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1986

Verb Concatenation in Southeast Asian Languages:
A Cross-Linguistic Study

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M.A. (University of California) 1975

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Linguistics

in the

GRADUATE DIVISION

OF THE

UNIVERSITY OF CALIFORNIA, BERKELEY

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DOCTORAL DEGREE CONFERRED
DECEMBER 16, 1986

Verb Concatenation in Southeast Asian Languages:
A Cross-Linguistic Study

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Donald R. Goral

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A Cross-Linguistic Study

Donald R. Goral

Abstract

A verb concatenation is defined to be a sequence of two or more verbs in a sentence. Verb concatenations were studied and compared in five Southeast Asian languages: Burmese, Cambodian, Indonesian, Thai, and Vietnamese. The basic objectives of the study were to find semantic and syntactic criteria for analyzing verb strings without overt grammatical markers and to determine the extent to which verb concatenation could be considered a Southeast Asian areal feature.

The cross-linguistic approach was supported by noting that the languages under consideration are related through genetic affiliation (in some cases), historical contact, and typological similarities.

The theoretical orientation of this study was 'eclectic heuristicsm'; that is, useful ideas and analytic techniques were adapted from various linguistic traditions, without subscription to the traditions themselves.

The data consisted of sentences and phrases, together with their English translations, found in various grammar texts and dictionaries.

Previous treatments of verbs in various linguistic frameworks and for languages outside this study were sum-

marized, and treatments of verbs in each of the five languages were analyzed critically.

Cross-linguistic patterns of various sorts were discovered and demonstrated. Some verbs were shown to have systematic meaning-shifts corresponding to position-shifts with respect to other verbs. Next, cross-linguistic verb sub-classes were set up, such that the classes could easily be defined by semantic and/or syntactic criteria, and such that membership in those classes would facilitate predicting the function of the member verbs in verb concatenations.

Implications of this study were discussed with respect to the status of lexical categories, the relationship between syntax and semantics, and the cross-linguistic approach to the study of grammatical problems.

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ABBREVIATORY CONVENTIONS & DOCUMENTATION

This dissertation is divided into eight chapters, denoted by roman numerals, and the chapters are divided into sections and sub-sections, denoted by decimal numbers. When a section is referred to in the body of the text, the section number is underlined, e.g. 2.2.3.

Each Figure is given the number of the section to which it belongs. If there is more than one figure in a section, then the section number is followed by a, b, etc.

If it is not otherwise clear from the context which language a particular item is from, the following labels are used.

- | | |
|----------------|----------------|
| (B) Burmese | (T) Thai |
| (C) Cambodian | (V) Vietnamese |
| (I) Indonesian | |

In each Figure which lists utterances from more than one language, the utterances are labeled (B-1), (B-2),..., (C-1), (C-2),..., (I-1), (I-2),... (T-1), (T-2),..., (V-1), (V-2)... If an utterance is referred to in the same section in which it is introduced, the above labels are used. If an utterance is referred to in a different section, then the section of origin is added.

Most of the data appears in the form of sentences or phrases in broad phonetic transcription for Burmese, Cambodian, and Thai, and in standard orthography for Indonesian and Vietnamese, followed by word - by - word translations into English, followed by free English translations. Each word in the word - by - word translations is separated from its neighbors by a hyphen "-". In some cases, primarily in Vietnamese, the constituents of compounds are separated by spaces in the orthography. For clarity, I indicate compounds with a "+", both in the original sentence or phrase and in the word - by - word translations.

I do not enjoy searching for footnotes at the bottoms of pages, at the ends of chapters, or at the end of a book, and I do not wish to inflict this activity on the reader. Therefore, all comments occur in the middle of the text. To cite quoted material, I give the author and page number in parentheses. If more than one reference exists for a particular author, then I add the date. If more than one work was published in the same year, I add the letter a or b after the date. These citations occur after the cited material. If several items in succession come from the same source, I cite the reference once at the end of the group of items. The complete bibliographic information is found in the Bibliography.

ACKNOWLEDGEMENT

I would like to thank all the scholars cited in this study, who collected the data which I was able to analyze. Whether I agreed or disagreed with their analyses, they gave me valuable ideas to grapple with.

And, of course, thanks to all the friends who kept asking me, "When are you going to finish?"

I. INTRODUCTION

1.1 Definition of Verb Concatenation. Verbs are not inflected in Southeast Asian languages such as Burmese, Cambodian, Indonesian, Thai, and Vietnamese. Thus, unlike the situation in Indo-European languages, Southeast Asian verbs are not overtly marked for such grammatical categories as number, gender, or tense. This study is concerned with two consequences of this lack of verbal morphology. First, verbs can neither be defined nor characterized by their occurrence in inflectional paradigms which differ from the paradigms of other well-defined word classes, such as nouns and adjectives. Therefore, other criteria will be needed to define the class of verbs in each language. Second, it is possible to have a sentence containing a sequence of two or more verbs, without any overt markings to identify the functions of each verb. The occurrence of such a sequence of two or more verbs in a sentence is called verb concatenation or verb serialization.

1.2 Interaction of Syntax and Semantics. The immediate question suggested by the existence of verb concatenation is: how can such sequences be analyzed? In The Grammar of Lahu, Matisoff claims that "there is a well-defined class of cases where the evidence indicates that it is the inherent semantic features of individual verbs which actually determine the structural descriptions of concatenations." (Matisoff, p. 199). Hence, besides its own intrinsic interest, verb concatenation provides an approach to

the study of the interaction of syntax and semantics.

1.3 Distinction Between Word Classes. The apparently innocuous problem of subcategorizing the verbs in a given concatenation quickly leads to wider problems. Distinguishing verbs from non-verbs is prerequisite to the analysis of verb strings, and the differences between Southeast Asian languages and Indo-European languages cast doubts on the entire traditional scheme of parts of speech. It will be shown later that there are confusions between the categories of verbs, adjectives, nouns, and prepositions.

1.4 Mutual Intertranslatability of Southeast Asian Languages. This study has another motivation besides the linguist's standard quest for the most elegant and revealing grammatical analysis of a given individual language. A brief excerpt from Haas's foreward to Thompson's A Vietnamese Grammar gives the background for this motivation.

"But problems of genetic relationship are by no means the only challenging problems regarding these languages. For centuries the great civilizations of India and China exerted a strong influence in matters of religion, literature and the arts, and in manners. This is reflected in the various languages which often show a heavy overlay of borrowed words from Pali and Sanskrit and from Chinese. The Indic influence was particularly strong in Burma, Thailand, and Cambodia, while the Chinese influence was dominant in Vietnam. More recently the influence of European languages has not been negligible. Of these, Portuguese

was perhaps the earliest, but Dutch, English, and French have also contributed their share. Moreover, at a deeper level we see that long contact among members of the various indigenous linguistic families has given rise to certain broad similarities characteristic of a linguistic area. Prominent cross-genetic features include the widespread use of status and kin-term pronominals, of numeral classifiers, and of complex verbal strings. As a consequence, any two languages of the area, whether related or unrelated, offer far greater ease of intertranslatability than either does with a European language." (Thompson, p. viii).

While studying individual Southeast Asian languages, I have often been struck by syntactic and semantic correspondences which appear to ignore genetic boundaries, although those boundaries are often in dispute.

Vietnamese: phải 'correct', toi phải đi

I - must - go

Cambodian: traw 'correct', knom traw tɨw

I - must - go

Vietnamese and Cambodian have been put into the "Austro-Asiatic" group of languages (Burling, p. 164), but Burling pointed out that many linguists are skeptical of this claim, and the most that Ehrman says is that "Mon-Khmer is probably related to Vietnamese." (Ehrman & Sos, p. 2). However, the above examples show that two words, bearing no phonetic similarities to each other, have the same meanings in isolation and the same shift in meaning and function

when preceding the word go. The correspondence is not perfect, because phái² also means 'right' (the direction), while Cambodian requires a different word for the direction. Still, such correspondences are abundant among the languages of Southeast Asia.

1.5 Purpose of Study. The primary purposes of this study are to formulate and justify a characterization of verbs in Southeast Asian languages and then to develop a cross-linguistic analysis of strings of concatenated verbs.

Correspondences such as those mentioned in 1.4 led me to an areal, rather than merely a language-specific, approach to the study of verbs. Despite the numerous differences between languages, I believe that there is a sufficiently large common set of grammatical patterns to warrant an areal analysis.

One practical and personal motivation for an investigation of verb concatenation is that it is such a widespread construction in Southeast Asian languages that I need to understand it in order to speak any single language. In "Numeral Classifier Systems: A Cross-Linguistic Analysis" (Goral, 1978), I applied a similar approach to another Southeast Asian areal feature. Eventually, I would like to expand this areal study to form an introductory description of the major areal features which would be useful to any student of Southeast Asian languages.

On a more abstract level, this investigation has impressed me with the inadequacy of existing linguistic theo-

ries. Generally, I have found that the theoretical arguments to which I have been exposed are irrelevant, if not hindrances, to comprehension of the grammars of any of the Southeast Asian languages which I have studied. Thus, verb concatenation supplies linguists with a mass of data which must be handled by any theory which claims to have universal applicability.

Another factor which highlighted the need for such a study for me is illustrated by the contrast between the grammars of Burmese written by Cornyn & Roop (Cornyn & Roop) and by Okell (Okell, 1969). These two works describe the same dialect of the same language, yet as will be shown below, they disagree on many points. If one wishes to compare any two languages, one usually must peruse grammars written by different linguists, often working in distinct theoretical frameworks. Therefore, it can be difficult to determine whether apparent contrasts between the languages are due to actual differences between the languages or only to differences between the analyses. The Burmese example shows that the latter is sometimes the case. Hence, another goal of this study is to provide a descriptive framework which is capable of handling data from any language in the area. On the syntactic and semantic levels, this corresponds to the development of the International Phonetic Alphabet on the phonetic level.

1.6 Scope of Study. I am concentrating on five national languages: Burmese, Cambodian, Indonesian, Thai, and

Vietnamese. Pragmatically, I have access to grammars and dictionaries of these languages. Also, they represent the major language families of the area.

In the literature on Southeast Asian linguistics, most of the articles which I have found are concerned with only one language or contain superficial generalizations about 30, 50, or more languages. I decided to steer a middle course between these extremes. In my study of numeral classifiers (Goral, 1978), I found that some properties of classifiers only revealed themselves when typologically distinct languages were compared. For example, repeaters, that is, words which are their own classifiers, only occur in languages with numeral phrases of the form noun + numeral + classifier and not in those languages with numeral phrases of the form numeral + classifier + noun. This kind of information is relevant to my analysis of the semantics of repeaters. On the other hand, the general surveys tended to be incorrect in their conclusions about languages which I had studied, making me suspicious of the statements made about languages which I had not studied. To avoid this kind of error, I have spent from several months to several years studying each of the five languages cited above. Malaysian and Indonesian may be considered as closely related dialects of the same language. In this study, I emphasize Indonesian, because I had the opportunity to study it, but the near-identity of grammatical patterns permits the use of Malaysian data, which will be

explicitly labeled.

While my detailed remarks will be confined to these five languages, I will briefly discuss data and theoretical results obtained from other Asian languages, such as Chinese and Lahu, and from African languages. Evidence from African languages suggests that verb serialization is more than an areal feature (Givon, 1975). In addition, even if the actual analyses of African verb concatenation differ from those of Asian verb concatenation, the methodologies may be interchangeable.

1.7 Theoretical Orientation and Methodology. As I indicated in 1.5, I do not think highly of recent theoretical developments in linguistics. Because no systematic linguistic paradigm is satisfactory, in my opinion, I prefer to apply Matisoff's "eclectic heuristicism" (Matisoff, 1973, p. 1). I have been exposed to and trained in various sorts of structuralist and generative traditions. Also, I have read works by scholars of earlier traditions, such as Sweet (Sweet, 1891, 1898) and Jespersen (Jespersen, 1921, 1924). The earlier scholars wrote more elegantly and clearly than most of the recent ones. Without using much formalism, both Sweet and Jespersen were able to discuss both syntax and semantics quite clearly. One defect in their work, from a modern point of view, was that many results were merely asserted, with no attempt at theoretical justification.

I use some of the concepts and notation from all of the

above-mentioned sources, but I do not accept most of the theoretical assumptions. I will make more detailed criticisms in discussing individual works. In generative terms, I will stay as close to the surface as possible in my analysis. Thus, I am primarily concerned with classifying the permissible occurrences of verb strings and the meanings associated with them. Following Matisoff's approach in The Grammar of Lahu, I am willing to postulate abstract underlying structures, if they unify and clarify the observed surface phenomena (Matisoff, 1973a, p. xlviii).

In order to avoid introducing any personal bias, my data are mainly sentences and phrases in each language, along with the corresponding translations given in the various references I have used. Most of the examples were intended to illustrate aspects of grammar or vocabulary, but only some of them were specifically included in these references to illustrate verb concatenation. Thus, I have no reason to suspect a theoretical bias, directly related to verb concatenation, in the translations. Also, I have more than one source of data for each language, to further counteract possible biases in any particular reference.

II. GENETIC AFFILIATIONS, HISTORICAL CONTACT, AND LANGUAGE TYPOLOGY

2.1 Linguistic Description and Similarities Between Languages. One of the functions of linguistics is to account for the similarities and differences between languages. Indeed, the discipline of comparative or historical linguistics was largely motivated by the need to explain widespread similarities between languages. Linguists have always had to deal with the problem of describing each language in its own terms or attempting to fit all languages into a common framework. This conflict goes all the way back to the ancient Greeks (Robins). Aristotle led the school of analogists, which emphasized the regularities of language, and the Stoics led the school of anomalists, which emphasized the irregularities of language. Since the Greeks concentrated mainly on their own language, this controversy was actually about whether a single language was basically systematic and therefore describable by rules or basically an arbitrary set of conventions which could only be listed.

The starting point for this study was the observed similarity in verb concatenation among Southeast Asian languages. I will not attempt to explain the causes of these similarities, but I will discuss various hypotheses. As discussed in the further sections of this chapter, there is evidence which is consistent with the hypotheses of borrowing, genetic affiliation, and typological pressure.

This evidence is sufficient to justify searching for a common descriptive framework. In particular, a cross-linguistic theoretical descriptive framework is necessary to distinguish the language-specific features of verb concatenation from the cross-linguistic features.

In this chapter, without trying to decide the origin of each cross-linguistic similarity, the possible reasons for these similarities will be outlined. Then, the current consensus for genetic affiliations will be presented. Finally, the data concerning historical contacts and possible diffusion of grammatical features in Southeast Asia will be discussed.

2.2 Reasons for Similarities Between Languages

2.2.1 Chance Relationships. A possible explanation for any observed similarity between two languages is chance. However, if the similarities are numerous and systematic, the probability of their occurrence being due to pure chance becomes too small to be plausible.

2.2.2 Borrowing. If pure chance is dismissed as the explanation, then other reasons for similarities must be found. Detailed discussions of these reasons can be found in such works as Lehmann's Historical Linguistics: An Introduction (Lehmann), but a brief sketch can be given here. If two languages have ever been in contact with one another, then it is possible for sounds, words, or grammatical features to be "borrowed" from one language to the other. For example, the word amuck, as in the English expression

to run amuck, came from the Malay word amuk. Here, the proposed mechanism for this borrowing is that speakers of English came into direct contact with speakers of Malay or came into contact with other individuals who had direct contact with speakers of Malay and so learned this word. The amount of borrowing between two languages may be limited to a few words or may be quite extensive and can go in one or both directions between the languages.

2.2.3 Genetic Affiliation. Another mechanism proposed to account for similarities between languages is divergence from a common ancestral language at some point in the past. First, the members of a single speech community would become separated into two or more groups. In each isolated group, the language would change over time in unpredictable but systematic ways. This process can be documented in written records in the case of Latin developing into the modern Romance languages: Spanish, French, Italian, etc. In other cases, the linguist is confronted with systematic correspondences between existing languages and postulates a proto-language along with rules to derive existing words from hypothetical proto-words. For example, Proto-Indo-European was postulated to account for the similarities between most languages found from Europe to northern India. Given such forms as English foot; Sanskrit pāt, pad, pādam, padah; Greek πούς, πός, πόδα; Hittite pata; Latin pēs, pedem; Gothic fōtus; Old English fōt; Old High German fuoz; Armenian ot-n, het 'footprint'; Old Norse fet 'step, foot

as measure'; the Proto-Indo-European forms *pod- and *ped- were reconstructed, with the * indicating that the actual forms were never attested, but only hypothesized (Beeler, p. 1). Languages which can be demonstrated to be related in this way are said to be genetically affiliated. In practice, it is often difficult to distinguish borrowing from genetic affiliation, and the difficulty is compounded by the possibility of both processes occurring together. For example, English and French are both considered members of the Indo-European family of languages; i.e. they are descended from Proto-Indo-European. However, with the Norman conquest of England, many French words entered the English language.

2.2.4 Language Typology. Chance similarities between languages clearly do not require any contact between the languages under consideration. On the other hand, both borrowing and genetic affiliation imply that the languages were in contact at some period or periods of their histories. Chance and borrowing can be used to explain some of the similarities between languages, while genetic affiliation is the basis of one system of classifying languages. The genetic affiliations of the Southeast Asian languages analyzed here will be discussed below. Also, "Languages can be compared and classified according to their types of structure, regardless of whether or not they are genetically related. This method of classification constitutes the typology of languages." (Chao, 1968, p. 87). Greenberg has

developed this approach in his search for linguistic universals, which are generally statements of the form: "If a language has inflection, it always has derivation." (Greenberg, p. 90).

2.2.5 Typology and Biology. Although typology may be a useful classificatory system, it is not an explanation, and Greenberg does not give reasons for his universals; they are only empirical observations. Chomsky asserts, "Thus it may well be that the general features of language structure reflect, not so much the course of one's experience, but rather the general character of one's capacity to acquire knowledge - in the traditional sense, one's innate ideas and innate principles." (Chomsky, 1965, p. 59). Again, this is an assertion, not an explanation. Chomsky's argument is that taxonomic linguistics is basically empirical in its approach to linguistic description, and because, according to various arguments which will not be discussed here, taxonomic linguistics was considered inadequate, transformational grammar along with a rationalistic philosophy is preferred by Chomsky (Chomsky, 1965, pp. 47-59). Chomsky presents no evidence for "innate ideas" except that he believes that they are necessary to explain language acquisition in humans.

One of the preoccupations of generative grammar is the search for linguistic universals. These are supposed to be grammatical categories or properties of language which are common to all languages, either on the level of direct

observation or on the level of abstract theory (Chomsky, 1965, pp. 27-30). These universals would represent the innate principles of language acquisition and organization which would presumably be transmitted as part of man's genetic heritage. In a generative theory, the universals would be stated at an underlying, abstract level, and then language-specific rules would derive the structures observed in each language.

In Biological Foundations of Language, Lenneberg discusses various conjectures about language in humans being a gradual continuation of sub-human communication systems or a qualitatively different development (Lenneberg). However, his survey of the biological data relevant to language shows that too little is known to support or refute Chomsky's assumptions about innate ideas. Nevertheless, Lenneberg uses a generative model similar to that developed in Chomsky's Aspects of the Theory of Syntax (Chomsky, 1965), but he does so without any biological justification.

2.2.6 Natural Logic. Another approach to underlying or abstract linguistic universals involves the idea of natural logic, which was incorporated in the semantically based forms of generative grammar. Thus Lakoff states: "Evidence is presented to show that the role of a generative grammar of a natural language is not merely to generate the grammatical sentences of that language, but also to relate them to their logical forms. The notion of logical form is to be made sense of in terms (of) a 'natu-

ral logic', a logical [sic] for natural language, whose goals are to express all concepts capable of being expressed in natural language, to characterize all the valid inferences that can be made in natural language, and to mesh with adequate linguistic descriptions of all natural languages. The latter requirement imposes empirical linguistic constraints on natural logic." (Lakoff, p. 151). The paper goes on to indicate some of the desired properties of natural logic without explicitly developing such a logic. As with Chomsky's innate ideas, the concept of natural logic does not provide an empirically based theory from which typological observations can be derived.

2.2.7 Typological Pressure. Although, as the above sections indicate, conjectures about the biological, psychological, or logical bases of language have been made, explicit mechanisms or theories are lacking. However, even without such mechanisms, there is evidence for what I will call typological pressure. This is related to the idea of linguistic universals, except that I do not wish to make such sweeping generalizations. I define the term typological pressure to refer to the psychological, biological, and logical principles, known or unknown, which cause a given linguistic structure to occur in a language when another linguistic structure is present.

For example, typological pressure is useful in explaining the occurrence of repeaters in the numeral classifier phrases of some languages. A numeral classifier is a word

used to make a mass noun countable, e.g. a loaf of bread, a sheet of paper. It turns out that only some languages have repeaters, that is, nouns which are their own classifiers (Goral, 1978, pp. 20-21, 33-34). These are the languages which have numeral classifier phrases of the form noun + numeral + classifier. Languages with classifier phrases of the form numeral + classifier + noun do not have repeaters. Reduplication is a common process among Southeast Asian languages and usually indicates plurality or generalization of some kind. Thus, a repeater directly preceding the classified noun could possibly be confused with reduplication. Whatever the underlying cause, the observed correlation is clear. Since the existence of repeaters is correlated with a typological datum, the word order of classifier phrases, and is not randomly distributed among languages, a cross-linguistic cause is suggested rather than a language-specific one.

2.3 Genetic Affiliations Among Southeast Asian Languages. Although it took centuries for the complicated web of languages to become established and spread out through Southeast Asia, the agreed upon genetic affiliations have changed drastically in only a few years. The anthropologist Keyes took a conservative approach by asserting as few genetic relationships as possible (Keyes, pp. 339-341). His scheme is the following, with the underlined languages being those emphasized here:

Figure 2.3a Keyes' Genetic Affiliations of Southeast Asian Languages

Austroasiatic: Mon, Khmer

Austronesian (Malayo-Polynesian): Indonesian

Sino-Tibetan: Chinese, Tibetan, Burmese, Chin, Kachin,
Meo-Yao(?)

Tai: Siamese (Thai), Lao, Shan (Tai possibly included in
Austronesian or Sino-Tibetan)

Viet-Muong: Vietnamese (Viet-Muong possibly included in
Sino-Tibetan, Austroasiatic, or Tai)

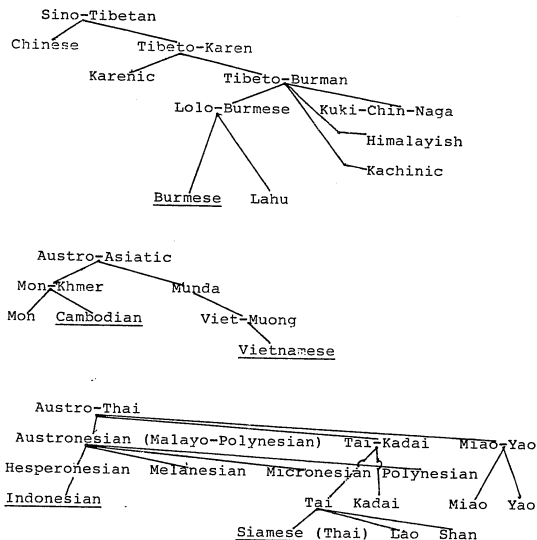
Dravidian (migrants)

Indo-European: English, French, Indian, Pakistani

Other languages are included in each of these families, but the main point is that the five underlined languages belong to separate families. Therefore, it is claimed in this classification that no genetic relationship can be demonstrated between any two of these languages.

Linguists have been more confident about positing more genetic affiliations. The following scheme is based on Benedict's research as cited by Matisoff (Matisoff, 1973b, pp. 84-85) and modified to reflect the 1980 consensus (Matisoff, 1980, personal communication).

Figure 2.3b Matisoff's Genetic Affiliations of Southeast Asian Languages



In this scheme, there are genetic affiliations between Cambodian and Vietnamese and between Indonesian and Thai. Nevertheless, since these affiliations, especially those of Vietnamese and Thai, have shifted about to such a great extent, it has required detailed research to untangle non-genetic from genetic similarities.

2.4 Historical Contact. Speakers of Burmese, Cambodian, Indonesian, Thai, and Vietnamese have been in contact with one another and with common outside languages for centuries. Here, I can not attempt to do justice to the rich history of the region but will only cite facts which are relevant to the development of the languages of South-east Asia.

2.4.1 Vietnam. Throughout its history, Vietnam has been under Chinese influence (Coedès, 1966, p. 218). What is now the northern part of Vietnam was a Chinese province in 111 B.C. and did not become independent until 939 A.D.. What is now the southern part of Vietnam was once the Indianized state of Champa, whose people spoke a Malayo-Polynesian language (Coedès, 1968, p. 9). Besides rebelling against Chinese domination, Vietnam had conflicts with its other neighbors. In particular, Vietnam continually expanded southward, finally conquering Champa in 1471 A.D. (Hall). European influence, in the form of missionaries and traders, was present by the seventeenth century, and France controlled Vietnam, along with Cambodia and Laos, from the mid-nineteenth century until the beginning of World War II. From 1940 until 1945, the Japanese occupied Vietnam. Then, France's attempt to regain power ceased with its defeat at Dien Bien Phu in 1954. The southern part of Vietnam was subjected to an increasing American presence, up to 500,000 soldiers by the late 1960's, but the Americans left by 1973, and the country was reunited in

1975.

2.4.2 Cambodia. In 200 A.D., Funan was the dominant power in what is now Cambodia, and it was the earliest known Indianized state in Southeast Asia (Huffman, 1970b, p. 4). It is not known whether Cambodian was the language of Funan. "At any rate, the fact that Cambodian was the language of Chen-La (550-802 A.D.), Funan's successor in the Mekong Valley, and of the great kingdom of Angkor (802-1431 A.D.), whose suzerainty at its height extended eastward to the sea, northward to Tongking and northern Laos, westward to Burma, and southward to Malaya, is attested by an abundance of stone inscriptions covering the period from the seventh to the eighteenth centuries. Furthermore, the fact that pockets of speakers of Mon-Khmer-related dialects are found all over mainland Southeast Asia seems to indicate that Mon-Khmer in fact represents a much older linguistic substratum which was later engulfed, partially assimilated, and pushed into the hills by succeeding migrations of Vietnamese, Tai, and Burmese." (Huffman, 1970b, p. 4). An example of the international contacts which have occurred between the countries of Southeast Asia throughout their histories is the Cham seizure of Angkor in 1177 A.D.. By the end of that century, the Khmers had recovered their strength and gone on to annex Champa (Coedès, 1968). Along with Vietnam, Cambodia was part of French Indochina until World War II. Afterwards, Cambodia maintained a precarious neutrality until

1970, when it could no longer escape involvement in the American-Vietnamese war. As of 1986, there are large numbers of Vietnamese in Cambodia, and its political future is uncertain.

2.4.3 Burma. In Burma, the Pyu, a Tibeto-Burman people, left inscriptions in an Indian script, dating from 500 A.D.. Later, the Mons also left inscriptions with a similar script, but it is not clear whether the Mons borrowed their writing system from the Pyus or directly from India (Roop, pp. ix-x). The Burmese were migrating south into Burma and by around 850 A.D. became the dominant power there. In 1057 A.D., the Burmese conquered the Mon city of Thaton and brought many monks and artisans to the Burmese capital of Pagan. A year later, Burmese inscriptions appeared in a script nearly identical to that of the Mons (Roop, p. x). In the first half of the fourteenth century, the Thais were in control of Burma (Coedès, 1968). Britain invaded Lower Burma from India in 1824 and went on to Upper Burma in 1885 (Graff, p. 52). Britain's rule did not end until World War II, when the Japanese moved in. After World War II, the British came back but granted Burma independence in 1948 (Graff, p. 91). At present, Burma has little contact with its neighbors.

2.4.4 Thailand. Tai speakers migrated from southern China into the Indo-Chinese peninsula about 1000 years ago (Rajadhon, p. 12) and split up into the Shans of Upper Burma, the Laotians of Laos, and the Thais of Thailand,

although the political divisions fluctuated quite a bit before reaching their present configuration. From the fifth to the thirteenth centuries A.D., the Thais were under the political influence of first the Mons and then the Khmers (Rajadhon, p. 14). Then, the Thais expanded at the expense of their neighbors. Unlike the other countries of Southeast Asia, Thailand was never a colony of a European power. Beginning in the 1850's, King Mongkut, and then his successor King Chulalongkorn, introduced administrative reforms and invited foreign advisors, to forestall unwanted foreign interference. This policy, combined with Thailand's value as a buffer state between French and British controlled territory, resulted in Thailand's unique freedom (Graff, pp. 55-56). During World War II, Thailand did not resist Japan, and so retained its independence, although it was certainly under the influence of Japan until the end of the war (Graff, p. 135). Since then, there has continued to be much foreign contact, especially with American military forces during the American-Vietnamese war.

