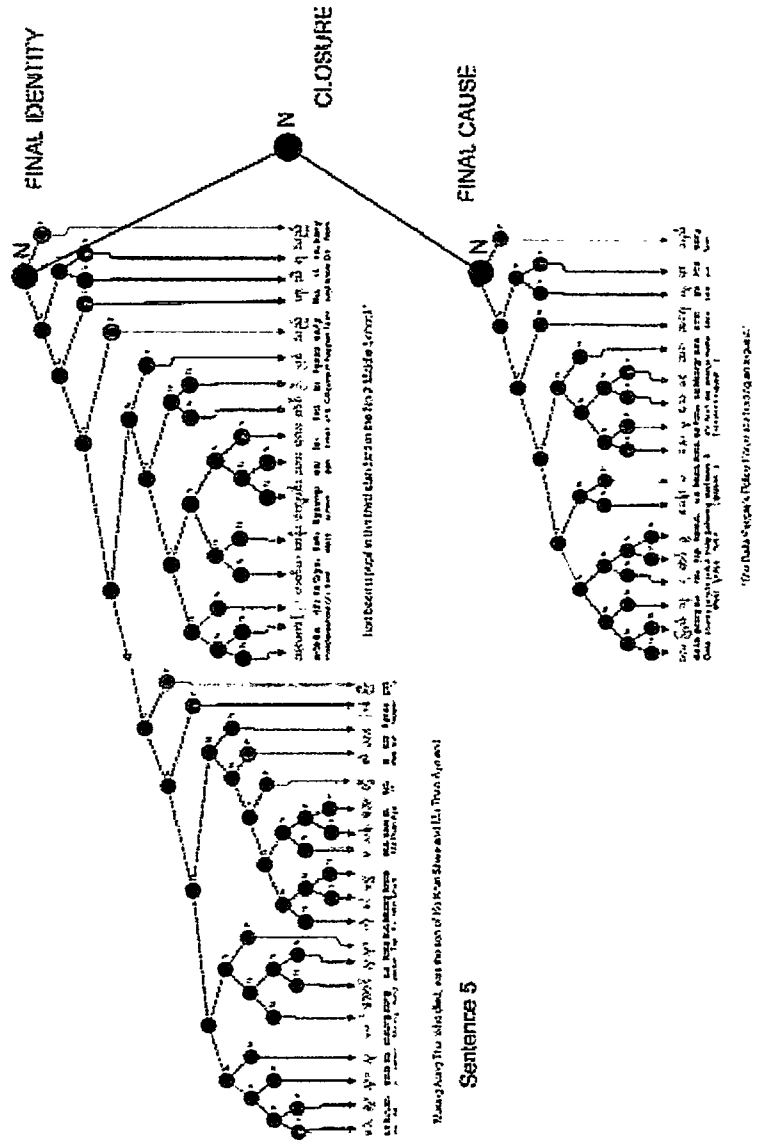
(1)
[Agent (unmarked) Patient Verb] Nominalizer
[John   letter (ကို **kui**) write] သည် **sany**

(2) As an *independent clause*: John writes/wrote the letter.
John   စာ   ရေး   သည်
         sa   **re:**   **sany**
John   letter   write   Nom/SF

(3) As a *nominalized clause*: That John wrote a letter....
John   စာ   ရေး   သည်
         sa   **re:**   .   **sany**
John   letter   write   Nom/Topic

The above pattern is exactly that of an independent clause or sentence. It is the pattern of a dependent clause. It is the pattern of a nominalized clause. There is no significant difference in Burmese between a simple sentence and a nominalized clause except for the many more particles in the independent, or final clause, that refer to the sentence as an object as a whole. This view is perhaps original here, so further comment is made since this study does not include the verb phrase and its detailed structure.

Post-verbal particles are analyzed as higher level heads to 'daughter' units that constituent often the whole of the preceding content. Thus verb particles like ရှိ **hri.** in the verb phrase သိရှိပြီး: **si. hri. pri:** 'know be Complete' the relationship of သိ

si. 'know' is as head to the larger construction of what was known. The verb ရှိ **hri.** 'be' is a further predication in a chain of predications that the whole clause of which သိ **si.** is the head, exists. It is as if to say 'x knows y' then the next predication indicates in the verb chain that " 'x knows y' exists"'. (See Sentence 3 part 2 of Snake Bite Text for a complete display of relationships.)