2.4.5 Indonesia and Malaysia. The national languages of Indonesia and Malaysia are essentially closely related dialects of the same language, justifying a combined treatment of the histories of these two countries. About a century after the founding of Funan, the Sumatran state of Srivijaya was founded by Indian merchants (Graff, p. 26). There were other Indianized kingdoms in Borneo and Java by

500 A.D., but Sriwijaya was the most powerful, both politically and commercially (Coedès, 1968). Sriwijaya declined in power until it was conquered by the Cholas of southern India in 1025 A.D. (Graff, p. 26). Arab merchants brought Islam to the coastal areas of Sumatra in the thirteenth century; Islam spread to the Malay Peninsula by the fourteenth century (Graff, p. 27) and to Java by the early 1500's (Coedès, 1968). The Portuguese captured the important port of Malacca in 1511, but lost it to the Dutch in 1641. In 1786, the British took the island of Penang and then extended their control over the rest of Malaya until the outbreak of World War II. As with other Southeast Asian nations, Malaya was occupied by Japan for the duration of the war and became independent soon after the war's end (Graff, p. 98). The Portuguese also captured Molucca in Indonesia in 1511, and they were followed by the Dutch, British, French, and Spanish, but the Dutch pushed the other colonial powers out and maintained control until World War II (Graff, p. 112). After Japanese occupation, the Dutch tried to regain control but gave up after four years of fighting.

2.4.6 India and China. The rich histories of India and China will not even be outlined here. The impact which these countries have had on Southeast Asia is suggested by the terms Farther India and Indochina, which have been applied to this area. Coedès contrasted the roles of India and China by claiming that China expanded through conquest

and political integration, while India expanded through cultural osmosis (Coedès, 1966, p. 230). In fact, Coedès characterizes the Mon-Khmers, Tibeto-Burmans, and Vietnamese as being culturally receptive rather than creative, from prehistoric times through the developments recorded by history (Coedès, 1966, p. 230). Although Indian brahmins were fixtures at many of the royal courts, Coedès considered these countries as cultural colonies of India rather than political dependencies (Coedès, 1968, p. 252). China, on the other hand, occupied Vietnam for a thousand years. Much of early Southeast Asian history is only attested in the Chinese records of embassies and tribute received from various vassal states (Coedès, 1968). With the thirteenth century Mongol conquests, it became Chinese policy to split up the old Indianized states, and it was then that the Thais became liberated from Khmer domination (Coedès, 1968).

Throughout history and up to the present, both Indians and Chinese have played important economic roles in Southeast Asian countries. As of 1967, there were more than 130,000,000 Overseas Chinese in Southeast Asia. One aspect of their status is that the Chinese term for these people, hua-chiao, means 'strangers' or 'guests' (Graff, p. 57). Similarly, the Thai term for Indian is khèk, meaning 'guest, visitor' (Haas, 1964, p. 69). Racial and ethnic friction has existed and does exist between many groups within and between countries in Southeast Asia. In Thai-

land, the Chinese have assimilated more than in other countries, while in Vietnam, there has been the recent exodus of refugees who are primarily ethnic Chinese.

2.5 Diffusion of Linguistic Features. The above historical sketches imply that there has been ample time and opportunity for interaction between languages in Southeast Asia. There is massive evidence of this interaction in the form of borrowed writing systems, vocabulary items, and even syntactic features.

2.5.1 Writing Systems. Vietnam may once have had an Indic writing system, but no concrete evidence supports this conjecture. Under Chinese domination, the Vietnamese adopted Chinese characters, calling them chữ nho 'scholar's characters' or chữ hán 'Han (Chinese) characters'. By 1343 A.D., another system, called chữ nôm 'popular characters', had been developing; this system consisted of modified Chinese characters. In the 1600's, Catholic missionaries began using the Roman alphabet to write Vietnamese, and in 1651, Alexandre de Rhodes published his Annamese [Vietnamese]-Portuguese-Latin dictionary. The romanized writing system he developed for this work is called quốc-ngữ 'national language', and it is now the official writing system of Vietnam. (Thompson, 1965b, pp. 52-55).

"The Cambodian script [called qagsaa kmae 'Khmer letters'], as well as the Thai, Lao, Burmese, Old Mon, Old Cham, and Old Javanese scripts, are all derived from some form (or perhaps from various forms) of the ancient Brahmi

script of South India." (Huffman, 1970b, p. 4). The Burmese received their writing system from the Mons, who in turn received it from either the Pyus or directly from India (Roop, pp. ix-x). The Thai script was officially introduced by King Ramkhamheng in 1283 A.D. and was based on the Khmer script (Rajadhon, p. 22).

Moslem missionaries introduced a modified Arabic script in the fifteenth century to write Malay (Sulaiman, p. xvii). Indonesian developed from Malay, and both languages are now written in romanized letters.

2.5.2 Lexical Diffusion. More than writing systems travelled from China and India to Southeast Asia. "The pronunciation of the wealth of Sino-Vietnamese (that is, Vietnamese words of Chinese origin) indicates that around the ninth or tenth century these forms left the stream of development of Chinese dialects and joined that of Vietnamese phonetic evolution." (Thompson, 1965b, p. 52).

The similarities between Thai and Chinese are striking enough to have caused genetic affiliation to be claimed. "The Thai language as spoken by the people of Thailand is, in its original structure, to a certain extent comparable with Chinese. Hence the two languages, i.e. the Thai and the Chinese, are philologically grouped together into the same family of languages. There are in both of these languages a number of similar words running to many hundreds. No doubt these words are in most cases due to cultural borrowings after long and continual contact of the

two peoples historically in the old days both in peace and war. Nevertheless, there are certain classes of words which apparently might have come from a common source in remote times." (Rajadhon, p. 3).

The cultural impact of India is illustrated by the fact that: "In all the Indianized countries of Indochina the grades of the official hierarchy, like the ranks within the royal family, have vernacular names which probably go back to the pre-Indianized past, whereas the offices held have Sanskrit names." (Coedès, 1966, p. 222). Furthermore, "Not only were abstract terms relating to religion and philosophy borrowed from Sanskrit, but also words concerning material culture, and even grammatical particles were borrowed in order to facilitate the expression of ideas, habitually expressed in an inflected language, in terms of an isolating language." (Coedès, 1966, p. 228).

Indonesian developed from Malay, which was used to facilitate communication between merchants and others throughout the Malayan peninsula and the Indonesian archipelago from the fifteenth century (Kwee, p. xi). "Arising from the necessity of communication between such diverse groups came the imperative adoption of a simplified Malay lingua franca. It included many terms borrowed from Javanese, Buginese, Indian, and Arab sources. It gradually spread to all parts of Southeast Asia, and came to be used by both the Portuguese and the Dutch, who added their own contributions." (Cady, p. 160).

2.5.3 Nissaya Burmese. "Nissaya are works in which each word or phrase of a Pali text is followed immediately by its Burmese translation." (Okell, 1965, p. 186). "Clearly, the word-by-word arrangement alone imposes a close structural correspondence with Pali; but, more than this, a system was established whereby certain particles - and in Burmese it is the suffixed particles that bear the main burden of grammatical and syntactic relations - were conventionally employed to represent such features as number, case, tense, and mood." (Okell, 1965, p. 187). This system has remained stable from the fifteenth century to the present. Okell suggests that the importance of these texts and the stability of the correspondence conventions between Pali and Burmese have had a significant effect on the development of Burmese grammar.

2.5.4 Morphological Borrowing from Mon-Khmer to Thai. Two morphological features are claimed to have come into Thai through contact with Mon-Khmer languages. The first is the use of prefixes and infixes to derive new words. The second is the use of "certain initial consonant clusters of two or more nonsyllabic sounds." (Rajadhon, p. 13). "In fact, the Thai had even adopted the device of making derivatives from their indigenous words with prefixes and infixes of the Mon-Khmer language." (Rajadhon, p. 15).

2.5.5 Syntactic Borrowing from Thai to Cambodian. "The syntactic parallelism between Thai and Cambodian is

striking. Not only is the order and inventory of individual form classes almost identical, but also many semantically equivalent forms seem to share identical ranges of syntactic occurrence...The increasing evidence for the existence of a Southeast Asian linguistic area, along with the close geographic, cultural, and political contact between Thai and Cambodian over a period of seven centuries, strongly indicates that the syntactic similarity is due to borrowing." (Huffman, 1973, p. 488). Huffman goes on with a more detailed comparison of Thai and Cambodian syntax, including the verb phrase, and, after considering evidence from neighboring dialects, concludes that the direction of borrowing was from Thai to Cambodian (Huffman, 1973, pp. 503-507).

2.5.6 Indo-European Syntactic Influence on Thai. Rajadon, a Thai scholar, claimed that English, Sanskrit, and Pali have influenced Thai syntax, although he did not give specific examples. "The Thai language has one of the simplest grammars of all languages as far as inflections are concerned. It is not tied by rules and conventions. But in the course of its historical and cultural development, the Thai language has suffered at the hands of Thai grammarians, through exotic rules and restrictions based on English, Sanskrit or Pali grammar." (Rajadon, p. 11). He also asserted that "Though there are comparatively few English words to be found in Thai, the influence of expression in Thai both in speaking and writing among younger

generations along the lines of English or American forms of sentence and idiom is seen more and more obviously through the medium of television, radio and translation." (Rajadon, pp. 21-22).

2.5.7 The Concept of Linguistic Area. The term linguistic area appeared in the quotation by Huffman in 2.5.5. This term was introduced by Emeneau when he described linguistic features which crossed genetic boundaries in India (Emeneau, 1956). That is, geographic boundaries were often more important than genetic boundaries in describing the distribution of various phonetic and syntactic features in Indian languages. More recently, Hashimoto argued that the "geographic dimension" must be considered in linguistic description. By comparing various Chinese dialects with neighboring Altaic languages in the north and with Tai languages in the south, he concluded that Chinese grammar has been strongly affected by these adjacent languages. (Hashimoto, p. 19).

III. THEORETICAL ORIENTATIONS AND METHODOLOGIES OF STUDYING VERBS

3.1 Traditional Treatments of Verbs.

3.1.1 Varro. Verbs are one of the traditional parts of speech that go back to the ancient Greek and Roman grammarians. The Roman, Varro (116-27 B.C.) defined nouns as words having cases, verbs as words having tenses, participles as words having both cases and tenses, and particles as words having neither cases nor tenses. Unfortunately, while this scheme may work for inflected languages such as Latin and Greek, it fails completely in the Southeast Asian languages under consideration. (Jespersen, 1965, p. 58).

3.1.2 Jespersen. In 1924, Jespersen wrote, regarding parts of speech: "Most of the definitions given even in recent books are little better than sham definitions in which it is extremely easy to pick holes; nor has it been possible to come to a general arrangement as to what the distinction is to be based on - whether on form (and form-changes) or on meaning or on function in the sentence, or on all of these combined." (Jespersen, 1965, p. 58). Jespersen went on to illustrate by criticizing the definition of verb given in J. Hall and E.A. Sonnenschein's Grammar of 1902: "By means of Verbs something is said about something or somebody." Jespersen's counterexample was "You scoundrel", where scoundrel is not a verb yet says something about you (Jespersen, 1965, p. 59).

Jespersen himself listed various distinguishing formal

traits of verbs which appear in Aryan, Semitic, and Ugro-Finnic languages, such as person, tense, mood, and voice, and added that in terms of meaning, most verbs denote actions, processes, or states (Jespersen, 1965, p. 86). Unfortunately, Jespersen gave no explicit definition of verb, but merely asserted that "It is nearly always easy to see whether a given idea is verbal or no..." (Jespersen, 1965, p. 86). Without a definition, such a statement is circular: an idea is verbal because we feel that it is. Jespersen did note that in languages such as Chinese, "there are no formal signs to show word classes" and that the classification of a given word could only be "shown by syntactic rules and the context." (Jespersen, 1965, p. 61). Thus, we are left without any specific theory which can handle verbs in uninflected languages.

3.1.3 Sapir. Sapir argued that "the 'part of speech' reflects not so much our intuitive analysis of reality as our ability to compose that reality into a variety of formal patterns. A part of speech outside of the limitations of syntactic form is but a will o' the wisp. For this reason no logical scheme of the parts of speech - their number, nature, and necessary confines - is of the slightest interest to the linguist. Each language has its own scheme. Everything depends on the formal demarcations which it recognizes." (Sapir, pp. 118-119). Yet Sapir went on to admit that most languages distinguish the noun, as the subject of discourse, and the verb, as the word which

predicates something about the subject and thus "clusters about concepts of activity" (Sapir, p. 119).

Sapir's remarks are not very encouraging for the search of a cross-linguistic characterization of the verb. Jespersen's counterexample to Hall & Sonnenschein's definition showed the inadequacy of a semantic approach to defining the verb. While Sapir admits the possibility of specific syntactic definitions of the verb, none were given.

3.2 Structuralism.

3.2.1 Bloomfield. Bloomfield's Language (Bloomfield) is the classic work of American structural linguistics. In this framework, linguistic features are defined in a hierarchical manner, and the definitions are intended to be mechanistic rather than mentalistic in order to justify calling linguistics a science. The first level is the phonetic level, which is the study of speech sounds without reference to their meanings (Bloomfield, p. 74). Next, the phonemic level is based on the concept of the phoneme, which is "a minimum unit of distinctive sound-feature" (Bloomfield, p. 161). "We may say that morphology includes the constructions of words and parts of words, while syntax includes the constructions of phrases." (Bloomfield, p. 207). Finally, semantics is discussed but is not treated in a rigorous way; the meaning of a linguistic form is simply defined as the context of the speech act (Bloomfield, p. 139). One of the important rules of structuralism is not to mix levels of analysis; that is, the ele-

ments of each level can only be defined in terms of elements of lower levels.

Bloomfield mentioned verbs as one of the possible parts of speech of languages such as those in the Indo-European family, but gave no definition of verb (Bloomfield, p. 198). He claimed that the only parts of speech in Chinese were full words and particles, the latter being words whose function is to mark the syntactic form-classes of the phrases in which they occur (Bloomfield, p. 199). In any language, if the function of a word is not determined by its internal structure or by an accompanying marker, then its form-class is arbitrary and must be listed in a description of that language (Bloomfield, p. 269).

3.2.2 Immediate Constituents and Substitutability.

One of the primary techniques of structural linguistics is immediate constituent analysis. Although the name may sound complicated, the ideas involved are relatively simple. "A construction is any significant group of words (or morphemes): A constituent is any word or construction (or morpheme) which enters into some larger construction ... An immediate constituent (commonly abbreviated IC) is one of the two, or a few, constituents of which any given construction is directly formed." (Gleason, pp. 132-133). There are various methods of determining immediate constituents, one of the most common being that of substitutability. For example, in the phrase his son's house, his son's is considered to be one of the two IC's, because when

the single word John's is substituted into the original phrase, John's house is still a meaningful, grammatical phrase (Gleason, p. 137). However, there are problems with IC analysis. IC's do not have to be continuous; that is, two IC's may be separated by other words. Hence, a long sentence may have many possible assignments of IC's which must be compared. Also, there are no explicit rules for determining IC's. When constituents are substituted for one another, both the form and meaning are allowed to change. The IC analyst must exercise judgment in deciding when the results of a given substitution are acceptable. (Gleason, p. 137).

In my opinion, IC analysis is nothing more than the application of the linguist's unsupported intuitions in dividing up the morphemes of a sentence. Consider the following examples of verb concatenation in English.

Figure 3.2.2 Verb Concatenation in English.

1) I want to go buy the book.

2) I want to { run.
swim.
eat. }

3) I want to go { run.
swim.
eat. }

4) I want a party.

5) A party is fun.

6) To go buy the book is fun.

The substitutions in (2) imply that go buy the book is one of the IC's of (1) and that I want to is the other IC. Yet, the substitutions of (3) imply that buy the book is one IC and I want to go is the second IC. (4), (5), and (6) imply that I want and to go buy the book are the two IC's of (1). Despite the lack of rigor associated with this technique, it is the basis of several important grammars, such as Noss's Thai Reference Grammar (Noss) and Thompson's A Vietnamese Grammar (Thompson, 1965b).

3.3 Generative Grammar.

3.3.1 Chomsky's "Aspects" Theory. Generative grammar is usually considered to have begun with the publication of Chomsky's Syntactic Structures (Chomsky, 1957), but the usual text which is cited in the linguistics literature is Chomsky's Aspects of the Theory Syntax (Chomsky, 1965). Even though generative grammar has undergone many changes since 1965, more recent developments have not had time to be assimilated into the published grammars of specific languages, so the "Aspects" model is sufficient for this discussion.

The goals of the generative linguist are different from those of the structuralist. Whereas the latter attempts to describe each language in its own terms without emphasis on universal elements of grammar, the former attempts to develop a general theory which can characterize the grammar

of each language in formal terms. The basic idea behind generative grammar is to devise a formal system which will "generate" all of the possible grammatical sentences of a particular language and block or fail to generate any ungrammatical sentence. The generation process consisted of manipulations of formal symbols according to various rules, modeled on results of mathematical logic. That is, the symbols were not supposed to have any intrinsic meaning during the manipulations, although their written forms were motivated by the interpretations which would be assigned to them by the end of the derivation, or generative process.

There are two fundamental types of rules. First, there are phrase structure or rewrite rules. Examples are in Figure 3.3.1.

Figure 3.3.1a Phrase Structure Rules

$S \rightarrow NP \quad \text{Aux} \quad VP$

$VP \rightarrow V \quad NP$

$V \rightarrow xyz$

S = sentence

NP = noun phrase

Aux = auxiliary

VP = verb phrase

V = verb

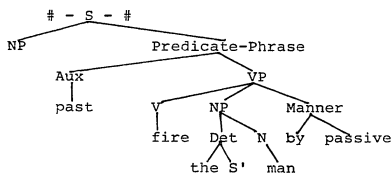
xyz = a specific word

(Chomsky, 1965, p. 68)

The arrow $\rightarrow$ means that the symbol on the left is rewritten as the sequence of symbols on the right. In a complete derivation, all of the formal symbols are eventually rewritten as words. Then, there are transformational rules, which operate on the strings of words resulting from the application of the phrase structure rules. The transformational rules were proposed to generate interrogative sentences from declarative sentences, to generate passive sentences from active sentences, and so forth. They operate by rearranging, deleting, and inserting elements in the input strings.

The "Aspects" theory generates syntactically based grammars. The derivation of a sentence starts with formal syntax, as shown above, and phonological and semantic interpretations are added later. The semantic information in a sentence is coded into abstract underlying tree diagrams. For example, Chomsky gave the following structure as the basis of the sentence The man was fired.

Figure 3.3.1b Chomsky Tree Diagram



(Chomsky, 1965, pp. 128-129)

This tree diagram would then be interpreted by the semantic component of the grammar. Transformational rules would modify the structure to produce a surface structure, which would then be interpreted by the phonological component of the grammar. Much of the theory has changed since 1965, so there is no need to define all of the symbols or to discuss all of the details here. The main point is that the papers published in the field of generative or transformational grammar were usually concerned with justifying various underlying structures for sentences and with proposing rules which could derive sentences in the most elegant way.

3.3.2 Ross's "Auxiliaries as Main Verbs". The goals and methods of generative grammar are illustrated in this 1967 paper (Ross, 1967a). Ross argued "that auxiliaries and verbs are really both members of the same lexical category, verb" and "that they must be main verbs. That is, I will argue that in deep structure, each of the five underlined words in (1)

(1) Boris must have been being examined by the captain, must be the main verb of some underlying S: all verbs (this term covers what have traditionally been called adjectives, auxiliaries, the copula, and true verbs) are directly dominated by VP in deep structure." (Ross, 1967a, p. 77).

Ross cited the fact that some transformational rules contained terms of the form: Tns ($\left\{ \begin{array}{c} M \\ \text{have} \\ \text{he} \end{array} \right\}$),

where Tns = tense, M = modal. He proposed to replace this term with $\left[\begin{array}{c} +V \\ +Aux \end{array} \right]$ (Ross, 1967a, p. 78). In other words,

what was traditionally called an auxiliary verb was first relabeled in transformational theory as a list of words which could fit into particular positions of tree diagrams and then was further relabeled as an auxiliary verb, but in formal notation.

In the midst of the detailed argumentation of linguistic theory, logic sometimes becomes confused. When Ross tried to show that the may of permission is a true verb, he stated: "But the rule of Flip applies only to verbs - hence the fact that it must apply to may argues that this modal is also a verb." (Ross, 1967a, p. 80). Flip is a transformational rule, the details of which are irrelevant to the discussion. Logically, it is just as likely that the rule Flip simply applies to other categories in addition to that of verb. The difficulty is that the status of lexical categories, such as verb, is not made clear in generative theory. If they are purely formal categories, in the mathematical sense of having no intrinsic meaning, then they are only characterized by the rules which apply to them or by the explicit lists of words which are associated

with them. No exhaustive lists of verbs are actually given in the literature; instead individual words are simply declared to be verbs. If the traditional status of particular words can be accepted without any further justification, then generative theory is not being rigorously applied to what a verb is. Therefore, Ross's arguments leave us with the conclusion that although we do not know what a verb is, we do know that what was traditionally labeled as an auxiliary verb behaves syntactically in the same way as the original unknown.

3.4 Givón's Verb Typology. While the popularity of generative grammar persisted throughout the 1960's and early 1970's, the very abstraction and formalism which was intended to be its strength made its application difficult for linguists in the field. In the initial chapter of Syntactic Typology and Field Work, Givón outlined several goals, including to "Provide a broad, universal semantic characterization of the major types of verbs (or predication) in languages, to serve as a field procedure for the elicitation of the verb universe of any particular language; Since the verb types also define - and are defined by - the nominal cases ('roles', 'participants') associated with the verb, this typology also provides a procedure for eliciting the nominal case-system of the language..." (Givón, 1977, p. 1).

Both separation of levels of analysis from structural linguistics and the formalism of generative linguistics

were absent in this pragmatic approach to field work with verbs. No rigorous theoretical framework was constructed to justify the semantic and syntactic features given in this typology. Perhaps the inapplicability of rigorous linguistic theory to field work is an indication of the true value of recent and current linguistic theories.

Givón's typology is based on knowledge of languages from various language families: Indo-European, Sino-Tibetan, African, and American Indian. Although some of the generalizations may have come out of work done in the framework of structural or generative linguistics, they are not logically dependent on those theories. Once again, the verb is not explicitly defined. Instead, it is taken as a given lexical category. With examples from particular languages used as evidence, various syntactic and semantic features are presented as likely attributes of verbs in any language which the linguist in the field might be investigating.

Thus, adjectives are distinguished from verbs by virtue of their secondary historical development in some languages. Also, it is suggested that the class of adjectives in some languages arises from verbs which express some "permanent/inherent condition or property/quality"; that is, there are semantic differences between adjective-like verbs and other verbs. Finally, the absence of tense-aspect morphology in adjectives is pointed out as a common difference between adjectives and verbs in those languages

in which the two categories are distinct. (Givón, 1977, p. 6). It should be noted that the above features are characteristics of verbs and adjectives but are not used to define these categories.

Syntactic properties of verbs include being subjectless (Givón, 1977, p. 8), having a subject but not an object (Givón, 1977, p. 9), having a sentential subject (Givón, 1977, p. 10), having a cognate or 'dummy' object (Givón, 1977, p. 11), having a direct object (Givón, 1977, p. 12), and having an indirect object (Givón, 1977, p. 17). Semantic properties of verbs include the denotation of states, change of states, bodily functions, voluntary activities (Givón, 1977, p. 9); the indication of motion of the subject, the requirement of an 'experiencer' subject (Givón, 1977, p. 14); the indication of reciprocity (Givón, 1977, p. 15). Because these syntactic and semantic properties of verbs often interact in complex ways, they are considered together rather than separated as earlier theories would require. The information in this work may be invaluable to the field linguist and must be handled by the theoretical linguist, but the fundamental questions of defining the category of verb and of fitting such a definition into a larger theoretical framework remain unanswered.

3.5 Thompson's "Discourse Basis for the Manifestation of Linguistic Categories". In a talk given in 1980, Thompson discussed how linguistic categories are manifested in discourse (Thompson, 1980). She stated that it is diffi-

cult to define linguistic categories, and part of the reason for this is that category-hood is a function of the pragmatics of human communication. Rather than making specific definitions of categories, Thompson considered their canonical functions. Characterizing communication as using propositions to manipulate the environment, Thompson started with the basic ideas of symbolic logic. Sentences represent propositions with nouns referring to the arguments of the propositions and verbs predicating something about the arguments. She did not recommend attempting to identify the category of any given word. Instead, she advocated looking cross-linguistically at the trappings of each category. She claimed that the closer a word was to having a canonical function of a particular category, the more that it would exhibit the trappings of that category.

For example, in English, man in the compound manpower loses some of the trappings of noun-hood: it cannot take a determiner or be part of a genitive construction. In Yoruba, a Niger-Congo language spoken in Nigeria, the first verb in the following serial verb construction is "defective" in that it is not inflected.

mò N' mu iwe' bò 'I'm bringing a book.'

1sg PROG take book come

The basic idea behind this approach seems to be that there are canonical semantic features which have collections of syntactic properties in each language. The syntactic properties of a given category in one language may

reveal information about the same category in another language where the syntactic features are not as obvious. Thompson illustrated her talk with numerous examples of words losing some features of category-hood. In order for this approach to work, however, the properties of each category must already be identified. Thompson's examples are certainly useful in suggesting properties of category-hood, but a rigorous characterization of categories remains to be developed, and the respective roles of syntax, semantics, and pragmatics are still unclear.

IV. VERB CONCATENATION IN LANGUAGES OTHER THAN BURMESE, CAMBODIAN, INDONESIAN, THAI, AND VIETNAMESE

4.1 Relevance of Other Languages. In Chapter II, various reasons were presented to justify the cross-linguistic approach to studying verb concatenation. Different aspects of this phenomenon have been investigated in various languages, primarily African and Asian. For the Asian languages, there are genetic links with some of the languages emphasized in this study, and this fact makes it inadvisable to ignore results in these additional languages, although extensive comparisons are beyond the scope of this dissertation. No claims of genetic affiliations are made between the African languages and Southeast Asian languages, and borrowing is at most minimal. Therefore, typological pressure seems to be the basis of the similarities which can be gleaned from the literature. Even if the details of verb concatenation in African languages differ quite a bit from those in Southeast Asian languages, some of the same questions are being asked, and the analyses may have some applications to the Southeast Asian cases. To the extent that typological pressure, as defined in 2.2.7, is operating in verb concatenation, the same analytic techniques should apply to any language in which verb concatenation occurs.

4.2 Givón: "Serial Verbs and Syntactic Change: Niger-Congo". One major difference between Niger-Congo languages and Southeast Asian languages is that the former have verb

morphologies, i.e. verbal affixes, while Indonesian is the only one of the five languages emphasized here which has verbal affixes. Perhaps this is why explicit characterizations of Niger-Congo verbs were not given. Givón proposed two diachronic processes occurring in the Niger-Congo family. First, Subject + Object + Verb (SOV) syntax broke down, and this led in some cases to verb serialization. Second, verbs in some Niger-Congo languages have been or are being reanalyzed as prepositional case markers, resulting in a departure from a verb serializing typology. (Givón, 1975b, p. 49).

Givón listed three questions which have been raised concerning verb serialization in African linguistics; these are relevant to Southeast Asian linguistics also.

"(a) Whether serial verbs are synchronically verbs or prepositions;

(b) Whether - if they are analyzed as verbs - they represent synchronically a coordinate or subordinate structure;

(c) Whether diachronically serialization arises from conjunction or from subordination." (Givón, 1975b, p. 66).

In this dissertation, question (a) will be generalized to : how are the categories of words to be determined so that examples of verb concatenation can be identified? Question (b) will be answered by exhibiting examples of both coordinate and subordinate constructions. Question (c) will not be discussed. Although it would certainly be

interesting to establish the historical development of verb concatenation, even definitive answers to this question would not resolve the synchronic problem of describing the current structures.

The importance of diachronic arguments in developing a synchronic analysis was illustrated by verb serialization in Kru only occurring to signal the instrumental/manner case; other cases are signaled by affixes. "The implications of such a typology is that verb serialization may be introduced gradually and partially, invading first the specific areas where the older case-marking system has been lost." (Givón, 1975b, pp. 74-75). If the diachronic history is sufficiently clear, it could then aid in the synchronic analysis. These Niger-Congo results suggest looking for case-marking functions of concatenated verbs in Southeast Asian languages.

Givón summarized the results of looking at both Niger-Congo and Chinese data in a table which shows "what verbs may give rise to what prepositions" (Givón, 1975b, p. 93), and these patterns will show up in other Southeast Asian languages as well.

Figure 4.2 Givon's Verb-Preposition Correspondences

<u>case</u>	<u>verb(s)</u>	<u>preposition</u> <u>sense</u>
accusative	'take', 'get', 'do'	ACC.
locative	'go', 'come'	'to'
	'exit', 'leave'	'out', 'from'
	'enter'	'into', 'in'
	'be at', 'live', 'sit'	'in/at/on'
	'rise', 'climb'	'up'
	'fall', 'descend'	'down'
dative/	'give', 'present',	'to/for'
benefactive	'send'	
benefactive	'benefit', 'help'	'for'
instrumental	'take', 'hold',	'with'
	'use', 'be with'	
associative	'be at', 'be with',	'with'
	'join', 'meet'	
conjunction	'be at', 'be with',	'with', 'and'
	'join', 'meet',	
	'add', 'repeat'	

(Givón, 1975b, p. 93, (210))

4.3 Chinese.

4.3.1 Chao. In A Grammar of Spoken Chinese, Chao worked primarily in the structuralist tradition, modified slightly by the occasional use of generative rules. That is, he used "hierarchies of ICs as the main approach to structure" (Chao, 1968, p. 3). Chao added that "In particular, grammar is the study of groups or classes of forms as regards their occurrence in frames or slots constituted by other classes. All forms which behave alike in this respect are members of a form class." (Chao, 1968, p. 5). Chao noted the problem of circularity of definition: if the frames also consist of form classes, where is the starting point? His solution was to require a complete lexicon of the language, with each word marked as belonging to a particular form class (Chao, 1968, p. 6). This is difficult to carry out in practice and is not very revealing of linguistic structure. In some cases, the circularity is circumvented by completely enumerating the defining form class (Chao, 1968, p. 7). Also, Chao violates the structuralist prohibition against mixing levels of analysis by considering meaning and then looking for formal similarities between items with similar meanings. "On the whole, nouns are names of persons and things, verbs are words expressing events and actions, and so on." (Chao, 1968, p. 6). Chao is careful to distinguish between non-rigorous heuristic approaches of discovering grammatical patterns and the rigor which is necessary in the final definitions

and descriptions.

Chao first characterized verbs syntactically with: "A free verb can occupy the frame V-not-V in a question, the negative being bu or mei, the latter being the negative for the verb yeou 'has, there is'." (Chao, 1968, pp. 162-163). Adjectives fit the same defining frame as verbs (Chao, 1968, p. 163) and also satisfy the predicative condition (Chao, 1968, p. 663), and so are a subclass of verbs. They are distinguished syntactically from verbs by taking adverbs of degree like heen 'very' and tzuey 'most' and by fitting the frame bii N... '...-er than N' (Chao, 1968, p. 163). Another characterization of adjectives, which is both syntactic and semantic, is "intransitive quality verb" (Chao, 1968, p. 675).

Instead of simple verb concatenation, as defined in 1.1, Chao used the term "verbal expressions in series (V-V series)" (Chao, 1968, p. 325), where a verbal expression may consist of either a verb or a verbal phrase (Chao, 1968, p. 60). Because there is usually an object after the first verb (Chao, 1968, p. 325), Chao's V-V series raise the question of what constructions to include in verb concatenation. Is it sufficient merely to have more than one verb in the same sentence, regardless of what other words intervene between the verbs? If there is a superficial sequence of verbs, but there are reasons to posit intervening material at an underlying, abstract level of analysis, can the sequence still be considered an example of verb concatenation?

tion? I will postpone giving answers to these questions, but I will indicate some of Chao's positions.

A sequence of verbs is not considered a V-V series if the sequence is too tightly bound. "In general, when two monosyllabic verbs come in succession, even though both are free, they do not form a V-V series, but tend to form a compound." (Chao, 1968, p. 329).

Questions of categoriality arise again with respect to co-verbs and prepositions, issues which will be discussed further in connection with other languages. "Most transitive verbs occur as first verb only occasionally. A listable number of verbs occur as first verbs with at least the same order of frequency as in other positions and are thus called co-verbs or prepositions, since they translate readily into prepositions when used in the first position." (Chao, 1968, p. 335). The behavior of a word or class of words under translation may provide useful clues to its behavior in its own language, but it should not be the sole basis for categorial judgments. Elsewhere, Chao stated that prepositions usually do not have aspects and usually do not function as centers of predicate expressions. Nevertheless, he conceded that the vagueness of these conditions necessitated definition of this class by enumeration' (Chao, 1968, p. 749).

Verbal expressions were described as intermediate between coordinate and subordinate constructions but somewhat closer to subordinate (Chao, 1968, p. 325). V-V series are

coordinate in that the component expressions can be reversed without usually destroying grammaticality, although the meaning may be radically changed (Chao, 1968, pp. 325-326). The subordinate aspect is due to the first verbal expression modifying the second, which "has approximately the same function as the whole" (Chao, 1968, p. 326).

Chao distinguished V-V series from pivotal constructions. "A pivotal construction consists of a succession of a verbal expression V_1 , a nominal expression, and another verbal expression V_2 , with the nominal expression serving at once as object of V_1 and subject of V_2 ." Chao, 1968, pp. 124-125). The distinction is that the two verbs in a V-V series have the same subject (Chao, 1968, p. 327).

Semantically, V-V series are given the "overall class meaning" of "order of events" or "circumstances of events" (Chao, 1968, p. 336). Chao further subdivided V-V series into a number of more specific semantic categories.

4.3.2 Li & Thompson. Li & Thompson tackled both the categorial question of co-verbs and the structural question of coordination versus subordination as the better analysis of serial verbs in Mandarin Chinese.

The term co-verb is used "to refer to the verb-like morpheme with a prepositional meaning which occurs in the frame: Subject _____ NP V (NP) " (Li & Thompson, 1973b, p. 1). Li & Thompson claimed to show that co-verbs are actually prepositions and that verb/preposition homophones can be distinguished (Li & Thompson, 1973b, p. 3).

The analytic confusion was felt to be due to the historical verbal origin of co-verbs and the present existence of verb/preposition homophony (Li & Thompson, 1973b, p. 3).

Three arguments were presented to show that co-verbs are verbs that are in the process of becoming prepositions, with uneven progress being made by different morphemes in the class of co-verbs. First, some co-verbs can optionally take the verbal suffix -zhe (Li & Thompson, 1973b, p. 5). Second, most, but not all, co-verbs can be directly negated by bu, or its variants bie and mei (Li & Thompson, 1973b, p. 7), Chao's criterion for verb-hood. Third, most co-verbs have homophonous verbs, most of which agree in sound and meaning, some of which agree only in sound (Li & Thompson, 1973b, p. 8). At this point, prepositions were not yet defined, so that the prepositional qualities of co-verbs were not explained. The three arguments fail, moreover, to prove that co-verbs are not verbs. They only indicate that some members of the class of co-verbs are not verbs, others lack some attributes of verbs and possess others, and still others apparently satisfy the formal definition of verb. Li & Thompson's conclusion that co-verbs are "in transition" (Li & Thompson, 1973b, p. 8) from verbs to prepositions does not even claim the complete categorial shift that they set out to prove.

The actual argument that co-verbs are prepositions seems to be more assertion than logic. Serial verb sentences are characterized as having the form: Subject + V +

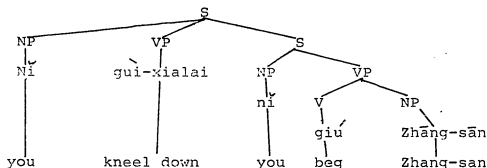
(NP) + V + (NP), where each of the verbs represents a separate action, and where each sentence is open to the four possible interpretations of purpose, consecutive actions, simultaneous actions, or alternating actions. The crucial distinction between co-verb sentences and true serial verb sentences is alleged to be that in the former, the co-verb and verb never represent separate actions, thus making the four serial verb interpretations impossible (Li & Thompson, 1973b, p. 11). The lack of separate actions in co-verb sentences seems to depend on the existence of one action and one preposition, which does not represent an action, in the English translation. Even if the one action/ two action question could be answered satisfactorily, there is a fundamental circularity to the argument. In this paper, co-verb sentences are excluded from the class of serial verb sentences because the former are not open to the four interpretations given above (Li & Thompson, 1973b). However, the justification for characterizing serial verb sentences in this way was given in another paper (Li & Thompson, 1973a, p. 98). Here, co-verbs were excluded because they function as prepositions rather than as true verbs and because Chao (Chao, 1968, p. 749) claimed that they usually lack some of the syntactic properties of verbs. It is possible simply to assert that a word is not a verb, because it translates into an English preposition, but this is an arbitrary classification and not a reason. Chao himself admitted the inadequacy of his syntactic rea-

sons for distinguishing the class of prepositions, as was pointed out in 4.3.1. So, we are left with the argument that co-verbs do not satisfy the criteria for serial verbs, because the criteria were designed to exclude co-verbs.

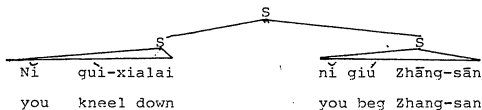
Li & Thompson analyzed the structure of serial verb constructions within the framework of generative grammar. First, using the arguments discussed above, they excluded co-verb constructions from consideration (Li & Thompson, 1973a, pp. 97-98). Then, they claimed that each serial verb sentence is open to the four possible interpretations listed above and that "knowledge of the world" rather than linguistic knowledge is required to choose the correct reading for a particular utterance (Li & Thompson, 1973a, p. 99). Finally, they proposed a subordinate structure for "the sentoid with the purpose reading, and a co-ordinate structure for the sentoid with the consecutive action, the simultaneous action, and the alternating action reading." (Li & Thompson, 1973a, p. 100). These structures were illustrated with the serial verb sentence:

<u>Nǐ</u>	<u>qū-xiàlái</u>	<u>qiú</u>	<u>Zhāng-sān.</u>
you	kneel down	beg	Zhang-san

Figure 4.3.2 Li & Thompson: Serial Verb Structures



'You kneel down in order to beg Zhang-san.'



'You knelt down and then begged Zhang-san.'

'You knelt down begging Zhang-san.'

'You knelt down and begged Zhang-san.'

(Li & Thompson, 1973a, p. 100)

Transformational theory is needed to explain and support the above syntactic structures. "In all cases a rule of identical subject deletion is assumed to apply in the second conjunct and the subordinate sentence." (Li & Thompson, 1973a, p. 100). The second occurrence of ni in each diagram is a representation of the fact that ni is the subject of each verb. However, the appeal to the deletion

rule is misleading. It presupposes a well-defined set of transformational rules which systematically generate grammatical sentences. In fact, only fragmentary subsets of such rules exist in the literature, and they usually do not work correctly in general.

There is a tautological flavor to the syntactic argumentation which was used to distinguish the two structures. First, it was stated that the preposing of Zhāng-sān or of qiú Zhāng-sān can only occur with the purpose reading of the sentence (Li & Thompson, 1973a, p. 100). My own knowledge of Chinese is too limited for me to dispute this claim. Then, it was pointed out that "preposing from within a sentence-final embedded clause ... is very common in languages, whereas preposing from within a conjoined clause appears to be impossible." (Li & Thompson, 1973a, pp. 100-101). They concluded that the possibility of preposing in this way indicated a subordinate structure for the purpose reading. Although Ross's Co-ordinate Structure Constraint (Ross, 1967b, p. 161) was intended to be a universal linguistic principle, it was also an empirical statement. Thus, we could analyze the preposing example as preposing from a co-ordinate structure, providing a counterexample to the Co-ordinate Structure Constraint, rather than considering it as evidence against a co-ordinate structure. Argumentation of the sort presented by Li & Thompson implies that, even in principle, the generalizations of transformational theory cannot be refuted. The

remaining arguments require a more detailed understanding of Chinese grammar and so will not be discussed here.

4.4 Mon-Khmer.

4.4.1 Diffloth. After studying several Mon-Khmer languages, Diffloth described resultative verb pairs in these languages from a semantic viewpoint. "The Resultative verb pairs I will study here can be derived from semantic representations containing at least three propositions: the first represents a voluntary action, the Initiative, performed by an Agent; the second contains a specific two-place predicate, INTEND, which is usually not overtly manifested in syntax, and remains abstract, with some important exceptions; the third is a one-place predicate, a State in which an Experiencer finds itself, let us call it the Result." (Diffloth, p. 1). Diffloth noted that in real time, the Result always occurs after the Initiative in Thai and Mon-Khmer and that this is not accidental, "but yet another manifestation of iconicity in language". He also pointed out that generative theories were unable to cope with iconic notions. (Diffloth, p. 2).

4.4.2 Phillips. Phillips focused on the verb phrase in order to indicate how a pedagogical grammar should be devised for Mnong, a South-Bahnaric Mon-Khmer language (Phillips, p. 129). He asserted that "Verbs are defined by position in the verb phrase." (Phillips, p. 130), but his definitions are circular. The verb phrase in Mnong is

given the structure: preverb + auxiliary + verb + post verbal, where the preverb is called a particle and the other three elements are called verbals. An exhaustive list of preverbals was not given, but they include negatives and temporals. There is more difficulty with the concept of auxiliary. Auxiliaries are verbals that precede and modify a verb; most also occur as verbs, but with different meanings (Phillips, p. 130). "Postverbals are inseparable from the preceding active verb which they modify..." (Phillips, p. 131). It is not clear whether the three types of verbals are simply labels for three consecutive slots in the verb phrase, or whether there is supposed to be a semantic basis for distinguishing them. If all three verbals are not present, there is no scheme for labeling or defining those that are present. Verbs themselves are not defined at all, except implicitly as verbals in between the other two verbals. In agreement with Li & Thompson's analysis of Chinese, given in 4.3.2, Mñong has a centered construction, a serial verb construction in which the second verb is subordinate to the first, and a coordinate construction, in which the two actions are coterminus, sequential, or alternative (Phillips, pp. 131-132). There are also verb-object constructions, such as learn speak 'learn to speak' and hear sick 'feel pain' (Phillips, p. 132). Although there are examples of the various constructions, there are no explanations to justify the analyses given.

4.5 Tibeto-Burman.

4.5.1 Hope. The title of Hope's work: The Deep Syntax of Lisu Sentences: A Transformational Case Grammar, identifies his theoretical orientation (Hope). He applied the concepts of Fillmore's case grammar to his analysis of Lisu, stating that Lisu required "an abstract level of representation in which the categories which are generated are semantic in nature" (Hope, p. 18), and, in particular, that the verb was "apparently a notional or semantic category rather than a morphological class" (Hope, p. 25).

Hope gave an example to illustrate the ambiguity between means and purpose in sentences involving verb concatenation. A particular Lisu sentence could be translated: "Asa went running into the shack; Asa went into the shack to run; Asa ran to the shack to enter it." (Hope, p. 147). Hope's method of handling this ambiguity was to posit the abstract verbs <Means> and <Purpose> (Hope, p. 148). In my opinion, this is merely placing a formal label on his own intuitive judgments. Hope applied Ross's analysis, given in 3.3.2, and treated aspect and other modal categories as predicates or main verbs (Hope, p. 150).

4.5.2 Matisoff. The most comprehensive study of verb concatenation appears in Matisoff's The Grammar of Lahu (Matisoff, 1973a). While many of his conclusions refer only to Lahu, the methodology is applicable to other languages as well. Matisoff's eclectic heuristicism includes concepts from structuralism and generative grammar (Matisoff,

1973a, pp. xliv-1). Matisoff noted the problems associated with defining form classes and added that "ultimately the analyst's decisions (whether he admits it or not) will be based on esthetic considerations" (Matisoff, 1973a, pp. 42-43). He concluded that "As a rule of thumb, we adopt the principle that major form-classes be set up as far as possible on the basis on [sic] purely syntactic criteria; but minor classes may be arrived at through at least partially semantic considerations as well." (Matisoff, 1973a, pp. 43-44).

The general guidelines were applied to the case of verbs. "All (and only) the words which may directly follow the negative adverb mā 'not' belong to the class of Lahu verbs. (Similar criteria work for all other Tibeto-Burman languages so far studied, for all the Chinese dialects, and for such non-Sino-Tibetan languages in Southeast Asia as Thai and Cambodian.) Less specifically we might say that verbs are those words which may be preceded by adverbial expressions and/or followed by verb-particles." (Matisoff, 1973a, p. 193). The negatability test will turn out to be the single most useful criterion of verb-hood for Burmese, Cambodian, Indonesian, Thai, and Vietnamese, but complications arise with Indonesian and with Vietnamese.

Adjectives are labeled adjectival verbs; they are a subclass of verbs, distinguished from action verbs largely on semantic grounds, though there are also some syntactic differences (Matisoff, 1973a, p. 193). The class of prepo-

sition does not occur in this grammar, so the issue of the status of co-verbs, also not mentioned, is not relevant.

As for verb concatenation, Matisoff concentrated on strings consisting of a head verb and subordinate verbs of a type which he called versatile verbs. The versatile verbs can occur both to the left and the right of the head verb; they "are all true verbs, and can each occur alone as the only verb in a VP, though with a rather different meaning in many cases." (Matisoff, 1973a, pp. 199-200). Versatile verbs are characterized by their "juxtapository productivity" (Matisoff, 1973a, p. 200); that is, they may occur with a wide range of other verbs.

Versatile verb concatenations were distinguished from non-versatile multiverbal constructions and from constructions which superficially resemble multiverbal constructions but which are actually another type. First, there are verb + verb-particle sequences. Semantically, some of the verb-particles may resemble some of the more abstract versatile verbs in Lahu, but they fail the negatability test and may not be the sole members of a verb phrase (Matisoff, 1973a, p. 203). In Burmese, one problem in the literature is that of classifying lexical items as verbs or particles. Second, "Lahu verbs are said to be in 'fortuitous concatenation' when they appear in juxtaposition wven though they belong to separate underlying VP's. In most cases the verbs represent a series of temporally consecutive actions." (Matisoff, 1973a, pp. 203-207). Third,

there are verb head + resultative complement constructions, in which the resultative complement is a verb which indicates the result of the action of the verb head, but which is not "juxtapositorily productive" (Matisoff, 1973a, p. 207). These are not compounds, because the negative adverb mâ is inserted between the verb head and the resultative complement, while the members of a compound may not be separated (Matisoff, 1973a, p. 208). Fourth, there are lexical compounds consisting of two verbs, which may not be separated and whose order may not be reversed (Matisoff, 1973a, p. 209).

Pre-head concatenations are those in which the versatile verbs precede the head. The structure of this type of concatenation was determined by permuting the verbs and noting the meaning difference. For example, as main verbs, qhô means 'steal' and phô means 'assemble; pile up', while they produce the following concatenations:

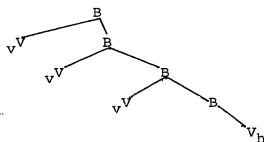
qhô phô 'assemble secretly', phô qhô 'steal in a group',

$v^V \quad v_h$

$v^V \quad v_h$

where v_h = verb head, v = pre-head versatile verb (Matisoff, 1973a, pp. 211-212).

Multiversatile pre-head concatenations, those which have more than one vV , have the following type of structure, where B = verbal nucleus and the example has three vV :



(Matisoff, 1973a, p. 214)

In contrast to Ross's analysis, as discussed in 3.3.2, this structure involves nested verb strings rather than underlying sentences. The reasons for this are that complicated generative theoretical manipulations are avoided and that generative theory would not explain why there were meaning changes in the embedded verbs (Matisoff, 1973a, p. 216).

Post-head versatile verbs (V_v) are divided into four subclasses: juxtacapitals, medials, caudals, and variables. The juxtacapitals directly follow the V_h , are mutually exclusive, and deal with motion and directionality. The medials come next, are mutually exclusive, and include all the adjectives. The caudals come next; more than one can sometimes appear in a given concatenation; they are very abstract and relate to modes of ability or potentiality. The variables are the most abstract and can occur before or after medials, caudals, or other variables (Matisoff,

1973a, pp. 220-222). Thus, in general, the more abstract V_v 's stand farther to the right of the V_h than do the more concrete V_v 's.

There are also fore-and-aft concatenations, in which there are both vV 's and V_v 's (Matisoff, 1973a, p. 248). Matisoff reiterated that "it is the ensemble of the inherent semantic features of individual versatile verbs and VPVhPV's that ultimately determines the structural descriptions of concatenations." (Matisoff, 1973a, p. 260).

Before The Grammar of Lahu, Matisoff described verb concatenation on a more modest scale in Kachin, another Lolo-Burmese language (Matisoff, 1974). In this earlier work, the presentation is not quite as logical as in his later analyses. Thus, verbal bound prefixes are defined as occurring before verbs, verbs are defined as those words which can occur after a verbal bound prefix or before a verbal particle, and verbal particles are defined as occurring after a verb or another verbal particle, or before another verbal particle (Matisoff, 1974, pp. 189-190). Fortunately, this type of circularity is absent in the more sophisticated analysis of Lahu. Besides versatile verb concatenation of the type discussed in Lahu, Kachin also has concatenations in which two verbs are separated by a verbal particle, the two most important being a conjunctive particle, translatable as 'and', and a particle indicating orientation to the future (Matisoff, 1974, p. 191). The versatile verbs in Kachin were divided into semantic clas-

ses which were similar to those of Lahu (Matisoff, 1974, pp. 192-204).

While Matisoff made no strong claims about the nature of verb concatenation in other Southeast Asian languages, the approach which he developed in relation to Lahu has since been applied to other languages, such as Vietnamese and Burmese. There are no complicated theoretical claims made, but his results emphasize the importance of semantics in making structural analyses and provide a convenient descriptive framework as a starting point for cross-linguistic analyses.

V. ANALYSIS OF PREVIOUS RESULTS IN BURMESE, CAMBODIAN, INDONESIAN, THAI, AND VIETNAMESE

5.1 Overview of Previous Results. Inconsistency and lack of theoretical rigor are two of the more notable traits of most of the language-specific treatments of verbs and verb concatenation. The inconsistencies between different analyses of the same language must be resolved if different languages are to be compared. The lack of rigor shows up first in the introduction of grammatical categories. Rather than giving a precise syntactic or semantic definition of the categories, most authors seem to treat the lexical categories, or parts of speech, as given concepts and merely give examples to illustrate each category. When definitions appear, they are frequently circular, e.g. a verb is that which precedes a verb particle, and a verb particle is that which follows a verb. In the case of some teaching grammars, it may be possible to argue that pedagogical technique takes precedence over linguistic theory. However, this argument only holds if one believes that a language learner should be exposed to grammatical patterns without any explicit explanation.

Most of the reference grammars available for Southeast Asian languages are written more-or-less in the framework of structural linguistics. They describe pronunciation, parts of speech, morphology, and then syntax. Because verb concatenation is not a standard topic in Indo-European grammars, it is handled in different ways by different

writers. Verb concatenation involves the following questions. Which elements are modifiers and which are modified? Which elements are words and which are particles? Which constructions are lexical compounds, thus belonging to the realm of morphology, and which are syntactic constructions?

In the following sections of this chapter, a brief summary of the grammatical features of each language will be given. Then, the language-specific analyses of the treatment of verbs in each language will be contrasted. For the moment, cross-linguistic comments will be kept to a minimum.

5.2 Burmese.

5.2.1 Grammatical Summary. The Burmese sentence has the basic order: Subject + Object + Verb. Burmese has four tones. "Probably the majority of verbs are monosyllabic" (Okell, 1969, p. 23). Noun attributes, or modifiers, ordinarily precede the modified noun, whether the modifier is a verb (Okell, 1969, p. 61) or another noun (Okell, 1969, p. 68), though there are complexities which will be discussed in 6.4.4. In possessive constructions, the possessor precedes the possessed (Okell, 1969, pp. 57-58). numeral classifier phrases have the form: noun + numeral + classifier (Okell, 1969, p. 76).

5.2.2 Sources of Data. My three main sources of data are Stewart's Manual of Colloquial Burmese (Stewart), Cornyn & Roop's Beginning Burmese (Cornyn & Roop), and Okell's

A Reference Grammar of Colloquial Burmese (Okell, 1969). The first two are teaching grammars, and so the grammatical information is arranged for ease of learning rather than for ease of linguistic reference. I will use Cornyn & Roop's transcription for citing Burmese data for all three sources. A phonological rule causes certain syllable-initial consonants to become voiced when the syllable is joined to a preceding syllable not ending in the fourth, or stopped tone (Okell, 1969, p. 12). In these cases, the voiced form will be written.

5.2.3 Major Lexical Categories. All three agree as to the major lexical categories, although they use different terminologies. Stewart called the parts of speech nouns, verbs, and particles. "The equivalents of adjectives and adverbs are obtained by subordinated uses of nouns and verbs... grammatical relations between words are indicated by position or, where this by itself is insufficient, by particles." (Stewart, p. 10). There are numerous examples of each category, but no explicit definitions. Cornyn & Roop gave the same tripartite division, calling the results three form classes. "Verbs and nouns are free forms, that is, they occur independently, and the particles are bound forms, that is, they occur only in combination with other forms." (Cornyn & Roop, p. 11). Verbs are defined as forms which can occur in combination with a final particle (Cornyn & Roop, p. 42), where the final particles are -me (-ma=) 'potential mode', -pi (-pa=) 'perfective mode', -te

(-tha=) 'actual mode', and -ye./-ke. 'actual mode' (Cornyn & Roop, pp. 501, 42-44, 129). Okell first divided morphemes, "the smallest analysable units of meaning in the language", into "particles, which are the grammatical morphemes, such as ma 'not', ne. 'with', le. 'also'" and "words, which are the lexical morphemes, such as mi: 'fire', la 'come', he. 'hey!'" (Okell, 1969, p. 1). The class of words is subdivided into nouns, verbs, and interjections, and it is noted that particles are prefixes, suffixes, or processes, e.g. a repetition of a word or addition of a rhyming syllable (Okell, 1969, p. 1).

5.2.4 Problems with the Basic Definitions. Because Stewart only gave implicit definitions by arranging words and particles in various categories, there are no specific claims to test or refute. On the other hand, any generalizations about Burmese can only be guessed at, and the only way to determine the category of a given item is to see how Stewart labeled it.

There are a number of difficulties with Cornyn & Roop's definitions. As a matter of terminology, the final particles are not final. For example, the alternative form -ma of the potential mode particle is the form which precedes an interrogative particle.

ba sa: ma le:

what - eat - fp - ip

'What'll you have to eat?' (Cornyn & Roop, p. 43)

fp = final particle, ip = interrogative particle

Thus, the final particle is not necessarily the actual final particle of the sentence. Still, the category of final particles is closed and finite and can be considered well defined, if misnamed. A crucial problem arises with the introduction of secondary particles. "A particle (bound form) which follows a verb and precedes a final particle we call a secondary particle (2p)." (Cornyn & Roop, p. 45).

thau' te 'he drinks, drank'
drink fp

thau' hcin de 'he wants, wanted to drink'
drink - desire -fp
2p (Cornyn & Roop, p. 45)

Unfortunately, the secondary particle seems to satisfy the definition given for the verb; it is a form which precedes a final particle. A possible way of salvaging the verb/2p distinction is to stick more closely to the example than to the definition of verb. Thus, a form would be a verb if it can occur in an utterance consisting only of the putative

verb followed by a final particle. We will return to this question later, because this is precisely the area of most disagreement in the various treatments of Burmese.

Okell's definition of particles being grammatical morphemes and words being lexical morphemes implies that membership in these two categories depends upon the intrinsic semantic features of the morphemes rather than upon their distributional properties. Verbs are divided on semantic grounds into functive, denoting actions or functions, and stative, denoting qualities or states, but no explicit definition of verb is given (Okell, 1969, p. 43).

5.2.5 Stewart's Enclitic Verbs. Stewart was aware of some aspects of verb concatenation, but treated the concept in a confused manner. He introduced the term enclitic verb, which resembles Matisoff's versatile verb. "These are verbs expressing desire, ability, suitability, ease, difficulty, etc., which are subjoined to other verbs and form with them an intimate combination, the two being pronounced without any pause between them. Most, but not all of these enclitic verbs, are also capable of being used independently." (Stewart, pp. 42-43). Then, he included enclitic verbs in his "Index of Particles and Other Form Words" (Stewart, p. 119), indicating that he considered them more as particles than as independent words. One important measure of the intimacy of combination of enclitic verbs with their neighbors is that the negative particle ma always precedes the entire combination of verb +

enclitic verb.

ma pyo: ta' hpu: 'I cannot say.'

not - say - ability, habit - negative particle

(Stewart, p. 43)

Stewart did not mention the fact that for the 25 common enclitic verbs he listed, each follows the other verb (Stewart, pp. 43-45). Included in this list were four enclitic verbs for which the negative particle usually is placed directly before the enclitic verb.

sa: ma kaun: bu:

eat - neg. - relish, well-being - neg.

'I do not have a good appetite.' (Stewart, p. 45)

Without any comment, Stewart gave an example of a main verb followed by two enclitic verbs, the second enclitic being one of the four less intimately combining forms.

sa: nei ca. qasa:

eat - duration - permanence, - food

regularity

'One's regular food' (Stewart, p. 43)

Stewart gave examples of phrases containing each enclitic verb, and these showed that the enclitic verb follows

the main verb and precedes the particles te 'actual mode', me 'potential mode', and hpu 'negative'. In order to determine whether enclitic verbs could actually occur as main verbs, I checked each one in Cornyn & Musgrave's Burmese Glossary (Cornyn & Musgrave). In Figure 5.2.5 are listed Stewart's enclitic verbs, followed by his definitions. Next, I give Cornyn & Musgrave's classification of each form as a secondary particle (2p), auxiliary verb (av), enclitic (en), or main verb. Some forms belong to more than one of these categories; in the third column of Figure 5.2.5, the meaning is as a main verb unless otherwise marked.