The following list corresponds to the types of nominalization patterns observed cross-linguistically. In Burmese, these are patterns are based upon the same basic set of a regular nominalized clause pattern: Clause-Nom, or the relative clause pattern: of an object or subject nominalization with the specific argument extracted as the head nominal of the relative clause:

(4) Clause - Nom Head [Subject / Object]

A further principle of tight (reduced) construction mirroring the semantic blending of elements into a whole is also exemplified in Burmese nominalizations. The basic principle being that reduction of postposition particles reduces the grammatical and phonological 'bulk' and that simplification iconically mirrors the extent of blending of the concepts into a whole unit. (See the Adjectival Nominal below.)

1   Action Nominal

John's writing the letter ...(surprised us).

(5) The letter John wrote (surprised us).

ဂျောဟန်	ရေး	သော	စာ	ကို	(ကျွန်မ	တို့	သည်	အံ့ဩ	စေ	သည်။)
jon	re:	sau	ca	kui	(kywan ma.	tui.	sany	am. au	ce	sany)
[[[John	write]	Atr]		letter]	G]	(1p - female)	Pl	Nom/Top	surprise	Cs	Nom/Sf)

The full sentence is included here in order to demonstrate the full form, but what is focal is the nominalized clause (in black font) which functions as the object of the matrix clause.

(6) John's letter he wrote surprised us.

ယောဟန်	ရေး	သော	စာ	သည်	(ကျွန်မ	ကို	အံ့သြ	စေ	သည်။)
jon	re:	sau	ca	sany	(kywan ma.	kui	am. au	ce	sany)
[[[[John	write]	Atr]	letter]	Top/Nom]	(1p - female)	Ob	surprise	Cs	Nom/Sf)

The difference between the action nominal in 5) and 6) is the profiling of the nominalized clause. In both examples the internal structure of the nominalized clause is exactly the same with the extracted object of 'letter' to form a construction of an attributive nominal clause. In 5) the 'letter' is the direct object marked by ကို **kui** and in 6) it is the topic marked by သည် **sany**. The topicalized nominal has the force of establishing the ground or basis for something else to follow.

(7) For John to write the letter....(surprised us)

ယောဟန်	ဒိ	စာ	ကို	ရေး	(ရ).	ခြင်း	သည်
jon	di	ca	kui	re:	(ra.)	hkrang:	sany
[[[[[John	[Dm-p	letter]]	Ob]	write]	(De)]	Nom]	Nom]

Here the deontic particle is not obligatory in the nominalizing construction, but when added, the semantic force of the nominalization is reinforced as being 'off' the main proposition line of the sentence. While it is perfectly clear grammatically that this nominal clause is subordinated to the main clause, the nominalizer itself is semantically 'bland' and thus is more likely to occur with such verbal particles that establish the reason or type of action of the nominalized clause in relation to the main clause.

2   Factive

(8) That John wrote the letter....

ယောဟန် ဒီ စာ ကို ရေး ခြင်း ကို ပင်

| jon | di | ca | kui | re: | **hkrang:** | kui | pang |
| [[[[[John | [Dm-p | letter]] | Ob] | write] | **Nom]** | Ob] | Emp] |

(9) That John wrote the letter....

ယောဟန် စာ ကို ရေး ခဲ့ ခြင်း

| jon | ca | kui | re: | hkai: | **hkrang:** |
| [[[John | [letter | Ob] | write] | Pr] | **Nom]** |

(10) That John wrote the letter....

ယောဟန် စာ ကို ရေး ရ ခြင်း သည်

| jon | ca | kui | re: | ra. | **hkrang:** | **sany** |
| [[[[John | [letter | Ob] | write] | De] | **Nom]** | **Nom]** |

(11) John's having written the letter....

ယောဟန် စာ ရေး ့ခဲ့ သည်

jon	ca	re:	hkai.	**sany**
[[[John	let-	write]	Pr]	**Nom]**
	ter			

3   Future Nominal

(12) That John will write the letter....

J.   စာ ကို ရေး လိမ့် မည်॥

| jon | ca | kui | re: | lim. | **many** |
| [[[[John | [letter | Ob]] | write] | Psb] | **IrRl]** |

(13) John's (future) writing the letter...

J.   (နောက်မှာ) ရေး မည့် စာ သည်

| jon | nauk hma | re: | **many.** | ca | sany |
| [[[[[John | afterward] | write] | **IrRl/ Rel]** | letter] | Nom] |

4   Procedural

(14) John's writing of the letter...

စာ ကို J ရေး ထား သည့် ပုံ သည်

ca	kui	jon	re:	hta:	**sany.**	pum	sany
[[[[[letter	Ob]	John	write	put]	**Nom/ Rel]**	manner	Nom]
						]	

By using the head noun ပုံ **pum** as a nominal in its basic meaning as manner or way of doing something, i.e. how he wrote the letter, the construction allows focus on the action of writing and amplification of that verb with the possibility of additional specifiers of action.[1] The manner nominal becomes the head of the immediate relative clause construction with the object role extracted to the left. This fronting is not necessarily focus shifting for the purpose of highlighting the object. Rather the process of tightening the construction by placing the agent next to the verb, invokes a closer formal semantic blending of the nominalized clause giving the reading of emphasis on the procedure.

(15) The way John writes (wrote) the letter....

J.	စာ	ရေး	တဲ့	ပုံ	သည်/က
jon	ca	re:	tai.	pum	sany / ka.
[[[[John	[letter	write]]	Nom/ Rel]	manner]	Nom/ A]

5 Infinitive

(16) To write the letter....

စာ	ရေး	ရန်
ca	re:	ran
[[letter	write]	Pur]

(17) Writing the letter...

စာ	ကို	ရေး	ရ	ြခင်း
ca	kui	re:	ra.	hkrang:
[[[[letter	Ob]	write]	De]	Nom]

---

[1] Note, the view taken here differs from traditional Burmese grammar in which post-verbal particles are regarded as auxiliaries to the main verb which is the head of the construction. Here particles are regarded as heads of the construction. Successive particles following the main verb are treated as types of higher-level propositions whose scope may relate to the whole sentence rather than as an apparent immediate constituent of the verb.

6 Agentive

(18) Whoever writes (wrote... the letter)

မည်	သူ	မ	ဆို	ရေး	သည့်	စာ	ကို /သည်
many	su	ma.	hcui	re:	**sany.**	ca	kui / sany
[[[[[I/IrRI	person	Ng	say]	write]	**Nom/ Rel]**	letter]	Ob/ Nom]

Nominalization of the action with explicit mention is typically realized as a relative clause. The role of the agent is in normal clause order. The object is extracted.

7 Future Agentive

(19) Whoever is going to write the letter...

မည်	သူ	မ	ဆို	ရေး	မည့်	စာ	ကို/ သည်
many	su	ma.	hcui	re:	**many.**	ca	kui/ sany
[[[[I/IfRI	person	Ng	say]	write]	**Nom/ Rel**	letter]	O/Nom]

Future agentive is no different from realis agentive in that both are best realized as relative clauses. The difference with the future is the use of the irrealis postposition မည်. **many**, marked by creaky tone which phonologically restricts close juncture. One function of open juncture here is to keep the relative clause constituency clear. That is one would not mistake this clause for a final clause due to this tone change and other intonational characteristics. The extracted grammatical object also marks the clause structure as distinctly subordinate.

8 Professional Nominal

(20) A letter-writer

စာ	ရေး	ဆရာ
ca	re:	hcara
[[letter	write]	teacher]

(21) A thing used for writing letters....

စာ	ရေး	သည့်	အခါ	သုံ	သည်
ca	re:	**sany.**	a-hka	sum	sany
[[[[[letter	write]	**Nom/Rel]**	time]	use]	Nom]

(22) A person used for writing letters....

သူ	စာ	ရေး	ရန်	သုံ	သည်
su	ca	re:	ran	sum	sany
person	letter	write]	Pur]	use]	Nom]

9 Agentive Nominal (Attributive)

(23) John, who is writing the letter... (attribute of the subject)

ဤ	စာ	ကို	ရေး	နေ	သော	John..
i:	ca	kui	re:	ne	**sau:**	John
Dem-p	letter	O	write	Prs	**Acc**	John

(24) John, who is writing the letter... (proposition – statement)

ဤ	စာ	ကို	ရေး	နေ	သည်.	John
i:	ca	kui	re:	ne	**sany.**	John
Dem-p	letter	O	write	Prs	**Nom/Rel**	John

10 Future Attributive Nominal

(25) John, who'll write the letter

ဤ	စာ	ကို	ရေး	မည့်	John,
i:	ca	kui	re:	**many.**	John
Dem-p	letter	O	write	**Nom/IrRI/Rel**	John

11 Participial Nominal

(26) The letter which John wrote...

John	ရေး	ခဲ့	သည်.	စာ
John	re:	hkai.	**sany.**	ca
John	write	Pr	**Nom/Rel**	letter

12 Future Participial Nominal

(27) The letter which John will write.