Figure 5.2.5 Stewart's Enclitic Verbs

<u>Enclitic-Enclitic</u>		<u>Meaning as Main Verb,</u>
<u>Verb</u>	<u>Meaning</u>	<u>2p, av, or en</u>
ca.	permanence,	regularity;
	regularity	2p: plurality
hcin	desire	desire to (verb);
		2p: desire
hke:	difficulty	be hard
hpyi'	actuality	happen, be, become
htai'	suitability	be worth;
		av: be worthy, fit
lau'	sufficiency	---

lun:	excess	(lun) be, go beyond, exceed; 2p: de- notes excess
lwe	ease of performance	be easy
nain	ability	be victorious, win; 2p: ability
qa'	suitability	give, hand over
qa:	leisure	be free, vacant
pyan	repetition	return, do in return, send back, reply
sei	causation, permission	to ask, instruct (to do); 2p: 'im- perative'
ta'	ability, habit	afford, be able
tan	suitability	be fit, sufficient, equal; av: be proper, suitable
tan:	mutuality	---
tha	possibility, convenability	(?) be pleasant
wun.	daring	av: dare to
ya.	compulsion, opportunity	get, obtain; 2p: compulsion
ye'	callousness	av: be capable of, have the heart to

ye:	daring	be bold; av: be bold enough, dare
-----	--------	--------------------------------------

(less intimately combined enclitics)

kaun:	fitness; relish, well-being;	to be good, well;
-------	---------------------------------	-------------------

mye:	continuity, as always	be permanent; en: always, permanently
------	--------------------------	---

nei	duration	remain, live, be
-----	----------	------------------

pei:	doing for another	give, do (for another)
------	-------------------	---------------------------

(Stewart, Cornyn & Musgrave)

From Figure 5.2.5, it can be seen that 19 of the enclitic verbs are also primary verbs; 6 have 2p definitions; 4 have av definitions; and 1 has an en definition. Cornyn & Musgrave's 2p classifications agree with Stewart's enclitic meanings. Furthermore, the main verb meanings are either identical to the enclitic meanings, or the latter are slightly more abstract. For example, lun is a main verb meaning 'be, go beyond, exceed' while the enclitic lun:

means 'excess'. Incidentally, there is a tone difference between these two forms, a feature which does not occur with any of the other enclitic verbs listed in Figure 5.2.5.

5.2.6 Cornyn & Roop's Auxiliary Verbs & Verb Combinations. The overlap between Stewart's enclitic verbs and several different categories in Cornyn & Roop's analysis suggests that we take a closer look at the latter. Secondary particles were introduced in 5.2.4. "Auxiliary verbs function both as full verbs and as modifiers immediately following full verbs. They precede the particles, secondary and final, in verb expressions. In a negative sentence containing an auxiliary verb, the negative particle ma= precedes the full verb." (Cornyn & Roop, p. 145).

zaga: lei: nga: myou: kaun: gaun: pyo: da' te
language - four - five - sort - good - good - speak -know
howto- actualmode

'He can speak four or five languages well.'

yu.hya: zaga: ma pyo: da' hpu: la:
Russian - language - neg - speak - know how to -
neg - question particle

'Doesn't he speak Russian?' (Cornyn & Roop, p. 145)

The underlined ta', here voiced to da', is an auxiliary verb in the two above examples; neg = negative particle.

In a sequence of verbs, Cornyn & Roop also refer to subordinate verbs. "Combinations of verbs like thai thwa: [die + go = 'to pass away']... and win la [enter + come = 'come in']... are frequent in Burmese. The last of more than one verb in an expression is the main verb; preceding verbs are subordinate. In such expressions the negative particle ma regularly precedes the main verb." (Cornyn & Roop, p. 215). Here, no justification is given for this analysis. The distinction between a subordinate verb which must precede the main verb and an auxiliary verb which follows the main verb is not made clear.

Although Stewart's definition of enclitic verb is very similar to Cornyn & Roop's definition of auxiliary verb, the two categories do not have the same membership. In fact, the classification of some items differs between Cornyn & Roop and Cornyn & Musgrave.

Figure 5.2.6a Cornyn & Roop's Auxiliary Verbs

<u>verb</u>	<u>auxiliary meaning</u>	<u>Cornyn & Musgrave's</u> <u>Definition</u>
san:	polite urgency	verb: to try, feel, test; unspecified bound form: polite urgency
sei	causative, sends, causes to do	verb: to ask, in- struct (to do); 2p: 'imperative'

ta'	ability	verb: afford, be able
thin.	should, must, ought	verb: be conven- ient, get along with; av: should, must, ought
ya.	to have the opportunity	verb: get, obtain; 2p: compulsion

(Cornyn & Roop, pp. 470-501; Cornyn & Musgrave)

All of Cornyn & Roop's auxiliary verbs have meanings as main verbs, and the latter meanings are more concrete than the auxiliary meanings. In the Cornyn & Musgrave analysis, san: is not classified in its bound occurrence; sei. and ya. are classified as 2p; ta' is only given a main verb meaning; only thin. is also an auxiliary verb. Cornyn & Musgrave included a total of eight auxiliary verbs.

Figure 5.2.6b Cornyn & Musgrave's Auxiliary Verbs

<u>Verb</u>	<u>Auxiliary Meaning</u>	<u>Main Verb Meaning</u>
kaun:	indicating probability	to be good, well
tan	be proper, suitable	be fit, suf- ficient, equal
thin.	should, must, ought	be proper, suitable

sei (si)	causative	to ask, instruct (to do), (also 2p, imperative)
htai'	be worthy, fit	be worth
ye'	be capable of, have the heart to	---
ye:	be bold enough, dare	be bold
wun.	dare to	---

(Cornyn & Musgrave)

Again, the main verb meanings are a bit more concrete than the auxiliary meanings. Since ye' and wun. are not given main verb definitions, more evidence is needed to justify their status as actual verbs.

5.2.7 Okell's Verb Compounds. Okell has the most extensive treatment of verbs and particles in Burmese. What is referred to in this dissertation as verb concatenation is considered a special case of verb compounding by Okell. A compound word consists of two or more words "joined together" (Okell, 1969, p. 1), and if the words are all verbs, then the compound is a compound verb (Okell, 1969, p. 25). Okell discussed the phonetic criteria which have been proposed to distinguish phrases from compound words and decided that no simple phonetic characterization of such a distinction was justifiable (Okell, 1969, pp. 222-223). Continuing this argument, he declined to propose a rigorous definition of word (Okell, 1969, p. 224). Okell

used various syntactic and semantic criteria to separate word-particle homonyms but as a general rule preferred to consider such morphemes as words as much as possible, rather than as pairs of homonyms (Okell, 1969, p. 221). This attitude explains why many of Cornyn & Roop's secondary particles are considered auxiliary verbs by Okell.

Okell classified bi-morphemic compounds on syntactic and distributional grounds. If a compound verb + verb has an alternative form verb + pi: + verb, with the same meaning, the original compound is called a pre-verb compound, and the first verb is called a pre-verb. The particle pi: 'and' is considered to be suffixed to the pre-verb. (Okell, 1969, p. 25).

thwa: we. thwa: pi: we 'go and buy'

go - buy go - and - buy (Okell, 1969, p. 25)

An auxiliary verb is any one of a small number of verbs which can occur in verb "compounds following a wide variety of other verbs -- in fact virtually any other" (Okell, 1969, p. 25).

ci. jin 'want to look'

look - want to (Okell, 1969, p. 24)

An ordinary verb is any verb which is not a pre-verb or an auxiliary verb (Okell, 1969, p. 25).

The ordinary verb compounds, those whose members are

both ordinary verbs, seem to me to be lexical compounds. The reason is semantic rather than phonetic. A casual inspection of 13 ordinary compounds given by Okell shows that the meaning of the compound is an arbitrary generalization or abstraction from the meanings of the elements in the compound. Here are two examples.

yaun: we 'trade'
sell - buy

cei na' 'be satisfied, contented'
be ground down - be fully cooked (Okell, 1969, p. 25)

The class of doubled verbs is a subclass of the ordinary verb compounds. The meaning of a doubled verb is identical to that of either of its members, but the style is more elevated or literary.

pyo: hsou 'speak'
speak - speak (Okell, 1969, p. 26)

The class of artificial compound verbs is a subclass of doubled verbs, in which the second member of the compound is derived from the first by rhyme or chime.

thwe' le' 'be nimble, fluent'
.be nimble, fluent - rhyme syllable (Okell, 1969, p. 28)

nye' nyo. 'be fine, smooth'

be fine, smooth - chime syllable (Okell, 1969, p. 29)

The meaning of a doubled verb is not arbitrarily derived from the meanings of the elements, but since the meaning of such a compound is identical to the meaning of a single verb, a doubled verb can be considered as a single lexical unit.

Figure 5.2.7a Okell's Common Pre-Verbs

<u>verbs of Movement</u>	<u>Meaning in Compound</u>
thwa:	go and
la	come and
win	go (or come) in and
htwe'	go (or come) out and
htain	sit and
hta.	get up and
te'	go (or come) up and
hsin:	go (or come) down and
hle.	turn around and
lai'	accompany and
<u>Other verbs</u>	<u>Meaning in Compound</u>
thei'	very
te	very
hlu'	tremendously

hpi.	tremendously
nin:	tremendously
tha	more
pou	more
hta'	repeat, again
pyan	return to, again
sa.	begin to
hse'	continue to
hyau'	wandering
hlan.	reaching
cou	in advance
ci.	at discretion

(Okell, 1969, p. 31)

Figure 5.2.7b Okell's Auxiliary Verbs & Classification by Others

(Stewart: v = primary verb, e = enclitic verb, p = subsidiary verb particle, i = imperative particle;

Cornyn & Roop, Cornyn & Musgrave: v = primary verb, av = auxiliary verb, 2p = secondary particle, vp = verb particle, e = enclitic, c = unspecified verb combination, ub = unspecified bound form)

<u>Aux</u>	<u>Verb</u>	<u>Meaning</u>	<u>Stewart</u>	<u>Cornyn</u> <u>& Roop</u>	<u>Cornyn</u> <u>& Mus-</u> <u>grave</u>
lwe		be easy to	e	v	v
lau'		be enough to	e	v	-

qa:	be free to	e	v	v
hkain:	command, tell to	-	-	v
ye:	dare	e	-	v, av
wun.	dare	e	-	av
tan	be suitable, fitting to	e	-	v, av
htai'	"	e	-	v, av
thin.	"	e	av	v, av
qa'	"	e	-	-
kaun:	be good, wise, likely to	e	v	v, av
ya.	may, can, must	e	v, av,	v, 2p
			2p	
nei	stay, be	e	v, c	v
ta'	can, be apt to	e	av	-
pi:	finish, have	p, v	v	v
thwa:	go, finish, become	-	v	v
la	come, finish, become	-	v	v
ci.	try out	-	v	v
hca.	let rip	-	-	v
pei:	for	e	v, c	v
pya.	demonstrate	-	v	v
hta:	permanently	-	v	v
sou.	let's	-	-	i(1st pl)

hpyi'	work out,	e	c	v
	manage to			
hcin	want to	e	2p	2p,c
nain	be able to	e	2p.	v,2p
sei	make, let, may	e	av	v,2p
ye'	have the heart to	e	-	av
tha	conveniently	e	-	v
pyi'	completely,	-	-	v
	quickly			
hke:	rarely	e	v	v
pain	have the right to	-	-	v
hla.	greatly	p	v,2p	v,2p
mi.	inadvertently	p	2p	v,2p
hnin.	ahead	p	-	-
lai'	away, lightly,	-	v,2p	v,2p
	greatly			
hpu:	ever	-	-	-
yi'	behind	p	-	2p
pyan	again	e	v,c	v
koun	all	-	v	v,2p
hke.	back there	p	2p	2p
hkin	in time	-	-	-
qa:ci:	too much	-	-	v
lun:	too much	e	-	v,2p
yo.	by now	-	-	-
lein.	no doubt	p	2p	2p
lu.	almost	p	-	-

thei:	yet	p	2p	2p
qoun:	further	-	2p	2p
to.	<u>final</u>	p	2p	2p
ca.	<u>severality</u>	p	2p	2p
toun	<u>alternating</u>	p	-	e
pa	<u>polite</u>	p	v, 2p	v, vp
san:	<u>urgent</u>	p	av	ub
hle.	<u>encouraging</u>	i	-	2p
hya	<u>pity</u>	p	-	2p
pei	<u>euphonic</u>	-	-	-
lei	<u>euphonic</u>	-	-	-
hci	<u>euphonic</u>	-	-	2p
(Okell, 1969, pp. 32-33, Stewart, Cornyn & Roop, Cornyn & Musgrave)				
<u>Totals</u>	59 aux verbs	23 e	5 av	6 av
		15 p	18 v	23 v
		1 v	13 2p	19 2p
		1 i	3 c	1 i, 1 c
				1 e, 1 vp
				1 ub

Figure 5.2.7b shows that Okell's class of auxiliary verbs is more inclusive than Stewart's enclitic verbs or than the verbs and auxiliary verbs of Cornyn & Roop and Cornyn & Musgrave. This result is consistent with Okell's stated policy of making as few verb/particle splits as possible. There is general agreement as to the meanings of

these linguistic forms. The problem is one of classifying them and assigning structural descriptions to the constructions which contain them.

The classification of a form as a pre-verb or an auxiliary verb does not exclude the other possibility. The forms thwa:, la, hle., lai', tha, pyan, and ci. appear in both lists, with the same Burmese spelling. Because the meanings are sometimes different, it is not clear whether we have otherwise unrelated homonyms or the same items with meaning shifts associated with position shifts.

Because Okell does not give explicit criteria for verbhood it is difficult to justify some of his classifications. For example, he specifically pointed out that some verbs are "bound verbs"; that is, they occur exclusively in compounds.

youdhei 'be respectful'

hkanza: 'enjoy'

(Okell, 1969, p. 34)

The underlined verbs are the bound forms. Also, the auxiliary verbs, hcin 'want to', hpu: 'ever', and lun: 'too much' and the pre-verb te 'very' are all bound verbs. (Okell, 1969, p. 34). Other authors do not have a category corresponding to Okell's pre-verbs, but the behavior of individual pre-verbs is described. Cornyn & Roop characterize Okell's pre-verb sa. 'begin to' as participating in "verb combinations"; when sa. "precedes another verb it

indicates that the action of the main verb is beginning" (Cornyn & Roop, p. 216). Once the various disyllabic compound verbs were described by Okell, he showed that there are also multiple compound verbs, which are built up from various combinations of pre-verbs, auxiliary verbs, and ordinary verbs (Okell, 1969, pp. 37-39), resembling Matisoff's multiversatile and fore-and-aft concatenations.

5.2.8 Position of the Negative Prefix 'ma'. In Okell's work, the position of ma is an additional feature of various constructions; it is not used as a diagnostic criterion. Before summarizing his results, we need to define one further construction involving verbs. This is the tied-noun verb, which consists of a noun, followed by a "closely linked" verb, such "that the whole phrase may be regarded as a single unit of meaning" (Okell, 1969, p. 36).

hnou' hse' 'greet

mouth - join (Okell, 1969, p. 36)

Figure 5.2.8 Position of Negative Prefix 'ma' in Verb Compounds (V = verb, N = noun)

	<u>maVV(maNv)</u>	<u>VmaV(NmaV)</u>	<u>maVmaV</u>
ordinary compounds	usual	--	occasional
pre-verb compounds	exceptional	usual	--
auxiliary compounds			
some	usual	occasional	--
others	--	usual	--
tied-noun verbs	exceptional	usual	--

(Okell, 1969, p. 42)

The fact that ma usually does not separate the verbs of an ordinary compound can be considered as syntactic evidence for the tightness of the elements of the compound. Since pre-verb compounds are defined by the possibility of containing the intervening particle pi: 'and', the position of ma is consistent with this pattern and also shows a looser connection between the elements of the compound. The behavior of ma in auxiliary compounds will be explored further.

5.2.9 Allot's Verb Classes. Allot first distinguished simple verbs and complex verbs on phonetic grounds. Simple verbs can be monosyllabic or disyllabic, and the latter can consist of independent or bound forms. A complex verb consists of a "sequence of two, three or more separate verbs following each other in open, interverbal junction" (Allot, p. 286). The term complex was proposed, because Allot did "not wish to suggest that one verb of the sequence is

subordinate to the others" (Allot, p. 286). As mentioned in 5.2.7, Okell objected to such phonetic criteria for defining grammatical classes.

Modal verbs are verbs which frequently occur in the second position of complex verb heads, "with a slightly different meaning"; their initial consonants are usually not voiced, an indication of loose juncture, and the negative prefix ma usually directly precedes the modal. The existence of optional variants of negative modal phrases in which the negative prefix ma precedes the entire complex verb is taken as evidence of the unity of the "complex idea" (Allot, pp. 286-287). Some examples of modal verbs were given, and they are contrasted with Okell's classification in Figure 5.2.9.

Figure 5.2.9 Allot's Modal Verbs

<u>Modal Verb</u>	<u>Meaning</u>	<u>Okell's Classification</u>
pi:	finish	auxiliary verb
pei:	give, do for another	auxiliary verb
hta:	keep, put	auxiliary verb
ci.	look, try out	auxiliary verb, pre-verb
pya.	show	auxiliary verb
koun	be used up	auxiliary verb
nei	remain, be (do)ing	auxiliary verb
la	come	pre-verb, auxiliary verb

thwa: go pre-verb, auxiliary verb
 (Allot, p. 286)

Auxiliary verbs are characterized syntactically by the fact that the negative prefix ma always precedes the verb head and not the auxiliary verb in a negative verb construction. Semantically, auxiliary verbs "characterize the degree, likelihood, suitability, possibility etc. of the verb... AV's are distinguished from particles because, in most cases, a homonymous main verb of the same or similar meaning exists, and because they co-occur with certain particles but not with each other. However the listing of a word as an AV does not necessarily imply the existence of a homonymous main verb." (Allot, p. 287).

Allot's modal verbs are precisely those auxiliary verbs which Okell noted as having the negative prefix ma attached (Okell, 1969, pp. 40-41). All of Allot's 25 auxiliary verbs are included among Okell's auxiliary verbs. However, Allot stated that the auxiliary verb hke: 'rarely met with, seldom' does not occur in the negative (Allot, p. 303). Thus, it fails the syntactic criterion of auxiliary verb-hood.

5.2.10 Smeall's Verb-Particle Continuum. Smeall worked within a transformational framework and was inspired by Ross's work, which was described in 3.3.2. In one study, he began with Okell's auxiliary verbs and proposed various phonological and syntactic tests to determine the

position of the auxiliary on a continuum between full verb-hood and particle-hood. The major phonological test was : "if an auxiliary does not undergo voicing, then it is a main verb and is separate from what precedes it by a (possibly underlying) major constituent boundary (Smeall, 1974, p. 10). However, Smeall himself noted the circularity of this characterization of word boundary (Smeall, 1974, p. 9). Next, there seems to be the assumption that if an auxiliary can take a sentential complement, it must be a "main verb" (Smeall, 1974, p. 10). Because of the vague notions of lexical categories in generative theory, as discussed in 3.3, the significance of such a claim is not clear. After considering several syntactic properties of auxiliary verbs, such as the position of the negative prefix ma and the placement of complementizers, Smeall concluded that there was a continuum of "verbiness" (Smeall, 1974, p. 23).

In a later study, Smeall continued to work in a transformational framework, but was more influenced by Matisssoff's treatment of verb concatenation in Lahu. Smeall preferred to label verbs which participate in "tightly bound strings" as incorporable verbs (Smeall, 1975, p. 274). Considering such features as scope, occurrence of complements, occurrence of complementizers, and nominalization of complements, Smeall subcategorized the incorporable verbs into a hierarchy of verbiness (Smeall, 1975, p. 276).

5.2.11 Thurgood's Historical Morphology. In this

dissertation, I am concentrating on problems of synchronic description. Nevertheless, Thurgood's diachronic study sheds some light on the origin of synchronic problems. "Aside from a handful of borrowings and a small number of forms inherited from proto-Lolo-Burmese proto-tone *3, all the Written Burmese creaky tone forms with clear etymologies arose out of the verbal morphology! The presence of auk mrac on a morpheme tags it as having originated as a sentence-final verb." (Thurgood, p. 685). Adjective is the term often used for stative verbs, and Thurgood gave several examples of creaky-toned verbs paired with level-toned stative counterparts, e.g. mau. 'turn up face; look up'; mau 'ascending, high in slanting direction; haughty' (Thurgood, p. 686).

We have already seen that linguists cannot agree on the classification of many forms as verbs or particles in Burmese. "The presence of a creaky tone on many of them substantiates the belief that verb particles originated as full verbs." (Thurgood, p. 688). Thurgood added that the property of certain verbs of occurring after "a wide variety of other verbs", the "increasing inability to be negated", and "less specific and less restricted" meanings are all signs "of the impending particle status of a former full verb" (Thurgood, p. 688). Hence, the synchronic continuum described by Smeall could result from the diachronic process described by Thurgood. This suggests that the distinction between verb and particle may, in principle, be

unclear, or, at least, that some arbitrary classificatory decisions are unavoidable.

5.2.12 Summary of Burmese Results. One of the most salient features of Burmese grammar is the prominence of particles. The verb is either not explicitly defined, or the definitions given are not adequate to include all the forms which are listed as verbs in the various grammars. On the phonetic level, we have loose juncture, involving voicing of obstruents and other features, as a possible indication of word boundaries, and we have the creaky tone as historical evidence of verb-hood. Syntactic facts such as the possibility of being negated and co-occurrence with specific particles are used to characterize verbs. Distributional properties and a semantic shift towards abstraction are used to identify forms which are called auxiliary verbs, pre-verbs, modal verbs, enclitic verbs, and secondary particles by various scholars. Forms are described as bound or free, but the definitions are not clear, and the relative freedom of auxiliary verbs is not described clearly.

5.3 Cambodian.

5.3.1 Grammatical Summary. The Cambodian sentence has the basic order: Subject + Verb + Object. There is no lexical tone, but some writers discuss "register", which seems to involve vowel quality and phonation rather than pitch (Henderson, 1952). "Unlike its neighbors Thai and Vietnamese, which are tonal and essentially monosyllabic, Cambodian is non-tonal and has a high percentage of disyllabic words. Like the Malayo-Polynesian languages, it has a relatively complex morphology, forming disyllabic derivatives from monosyllabic bases by prefixation and infixation, although these processes are rarely productive in the language." (Huffman, 1970a, p. ix). Modifiers generally follow the words they modify (Huffman, 1970a, p. 17). In possessive constructions, the possessor follows the possessed (Huffman, 1970a, p. 72). Numeral classifier phrases have the form: noun + numeral + classifier (Huffman, 1970a, p. 67).

5.3.2 Sources of Data. My main sources of data are Huffman's modern Spoken Cambodian (Huffman, 1970a), Ehrman & Sos's Contemporary Cambodian: Grammatical Sketch (Ehrman & Sos), and Jacob's Introduction to Cambodian (Jacob). I will use Huffman's transcription for citing Cambodian data from all sources.

5.3.3 Major Lexical Categories. For the glossary at the end of his grammar, Huffman listed 31 different grammatical designations, including noun, seven types of verb,

adverb, four types of adjective, four types of particle, auxiliary, preposition, and conjunction (Huffman, 1970a, p. 405). Unfortunately, they are not all defined, and the relationships between various categories are not clear. For example, touc 'to be small' is listed as an adjectival verb in the glossary (Huffman, 1970a, p. 425), but is labeled an adjective in the phrase:

pũq-maaq touc rəbəh kñom pii nēq nih
 friend -small -of - mine - two - person - this
 'these two small friends of mine'
 (Huffman, p. 1970a, p. 73)

Verbs are defined and subcategorized more precisely than most of the other grammatical categories. "A verb may be defined as any word which can be preceded by the negative auxiliary m̄in." (Huffman, 1970a, p. 56).

Ehrman & Sos claimed that four major word classes could be defined on the basis of syntactic and morphological criteria, but they actually defined the classes in functional terms. Nominals are "words which can serve only as subject but not as predicate of a major clause." Verbals are "words which may serve either as predicate or as subject of a major clause." Adverbials are "words which can be neither subject nor predicate and which do not connect any two units." Relators are "words which can be neither subject nor predicate and which connect two phrases or two

clauses." (Ehrman & Sos, p. 38). Verbals are divided into auxiliaries, stative verbs ('adjectives'), and action verbs (Ehrman & Sos, p. 56), and "the term 'verb' is used to refer to both adjectives and action verbs." (Ehrman & Sos, p. 59). The property of being preceded by the negative m̄n is not mentioned.

Jacob "catalyzes", that is, defines the four main word categories of verb, noun, numeral, and numeral coefficient, by the property of the word to be identified immediately following one of a closed list of given words. Verbs are catalyzed by m̄n 'not', n̄n 'will', kom 'don't', and kaa 'so'. Nouns are catalyzed by kn̄n 'in', gae 'at, and gampii 'of, about'. Numerals are catalyzed by tii 'ordinalizing prefix' and c mnu n 'number'. Numeral coefficients are catalyzed by numerals. All words which cannot be catalyzed as verb, noun, numeral, or numeral coefficient are particles, including pre-verbal particles, which can only occur immediately preceding a verb. (Jacob, pp. 330-331).

5.3.4 Huffman's Verb Classes. Huffman's verbs are divided into seven classes on the basis of syntactic and semantic criteria. A transitive verb (tV) is a verb "which may be followed by a direct object" (Huffman, 1970a, p. 56). An intransitive verb (iV) is a verb which is "never followed by an object" (Huffman, 1970a, p. 56). An adjectival verb (aV) "may be defined as any verb which may be followed by the intensifying adverb nah 'very'." (Huffman,

1970a, p. 57). Adjectival verbs "function as noun modifiers (English adjectives), as verb modifiers (English adverbs), and as main verbs (in which case they are equivalent to English be + adjective)" (Huffman, 1970a, p. 56). A modal verb (mV) is a preposed modifier of main verbs (Huffman, 1970a, p. 55); "modal verbs precede, and in some way limit or modify, a following main verb or another modal verb" (Huffman, 1970a, p. 76). "Directional verbs [dV] occur after primary verbs which are non-specific as to direction or goal, and specify the direction or general orientation of the action initiated by the verb." (Huffman, 1970a, p. 138). "Completive verbs [cV] follow, and express the completion, expected result, or possibility of achievement, of primary verbs which initiate an action." (Huffman, 1970a, p. 187). The only copulative verb or connecting verb is cia 'be, is' which connects or equates noun phrases or propositions; the term copulative verb is not defined, but this is the function which I deduced from the examples (Huffman, 1970a, p. 221).

The above classes are not all mutually exclusive. For example, tiw is defined as a transitive verb 'to go' and a directional verb 'orientation of action away from speaker: to, up to', as well as an aspectual particle 'orientation away from speaker in time', and an imperative final particle 'go ahead' (Huffman, 1970a, p. 425). Huffman seems to prefer not to establish sets of homonyms, but rather to define the grammatical designation of the occurrence of a

particular form, according to its intrinsic meaning and to its relationships with surrounding forms.

5.3.5 Huffman's Preverbal Auxiliaries. "Preverbal auxiliaries are words which qualify a following modal or primary verb, but which never themselves occur as verbs, or whose meanings as auxiliaries differ from their meanings as verbs. Auxiliaries are defined by the following criteria:

1) In sentences involving both auxiliaries and modal verbs, auxiliaries precede modal verbs.

2) They never occur as verbs.

3) They are never negated (although some are inherently negative)." (Huffman, 1970a, p. 249).

Figure 5.3.5 Huffman's Most Common Preverbal Auxiliaries

<u>Preverbal Auxiliary</u>	<u>Meaning</u>
m̄n	not
qat (q̄at)	not (colloquial)
pum	not (literary)
kom	don't
m̄n-s̄aw	hardly, not very
m̄n-tō̄n	not yet
n̄ig	will, about to
c̄it	nearly, almost
k̄āq	so, then, accordingly
crān (-tae)	usually, mostly
sot (-tae)	all without exception
k̄ampun̄ (-tae) (n̄ig)	in the process of

təp (-tae)(nɪŋ)	just now
muk-tae	probably, likely to
ceh-tae	always
kuə-tae	should
srap-tae	suddenly
taen-tae	usually
rɪt-tae	increasingly
kan-tae	increasingly
trəw-tae	absolutely must

(Huffman, 1970a, p. 250)

The preverbal auxiliaries occupy the same ambiguous grammatical territory in Cambodian that the auxiliary verbs and secondary particles do in Burmese. Thus, cɪt is listed in Figure 5.3.5 as a preverbal auxiliary meaning 'nearly, almost', but it is listed in the glossary as an adjectival verb 'near' and a modal verb 'nearly, almost' (Huffman, 1970a, p. 407). Thus, at least for this item, we have the same pattern as for Burmese auxiliary verbs; the meaning of the verb becomes more abstract when it precedes a main verb. If a form can be classified as a different type of verb according to its position in a sentence, is Huffman justified in putting all of the preverbal auxiliaries in a separate category?

5.3.6 Huffman's Modal Verbs. Figure 5.3.6 shows all of the forms which Huffman labels as modal verbs, along with the other categories in which he includes these forms.

A meaning is given for the other category only if it differs from the modal meaning.

Figure 5.3.6 Huffman's Modal Verbs

(tV = transitive verb, iV = intransitive verb, cV = completive verb, aV = adjectival verb, dV = directional verb, aux = auxiliary; if an entry is classified by Jacob as an initiating verb (see 5.3.17), there is a + in the final column, if not, there is a -)

<u>modal verb</u>	<u>modal meaning</u>	<u>Other Category</u>	<u>Initial</u>
baan	to have done something, to have had the opportunity to	tV: to have, to get, to obtain cV: to be able to	+
ban	to hope, to pray (that)	iV	-
cap	to begin (to)	tV: to catch	+
cap-pdaəm	to begin (to)	tV	-
<u>can</u>	to want to	-	+
ceh	to know how to	tV: to know, be educated	+
cāt	nearly, almost	aV: near	+
coul-cæt	to like (to)	tV	-

cuəy	to help (to)	tV	-
		Aux: help by..., please...	
chap	to be quick to, prone to	aV: fast, quick	+
chup	to stop, cease	tV	+
<u>dael</u>	to have ever	-	-
<u>kamraa</u>	to be poor at	-	-
kit	to plan, intend to	tV: to think	+
kcil	to be too lazy to, disinclined to, not feel like	aV: to be lazy	-
khaan	to fail to, miss, lack	cV: (not) fail, miss	-
kraen	to fear, be afraid that	tV	-
mien	to happen to, to have occasion to	tV: to have, to exist	-
niw	to be still... to remain...	tV: to be sit- uated, re- side, remain; adverb: yet, still	-
<u>paen</u>	to intend (to)	-	-
pukae	clever, skillful (at)	aV	+
pdaem	to begin (to)	tV	+

prañap	to hurry to (do something)	aV: to hurry	+
prasap	to be good (at), skillful (at)	aV	+
prayat	be careful (to), take care (in)	aV	-
<u>prccm</u>	to agree (to)	-	+
<u>qaac</u>	to have the power or ability to	-	+
qaoy	to cause, make, let, allow	tV: to give dV: for, on be- half of (familiar)	-
qañceañ	polite in- vitation	(in isolation): please go ahead	+
quhsaa	frequently, often	aV: industrious, diligent	-
<u>samrac</u>	to decide (to)	-	-
samrap	to use for	tV	+
stoæt	to be good (at), skilled (at)	aV	-
tlōap	used to, custom- arily	aV: to be accustomed	+
traw	to have to, must	aV: to be right, cor- rect	+

tV: to hit, come
 in contact with;
 be subjected to,
 meet with

(Huffman, 1970a, pp. 405-427)

Totals: 36 modal verbs
 7 modal verb only (underlined modal verbs)
 25 tV or iV or aV
 2 cV
 1 dV
 1 Aux
 1 adverb
 1 isolated form
 18 initiating verbs

From Figure 5.3.6 we see that 27 of the modal verbs can also occur as primary verbs, thus justifying categorizing them as verbs. The difference between most of the transitive verbs and their corresponding modal verbs is that the former are followed by nouns and the latter by verbs; otherwise the meanings are the same. In a few cases, the transitive verb has a more concrete meaning, as with n+V. Even for those seven cases in which the form appears only in modal position, the negative auxiliary m+n still precedes it, so the definition of verb is satisfied.

kñom mán trəw tɔw ptəsh tee

I - not - must - go - home - negative particle

'I don't have to go home.' (Huffman, 1970a, p. 55)

5.3.7 Huffman's Completive Verbs. The definition of the completive verb, given in 5.3.4, has both a syntactic and semantic component. Syntactically, the completive verb follows the main verb, and semantically, it completes the action initiated by the main verb. Huffman defined "two classes of completive verbs: 1) specific completive verbs, which have a resultative relationship with a specific primary verb (or with a specific semantic group of primary verbs), and 2) general completive verbs, which occur after a wide variety of verbs, and express the completion, or the possibility of achievement, of the initiated action" (Huffman, 1970a, p. 187). Here we are at the boundary between morphology and syntax. How do we distinguish between lexical compounds and syntactic phrases? In particular, if a given form only occurs in combination with a primary verb and never alone, can it still be called a word? Figure 5.3.7 contains Huffman's completive verbs, along with other categorizations of the same forms.

Figure 5.3.7 Huffman's Completive Verbs

(G = general completive verb, S = specific completive verb,
? = item not classified, tV = transitive verb, iV = intran-

sitive verb, mV = modal verb, adv = adverb, con = conjunction)

<u>Completive</u>	<u>completive</u>	G/S	<u>Other</u> <u>Category</u>
<u>Verb</u>	<u>Meaning</u>		
baan	to be able	G	tV: to have, to get, to obtain mV: to have (done some- thing), to have had the opportunity
cap	to complete, get to the end	G	iV: to finish, come to a close
ceh	to know	S	tV: to know, be educated mV: to know how to
cōōp	to pass (an examination)	?	iV: to stick, be attached
haay	to be ready, finished	?	Adv: already, indeed con: then, and then
kaət	to be able	G	tV: to give birth to, be born; to happen, arise, develop, catch (a disease, etc.)
<u>kaa-baan</u>	to be a possibility	?	---
<u>kaa-miən</u>	does happen, is possible	?	---

khaan	(not) fail,	G	mV: to fail to, miss miss, lack
khəən	to see	S	tV: to see, perceive
lɨɨ	to hear	S	tV: to hear, to sound
<u>luəŋ</u>	to fall asleep	S	---
mut	to cut,	S	iV: to cut, to be go in sharp (cutting)
<u>phot</u>	to be free	S	---
	(of), clear		
	(of)		
ruəc	(after neg- ative) to be	G	con: then, besides
	able; to fin- ish, complete		
<u>srac</u>	to decide on,	?	---
	dispose of, finalize		
<u>təən</u>	to be on	S	---
	time for		
thum	to smell	S	tV: to smell, sniff
	(Huffman, 1970a, pp. 187-189, 405-427)		

Totals: 18 completive verbs

6 completive verbs only (underlined)

9 tV or iV

2 con or adv

1 mV, not tV, not iV

2 mV and tV

Two of the forms which appear only as completive verbs are compounds containing kaa (ka-), an auxiliary meaning 'so, then, accordingly' as in

tɪw, ka-tɪw 'Let's go then. (We'll go if you wish.)'

go - then - go (Huffman, 1970a, p. 45)

It is not clear why these constructions are considered as lexical compounds.

5.3.8 Huffman's Directional Verbs. This class is important in each language studied. Class membership is easily determined by the semantic part of the definition given in 5.3.4. Figure 5.3.8 gives Huffman's directional verbs along with their other categorizations.

Figure 5.3.8 Huffman's Directional Verbs

(tV = transitive verb, iV = intransitive verb, mV = modal verb, aux = auxiliary, aP = aspectual particle, fP = final particle, adv = adverb)

<u>Verb</u>	<u>Directional Meaning</u>	<u>Other Category</u>
mɔɔk	orientation toward speaker in space	tV: to come (to); aux: come on and, do; aP: orientation toward speaker in time

tɪw	orientation away from speaker in space	tV: to go; aP: orientation away from speaker in time; fP: imperative final particle: go ahead
cuun	on behalf of, for (formal)	tV: to accompany
gaoy	on behalf of, for (familiar)	tV: to give; mV: to cause, make, let, allow
taam	along, following	tV: to follow
nɪw	still, remaining at	tV: to be situated, reside, remain; mV: to be still..., to remain; adv: yet, still
coh	down, downward	tV: to lower; go down, descend
laɔŋ	up (on), upward	tV: to climb, ascend
coul	in, into	tV: to enter
cəŋ	out, out (of)	iV: to exit, leave

(Huffman, 1970a, pp. 139, 405-427)

Totals: 10 directional verbs

9 tV	2 aP	1 adv
1 iV	1 fP	
2 mV	1 aux	

Each directional verb can also occur as a primary verb. Syntactically, both directional verbs and completive verbs follow the primary verb. Huffman distinguished the two categories semantically, but directionality could also be considered as a special case of a result.

Huffman noted that when directional verbs are followed by an object, they are "frequently best translated as prepositions in English", and when they are not followed by an object, they can be translated as adverbs.

yɔɔk qəywan nih tɛw bəntup
 take - thing - this - go - room
 'Take these things to the room.'

yɔɔk qəywan nih tɛw
 take - thing - this - go-
 'Take these things away. (Huffman, 1970a, p. 138)

Unlike the scholars working in Chinese, discussed in 4.3, Huffman did not use English translation as a basis for classification. The difference between the classification of tɛw 'go' in the last example as a directional verb rather than a particle needs to be investigated. Although the direct object qəywan nih 'these things' separates the primary verb from the directional verb, this construction is still considered as verb concatenation. Huffman called bəntup 'room' the "object" of tɛw, but the type of object

has yet to be clarified.

5.3.9 Huffman's Coordinate Compounds. "A very common derivational technique in Cambodian is the joining of two words of the same or similar meaning to form a coordinate compound whose meaning is more general than that of either constituent, or is the sum of the meanings of the two constituents." (Huffman, 1970a, p. 296).

Figure 5.39a Examples of Noun Compounds

qəwpuk-mdaay 'parents'

father - mother

khao-gaaw 'clothing'

trousers - shirt, coat (Huffman, 1970a, p. 296)

Figure 5.3.9b Examples of Verb Compounds

cumriəp-sue 'to greet'

to inform - to inquire

dək-nōəm 'to transport'

to carry - to lead (Huffman, 1970a, p. 297)

The above examples show that the same process occurs with both nouns and verbs. How does such compounding differ from combinations of primary verbs with modal verbs or with completive verbs? A major difference is that between coordination and subordination, an issue which was

discussed in 4.3.

5.3.10 Ehrman & Sos's Tense/Aspect Auxiliaries. The class of auxiliaries is a subset of the class of verbals, defined in 5.3.3. Auxiliaries precede the verb (Ehrman & Sos, p. 54), but they are otherwise defined semantically only. Figure 5.3.10 contains Ehrman & Sos's tense/aspect auxiliaries along with the corresponding preverbal categories according to Huffman.

Figure 5.3.10 Ehrman & Sos's Tense/Aspect Auxiliaries

(D = durative, i.e. the action is either repeated or overlaps in time with some other action; U = unmarked for duration)

<u>Auxiliary</u>	<u>meaning</u>	<u>D/U</u>	<u>Huffman's Category</u>
<u>Completed Action:</u>			
baan	past action	U	modal verb
dael	within the subject's previous experience; have ever, never	U	modal verb
tlōōp	within the subject's previous experience (usually refers to an act done more once); used to	D	modal verb

niyum frequent D ---
practice

Begun but not completed Action:

nāw (tae) still U modal verb
(emphasizes
incompletion)

kampung (tae) action in D preverbal auxiliary
progress at the
same time as some
other action which
is usually the act
of speaking

Unbegun Action:

nāg will, (pre- U preverbal auxiliary
dicted action
in the future

mān-tōān not yet, U preverbal auxiliary
(unbegun but
anticipated as
strong possibility

(Ehrman & Sos, p. 57)

The disagreement between Huffman and Ehrman & Sos is that if a preverbal form can also occur as a primary verb, Huffman classifies it as a modal verb, while Ehrman & Sos evidently consider only the preverbal position and meaning.

5.3.11 Ehrman & Sos's Modal Auxiliaries. "There are

many verbs used before another verb with modal meaning, but there is only a small class of verbs of which occur only as auxiliaries." (Ehrman & Sos, p. 58).

Figure 5.3.11 Ehrman & Sos's Modal Auxiliaries

<u>Modal</u>	<u>Meaning</u>	<u>Huffman's Category</u>
<u>Auxiliary</u>		
kuə-tae	should	preverbal auxiliary
trəw	must	modal verb
qaac	can, (is)	modal verb
	able	
mɛn bac	don't	---
	need to	
cəŋ	to want to	modal verb

(Ehrman & Sos, p. 58)

"Other verbs which occur in preverbal position are considered full verbs which are in an attributive construction with the main verb" (Ehrman & Sos, p. 58). This statement shows that for modals the defining criteria include both "modal meaning" and non-occurrence as a full verb. Thus, modals and tense/aspect auxiliaries are treated differently. Also, Huffman considers trəw 'must' and cəŋ 'to want to' to have primary verb meanings, while Ehrman & Sos do not.

5.3.12 Ehrman & Sos's Compound Verbs. Ehrman & Sos noted the same type of coordinate verb compounds as those described in 5.3.9. There are also verb compounds involving "some form of partial reduplication -- rhyming or alliteration" (Ehrman & Sos, p. 61). An additional type of compound verb consists of a verb and a noun.

qaa-kun 'thank you'

happy, pleased - merit, moral credit (Ehrman & Sos, p. 62)

5.3.13 Ehrman & Sos's Preverbal Attribution. The preverbal elements which can modify the verb are verbal auxiliaries, treated in 5.3.10 and 5.3.11; adverbs, corresponding to Huffman's preverbal auxiliaries, treated in 5.3.5; and verbals, including both adjectives and action verbs (Ehrman & Sos, p. 21).

Figure 5.3.13 Ehrman & Sos's Examples of Preverbal Attribution by Verbs

rowuəl niyiəy 'busy talking'

busy - talk

kət niyiəy 'to plan to speak'

to plan, to think - speak (Ehrman & Sos, p. 21)

The above attributive verbs, which are underlined in Figure 5.3.13, are respectively an adjectival verb and a modal

verb in Huffman's scheme.

"Normal preverbal word order in a verb phrase with only one main verb is:

preverbal + negator + auxiliary + attributive + main					
adverb			verb		verb
kōt	ceh-tae	m̄n	cəŋ	cap	riən
he	always	not	want	start	study

'He never wants to start studying.' (Ehrman & Sos, p. 24)

5.3.14 Ehrman & Sos's Postverbal Attribution. First, Ehrman & Sos gave examples of verb and noun attributes which may follow a verb.

Figure 5.3.14 Ehrman & Sos's Examples of Postverbal Attribution

niyiəy leep 'to joke, to say in fun'
to speak - to play (action verb)

srual twə 'easy to do'
easy - to make, to do (action verb)

niyiəy cbah 'speak clearly'
speak - to be clear (stative verb)

niyiəy wappəthə 'talk using elevated style'
speak - culture (noun) (Ehrman & Sos, pp. 19-20)

Ehrman & Sos added that "the object of a verb can be considered an attribute also" (Ehrman & Sos, p. 20). Thus, the attribution is a function of position rather than the lexical class of the attributive form. However, in the second example of Figure 5.3.14, srual 'easy' is an adjectival verb, and it is not clear why this is necessarily a case of postverbal attribution.

Two special cases of postverbal attribution are constructions involving resultative verbs, which correspond to Huffman's completive verbs, and attributive motion verbs, which correspond to Huffman's directional verbs.

5.3.15 Jacob's Attributive and Operative Verbs. Attributive verbs are those which are usually not followed by a noun, are often followed immediately by the adverbial particles nah 'very' and peek 'too much', and are translated into English as 'to be + adjective'. Most other verbs will be called operative verbs. (Jacob, p. 59). Because of the qualifications included in the definition, it is not clear how every case encountered can be handled. The terms suggest semantic motivations which are not reflected in the actual definitions.

5.3.16 Jacob's Pre-Verbal Particles. Jacob lists a number of pre-verbal particles (Jacob, p. 73), but does not say how exhaustive the list is. All of Huffman's preverbal auxiliaries are included among Jacob's pre-verbal particles, except cāt 'nearly, almost' and kuə-tae 'should', and cāt was treated inconsistently by Huffman (see 5.3.5).

Figure 5.3.16 Jacob's Pre-Verbal Particles Not Listed by Huffman as Preverbal Auxiliary

<u>Particle</u>	<u>Particle Meaning</u>	<u>Other Meaning</u>
kũəŋ-tae	continually, still	kũəŋ (verb) stay, sit (of monk)
cāmnam-tae	usually, habitually ---	
cāt-dal	almost (of time and place)	cāt (verb) near, close (pre-noun particle) near
cumnueh	instead of	cumnueh (noun) replacement cueh (verb) to replace
douc-cia	as though	(verb) seem as though, be like Huffman: (verb phrase) seems to be, appears to be, (preposition) such as
dael	already, has/ have ever at some time in the past	Huffman: (modal verb) to have ever
nīw-tae	continually, still	nīw (verb) remain, stay in, at

prahael	perhaps, it is possible that	(general particle) about (marker) perhaps, it is possible that Huffman: (preposition) about, approximately (conjunction) perhaps (adjectival verb) to be similar
prahael ciə	perhaps, it is possible that	(marker) perhaps, it is possible that (general marker) about Huffman: (prepositon) about, approximately (conjunction) perhaps
mīn-dael	never (in the past or present)	Huffman: (auxiliary + modal verb) never to have (done something)
mīn-mēn	not really	Huffman: <u>mēn</u> (verb) to be right, true
muk-ciə	perhaps, it is possible that, it is probable that; probably	(marker)
reɛŋ-tae	usually, habitually ---	
rəmeɛŋ-tae	usually, habitually ---	
səŋ-tae	almost all, al- --- most always, almost	

stəi-tae	on the point of,	<u>stəi</u> (verb) be on the
(niŋ)	about to	point of
hiəp-tae	almost	---

(Jacob, Huffman)

The entries in Figure 5.3.16 show that there is some confusion or disagreement in the categorization of some words as verbs or as pre-verbal particles or auxiliaries. For Jacob, prefixing mən 'not' or suffixing tae can convert a morpheme to a particle.

By calling such constructions as mən-dael 'never' and mən-mən 'not really' compound particles, Jacob avoids the catalysis of dael and mən as verbs, while Huffman classifies both of these words as verbs.

The verbs nəw 'remain, stay in' and stəi 'be on the point of' are converted to particles of related but more abstract meaning, by the addition of the suffix tae.

5.3.17 Jacob's Initiating Verbs. "A small number of verbs are regularly used immediately before another verb with no possibility of the occurrence of another noun or other word in between... Verbs fulfilling this function will be called 'initiating verbs'... The sequence of verbs [initiating verb + other verb] will be referred to as a 'close verbal sequence'. Any pre-verbal particle which is needed occurs before the initiating verb. Thereby making it the main verb of the sentence." (Jacob, p. 74).

Figure 5.3.17 Jacob's Initiating Verbs

(mV = modal verb, aV = adjectival verb, cV = completive verb, tV = transitive verb, dV = directional verb, iV = intransitive verb, aux = auxiliary)

<u>Verb</u>	<u>Initiating</u> <u>Meaning</u>	<u>Other</u> <u>Meaning</u>	<u>Huffman</u> <u>Classification</u> <u>& Meaning (if</u> <u>different from</u> <u>Jacob's)</u>
caŋ	to wish to	---	mV
prɔɔm	to agree to	---	mV
tɔtɔaɪ	to agree to	receive, meet	tV: to receive, accept
khɔm	to try hard to	---	---
lɔɔ	to try to	---	---
hiən	to dare to	---	aV: to be brave mV: to dare to
qaac	to have the power to, to dare to	---	mV
prasap	to be clever at, to be good at	---	aV mV
pukae	to be clever at, to be good at	---	mV aV
qɑŋcəəŋ	to invite to	---	mV
tɔw	to go to	go	tV dV

mɔɔk	to come to	come	tV dV
taeŋ	to have the habit of ___ing	---	---: usually, as a matter of custom
cɛt	to be near (in time) to	---	aV: near mV: nearly, almost
taŋ	to set to, to begin to	set, place	tV: to set up, display, estab- lish, to appoint
pdaem	to begin to	---	tV: to begin (to) mV: to begin (to)
cap	to begin to	catch	tV: to catch mV: to begin (to)
coul	to go in to	to enter	tV: to enter
cəŋ	to go out to	go out	iV: to exit, leave
chup	to cease to	cease, stop	tV: to stop, cease mV: to stop, cease
lɛeŋ	to cease to	cease	---: to leave off, desist from, to divorce
riən	to learn to	learn, study	tV: to study, learn
tlɔɔp	to be used to, accustomed to	---	aV: to be accustomed to mV: used to, customarily

ceh	to know how to	know	tV: to know, be educated mV: to know how to
chap	to be quick to	quick	aV: fast, quick mV: to be quick to, prone to
traw	to have to	must,	aV: to be right, coincide, correct be ne- mV: to have to, cessary; must right, tV: to hit, come in correct, contact with; be deserve subjected to, meet with
samrap	to be used for	---	tV: to use for mV: to use for
prañap	to be in a hurry to	hurry	aV: to hurry mV: to hurry to (do something)
rowūl	to be busy --ing	be busy,	aV: busy, pre- concerned occupied
kāt	to think of --ing	think,	tV: to think consider, mV: to plan, ponder, intend to discuss, wonder, think of

baan	to have already	get, obtain; be able	tV: to have, to get, to obtain cV: to be able to mV: to have (done something), to have had the opportunity to
soum	to ask to	ask, ask a favor	aux: please
gaanat	to be so kind as to	please	tV: to pity, take pity on

(Jacob, Huffman, 1970a)

Totals: 33 initiating verbs

19 modal verbs

Figures 5.3.6 and 5.3.17 show that there is a considerable overlap between Huffman's modal verbs and Jacob's initiating verbs. The definitions focus on different aspects of syntax and distribution, but both groups precede other verbs and are preceded by the negative word m+n. Jacob does not set up initiating verbs as a distinct word class; rather a verb may function as an initiating verb, and the other definitions given in the third column of Figure 5.3.17 show that it may also function in other ways.

5.3.18 Jacob's Minor Verbs. "A small number of verbs, which express lexically the idea of motion or position, are regularly used to perform a minor function.... The minor verbs are used after a major verb which expresses the idea of 'setting in motion' without specifying the direction." (Jacob, p. 76). This definition is similar to that of Huffman's directional verbs (see 5.3.4). "These verbs may be used as main verbs (i.e. having the position of verb in a sentence of the pattern" (responding particle) (adverbial construct) noun construct (pre-verbal particle) verb (adverbial construct) (final particle), where the parentheses indicate optional components, "and being preceded by any pre-verbal particle which occurs." (Jacob, p. 77). Thus, the minor verbs are a subclass of verbs, defined both syntactically, by the position after a main verb, and semantically, dealing with motion and direction.

Figure 5.3.18 Jacob's Minor Verbs

(dV = directional verb, aV = adjectival verb, mV = modal verb, prep = preposition, con = conjunction, cop = copulative verb, tV = transitive verb)

<u>Verb</u>	<u>Main Verb</u>	<u>Pre-</u>	<u>Huffman</u>
	<u>Meaning</u>	<u>Nominal</u>	<u>Classification</u>
		<u>Particle</u>	
tɨw	to go	-	dV (additional classifications for dV given in Figure 5.3.8)
mɔɔk	to come	-	dV
coh	to go down	-	dV
laɔŋ	to rise up	-	dV
cəñ	to go out	-	dV
coul	to go in	-	dV
kraom	to be under	+	prep
lɔə	to be on	+	prep
taam	to follow, to go along	+	dV
daoy	to follow, to go along	+	con: with the fact that, because, since prep: with, by
[but in glossary, marker: because; pre-nominal particle: along, by; in a --manner (Jacob, p. 297)]			
douc	to be like	+	aV: similar to, like, as
cɨt	to be near	-	aV: near mV: nearly, almost

cɣaay	to be far	-	aV: far, distant
nɪw	to stay, be at	+	dV
ciə	to be, to be as	+	aV: to be well cop: to be con: that
qaoy	to give	+	dV
cuun	to offer	-	dV
dəl	to arrive	+	tV: to reach, arrive at con: when (in the future) prep: to, until, reaching to
trəɣ	to move directly towards	+	aV: straight, honest
kraoy	to be after (of time)	+	prep: after, behind

(Jacob, pp. 76-77, 137-138)

All ten directional verbs listed in Figure 5.3.8 are included among the twenty minor verbs of Figure 5.3.18. Five of the non-dV entries are classified by Huffman as prep, among other categories. Huffman does not explicitly define preposition, but it appears to refer to Jacob's pre-nominal particles, some of the members of which may also be

verbs (Jacob, pp. 137-138). The differences in classification evidently result from considering position - post-verbal and pre-nominal - as well as the semantics of spatial relationships. However, the spatial components of douc 'to be like', cuun 'to offer', and gaoy 'to give' are not as direct or concrete as in the other minor verbs. Offering and giving imply that something may be moved, but where is motion involved in similarity?

5.3.19 Jacob's Major Verbal Sequences with Main Verb in First Position. In addition to the initiating verb + major verb and major verb + minor verb sequences discussed in 5.3.17 and 5.3.18, Jacob describes sequences of the form: (responding particle) (adverbial construct) noun construct (pre-verbal particle) major verb construct (adverbial construct/minor verb) major verb construct (adverbial construct/minor verb) (Jacob, p. 79). Unlike minor verbs, the second major verb usually receives stress (Jacob, p. 79). The main verb is defined as the verb which may be directly preceded by the negative pre-verbal particle min; in the following examples, the main verb is the first major verb (Jacob, p. 118).

First, there is the combination: operative verb + attributive verb.

caap yum piirūsh

sparrow - to weep, cry, call - to be beautiful to hear

'The sparrow chirps delightfully.'

wiə tɪw rɔhah

he - to go - to be quick

'He goes quickly.'

(Jacob, p. 79)

Next, there is the combination: operative verb + operative verb, which can be analyzed in various ways.

wiə deik lũəq

he - to lie down - to fall asleep

'He lay down and slept.' or

'He lay sleeping.'

caw tɪw psaa taam rɔteh

boy - to go - market - to follow - cart

'The little boy went to market following the cart.'

kɔst tɪw psaa tɪñ trɔy

she - to go - market - to buy - fish

'She went to the market to buy fish.'

(Jacob, p. 80)

The sequence deik lũəq 'lie down + fall asleep' can thus be analyzed, according to context, as two consecutive actions or as one action modified by the second. In the last example, tɪñ 'to buy' is interpreted as the purpose of tɪw 'to go'. (Jacob, p. 80).

Jacob notes without further explanation that "sentences have now been introduced which are composed of the same kind of word sequence but which should be analyzed differently" (Jacob, p. 81).

wia cap trøy touc

he - catch - fish - small

'He is catching small fish.'

structure: N + V

vN

n + vnv

where N = noun construct

n = noun

V = verb construct

v = verb

wia cap trøy lūōg

he - catch fish to sell

'He is catching fish to sell.'

structure: N + V + V

vN + v

n + vN + v

(Jacob, p. 81)

The important and unanswered question brought out by the above examples is: how can we analyze a given surface structure including several verbs? In one example, Jacob invokes context to assign a structure to a verb string, and in another example, she states that similar surface structures may be assigned different deep structures (although

Jacob does not use the terminology of transformational grammar), but no principles are given to guide these assignments.

5.3.20 Jacob's Major Verbal Sequences with Main Verb in Second Position. One group of verbs which occur in major verbal sequences as the main verbs in second position corresponds to Huffman's completive verbs. The structure is defined syntactically by the negative pre-verbal particle occurring between the two major verbs. "Pre-verbal particles other than the negative ones may occur before either the first or second verb." (Jacob, p. 119). This group can be further divided according to lexical meanings. First, there are "verbs which may be second in a sequence where the two verbs are lexically comparable with each other, the first expressing the idea of an action and the second expressing the idea of its completion or result. The second verb is very often negative." (Jacob, p. 119). These correspond to Huffman's specific completive verbs. Next, "where the idea of achievement or failure needs to be expressed and no special word is lexically suitable for position 2, one of the following verbs is used:" baan 'to be able, to have the possibility', kaat 'to manage, to be able', ruac 'to have finished; to achieve, be able'. (Jacob, pp. 119-120). These correspond to Huffman's general completive verbs.

Figure 5.3.20 Jacob's Lexically Comparable Verb Pairs with Main Verb Second

<u>1st Verb</u>	<u>Meaning</u>	<u>2nd Verb</u>	<u>Meaning</u>	<u>Sequence</u> <u>Meaning</u>
rɔɔk	to look for	khəəŋ	to see	to find
ni:k	to rack one's brains, to think about	khəəŋ	to see	to realize, to come to a conclusion
məəl	to look at	khəəŋ	to see	to observe
sɔap	to listen	lii	to hear	to hear (intentionally)
ca:k	to stab at	mut	to be pierced at the surface	to inflict a stab-wound
riən	to learn	ceh	to know	to know by learning, to have learned
tɔtɔ:k	to be wet	cook	to be soaked	to be wet through
ciəh	to avoid	phot	to be free from	to escape from, to get free from
kap	to strike with pointed weapon	ca:k	to stab (at)	to stab, to attack with a dagger

kɨt	to think, ponder	khoh	to be wrong	to be wrong
kɨt	to think, ponder	trəw	to be right	to be right
smaan	to guess	khoh	to be wrong	to guess
smaan	to guess	trəw	to be right	wrongly to guess rightly
kɨt	to think, ponder	khəəŋ	to see, perceive	to realize, conclude, solve a problem

(Jacob, p. 119)

"Sometimes a verb which has no connection lexically with the idea of achievement or completion may be the main verb in position 2. The inversion of main verb/verb order in the V V construction may in fact apply to any appropriate sequence of verbs." (Jacob, p. 120).

niəŋ nuh slaa səmləə mɨn dag mteeh tee
 young lady - that - make soup - stew - not - put, put in -
 seasoning - negative particle

'She makes soup without putting seasoning in!'