John	ရေး	မည့်	စာ
John	re:	**many.**	ca
John	write	**Nom/IrRI/Rel**	letter

This is a simple irrealis relative clause, a very common type of nominalization in Burmese.

13 Participial Nominal (with Genitive)

(28) John wrote the (first page of) the letter.

ရေး ထား သော စာ

re:	hta:	**sau:**	ca
write	put	**Atr**	letter

14 Adjectival Nominal

(29) The letter on the table...

စာ: ပွဲ ပေါ် ရှိ စာ

ca:	pwai:	pau:	hri.	ca
eat	gather	upon	be	letter
	table			

This construction is reduced without the postpositional markers and is semantically blended into a whole concept this is in contrast to (30):

(30) The letter which is on the table...

စာ: ပွဲ ပေါ် မှ ရှိ တဲ့ စာ

ca:	pwai:	pau:	hma.	hri.	**tai.**	ca
eat	gather	upon	Loc	be	**Nom/Rel**	letter
	table					

This is a predicative relative clause rather than a property of the head nominal, a proposition versus the attributive clause. The difference between the attributive and proposition semantically, although they have the same contents, is profiling.

15 Attributive Nominal

(31) The man with the letter....

စာ ကိုင် ထား: သည့် လူ

ca	kuing	hta:	**sany.**	lu
[[[[letter	grasp]	put]	**Nom/Rel**]	person]

To make the construction more highly active or more transitive another verb like ဿာ: **hta:** 'put' is used to indicate the manner of the action 'grasping the letter'. The first construction emphasizes the action of the man, while the second construction shows the relationship of the man to the letter as not one of action but of accompaniment, yet with the whole construction as a nominal that could be translated into English as 'letter man' in the sense that he is the one who has the letter, or the reading where he is characterized as the person with the letter. His identity is of having a letter.

(32) The man with the letter.... (a letter man).

စာ	နှင့်	လူ
ca	hnang.	lu
[[letter	Acc]	person]

(33) The man with the letter... (a man who had a letter).

စာ	ရှိ	တဲ့	လူ
ca	re:	**tai.**	lu
[[[letter	be]	**Nom/Rel]**	person]

16 Adjective Nominal

(34) The long letter....

စာ	ရှည်
ca	hrany
letter	long

(35) The letter which is long....

ရှည်	သည့်	စာ
hrany	**sany.**	ca
long	**Nom/Rel**	letter

17 Abstractive Nominal

(36) The length of the letter...

စာ ရဲ့ အရှည်
ca   rai.   a-hrany
letter Poss **Nom-long**

18 Genitive Nominal

(37) John's letter...

John ၏ စာ

jon   e.   ca
[[John **Poss]** letter]

(38) John's letter...

John ရဲ့ စာ

jon   **rai.**   ca
[[John **Poss]** letter]

19 Attributive Nominal

(39) The written letter...

ရေး ထား သော စာ
re: hta: **sau**   ca
[[[write put] **Atr/Nom]** letter]

20 Action Noun

(40) Writing (of things)... (action)

ရေး ထား သည့် အကြောင်း အရာ
re: hta: **sany.**   a-kraung: a-ra
write put   **Nom/Rel**   reason   Nom-thing

    Here the distinction of an action versus a quality is contrasted by the selection of သည့် **sany** variant, either သည့် **sany**, which selects the action reading, or သော **sau** (below) which emphasizes the verb as a property of the head nominal. Even though the subordinate verb is a property of something else, it is still possible to maintain a higher transitivity with the verb ထား: **hta:** 'put'.

(41) Writing (of things)... (quality)

ေရး ထား ေသာ အေၾကာင်း အရာ

re:	hta:	**sau**	a-kraung:	a-ra
write	put	**Atr**	reason	Nom-thing

21 Derived Noun

(42) The inscription... (stone inscription)

ေရး ထို: ြခင်း

re:	htui:	**hkrang:**
write	hit	**Nom**

The difference between these two nominals is the second verb ထို: **htui:** 'hit/ incised' versus ထား: **hta:** 'put', which signals differences in manner in the action of writing, and therefore infers a different media. Both are gerund type nominals. There are of course other type nominals for this same meaning, but the distinction between ေကျာက်စာ **kyauk ca** stone+letter 'inscription' and ေရး:ထို:ြခင်း: 'inscription' (above) is actual similar to the difference between result and event nominals.

(43)The inscription... (paper or flat surface inscription)

ေရး ထား ြခင်း

re:	hta:	**hkrang:**
write	put	**Nom**

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