(Jacob, p. 120)

What is "appropriate" is not explained. Thus, the verbs referred to in the above quotation are not actually charac-

terized, other than by not belonging to the class of completive verbs.

5.3.21 Jacob's Multiverbal Constructions. No further principles of analysis are presented, but examples are given to illustrate sentences containing several initiating and minor verbs together and sentences having three or more verb constructs, with or without minor ones (Jacob, pp. 144-146).

5.3.22 Jacob's Compound Verbs. "The process of reduplication is encountered both in the formation of words and in syntax.... The effect of reduplication on lexical meaning varies but there is a strong tendency towards either the intensification or the restriction of the meaning of an unreduplicated partner-word... A high proportion of reduplicative compounds are attributive verbs. These often convey the idea of plurality to the noun with which they are associated." (Jacob, p. 188). Reduplicative words are of four types: alliterative, chiming, rhyming, and repetitive (Jacob, pp. 188-189).

In addition, there are compounds in which both components are in current use as words and in which there is no reduplication. A compound verb may express purpose, e.g.,
 rɔɔk-sii 'to earn a living',
 to seek - to eat
 or it may express two simultaneous actions, e.g.,
 lɔŋq-dou 'to do business'
 to sell - to barter (Jacob, p. 198).

Semantically, the relationships between the components of these compounds appear to be similar to those between non-compound verbal sentences mentioned in 5.3.19 and 5.3.20. However, Jacob distinguishes compounds from other sequences by the following characteristics:

- "(i) The first component is not an initiating verb.
- (ii) The second component is not a minor verb.
- (iii) In first reference the two components do not necessarily both have stress.
- (iv) In contrast to the utterance of a sequence of major verbs, the components may not be phrased separately.
- (v) No other word may intervene between the two components, as is possible with two major verbs...
- (vi) A second reference includes both components..."

(Jacob, p. 200)

A compound verb may consist of operative verb + operative verb, attributive verb + attributive verb, or operative verb + attributive verb (Jacob, p. 200).

5.3.23 Position of the Negative Auxiliary 'm̄n'. For Huffman, the possibility of negating a word is what classifies it as verb, so the position of the negative auxiliary m̄n is crucial to the analysis of the verb phrase. Ehrman & Sos mention the position of m̄n only as additional information.

mɛn niyɛy leɛŋ

not - speak - to play

'to not say in fun' (Ehrman & Sos, p. 21)

kɔ̃m mɛn cəŋ ɲam baay tee

I - not - want - eat - rice - negative particle

'I don't want to eat.' (Huffman, 1970a, p. 38)

kɔ̃m sdaɲ mɛn baan tee

I - hear - not - able - negative particle

'I can't understand.' (Huffman, 1970a, p. 38)

The first example illustrates the rule that the negative auxiliary precedes the main verb for an ordinary verb (Ehrman & Sos, p. 21). The second example illustrates the rule that the negative auxiliary precedes the modal verb (Huffman, 1970a, p. 38). The third example illustrates the rule that in a resultative or completive verb construction, the negative auxiliary comes after the main verb and before the completive verb (Huffman, 1970a, p. 38).

Jacob uses mɛn 'not' to catalyze any immediately following word as a verb, though three other words serve the same function (see 5.3.3). In a sequence of verbs, the main verb is identified by the possibility of being directly preceded by mɛn (see 5.3.17). mɛn precedes the first verb in both initiating verb + major verb (5.3.17) and major verb + minor verb (5.3.18) sequences, while mɛn

precedes the second verb in the completive and miscellaneous constructions discussed in 5.3.20. Furthermore, Jacob points out that in some sentences the position of m̐n can shift, with a corresponding meaning shift.

kōət criəŋ piirueh nah

he - sing - good to hear, beautiful to hear - very

'He sings beautifully.'

kōət m̐n criəŋ piirueh tee

he - not - sing - good to hear, beautiful to hear -

negative particle

'He does not sing beautifully.'

kōət criəŋ m̐n piirueh

he - sing - not - good to hear, beautiful to hear

'He sings, but not well. / He's not much of a singer.'

(Jacob)

5.3.24 Summary of Cambodian Results. Huffman's definition of verb-hood by the possibility of being preceded directly by the negative auxiliary m̐n is a useful diagnostic tool for identifying verbs. There is some confusion about the boundary between auxiliary verbs of various sorts and other elements in the verb phrase, somewhat analogous to the Burmese problem of distinguishing verbs from particles. Compound verbs are distinguished from other verb

constructions, but the nature of the distinction is not clear. Semantics plays an important role in the characterizations of the non-head verbs in the verb phrase. For Ehrman & Sos, modal verbs have "modal meaning" which deals with the possibility of the action of the verb occurring or with the speaker's attitude toward the action. Huffman, on the other hand, requires only that the modal verb precedes and modifies the main verb. Completive or resultative verbs are defined by their post-head positions, their semantic properties of completing the action initiated by the main verb, and by being directly preceded by the negative auxiliary. Directional verbs are defined primarily by their meanings, and they vary from concrete directionality to more abstract meanings. The categories of tense and aspect are expressed by preverbal elements which are sometimes considered verbs and sometimes not. The choice of which verb in a construction is attributive seems to depend on the intrinsic semantics of the individual verbs involved. In general, Jacob's categories of verbs, though not the terminology, agree with Huffman's, but individual items are often classified differently. Analysis of verb strings depends on word order, intrinsic semantics, and context, with most of the semantic and contextual analytic principles not stated explicitly.

5.4 Indonesian.

5.4.1 Grammatical Summary. The Indonesian sentence has the basic order: Subject + Verb + Object. There is no lexical tone. Modifiers follow the nouns they modify. In possessive constructions, the possessor follows the possessed. (Kwee, p. 12). Numeral classifier phrases have the form: numeral + classifier + noun (Kwee, pp. 95-97). Indonesian has many disyllabic words, and unlike the other languages studied in this dissertation, it has a productive verb morphology. Verbal affixes do not indicate person, tense, gender, or number; they are concerned with possession, transitivity, location of the action of the verb with respect to the object, and sometimes with deriving verbs from other lexical categories.

5.4.2 Sources of Data. My main sources of data are Johns' Bahasa Indonesia, Langkah Baru: a new approach (Johns), Kwee's Teach Yourself Indonesian (Kwee), Omar's "Word Classes in Malay" (Omar), Mulyana's Kaidah Bahasa Indonesia [Principles of Indonesian] (Mulyana), and Lewis's Teach Yourself Malay (Lewis). Indonesian and Malaysian have gone through a number of spelling reforms in recent years, and I will represent Indonesian and Malaysian data in the current Indonesian orthography, which is used in Johns' grammar.

5.4.3 Major Lexical Categories. Johns' grammar is intended for teaching rather than reference. It has many examples of various grammatical structures, but they are

not explicitly defined. The terms noun, verb, pronoun, adverb, and adjective are used, but important words which correspond to auxiliaries in other languages are not categorized other than by appearing in unlabeled lists.

Kwee's approach seems to be to give the nearest Indonesian equivalent to English lexical categories. For example, in his chapter "Some Articles", he discussed demonstrative pronouns, the numeral "one", and the relative pronoun yang 'who, which, that' (Kwee, p. 109). These may be translated in some instances by English articles, but they are definitely not in the same grammatical class with articles or with each other. Without definitions, Kwee treated pronouns, negative words, question words, verbs, adjectives, prepositions, conjunctions, interjections, and other words which were not put into categories. In his chapter on adjectives, Kwee mentioned "adjectival roots", such as tua 'old' and mudah 'easy' and "adjectives which are formed by a verbal root and the prefix ter-". They correspond to the English past participle. Indonesian regards 'ter + verbal root' as an adjective since it denotes a state." (Kwee, p. 71). At least in this case, the category adjective is defined semantically.

In Wojowasito's Pengantar Sintaksis Indonesia [Introduction to Indonesian Syntax] (Wojowasito), there is a chapter "Kinds of Syntactic Units", which includes brief characterizations of the lexical categories of Indonesian. They are substantives, verbs, adjectives, adverbs, conjunc-

tions, interjections, numerals, pronouns, and prepositions. (Wojowasito, pp. 55-59). The relevant categories for the present analysis are verbs, adjectives, adverbs, and prepositions.

Verbs have these characteristics:

- a) usually have a predicative function
- b) usually follow the subject and precede the object
- c) are followed by prepositions
- d) are used for commands
- e) experience a change in genus (active and passive)
- f) are preceded by the words boleh 'is allowed to', akan 'will', hendak 'to intend to, want to', sedang 'is in the process of', telah 'has (perfective marker)', sambil 'while'

Adjectives have these characteristics:

- a) usually follow nouns as qualifications or clarifications
- b) enter into comparative constructions with the words lebih 'more' and paling 'most'
- c) are not used for commands
- d) are not preceded by the words hendak 'to intend to, want to', akan 'will', boleh 'is allowed to', sedang 'is in the process of', telah 'has (perfective marker)'

Adverbs have the function of making secondary statements, as in: orang itu amat besar

person - that - very - big

'that person is very big'

Prepositions have these characteristics:

- a) possess adverbial functions
- b) usually are placed before nouns

(Wojowasito, pp. 55-59).

Omar claimed that "word classification in traditional Malay grammar follows the pattern existing in traditional English grammar which in itself was modelled on Latin grammar." (Omar, p. 12). Using syntactical features and morphological paradigms, Omar formed three major classes: nominals, verbals, and function words, and the verbals were subdivided into verbs, adjectives, aspect verbs, and modal verbs (Omar, pp. 15-16).

5.4.4 Omar's Verbs. Morphologically, the verbs are characterized by the presence of the following affixes: me-, ber-, ter-, per-, di-, -kan, and -i (Omar, p. 16). The authors describe these affixes also, but they neglect to define verbs by the presence of these affixes. While the presence of one of these affixes indicates that the word is a verb, the absence does not imply that the word is not a verb. For example, pergi 'to go' and tidur 'to sleep' are universally considered verbs, but they do not take the common verb prefix me- at all and change their meanings when they take other prefixes.

Syntactically, Omar stated that verbs occur at the position V in the structure N1 - V - (N2), where N = noun and V = verb (Omar, p. 16). Since the classes of both nouns and verbs are open and large, this structure cannot be used to define nouns or verbs without producing logical circularity. If nouns and verbs are completely defined by their morphologies or intrinsic semantics, then the syntax may be deduced from this knowledge but the syntax will not define the classes.

5.4.5 Omar's Adjectives. Morphologically, adjectives can participate in the constructions ter + adjective 'most adjective' and se + reduplicated adjective root + nya 'as adjective as possible'. Syntactically, adjectives can participate in constructions with function words denoting intensity: paling 'too, excessively', sungguh 'very, really', agak 'quite', sekali 'most', amat 'too', terlalu 'too, excessively', sangat 'very', and terlampau 'too, excessively'. Paling, agak, terlalu, and terlampau occur before the adjective; amat, sangat, and sungguh occur either before or after the adjective; sekali occurs after the adjective. (Omar, p. 17).

Adjectives were also said to occur at the position V in the structure N1 - V, where the N2 slot must be deleted as it also must if V is filled with an intransitive verb (Omar, pp. 16-17). Thus, this syntactic criterion does not separate adjectives from intransitive verbs.

5.4.6 Omar's Aspect Verbs and Modal Verbs. "The as-

pect and modal verbs do not have any of the morphological features of the verb, but they can occur at V in the structure N1 V (N2)." (Omar, p. 17). This definition is somewhat inadequate, because we shall see later that modals and aspects must precede other verbs. The above syntactic definition would imply that such verbs as pergi 'to go' are aspect or modal verbs since they do not have the morphological features of other verbs, and this conclusion would violate the semantic criteria of aspect and modal verbs. Omar solved the problem of definition by simply listing all the members of these two classes.

Figure 5.4.6a Omar's Aspect Verbs and Modal Verbs

<u>Aspect Verbs</u>		<u>Modal Verbs</u>	
akan	'will, shall'	boleh	'can, may'
sedang	'in the act of doing'	dapat	'can'
masih	'still'	bisa	'can, may'
telah	'already'	mesti	'must'
sudah	'already'	harus	'must'
pernah	'already'	mungkin	'possible'

(Omar, pp. 17-18)

Although the above list is supposed to be "exhaustive", Omar went on to mention the modals mahu (mau) 'will, to want (to), to intend (to)' and hendak (or nak) 'to intend, want, wish (to)' (Omar, p. 18). To describe the distribu-

tional features of the modals and aspects, I will use the notation x to mean that an acceptable y construction can be obtained by choosing either x or y , but not both together.

Figure 5.4.6b Omar's Distribution of Aspect Verbs and Modal Verbs

any aspect + boleh + verb
bisa adjective

any aspect + dapat + verb

mesti mau verb
harus + hendak + adjective
mungkin any aspect
except sudah

akan + any aspect

<u>sedang</u> + <u>akan</u>	<u>masih</u> + <u>akan</u>
<u>masih</u>	<u>sedang</u>
<u>sudah</u> + <u>akan</u>	<u>telah</u> + <u>sudah</u>
<u>pernah</u>	<u>pernah</u>

(Omar, p. 18)

In Wojowasito's analysis, the modal and aspect verbs described by Omar are used in defining verbs and adjectives, but they are not themselves covered by the definitions. Adjectives cannot be preceded by modal or aspect verbs in Wojowasito's analysis, but they can according to Omar's analysis, as shown in Figure 5.4.6b.

5.4.7 Mulyana's Helping Verbs and Adverbs. Mulyana seemed to confuse tense and aspect. Tense was divided into imperfect, perfect, and future, and Mulyana listed the adverbs and helping verbs which express each tense. Some of Mulyana's adverbs correspond to Omar's aspect verbs.

Figure 5.4.7a Mulyana's Tense Words

<u>Tense</u>	<u>Adverb</u>	<u>Helping Verb</u>
imperfect	<u>sedang</u> 'to be in the process of'	---
perfect	<u>lagi</u> , <u>sudah</u> , <u>telah</u> 'already'	<u>ada</u> 'do, does, did'
future	<u>akan</u> 'will'	<u>hendak</u> , <u>mau</u> 'will, to intend, want, wish'

(Mulyana, p. 228)

Modality refers to the subjective feelings of the speaker of a sentence (Mulyana, p. 229). Again, Mulyana considered that various modal categories could be expressed either by adverbs or by helping verbs.

Figure 5.4.7b Mulyana's Modality Words

<u>Modality</u>	<u>Adverb</u>	<u>Helping Verb</u>
certainty	<u>tentu</u> 'fixed, definite, certain' <u>pasti</u> 'definite, certain' <u>niscaya</u> 'certainly, surely, undoubtedly'	<u>aða</u> 'do, does, did'
doubt	<u>rupanya</u> 'it seems, --- apparently' <u>rasanya</u> 'it feels' <u>barangkali</u> 'perhaps, maybe' <u>agaknyá</u> 'presumably, probably'	
possibility	<u>mudah-mudahan</u> 'may, I hope (that); maybe, perhaps' <u> mungkin</u> 'possible'	<u>dapat</u> 'can, be able, possible; may' <u>bisa</u> 'to be able' <u>boleh jadi</u> 'possibly, probably'

desire	<u>moqa-moga</u> 'may, I hope that' <u>barang</u> 'a wish'	<u>mau</u> 'shall, will; to wish, want' <u>hendak</u> 'to wish, will, be willing to; to in- tend, to be going to' <u>ingin</u> 'to wish, desire' <u>harap</u> 'please; to expect'
obligation	<u>perlu</u> 'necessary' <u>harus</u> 'to have to, must' <u>wajib</u> 'necessary, obligatory'	<u>mesti</u> 'certain, surely; must, have to'
consent	<u>baik</u> 'good, nice; yes, all right'	<u>boleh</u> 'to be permitted, may; ;to be able, can; likely'
invitation	<u>mari</u> 'come, let's' <u>ayo</u> 'come on, let's' <u>patut</u> 'proper, fitting, decent; should, ought to; in line with'	<u>hendaklah</u> 'please, is requested, should' <u>coba</u> 'please, look' <u>silakan</u> 'please'
prohibition	<u>jangan</u> 'do not, don't, should not	---

(Mulyana, p. 230)

Omar's modal verbs mungkin 'possible' and harus 'must' are labeled adverbs in Figure 5.4.7b. Also, Mulyana's class of helping verbs with modal meaning contains more members than Omar's exhaustive list of modal verbs.

"The helping verb can only be used with another verb, except in conversation as an incomplete sentence or in an elleptical sentence." (Mulyana, p. 159).

Boleh saya mengambil daun nyiur yang kering itu?
 can - I - take - leaf - coconut palm - which - dry - that
 'Can I take that dry coconut palm leaf?'

Boleh 'Can.'
 can

The complete answer would be:

Daun kering itu boleh kuambil
 leaf - dry - that - can - you take
 'That dry coconut palm leaf can be taken by you.'

Ke mana engkau?
 to - where - you
 'Where are you going?'

Saya mau ke pasar

I - will - to - market

'I am going to market.'

The full answer would be:

Saya mau pergi ke pasar.

I - will - go - to - market

'I will go to market.'

(Mulyana, pp. 159-160)

The idea of elliptical or incomplete sentences implies that the complete form can be postulated at some abstract level of analysis. Whether or not a word can be used as a complete answer to a question, as was boleh 'can' in the above example, will be used later to identify auxiliary parts of the verb phrase. The question ke mana engkau 'where are you going?' does not even have a helping verb, but Mulyana neglected to say whether it also was elliptical or incomplete.

5.4.8 Negative Words in Indonesian. In Matisoff's treatment of Lahu verbs, discussed in 4.5.2, and in Huffman's treatment of Cambodian verbs, discussed in 5.3.3, the property of being directly preceded by the respective negative auxiliary of each language was the decisive defining criterion. Indonesian has several negative words, some of which can co-occur, so simple negatability cannot be taken as a definition of verb-hood.

Mulyana argued that the three negative words tidak, tiada, and tak, all with meaning 'no, not', are historically related. The original negative morpheme was ta- pronounced with either a final velar stop [k] or with a final glottal stop, which is indicated in modern Indonesian orthography with a k. The ta-ada or its variant ti-ada would mean 'not exist', because ada means 'there is, to have'. Today, all three forms exist, with tidak being used most and with tak generally being used before words such as dapat 'can', pernah 'already', akan 'will', and boleh 'may'.

Sometimes tiada has the meaning 'does not exist', as in

Jika tuan tiada di rumah,...

when - you - not - at - house

'When you are not at home,...' (Mulyana, p. 152)

In other cases, the original analysis has been lost, resulting in the construction tiada ada 'there is not'. The words tidak and tiada are used to negate actions, situations, facts, or entire sentences. (Mulyana, p. 152).

While tidak and tak occur before verbals, the word bukan 'not' occurs before nominal and verbals (Omar, p. 18). One cannot say:

Ini tidak buah jambu

this - not - classifier - kind of fruit

'This is not a jambu.'

Instead, one must say:

Ini bukan buah jambu

this - not -classifier - kind of fruit

'This is not a jambu.'

However, bukan can be used before verbs to give them a nominal flavor.

"Itu bukan menulis, melainkan menggambar!" kata guru.

that - not - to write - - but - to draw - word - teacher

"That is not writing, but drawing!" said the teacher.'

(Mulyana, p. 152)

The word jangan 'don't' is used in negative imperatives. The word belum 'not yet' does not have a corresponding form in Burmese, Cambodian, or Thai, but there is the Vietnamese word chua 'not yet'. It is possible to form a double negative to form a positive idea.

jangan tidak datang

do not - not - come

'do come'

(Omar, p. 18)

bukan tidak percaya kepadamu

not - not - trust - to you

'It is not (that I) do not trust you.' (Mulyana, p. 153)

Therefore, we can still consider the negatability test as a criterion for verb-hood in Indonesian, but only with tidak, tiada, or tak, not janjan or bukan. Bukan does distinguish between nouns and verbs, and if janjan were used, then tidak itself would have to be a verb.

5.4.9 Summary of Indonesian Results. There is a great deal of confusion regarding the tense/aspect words and modal words in Indonesian. They can be regarded as verbs if negatability by tidak 'not' is the criterion. Aside from these two classes of wrds, verbs can be defined morphologically by the presence of several prefixes, especially me-. The words which are traditionally called adjectives also satisfy the negatability criterion, but differ morphologically from the above class of verbs.

5.5 Thai.

5.5.1 Grammatical Summary. The Thai sentence has the basic order: Subject + Verb + Object. There are five lexical tones. Most words are monosyllabic, but there are unanalyzable polysyllabic words. There is derivational morphology, but no inflection. (Haas, 1964, p. xi). Modifiers follow the words they modify. In possessive constructions, the possessor follows the possessed. (Haas & Subhanka, p. 90). Numeral classifier phrases have the form: noun + numeral + classifier (Haas & Subhanka, p. 59).

5.5.2 Sources of Data. My main sources of data are Haas & Subhanka's Spoken Thai (Haas & Subhanka), Haas' Thai-English Student's Dictionary (Haas, 1964), Noss's Thai Reference Grammar (Noss), Intrakomhaeng's Thai for Foreigners (Intrakomhaeng), Brown's AUA Language Center Thai Course (Brown, 1967, 1968, 1969), and Panupong's Inter-sentence Relations in Modern Conversational Thai (Panupong). I will use Brown's transcription system for citing all Thai data.

5.5.3 Major Lexical Categories. There is disagreement about even the major lexical categories in Thai. It appears that the most important variable in assigning categories to words is the theoretical framework of the linguist. Noss worked in the structuralist tradition, discussed in 3.2, and stated that "The approach to classification of grammatical features attempts to follow current techniques of American descriptive linguistics of the 'item-and-

arrangement' school." (Noss, p. 1). Free lexemes are those forms that can occur in isolation. The major classes of free lexemes are substantives, predicatives, and isolatives. Bound lexemes occur only as constituents of higher order constructions, and the major classes are prepositions, conjunctions, modals, postpositions, and sentence particles (Noss, p. 79). Predicatives consist of modal verbs, adjectives, transitive verbs, and completive verbs (Noss, p. 114).

Haas's "word classes are nouns (N), numerals (NM), classifiers (C), demonstrative adjectives (dA), demonstrative pronouns (dP), interrogative-indefinite pronouns (iP), personal pronouns (P), verbs (V), adverb-auxiliaries (AA), prepositions (Pp), conjunctions (Cj), particles (Pt), and exclamatives (E). Before illustrating some of these classes, it is important to point out that words corresponding to adjectives and adverbs in English are true verbs in Thai." (Haas, 1964, p. xx).

Intrakomhaeng worked in the generative grammar tradition. Thus, lexical categories are labeled but not defined. The major categories used are nominal, verb, adjective, adverb, number, classifier, preposition, and marker. Verbs are divided into intransitive verb, transitive verb, and copulative verb. Markers deal with tense, aspect, and interrogation. (Intrakomhaeng, p. 29).

Rajadhon worked outside of the strict structuralist and generative traditions. He argued that lexical categories

could only be assigned to words on the basis of word order and context. "There is no hard and fast rule relating to 'parts of speech' in the actual sense of the word. A word may be noun, adjective, verb, or adverb only in relation to other words in a phrase or sentence. Hence the important thing in the Thai language is word order. 'Grammatical words', such as articles, prepositions, conjunctions, etc. which serve as a help to clarify the 'real words', i.e. nouns, verbs, etc. in a sentence, are not necessary if the context in the sentence is logically clear." (Rajadon, p. 9).

5.5.4 Noss's Predicatives. Noss's verbs are defined in structuralist terms, that is, in terms of constituents and substitutability. It is a detailed system and can only be approached through several layers of definitions.

"An endocentric phrase, or expression, is any consecutive-order syntactic construction such that the first lexeme, or head, can substitute for the whole construction. Endocentric phrases will later be characterized by reference to the form-class of the head (which is also the form-class of the whole phrase), as noun expression, verb expression, etc." (Noss, p. 73). "A predication is any consecutive-order syntactic construction such that some lexeme or constituent other than the first lexeme or constituent can substitute for the whole construction. Any single lexeme which substitutes in this way is a predicator; a more complex constituent filling the same role is

called a predicate. The first constituent in a predication is the subject... The residual constituents of predicates, after the predicator has been identified, are objects." (Noss, p. 74). "A predicative is any free lexeme which occurs as predicator (in a non-equational predication)." (Noss, p. 114). "A substantive is any free lexeme which occurs as co-constituent of a predication of which it is not the predicator." A substantive may also satisfy the definition of predicative, in which case it is considered a predicative. (Noss, p. 88).

We will see below that the various types of verbs are special cases of predicatives. One important method of testing for substitutability is to check if the putative predicative can occur as a one word answer of a question involving a more inclusive constituent; we will see examples of this below. Note that negatability is not mentioned here. Also, semantics participates only indirectly in the above set of definitions, as is characteristic of the structuralist approach. That is, when a substitution occurs, the new construction does not have to preserve the original meaning; it must only preserve grammaticality.

5.5.5 Noss's Modal Verbs. "A modal verb is any predicative which occurs as the predicator, or as head of an endocentric predicate, with an object which is also a predicative or predicative expression." (Noss, p. 114). "Specific modal verbs occur only with objects which are themselves predicatives. The class is small and

closed...." (Noss, p. 115). "General modal verbs occur with both predicative and substantive objects. the class is much larger than that of specific modal verbs, and is almost certainly open." (Noss, p. 117).

Figure 5.5.5a Noss's Specific Modal Verbs

(Haas Category: V = verb, AA = adverb-auxiliary)

<u>Modal Verb</u>	<u>Meaning</u>	<u>Syntactic Context</u>	<u>Haas Category</u>
khəəy	to have experienced, to have done at least once; ever, used to	before verbs & verb expressions, before other modal verbs	V, AA
rúucàk	to have been; ever, used to be	before adjectives and adjective expressions	V
tŋ	must, is obliged to, has to	before all types of predicatives, including other modal verbs	V, AA
yɔɔm	be willing to, allow oneself to; accept	mainly before verbs, but may follow other modal verbs	V

y ^h aak	to want to, to wish for	mainly before verbs, but may follow other modal verbs	V, AA
samak	to volunteer,	mainly before	V
samak-cay	offer one's services	verbs, but may follow other modal verbs	
khuan	should, ought to; properly does	before verbs, adjectives, and other modals	V, AA
taat	to be capable of	mainly before verbs	V
saa-maat	to be capable of	mainly before verbs	V, AA
phayayaam	to try, make a physical effort	mainly before verbs	V

(Noss, pp. 115-117)

Figure 5.5.5b Noss's Examples of General Modal Verbs

<u>Semantic</u>	<u>Haas</u>	<u>Modal Verb</u>	<u>Meaning</u>
<u>Category</u>	<u>Category</u>		
to like	V	ch ^h ɔp	to like, be fond of; to like (to do something); to be pleased, satisfied; to be right; appropriate
	V	r ^h ak	to love
to hate, to mind, to object	V	raŋkiat	to mind, dislike, be prejudiced against, have an aversion to
to think, to plan	V	kh ^h it	to think, figure, calculate
	V	ri ^h	to begin, start, originate
to hurry	V	riip	to hurry, hasten
to begin,	V	r ^h am	to begin, to start
to start	V	t ^h at ^h on	to begin, commence
to stop,	V	l ^h ak	to quit, finish, be through, be over; to end, discontinue; to give up; to break up
to end	V	y ^h ut	to stop, cease
to try out, to experiment with	V	l ^h on	to try, try out, try on

to help	V	ch ^h uay	to help, assist; to rescue
to ask a favor, to beg	V	kh ^h ɔ̌	to ask for, beg, re- quest; may I have let me, may I
	AA	kh ^h ɔ̌	
	V	waan	to ask (someone) to do something for one
to depend on someone else	V	f ^h aa ^h k	to deposit, entrust, leave (something) (with someone), put (some- thing) in the care or custody (of); to enroll (e.g. a child in a school)
	V	laas ^h ay	to live, dwell; to de- pend on, be dependent on; to be aided by
to invite	V	ch ^h aan	to invite;
	AA	ch ^h aan	please (do such and such), come and (do such and such)
	V	n ^h imon	to invite (a priest)
to accept	V	ra ^h p	to receive, accept, take on
	V	da ^h yra ^h p	to receive, get, obtain; to have received

the act of	V	bòk	to say (to), tell
speaking			(something) (to), in-
			form; to tell, indicate;
			to be told, spoken
	V	tyan	to warn, advise,
			caution, admonish

all completive verbs (see 5.5.8)

(Noss, p. 118; Haas, 1964)

In references other than Noss, such as Haas (Haas, 1964),, ruucàk (Figure 5.5.5a) only has the meaning 'to know, be acquainted with'. The Meanings in Figure 5.5.5b are all from Haas (Haas, 1964). Specific modal verbs either directly precede their objects or have the particle ca 'hypothetical predicate' between the modal verb and the object (Noss, p. 117). "General modal verbs usually precede specific modal verbs when they occur in the same construction... and they are almost never followed by the particle ca", except in the categories to think and to begin (Noss, p. 118).

It appears that an occurrence of a modal verb can be identified clearly in those instances where the word in question can be used as a one-word answer. The following example contains two modal verbs preceding the verb pen 'to be'.

phóm khò samàk pen samaa-chík

I - to ask - to volunteer - to be - member

'I would like to make application to be a member.'

(Noss, p. 117)

In the above example, we must apply the definition of modal verb to a sequence of nested constituents. In principle, khṵṵ 'to ask' can serve as an answer to a question such as:

phǒm khṵṵ samàk pen samaa-chík máy

I - to ask - to volunteer - to be - member - question
particle

'Do I ask to volunteer to be a member?'

This makes the entire sentence a predication, with phǒm 'I', the first lexeme, as subject, and khṵṵ 'to ask' as predicator. khṵṵ 'to ask' substitutes for all that follows phǒm 'I', in the sense that phǒm khṵṵ 'I ask' is grammatical. Therefore khṵṵ 'to ask' is the head of the endocentric expression khṵṵ samàk pen samaa-chík 'to ask to volunteer to be a member'. Now, khṵṵ 'to ask' satisfies the definition of modal verb only if the object samàk pen samaa-chík 'to volunteer to be a member' is also a predicative or predicative expression. But, pen samaa-chík 'to be a member' can substitute for samàk pen samaa-chík, and so pen samaa-chík is a predicate and the entire object is a predication. Hence, khṵṵ is a modal verb. phǒm samàk 'I

volunteer' is grammatical, which shows that samàk can also substitute for the entire predicate following phǒm. So, samàk is also a predicative. Similarly, pen samaa-chík is a predicate, making samàk a modal verb, also.

All these applications of the various definitions give us the final result of a structure including a sequence of two modal verbs and a non-modal verb. However, the various substitutions certainly did not preserve the meaning of the original sentence, and they do not reveal anything about the semantic relationships between the three verbs.

5.5.6 Noss's Adjectives. "An adjective is any predicative which occurs as a predicator with a subject which [is] also a predicative or predicative expression." (Noss, p. 118).

khun pay wát b̀y máy

you - go - temple - often - question particle

'Do you go to the temple often?' (Noss, p. 118)

b̀y 'often' can be a one-wrd answer to this question, so it is a predicative. Noss claimed that because pay wát 'go to the temple' is a predicative expression, then b̀y 'often' is an adjective (Noss, p. 118). However, khun 'you' can be considered the first constituent of the predication, and it is not a predicative. Does this mean that we can choose our constituents in such a way that we can determine lexical categories arbitrarily? Using Noss's analysis, we can

show that samàk 'to volunteer' is an adjective as well as a modal verb, in the sentence: phǒm khǎo samàk pen samaa-chík 'I would like to make application to be a member.' (see 5.5.5). Noss asserted that samàk was a modal verb, so samàk is a predicative. Since khǎo is a predicative, also being a modal verb, the khǎo can be considered the subject of samàk, thus making samàk an adjective.

There are three classes of adjectives. "Specific adjectives typically occur with subjects which are predicators, predicates, and predicative expressions, and are rarely found with substantive subjects and as substantive modifiers. The sub-class is small and probably closed; its meaning is 'manner, timing, or frequency of action'." (Noss, p. 120). "General adjectives occur in all the positions of specific adjectives, but also have substantives and substantive expressions as subjects, and occur as modifiers of nouns and classifiers." (Noss, p. 122). "Modal adjectives are general adjectives which introduce exocentric predicative phrases, occurring in the modal position... The meaning is 'general personal characteristic applied to a given situation.'" (Noss, p. 122). The adjectives are underlined in the following examples.

specific adjective: kháw tham-gaan rûay

he - work - continuously

'He keeps on working.' (Noss, p. 121)

general adjective: ʔaahǎan mây arɔɔy

food - not - good

'The food is not good.' or 'tasteless food' (Noss, p. 122)

modal adjective: khaw khii-kiat ca pay

he - lazy -hypothetical particle - go

'He's (too) lazy to go.' (Noss, p. 123)

5.5.7 Noss's Transitive Verbs. "A transitive verb is any predicative, other than a modal verb or completive verb [to be defined in 5.5.3], which occurs as predicator in predicates that have substantive objects." (Noss, p. 123). Since Noss added that "all transitive verbs occur both with and without objects, and both with and without subjects" (Noss, p. 123), it appears that a verb is transitive if it is capable of taking a substantive object. Noss's examples with the transitive verb lɛak 'to choose' illustrate this point.

kháw lɛak phâa sǐi aray

she - choose - cloth - color - what

'What color cloth did she choose?'

phâa nǐi lɛak yâak

cloth - this - lɛak - hard

'This cloth is hard to choose from.'

kháw ʔeɛj pɛn khon lɛak

she - herself - is person - choose

'She herself is the one who chose it.' (Noss, p. 123)

The second and third examples do not have substantive objects following lɛak. Since yâak 'hard' is a predicative, then lɛak satisfies the definition of modal verb in the second example. In the third example there is the object it in the English translation, but that does not justify calling lɛak transitive in the Thai sentence.

5.5.8 Noss's Completive Verbs. "A completive verb is any predicative which occurs both as a predicator with a substantive object and as a predicator with a predicative subject. Thus completive verbs satisfy the definitions of both adjectives and transitive verbs, and are commonly found in typical constructions of both types, sometimes simultaneously." (Noss, p. 125). "The class meaning is 'successful completion of attempted action,' and the class meaning of the transitive verbs occurring in the same predicate with them is 'attempted action'." (Noss, p. 126).

From the examples given by Noss, it appears that the conditions of the definition of a completive verb may be satisfied by considering more than one context at a time.

than rôt-fay

be in time - train

'caught the train'

maa than
to come - be in time
'came in time'

maa than rôt-fay
to come - be in time - train
'came in time to catch the train' (Noss, p. 125)

than 'be in time' has a substantive object in the first example, and it has a predicative subject in the second example. Both conditions are satisfied in the third example. Before presenting these examples, Noss labeled than 'be in time' as a completive verb (Noss, p. 125). The class meaning is satisfied in the second and third examples but can only be inferred from some additional contextual information in the first example. As an example of a "definitive context", Noss presented:

mɔɔŋ aray mây hěn
look - something - not -see
'Can't see anything.' (Noss, p. 125)

If mɔɔŋ aray 'look at something' is the predicative subject, then there is no object for hěn 'to see', and so the definition fails unless abstract objects can be postulated.

There are two, non-mutually exclusive subdivisions of

the class of completive verbs. "General completive verbs occur as predicators after a wide range of transitive verbs." (Noss, p. 127). The "principal members of this subclass" are shown in Figure 5.5.8a. "Specific completive verbs occur as predicators after certain transitive verbs or groups of transitive verbs with which they have a covert relationship. The sub-class meaning is 'to be able'." (Noss, p. 128). Examples of Noss's specific completive verbs are given in Figure 5.5.8b.

Figure 5.5.8a Noss's General Completive Verbs

<u>verb</u>	<u>Meaning</u>
dây	to be able, possible; to succeed
pen	to know how to, to do from habit
wáy	to be physically capable of
rôôt	to accomplish safely or freely
talôôt	to follow through all the way
thũa,	to cover an entire area, accomplish
thũa-thững	thoroughly
thun	to reach, go far enough
than	to be in time, reach soon enough
khróp	to succeed in filling up a set, to complete
mòt	to use up, exhaust a set
sét	to finish, accomplish a temporary or indefinite task
còp	to finish, accomplish a prescribed task with definite limits. (Noss, pp. 127-128)

Figure 5.5.2b Examples of Noss's Specific Completive Verbs

<u>Verb</u>	<u>Meaning</u>
khâw	to enter
ṭɔk	to emerge
khân	to rise
loŋ	to descend
hěn	to see
dây-yin	to hear
dây-klìn	to identify the odor of
dây-rót	to identify the taste of
thùuk	to hit
wáy	to move
phóp	to meet
cəə	to meet
tòk	to fall
than	to catch
phón	to get clear of
láp	to close the eyes, sleep
lúk	get up
təun	wake up
həay	to recover
fəun	to regain consciousness
taay	to die
tit	to stick, be stuck
lút	to come loose

(Noss, pp. 129-131)

5.5.9 Noss's Modals. "A modal is any bound lexeme which occurs as /x/ in the context /SxP/, where /S/ stands for a subject and /P/ for a predicate. Thus, modals fill the same position as the free lexeme class of modal verbs, the difference being that modals do not substitute for their predications and hence are not predicators. The class meaning is the same: 'mode of action, or specific applicability of situation described.'" (Noss, p. 133). Although Noss excludes modals from the class of predicates, because they are bound lexemes, many are treated as verbs by Haas. The decision of how to classify modals is similar to the decision of distinguishing words from particles in Burmese.

The modals are subdivided into three classes according to both syntactic and semantic criteria, with a residue of miscellaneous modals put into a fourth group. The first three classes are named after respective members of those classes. The kh^uen class consists of modals occurring between y^aa 'don't' and a verb, though they may occur without y^aa. The class meaning is "attitude of speaker toward the effect, timing, or setting of the action" (Noss, p. 133). The ma^k class modals are defined by the context /x camay V/ and have the class meaning "likelihood of imminence of action"; for those members which occur without ca, the class meaning can also be "frequency of action" (Noss, p. 138). The role of negative words in Noss's analysis of Thai will be considered in 5.5.10.

Figure 5.5.9a Noss's 'khuun' Class Modals

(V = verb, AA = adverb-auxiliary, sV = secondary verb)

<u>Modal</u>	<u>Haas</u>	<u>Meaning</u>
	<u>Category</u>	
kh ^h uun	V, AA	to do something one knows is wrong
f ^h uun	V	to force oneself to do something distasteful
mua	V	to keep on, to act stubbornly or tardily
ph ^h əŋ, or ph ^h əŋ	AA	to act prematurely (after yaa); to have acted recently (otherwise)
kl ^h əŋ, or kl ^h əŋ	V	to pretend, to act so as to deceive
l ^h əŋ	V	to act wrongly without realizing it
kl ^h əp	V, sV, AA	to act contrary to expectations or to reverse previous behavior
ʔ ^h əp	V	to act surreptitiously or from concealment

phl ^h əŋ	---	to act as a follower, to tag along
phaa kan	AA	to act as a group
ch ^h uay kan	V	to act as a group

maa	V, sV	to act toward the speaker, or so as to affect the speaker and his group

duu-m ^h an ca	---	seems to, apparently
th ^h aa ca	---	seems to, apparently
kh ^h ap	AA	almost
kh ^h ap ca	AA	about to, nearly
cuan	AA	almost
cuan ca	AA	about to, nearly
th ^h ep	AA	almost
th ^h ep ca	AA	about to, nearly
rim	---	almost
rim ca	---	about to, nearly
kamlay	AA	in the process of, somewhat
kamlay ca	AA	about to
kh ^h on-kh ^h aaŋ	AA	rather, quite
kh ^h on-kh ^h aaŋ ca	---	beginning to
ch ^h ak	AA	rather, quite
ch ^h ak ca	---	beginning to

(Noss, pp. 136-138)

"The members of this class apparently exclude each other semantically, although there are no obvious pairs of antonyms. There is consequently no internal order for the class. /n^hak/-class modals combine freely with modal verbs and other pre-verbal classes. They always precede such items." (Noss, p. 138).

Figure 5.5.9c Noss's 'mây' Class Modals

(AA = adverb-auxiliary, NE = negative expression, sV = secondary verb)

<u>Modal</u>	<u>Haas</u>	<u>Meaning</u>
	<u>Category</u>	
mây	AA	not, other than
mây-dây	NE	in fact not, subject other than what is assumed
mây-chây	NE	not a case of, predicate other than what is assumed
mây-khây	AA	hardly, not very; hardly ever, not very much
mây-than	sV	has not had time to, had not (by that time)
mây-yak	AA	has not (in the long run), not (in spite of expectations)
mây-hên	---	apparently not, in my opinion not
mây-chəəŋ	NE	not really, really not
yaa	AA	don't, shouldn't

(Noss, pp. 139-142)

Figure 5.5.9d Noss's Miscellaneous Modals

(NE = negative expression, V = verb, sV = secondary verb,
Nm = numeral)

<u>Modal</u>	<u>Haas Meaning</u> <u>Category</u>
ʔot...mây-dây	NE to be unable to keep from
kəət...khân	V it originates, an new thing happens
tàaŋ...təaŋ	V, each one in a different way sV, Nm,AA
yîŋ...yîŋ	AA the more...the more
châŋ	AA really, how surprisingly so, how, sure
khôy	AA, only then, not until then, sV after having waited a while
khôy-khôy	AA, gradually, gently sV
riip-riip	--- hurriedly, without pausing
ca	AA hypothetical situation

(Noss, pp. 143-146)

Most of the khân class modals are classified as verbs by Haas, which shows that some decision on verb-hood must be made to reconcile these two analysis. Since Haas's definition of adverb-auxiliary (AA) is similar to Noss's general of definiton of modal, there is evidently agreement

on the mák class modals. Except for yàa 'don't', all of the mây class modals in Figure 5.5.9c contain mây. The various categories given by Haas for the items in Figure 5.5.9c suggest that they may not all simply be bound lexemes. In particular, mây chây can be translated as 'no' or 'that's not it' and can form a complete utterance (Haas & Subhanka, p. 6).

5.5.10 Position of the Negative Word 'mây'. Negatability is presented by Noss as an attribute of word classes rather than as a defining criterion. He used the position of mây to distinguish two homonyms from each other.

mây-laat ca pay

not - capable of - hypothetical situation - 'to go
'unable to go'

laat ca mây pay

apt to - hypothetical situation - not - to go
'might not go' (Noss, p. 115)

In the first example, laat 'capable of' is a modal verb; in the second, laat 'apt to' is a modal.

Adjectives can be negated.

laahāan mây laay

food - not - good

'The food is not good.' or 'tasteless food' (Noss, p. 122)

mây directly precedes transitive verbs.

phôm mây pay ləy

I - not - go - at all

'I'm not going at all.' (Noss, p. 139)

In predicates involving completive verbs, the negative precedes the completive verb (Noss, p. 126).

tham mây wáy

to do - not - to be physically capable of

'(I) can't possibly do it.' (Noss, p. 127)

In addition to before predicatives, negation can also occur before modals, prepositions, and numeral phrases. This weakens the case for negatability as a criterion of verb-hood or requires the class of verbs to be extended. However, when I informally asked Thai native speakers, they found Noss's examples of negated numerals and prepositions strange or unacceptable. kháun class modals are defined by their occurrence after the negative imperative yaa 'don't', but are negated by mây-dây rather than by mây (Noss, p. 133).

kháw mây dây kléu chom

she - not - pretend - to admire

'She wasn't just pretending to admire it.' (Noss, p. 134)

māk class modals cannot be directly negated (Noss, p. 136), and their defining context contains the negative may after the modal and before the main verb.

"A preposition is any bound lexeme which introduces exocentric complement phrases." (Noss, p. 146).

kháw waan caan, mây nay túu

she - put - dish - not - in - cabinet

'She put the dishes not (elsewhere than) in the cabinet.'

(Noss, p. 139)

Numerals are defined in terms of classifiers. "A classifier is any substantive which occurs with weak stress directly before, and in construction with, demonstratives." (Noss, p. 104). "A numeral is any substantive which occurs as the first lexeme of a two-lexeme enumeration having a classifier as the second lexeme." (Noss, p. 109).

yag mây sɔɔŋ moon nîi

still - not - two - particle showing disagreement

'Well, it's not two o'clock yet.' (Noss, p. 139)

5.5.11 Haas's Primary and Secondary Verbs. Haas distinguished two categories of occurrences of verbs on the basis of both position and meaning. "Primary verbs function as the nucleus of a predication and are translated by English verbs. Secondary verbs, on the other hand, resemble English adverbs if intransitive, English prepositions if transitive." (Haas, 1964, p. xxii). Primary verbs were earlier characterized by Haas & Subhanka as those verbs which occur as the only verb in a phrase or as the first verb in a phrase, while secondary verbs were those verbs which occurred following a primary verb and which modified the meaning of the primary verb. The same verb can occur as a primary verb and as a secondary verb, and the secondary verb meaning may differ from the primary verb meaning. (Haas & Subhanka, p. 320).

náam loŋ

water - to descend

'The water recedes.'

nâŋ loŋ tha?

to sit - down -imperative particle

'Sit down!'

kháw pen khruu

he - to be - teacher

'He is a teacher.'

kháw kin khày pen ʔaahǎancháaw

he - to eat - egg - to be - breakfast

'He eats eggs for breakfast.' (Haas, 1964, p. xxii)

In the above examples, the primary verbs are in boldface type and the secondary verbs are underlined.

I believe that this analysis of verbs into primary and secondary functions is too simplistic and is difficult to justify in many cases. Although, as pointed out in 5.5.1, modifiers in Thai generally follow the modified word, there is no syntactic rule which identifies the occurrence of modification. In the second example above, lon 'to descend' behaves like the English adverb down, and so Haas's analysis works. But, in the fourth example, pen 'to be' does not modify the meaning of kin 'to eat'. Instead, this sentence fits Chao's definition of a pivotal construction, discussed in 4.3.1. khày 'egg' is the object of kin 'to eat' and is the subject of pen 'to be'. In transformational terms, we could derive the sentence from two underlying sentences: kháw kin khày 'He eats eggs' and khày pen ʔaahǎancháaw 'eggs are breakfast'. Then, a transformational rule would delete one of the occurrences of khày 'egg'. With this analysis, the two verbs are either in different verb phrases or different underlying sentences, whichever underlying form one prefers. Matisoff also suggested that pen 'to be' is no longer a full verb in this sentence, because it cannot be negated (personal communication,

1980). If negatability is one of the attributes of verb-hood, then this is one example illustrating Thompson's idea that a word can have some, but not necessarily all, of the trappings of a linguistic category, as was discussed in 3.5.

Haas mentioned the category of completive word as a special case of secondary verb. However, her example, sĩa, is of questionable status. It can serve as a main verb with the meanings 'to be spoiled, out of order, to spend' (Brown, 1969, p. 230).

rót phǒm sĩa maa lǎay wan léaw

car - I - to be out of order - to come - several - day -
already

'My car has been out of order for several days now.'

(Brown, 1968, p. 73)

khǎw ca tǎy sĩa ñik sìi sìp baat

he - will - must - spend - more - four - ten - baht

'He will have to spend 40 more baht.' (Brown, 1969, p. 17)

In both cases, sĩa is the head verb, although in the first sentence it is followed by the directional verb maa 'to come', which has an abstract meaning here, and in the second sentence it is preceded by tǎy 'must'. In Haas's examples, sĩa would be considered more of a particle than a verb by others.

kháw pay sĩa càak thii nĩi naan léew

he - to go - away - from - place - this - long time -
already

'He went away from here a long time ago.'

láy nĩa sĩa thəət

wash - face - up - imperative particle

'Wash up!' or 'Get washed!' (Haas & Subhanka, p. 320)

This use of sĩa is called a postposition by Noss (Noss, p. 186), where "A postposition is any bound lexeme that occurs as a latter constituent of an expression, predication, enumeration or phrase, such that the larger construction (prior constituent plus postposition) is less than an entire clause." (Noss, p. 183). This example shows that in considering the idea of completive verb, we must take into account both the semantics of completing an action as well as the syntactic properties which we wish to associate with verb-hood.

The word waa 'to say; thus' is classified as a secondary verb, but it does more than simply modify the meaning of a primary verb.

khun phũut waa ʔaray

you - to speak - to say - what

'What did you say?'

phộ́m mây khít wăa, fǎn ca tòk

I - not - to think - to say - rain - will - fall

'I don't think (that) it will rain.'

(Haas & Subhanka, p. 321)

wăa follows "verbs of saying, thinking, asking, telling, knowing, and the like" and precedes either single words or clauses (Haas & Subhanka, p. 321). Its status as an abstract grammatical word is indicated by Brown's definition of wăa as "a quotation signal" (Brown, 1969, p. 233).

The relative abstraction of some of Haas's secondary verbs agrees with Matisoff's description of post-head versatile verbs, as discussed in 4.5.2.

rótfay thẵn hǔahǎn lé̃w

train - reach - Huahin - already

'The train's got to ('reached') Huahin.'

raw kamlay phǔut thẵn khun

we - in the process of - about - you

'We were talking about you.' (Haas & Subhanka, p. 345)

Although the English translation uses a verb for thẵn in the first example and a preposition in the second, the extension of meaning is straight forward: the speaking reaches you. A similar meaning shift occurs with the word yùu 'to live, stay; to be'.

kháw yùu bân

he - to stay - home

'He stayed home.'

kháw kin ʔaahǎan yùu

he - to eat - food - to be

'He is eating ('is in the process of eating')'

(Haas & Subhanka, p. 345)

As a secondary verb, yùu indicates continuing action; that is, the agent stays in the state of doing the action indicated by the primary verb. Semantically, yùu as a secondary verb behaves the same as kamlan in the above example. In fact, both can occur in the same sentence.

raw kamlan phúut thǎn khun yùu thiaw

we- to be in the process of - to speak - to reach - you - to stay - exactly

'We were just talking ('in the process of talking') about you.'
(Haas & Subhanka, p. 346)

Here, thǎn 'to reach' and yùu 'to stay' are classified as secondary verbs, while kamlan 'to be in the process of' is an adverb-auxiliary, which will be discussed in 5.5.12.

Haas stated that if a verb follows another verb but "simply adds on a new and separate idea which is on a par with the idea expressed by" the first verb, then both are

primary verbs.

phrugnii kháw ca maa yiam phǒm

tomorrow - he - will - to come - to visit - me

'He'll come visit me tomorrow.' (Haas & Subhanka, p. 346)

As we saw in earlier sections, the structure of such a concatenation is not obvious. Are the actions simultaneous, or does the second verb indicate the purpose of the first? If the latter holds, then yiam could be considered a secondary verb. This example shows that according to Haas's analysis, the semantics as well as the surface syntax of the verb phrase must be considered to analyze verb concatenations in Thai.

I went through Haas's dictionary (Haas, 1964) to discover the size of the class of secondary verbs. I found 28 secondary verbs in the first 58 pages. Thus, assuming a uniform distribution of secondary verbs throughout the dictionary, with 638 pages in all, I estimate that Haas listed $(28 \times 638)/58 = 308$ secondary verbs. For most of the first 28, the meanings as secondary verbs were almost identical to the meanings as primary verbs, e.g.

kharǒm primary verb: 'to be loud, noisy, boisterous'

secondary verb: 'loudly, noisily'

(Haas, 1964, p. 49)

Therefore, I did not deem it fruitful to list all the secondary verbs.

5.5.12 Haas's Adverb-Auxiliaries. "Adverb-auxiliaries are a class of words, some of which are translated by English auxiliary verbs and others by English adverbs. All belong to a single class in Thai and are identified as such by their fixed position with respect to the subject (which they follow) and to the nuclear verb (which they precede)." (Haas, 1964, p. xxii). The adverb-auxiliaries ca 'will, shall' and mây 'not' can occur with other adverb-auxiliaries in fixed relative positions.

Figure 5.5.12 Haas's Adverb-Auxiliary (AA) Combinations

<u>AA that precede 'ca '</u>	<u>Meaning</u>
khonj (ca)	sure to, bound to
khuan (ca)	ought to, should
yâak (ca)	to wish to, want to
tôgkaan (ca)	to want to
mâk (ca)	likely to, liable to, usually
yôm (ca)	to be likely to, apt to
laat (ca)	may, might
hên ca	to seem, appear; apparently
kamlaj ca	to be about to
<u>AA that follow 'ca '</u>	<u>Meaning</u>
ca mây	will not
ca tôj	will have to

<u>AA that precede 'mây'</u>	<u>Meaning</u>
yaṅ mây	hasn't yet
khonj (ca) mây	surely (will) not
māk (ca) mây	not likely to
yōm (ca) mây	not likely to
hēn ca mây	apparently not
kamlaj ca mây	not about to

<u>AA that follow 'mây'</u>	<u>Meaning</u>
mây khuan (ca)	ought not, should not
mây khōy (ca)	scarcely, hardly, not quite, not very
mây yàak (ca)	not to want to
mây tōṅkaan (ca)	not to want to
mây tōṅ	not to have to
mây khəy	never

(The ca in parentheses may be inserted or deleted without any change in meaning.)

(Haas & Subhanka, pp. 582-583)

The adverb-auxiliaries in Figure 5.5.12 indicate the probability of the action of the main verb or the desire of the agent to carry out the action of the main verb, so there is a semantic as well as a syntactic unity to the class. The AA's that precede mây correspond to Noss's māk class modals. Although some AA's follow mây, they are not considered verbs by Haas. As can be seen in Figure 5.5.5a, of

the ten specific modal verbs given by Noss, five are classified as AA by Haas. In Haas's dictionary, there are about 100 entries labeled AA (Haas, 1964).

About 30 of the AA's in Haas's dictionary (Haas, 1964) also have definitions as verbs. For each of these, it appears that the occurrence of the word before another verb is sufficient to change its lexical class. According to Haas's scheme, it would be impossible to have what Matisoff would call a pre-head versatile verb; all pre-head modifying words would be called AA's. After a primary verb, there can be either a secondary verb modifying the first or another primary verb. No reason is given for the asymmetry of this analysis.

5.5.13 Panupong & Tanwanchon's Grammatical Words.

Panupong & Tanwanchon presented a very different analysis of the the Thai verb phrase. They first divided the Thai lexicon into basic words and grammatical or function words. The former consist of nouns, pronouns, "time and place telling words" [which do not appear to be adverbs], intransitive verbs, transitive verbs, and doubly transitive verbs (Panupong & Tanwanchon, p. 355). The rest of the lexicon consists of grammatical words, and they are discussed in detail in most of Panupong & Tanwanchon's paper.

The adjective is classified as a grammatical word which modifies nouns.

tək yàɤ

building (noun) - big (adjective)

'(a) big building' (Panupong & Tanwanchon, p. 359)

Thus, adjectives are separated from the class of verbs, by being considered grammatical words instead of basic words.

The adverb is a grammatical word which indicates the "condition" of the action of the verb it modifies.

dəən rɛw

to walk (verb) - fast (adverb)

'walk fast' (Panupong & Tanwanchon, p. 363)

The "quantity" of the action of the verb is also indicated by a modifying adverb.

kin cu

to eat (verb) - amplɪ (adverb)

'eat amplɪ' (Panupong & Tanwanchon, p. 363)

Although tense in Indo-European grammar usually refers to the properties of the verb itself which show the time of the verb's action, Panupong & Tanwanchon consider neighboring words of various types as indicating the tense of a verb.

Figure 5.5.13a Panupong & Tanwanchon's Types of Tense Indicating Words

	auxiliary pre-verb	verb
kháw	ca	nân
he	will	sit
'he will sit'		

	verb		post-verb
kháw	kin	khâaw	maa
he	eat	rice	come
'he has eaten rice'			

	special word	verb
nāmtan	pòkkatì?	wāan
sugar	usually	sweet
'sugar is usually sweet'		

	verb	time word
kháw	maa	ta kii
he	come	a moment ago
'he came a moment ago'		

(Panupong & Tanwanchon, p. 364)

Figure 5.5.13a shows that the tense words belong to different classes in this analysis and occur both before and after the modified verb.

Next, there are three types of words which are supposed

to show the "characteristics" of the verbs, although the meaning of "characteristics" can only be inferred from the given examples.

Figure 5.5.13b Panupong & Tanwanchon's Words Which Indicate Characteristics of Verbs

auxiliary pre-verb		verb	
kháw	yaŋ	kin	khâaw
he	still	eat	rice
'he still eats rice'			
verb		auxiliary post-verb	
kháw	kin khâaw	yùn	
he	eat rice	live (continuing action)	
'he is eating (rice)'			
verb		adverb	
kháw	maa	bòoy	
he	come	often	
'he comes often'		(Panupong & Tanwanchon, pp. 364-365)	

From the above examples, it appears that "characteristics" refer to aspect and repeated actions. These examples do not indicate the distinction between adverbs and auxiliary post-verbs.

Syntax and semantics seem to be confused in the following group of words, which indicate strings. Here, there

are auxiliary pre-verb s, auxiliary post-verbs, pre-verbs, post-verbs, special words, adverbs, negative words, imperatives, and final words, all of which modify verbs to indicate strings. Here, strings are classified by semantic or pragmatic criteria into indicative, negative, persuasive, suggestive, requestive, prohibitory, imperative, speculative, noncommittal, definite, advisory, and information-requesting. (Panupong & Tanwanchon, pp. 365-366).

Figure 5.5.13c Panupong & Tanwanchon's String-Indicating Patterns

(the modifying words are underlined)

- | | |
|-----------------------|----------------------------------|
| 1) auxiliary pre-verb | verb |
| <u>khuan</u> | <u>nân</u> [sic] |
| should | sit |
| 2) verb | auxiliary post-verb |
| <u>nân</u> [sic] | <u>léew</u> |
| sit | already |
| 3) pre-verb | verb |
| <u>pay</u> | <u>nân</u> |
| go | sit |
| 4) verb | post-verb |
| kin (khâaw) | <u>maa</u> |
| eat (rice) | come '(he) just ate (rice)' |

- | | |
|-----------------|----------------|
| 5) special word | verb |
| <u>pòkkatì?</u> | wáan |
| usually | sweet |
| 6) negative | verb |
| <u>mây</u> | maa |
| not | come |
| 7) imperative | verb |
| <u>coŋ</u> | maa |
| let's | come |
| 8) verb | adverb |
| maa | <u>nêe</u> |
| come | for sure |
| 9) verb | interrogative |
| maa | <u>thammay</u> |
| come | why |
| 10) verb | final word |
| maa | <u>sí?</u> |
| come | (emphasis) |

(Panupong & Tanwanchon, pp. 365-366)

(1), (3), (5), (6), and (7) in Figure 5.5.13c each have different types of verb-modifying words which precede the verb. No criteria for the distinction between these types is given, and they are given in the same syntactic context. Hence, the intrinsic semantics of each modifier seems to be the basis for classification. I suspect that the verbs in (1) and (2) are underlined by mistake. maa 'come' appears as a verb in (8), (9), and (10) and as a post-verb in (4), showing that a given word can be in more than one class.

The idea of passive is used to classify superficially similar phenomena.

Figure 5.5.13d Panupong & Tanwanchon's Passive

noun	auxiliary pre-verb	transitive verb	noun
dèk	thùuk	tè?	---
child	passive marker	kick	---
'(the) child (was) kicked'			
noun	auxiliary pre-verb	transitive verb	noun
khruu	hây	tham	kanbâan
teacher	give	do	homework
'(the) teacher made (them) do (their) homework'			

(Panupong & Tanwanchon, p. 367)

In the first sentence of Figure 5.5.13d, the word thùuk unambiguously indicates the passive voice; that is, child

is the patient of the action kick. However, hây is a causative rather than a passive marker. The superficial identity of structure, noun + auxiliary pre-verb + transitive verb, vanishes at a slightly more abstract level, because child is the patient of its sentence, while teacher is the agent of its sentence.

In the following example, hây is classified as a verb conjunction:

verb	verb conjunction	verb
nâp	<u>hây</u>	sabaay
sit	give	good, well
'sit (so that you are) well'		

(Panupong & Tanwanchon, p. 368)

No mention is made of any relationship between these occurrences of hây.

5.5.14 Panupong's Verbal Sentence Constituents. Nomi-na and Verba are either taken as given or are evidently defined a circular manner (Panupong, pp. 10-14). In any case, verba are subdivided according to their co-occurrence with objects. A transitive verbum is one which is followed by an object; an intransitive verbum is one which is not followed by an object; a double transitive verbum is one which is followed by a sequence of object and indirect object. These sentence constituents may be either indivi-

dual words or phrases. (Panupong, p. 14)).

Figure 5.5.14 Panupong's Verbal Sentence Constituents

1) fôn khoej+ca mây tòk

rain - likely to - not - fall

subject intransitive verbum

'It may not rain.'

2) tônmaay lék mây cháp náam maa

tree - small - not - like - water - much

subject transitive object

verbum

'Small trees do not like much water.'

(Panupong, p. 15)

3) chán sút khâaw maa léw

I - buy - rice - already

subject transitive object --transitive

verbum---

verbum

'I've already bought some rice.'

(Panupong, p. 20)

In Figure 5.5.14, (1) shows that at the level of verbal sentence constituents, the questions of the status of auxiliaries or negatives are ignored. (2) shows that at this level of analysis the status of adjectives, as indicated by lék 'small', is also not considered; here this element is

simply lumped together in a larger nominal category. (3) seems to imply a transformational criterion for identifying verba; that is, if a transitive verbum is identified by being followed by an object, what is the justification for labeling mae léé w 'already' as a part of a discontinuous transitive verbum?

5.5.15 Panupong's Word Classes. Testing sentence frames are proposed to establish membership in the word class of nouns and in various classes of verbs. Such testing frames can be evaluated by several criteria. First, do they classify words in such a way that native speaker intuitions are not violated? Must the frames be used in a circular manner or can they be used in a logical way to systematically classify words? If the frames work satisfactorily in a mechanical way, do they lead to a semantic description of the resulting word classes? Finally, can such frames be generalized in any way to other languages?

Figure 5.5.15 Panupong's Testing Sentence Frames for Word Classes Relevant to Verbs

Nouns and Intransitive Verbs

- | | | | | | |
|-----|---|--------|-------|--------|---------------------|
| (1) | 1 | 2 | léé w | léé w | 'already' |
| | 1 | kamlan | 3 | kamlan | 'in the process of' |

Any word which can occupy 1 in both frames is a noun

- (n). Any word which can occupy both 2 and 3 is an intransitive verb (v_1).

Transitive Verbs

- (2) n 2 n lɛ́w
 n kamlɔŋ 3 n

Any word which can occupy both 2 and 3 is a transitive verb (v_t).

SDouble Transitive Verbs

- (3) n 2 n n lɛ́w
 n kamlɔŋ 3 n n

Any word which can occupy both 2 and 3 is a double transitive verb (v_{tt}).

Intransitive Adjectival Verbs

- (4) n __ kwaa n lɛ́w kwaa 'more than'

Any intransitive verb which can occupy the blank is an intransitive adjectival verb (v_{ia}).

Auxiliaries

- (5) Any word which can replace lɛ́w in frames (1), (2), and (3), along with lɛ́w itself, is a post-verbal auxiliary word (aux₂). Any word which can replace kamlɔŋ in frames (1), (2), and (3), including kamlɔŋ itself, is a pre-verbal auxiliary word (aux₁).

(Panupong, pp. 120-128)

Adverbs(6) $n v_i -$ $n \text{ aux}_1 v_i -$

Any word which can fill either blank, which is not a verb, a post-verbal auxiliary, or a post-verb or a particle, is an adverb. (Panupong, p. 160)

Prepositions(7) $n v_i \text{ aux}_2 - n$ $n \text{ aux}_1 v_i - n$

Any word which can fill either blank is a preposition.
(Panupong, p. 162)

The intuitions of native speakers will not be evaluated here. The frames are presented in a logical way. Thus, nouns are defined by (1), so that they can then be used in (2), (3), and (4). Intransitive verbs are identified by (1), and then they may be further identified as intransitive adjectival verbs in (4).

Panupong's testing sentence frames characterize word classes explicitly in formal syntactic terms. In particular, this scheme categorizes adjectives as a subclass of intransitive verbs. However, it can be noted that the words used in the testing frames, kamlan 'in the process of' and leew 'already', indicate that the grammatical idea of aspect is intimately associated with verbs.

In order to be able to apply (6), it is necessary to

have the category of post-verb. The class of pre-verbs is defined by listing its two members, pay 'go' and maa 'come'; these words are identified as pre-verbs when they occur directly preceding verbs. The class of post-verbs is defined by listing its four members, pay 'go', maa 'come', wáy 'away', and síə 'out, (hortative)'. These words are identified as post-verbs when they occur directly following verbs. (Panupong, p. 158).

I included (7) in this discussion, because there is confusion between prepositions and co-verbs in the analyses of some languages. The definition of adverbs may work in a mechanical way, but no motivation for so distinguishing adverbs from verbs, or from the other classes mentioned in (6), is given. Similarly, the categories of pre-verb and post-verb are simply presented without motivation. Since pay 'go' and maa 'come' satisfy (1) and so are intransitive verbs, the relationship between verbs, pre-verbs, and post-verbs needs to be examined.

5.5.16 Panupong's Verb Phrase. "A verb or a verb and its expansion which may function as one of three verbal sentence constituents or Verba (namely, the Intransitive Verbum (V_i), the Transitive Verbum (V_t) and the Double Transitive Verbum (V_{tt}) will be referred to as a "verb phrase". (Panupong, p. 44). "The units of structure which occupy places in a phrase will be referred to as "phrase constituents". (Panupong, p. 46).

"Four constituents are postulated for verb phrases.

They are called Nucleus (Nuc), Pre-Nuclear Auxiliary (Aux₁), Post-Nuclear Auxiliary (Aux₂) and Modifier (M)." (Panupong, p. 83).

5.5.17 Panupong's Verb Phrase Nucleus. The Nucleus is the portion of the verb phrase which is most concerned with verb concatenation.

Figure 5.5.17 Panupong's Nucleus

- (1) a simple verb
yen 'cold'
- (2) a compound verb
khâw-cay 'understand'
- (3) a sequence of pre-verb and verb
pay-thiaw 'go to enjoy oneself'
- (4) a sequence of verb and post-verb
yaay-pay 'move to'
- (5) a sequence of pre-verb, verb, and post-verb
pay-thiaw-maa 'have been to enjoy myself'
- (6) a sequence of verbs, either with or without accompanying pre-verbs or post-verbs
mɔɔŋ hén 'can see'
nɔɔn lap - pay 'has gone to sleep'

(7) a sequence of two verbs linked by the verbal linker
 "hây"

nân hây sabaay 'sit comfortably'

(Panupong, pp. 83-86)

The distinction between compound verbs and other sequences of verbs is not made explicit here. In example (2), the compound is formed from the verb khâw 'enter' and the noun cay 'heart', and the resulting meaning 'understand' suggests a single action. No motivation is given for separating pre-verbs and post-verbs from other verbs which can occur in sequences.

5.5.18 Panupong's Auxiliaries and Modifier. The Pre-Nuclear Auxiliary (Aux₁) consists of one or more of the pre-verbal auxiliaries (aux₁) alone, aux₁ accompanied by the negator mây, or mây alone (Panupong, p. 86). The Post-Nuclear Auxiliary (Aux₂) consists of the words yuu, léw, or the sequence yuu léw, which also belong to the category of post-verbal auxiliary word (aux₂) (Panupong, p. 90).

Thus, negation is not given a special status in this analysis, but is merely another feature associated with verbs.

The Modifier (M) will not be discussed in detail here. It consists of various sequences of adverbs, locational phrases, and temporal phrases (Panupong, p. 91).

5.5.19 Panupong's Structure of the Verb Phrase. Ten combinations of verb phrase constituents are claimed to be

possible.

Figure 5.5.19 Panupong's Combinations of Verb Phrase Constituents

- (1) Nuc
- (2) Nuc Aux₂
- (3) nuc M
- (4) Nuc Aux₂ M
- (5) Nuc M Aux₂
- (6) Aux₁ Nuc
- (7) Aux₁ Nuc Aux₂
- (8) Aux₁ Nuc M
- (9) Aux₁ Nuc Aux₂ M
- (10) Aux₁ Nuc M Aux₂ (Panupong, p. 97)

5.5.20 Summary of Thai Results. Noss's classification of verbs and related lexemes is based on the substitutability of one expression for another, ignoring any resulting meaning changes. Haas distinguishes primary and secondary verbs in terms of position and function, but does not actually define the verb. Haas's adverb-auxiliaries roughly correspond to Noss's modals and modal verbs and are defined by position rather than function. The grammatical characterization of verbs and related items given by Panupong & Tanwanchon is extensive but neither explained nor justified. Panupong gives detailed testing frames to identify the various verb phrase constituents which she postu-

lated, but again these frames are neither explained nor justified. Negatability is not treated as a significant verbal attribute in any of the works discussed, but is rather mentioned incidentally. Adjectives are generally distinguished as a word class, sometimes as a subclass of the class of verbs, sometimes as an independent word class. From the cited sources, there are various classes of pre-verbs and post-verbs, which are not clearly distinguished from serial verbs.

5.6 Vietnamese

5.6.1 Grammatical Summary. The Vietnamese sentence has the basic word order: Subject + Verb + Object (Vuong-Gia-Thuy, p. 121). In the Hanoi dialect, there are six lexical tones, while in the Saigon dialect, there are five lexical tones, two of the Hanoi tones having merged (Thompson, 1965b, p. 104). Modifiers follow the nouns they modify (Vuong-Gia-Thuy, p. 101). In possessive constructions, the possessor follows the possessed (Vuong-Gia-Thuy, p. 106). Numeral classifier phrases have the form: numeral + classifier + noun (Vuong-Gia-Thuy, p. 100).

5.6.2 Sources of Data. My main sources of data are Emeneau's Studies in Vietnamese (Annamese) Grammar (Emeneau, 1951), Thompson's A Vietnamese Grammar (Thompson, 1965b), Vuong-Gia-Thuy's Vietnamese in a Nutshell (Vuong-Gia-Thuy), Nguyen-Dinh-Hoa's Speak Vietnamese (Nguyen-Dinh-Hoa, 1966a), and Nguyen-Dinh-Hoa's 201 Vietnamese Verbs (Nguyen-Dinh-Hoa, 1979). The data is cited in the standard Vietnamese orthography.

5.6.3 Major Lexical Categories. Emeneau gives the major word classes as substantive, verb, conjunction, final particle, and interjection (Emeneau, 1951, p. 45). The classes are further described but not explicitly defined.

Vuong-Gia-Thuy introduces some word classes and some individual words without explicit mention of class membership. The major categories seem to be noun, verb, preposition, adverbial, and conjunction. Other classes, such as

demonstrative, temporal word, classifier, and negative word, are introduced in relation to the words they modify or are otherwise associated with. (Vuong-Gia-Thuy, pp. 95-123). The emphasis in his work is to provide clear explanations of how to use words rather than to establish formal grammatical categories or rules. The treatment of adjectives illustrates the approach used. Adjective-like verbs are defined as those words which are translated into English as to be + adjective. Next, they are noted to be similar to Vietnamese action verbs in that both are negated by being preceded with khong. Adjective-like verbs are distinguished from action verbs semantically since the former describe states while the latter describe actions. Finally, a syntactic distinction is that adjective-like verbs cannot be used in commands or requests. (Vuong-Gia-Thuy, p. 108)

Thompson works in the structuralist tradition and uses immediate constituent analysis (see 3.2.2). Markers are defined as words which are severely limited in distribution and which always occur as complements and never as heads. Word classes are defined on the basis of syntactic co-occurrence and the presence of markers. (Thompson, 1965b, p. 125). The major word classes are substantives, predicatives, focuses, and particles. Substantives include numerals and nominals, the latter being further subdivided into categoricals and nouns. Predicatives are divided into negatives and verbals. (Thompson, 1965b, p. 360).

Speak Vietnamese (Nguyen-Dinh-Hoa, 1966a) is a teaching grammar rather than a reference grammar, and the word classes are introduced in pedagogical order without extensive analysis. The word classes mentioned are pronoun, noun, specifier [called demonstrative in most other works], verb, adverb, numerator, classifier, conjunction, co-verb, and post-verb. The class of auxiliary verb is cited, but its relationship to the class of verb is not explained. Adjective is equated with stative verb, a subclass of verb.

5.6.4 Emeneau's verb Series. A major difficulty with Emeneau's analysis is that verbs are not defined but are only labeled without explanation. Verb predicates are given a semantic characterization. "Verb predicates consist of a verb or a verb phrase. The class meaning is: actor acts." (Emeneau, 1951, p. 48). The following statements show that Emeneau allows substantives, in the form of subjects and objects, to intervene in verb series. "A verb phrase is of several sorts: (1) A verb followed by a substantive or substantive phrase which is the 'object' of the verb... (2) Several verbs in series, sometimes all continuing the same subject as the first; sometimes, however, there is a change of subject without any verbal indication that this has happened. (3) A verb series, of which any or each member may be followed by an object; the subject of the first verb in series may be the subject of all the verbs, or the object of one verb may be the subject of the next." (Emeneau, 1951, pp. 48-49).

Emeneau defines morphemes of restricted use as words which are "restricted to occurrence with certain other words" (Emeneau, 1951, p. 44). When both morphemes in a construction involving a restricted morpheme are verbs, the construction is referred to as a verb series rather than as a compound. An example of this is ám sát 'to murder', where ám 'to be dark, obscure' is a restricted verb, and sát 'to kill' is a restricted verb (Emeneau, 1951, p. 144; Nguyen-Dinh-Hoa, 1966b, p. 384). In the dictionary, ám-sát 'to assassinate' is simply listed as a compound (Nguyen-Dinh-Hoa, 1966b, p. 2). Whether or not particular morphemes are restricted, this example highlights the problem of distinguishing verb series from compounds. That is, how can it be decided whether the analysis is at the morphological or syntactic level?

Although không is usually defined as a negative word 'not' which precedes the main verb (Nguyen-Dinh-Hoa, 1966b, p. 224), Emeneau calls it a verb (Emeneau, 1951, p. 65), thus making any negated verb part of a verb series. However, almost every example of không is given a different gloss, which implies that this verbal hypothesis does not work well.

tôi nghĩ rằng, làng ta sẽ không việc gì, vì không có binh
nhật đóng

I - think - say as follows - village - our - will - not
have - trouble - any - because - there are not - there are
- soldier - of Japan - who have established camp

'I think that our village will have no trouble, because
there are no Japanese soldiers camped here.'

(Emeneau, 1951, p. 65)

Presumably the first occurrence of không is classified as a
verb because there are no other candidates for verbs in the
first clause.

tôi không biết

I - not act - know

'I don't know' (Emeneau, 1951, p. 66)

không in the second clause of the sentence with Japanese
soldiers and in the sentence where it precedes know has
glosses which seem to depend on the following verbs. Ra-
ther than analyzing không as having an indefinite number of
semantic components, each depending on a co-occurring verb,
it is simpler to adopt the conventional analysis of calling
it a negative word, which negates whatever follows.

Emeneau gives a preliminary sketch of the order of
verbs in a verb series as follows.

1	2	3	4
cũng	sẽ 'will'	chớ/đừng	tự
'exactly	đã 'are	'prohibit'	'to act ...
as'	already'	không/chẳng	of one's
		'not'	own accord'
	chưa		
	'not yet to exist		
	or have acted'		

(Emeneau, 1951, p. 74)

If this analysis is accepted, then negatability cannot be taken as the sole criterion for verb-hood. On the other hand, there are no reasons given for considering the words preceding không as verbs.

5.6.5 Vuong-Gia-Thuy's Verbs in Succession. "In Vietnamese, one often comes across a succession of verbs preceded by one subject. This arrangement often indicates a succession of actions." (Vuong-Gia-Thuy, p. 112).

ông đi vào ngồi đợi

he - went - entered - sat (down) - waited

'He went in, sat (down), waited.' (Vuong-Gia-Thuy, p. 112)

"If the succession involves only adjective-like verbs, it indicates a combination of different states." (Vuong-Gia-Thuy, p. 112).

c^hỏ n^hỏ đ^ẹp

she - small - pretty

'She (is) small (and) pretty.' (Vuong-Gia-Thuy, p. 112)

Action verbs and adjective-like verbs are distinguished, in this analysis, only on semantic grounds (see 5.6.3). There are no overt grammatical markers in the above examples to aid in determining any sort of structural description.

5.6.6 Vuong-Gia-Thuy's Modal Verbs. The modal verbs are simply listed and not given a formal class definition.

Figure 5.6.6 Vuong-Gia-Thuy's Modal Verbs

<u>Verb</u>	<u>Meaning</u>
có thể ^h	to be able to
được	to be able to
phải ^h	must
cần phải ^h	must (emphatic)
nên ^h	ought to, should
để ^h	to let
cho	to let
để cho ^h	to let (emphatic)

(Vuong-Gia-Thuy, p. 108)

Indirectly, it is stated that a modal verb is associated with another verb, because it is noted that each verb

other than được precedes the verb with which it is associated. Được, on the other hand, follows the verb with which it is associated, but not necessarily immediately. (Vuong-Gia-Thuy, p. 108).

Although Vuong-Gia-Thuy makes no comment, this list raises the issue of distinguishing compounds from verb series. The first compound có thể 'to be able to' is formed from the verb có 'to exist, to have' (Nguyen-Dinh-Hoa, 1966b, p. 39) and the noun thể 'ability, capability' (Nguyen-Dinh-Hoa, 1966b, p. 466). Cần phải is defined as the emphatic form of 'must', where cần 'to be needed, urgent, pressing' is a verb (Nguyen-Dinh-hoa, 1966b, p. 37). Similarly, để cho 'to let' is composed of two verbs. These two examples imply that concatenating two verbs of similar meaning results in the same meaning emphasized. The status of these combinations as compounds is not clear, since the components can occur independently.

5.6.7 Vuong-Gia-Thuy's Verbal Modifiers. "Verbal modifiers are words which are used to modify verbs." (Vuong-Gia-Thuy, p. 110). Since modal verbs also satisfy this definition, it is not a very rigorous characterization of a word class. This class is subdivided into several groups, as shown in the following figure.

Figure 5.6.7 Vuong-Gia-Thuy's Verbal ModifiersAspect

cũng	also, too
không	not, do (does, did) not
hay	often, frequently
chỉ	only
đều	all, altogether

TimePast Action

mới	just, just now
vừa	just, just now
đã	(past tense marker)
chưa	not yet
có	(past tense marker)

Continuous Action

đang	to be in progress
đang	to be in progress
còn	still

Future Action

sẽ	shall, will
sắp	to be going to

(Vuong-Gia-Thuy, pp. 110-112)

Since grammatical aspect usually is considered to refer to the completion or duration of an action, it is not clear why the words cũng 'also', chỉ 'only', and đều 'all' are included in this category, or why the continuous actions words are excluded.

All of the verbal modifiers mentioned above precede the verbs they modify. All of the words in the aspect group may occur in the following order:

cũng đều chỉ không hay modified verb
also - all - only - not - often - modified verb

Chúng tôi cũng đều không hay dậy trễ

we - also - all - not - often - get up - late

'We do not often get up late either.'

(Vuong-Gia-Thuy, p. 112)

The past action modifiers mới and vừa 'just' can occur singly or in sequence with either word appearing first and no change in meaning (Vuong-Gia-Thuy, p. 111).

The continuous action modifiers đang 'to be in progress' and còn 'still' can be used together for emphasis. In this case either modifier may precede and the meaning is the same. (Vuong-Gia-Thuy, p. 112).

5.6.8 Vuong-Gia-Thuy's Prepositions. The discussion of preposition skirts the issue of co-verbs, introduced in 4.3.2. That is, it is only noted that some prepositions

may also be used as verbs.

Figure 5.6.8 Vuong-Gia-Thuy's Prepositions and Verbal
Meanings

<u>Word</u>	<u>Prepositional</u> <u>Meaning</u>	<u>Verbal</u> <u>Meaning</u>
bằng	by means of, with	to be equal to
với	with	to join
cho	for	to give, to add, to let, allow
giùm	for	to aid, help
từ	from, since	---
đến	to, until	to reach, arrive
cho đến	to, until (emphatic)	---
tới	to, until	to reach, arrive
cho tới	to, until (emphatic)	---

(Vuong-Gia-Thuy, p. 116; Nguyen-Dinh-Hoa, 1966b, pp. 544,
68, 171)

Consultation of a dictionary (Nguyen-Dinh-Hoa, 1966b), the results of which are shown in Figure 5.6.8, showed that only từ 'from, since' has no verbal interpretation. Without an explicit definition of prepositions, the classification here cannot be attacked or defended. As with the modal verbs (5.6.6), it is not made clear whether the

emphatic constructions involving cho 'for' are compounds or verb series.

5.6.9 Thompson's Grammatical Framework. In order to understand Thompson's treatment of Vietnamese verbs, it is necessary to understand his variety of structural linguistics. Grammatical analysis consists of dividing utterances into a hierarchy of immediate constituents (see 3.2.2). If a particular short sequence bears the same relationship to its immediate constituent partner as a longer sequence in the same position, then the short sequence is called a model for the longer sequence, which in turn is called an expansion of the shorter one (Thompson, 1965b, p. 111). If one of the immediate constituents of a particular constituent is a model of that constituent and if the referential relationship remains the same when the model is substituted for its constituent in the context, then that immediate constituent is a nuclear model (Thompson, 1965b, p. 114).

Another hierarchy of definitions is devoted to the characterization of words, and in particular to the identification of compounds. "Minimum pause groups are the smallest bits of a normal conversational speech which occur by themselves, isolated by preceding and following pauses (although not necessarily constituting whole sentences)... Any constituent which occurs on some occasion as a minimum pause group is a basic free form." (Thompson, 1965b, p. 105). "A morpheme which occurs either as a basic free form or (on at least some occasions) as the partner of an imme-

mediate constituent which is greater than a basic free form is a free morpheme. Other morphemes (those which do not occur either as basic free forms or as partners of immediate constituents greater than a basic free form) are bound morphemes (called restricted words in Emeneau, 1951)." (Thompson, 1965b, p. 118). "Single free morphemes... and basic free forms ... containing no more than one free morpheme (or none at all) are words." (Thompson, 1965b, p. 118). A word which consists of a single free morpheme is simple; a basic free form consisting entirely of bound morphemes or consisting of one free element and one or more bound morphemes is complex (Thompson, 1965b, pp. 118-119). Words which occur as basic free forms are independent, and words which do not occur as basic free forms are dependent (Thompson, 1965b, p. 119).

Of particular relevance to the problem of verb concatenation are the distinctions between complex words, compound words, and phrases. A bound morpheme having only a single monosyllabic allomorph is a pseudo-base; other bound morphemes (having multiple allomorphs or allomorphs shorter than one syllable) are affixes. Words containing pseudo-bases are pseudo-compounds; words containing affixes are derivatives. "In general a sequence of two or more free morphemes ... constitutes a sequence of two or more words... However, there are borderline cases where such sequences appear to be more like complex words... Such sequences are called compound words or simply compounds."

The formal characteristics of compounds are not entirely clear, and in many individual cases it is difficult to determine whether a morpheme sequence constitutes a compound or a phrase. However, compounds are generally distinguished from phrases on the basis of the following factors: compounds have only two immediate constituents; they regularly have a heavier stress... accompanying their final constituent except in circumstances where both constituents have medium stress; they are always themselves constituents and do not correspond to expanded forms with either of their constituents complemented by another element. Phrases are not limited in any of these ways." (Thompson, 1965b, pp. 120-121).

"Phrases are constituents consisting of more than one word... A construction which forms phrases with more than one head is coordinating. Other constructions (forming phrases containing only one head each) are subordinating. There are also mixed constructions, which are basically coordinating (they form phrases containing more than one head) but which also have a complement. Subordinating constructions are restrictive, forming phrases with the order complement - head, and descriptive, forming phrases with the order head - complement." (Thompson, 1965b, p. 123).

5.6.10 Thompson's Predicative Elements. A hierarchy of definitions leads from predications to verbs. A predication is the head of an independent sentence; a predica-

tion is either itself a predicate or contains one or more predicates as heads. A phrase which includes the identificational marker la 'be, which is (are), that is, namely' is an identificational predicate. A phrase which includes the tense marker da 'anterior' or the tense marker se 'subsequent' is a temporal predicate. A sequence which is identical to a temporal predicate except without a tense marker is an unmarked predicate. A verbal predicate is a temporal or unmarked predicate which is not a substantival phrase. "All those words which are found in some instances directly following a sentence initial plural marker and/or which occur as head with a demonstrative marker as complement are substantives... A phrase containing a substantive as center... is a substantival phrase," (Thompson, 1965b, p. 179). A word which occurs singly as a head of a verbal predicate is a predicative, and an independent word which is not a substantive and which occurs between a tense marker and predicate center is a predicative. (Thompson, 1965b, pp. 206-208).

A negative is a predicative which does not occur as a head of a descriptive phrase. A verbal is a predicative which does occur as head of a descriptive phrase. Verbals are divided into the definitive, comparatives, quantifiers, auxiliaries, and verbs. These verbals are defined in structural, that is, distributional, terms, but can also be characterized semantically or by simple listing. The definitive rōi 'to be over and done with' never has another

verbal as descriptive complement. Comparatives are verbals which occur with non-verbals as descriptive complements, but generally only the definitive rôl is allowed as a verbal descriptive complement; comparatives can be descriptive complements of other verbals. "Quantifiers are verbals which occur with certain non-verbals... with the definitive and comparatives as descriptive complements." "Auxiliaries are verbals which occur as restrictive complements of other verbals." "Verbs are verbals which do not appear as restrictive complements and do occur as heads of descriptive phrases with a variety of verbal descriptive complements." (Thompson, 1965b, pp. 210-217).

The above distributional definitions are not very clear, and the theoretical machinery may be excessive, considering that the largest class, aside from the verbs, has only twelve members. Indeed, the names of the classes suggest that semantics and function are the true motivating factors for establishing these classes.

Figure 5.6.10 Thompson's Verbals, Aside from Verbs

<u>Verbal</u>	<u>Thompson's</u>	<u>Nguyen-</u>	<u>Nguyen-</u>
	<u>Meaning</u>	<u>Dinh-Hoa's</u>	<u>Dinh-Hoa's</u>
		<u>Meaning</u>	<u>Meaning</u>
		<u>(1966a)</u>	<u>(1966b)</u>
<u>The Definitive</u>			
rồi	to be over and done with	already (particle), then; after- wards, next (conjunction)	to finish, already; then
<u>Comparatives</u>			
hơn	be greater, more (than)	more than (co-verb)	to be more...than; surpass, outdo; to have more...than; more...than, ...-er than
quá	exceed, be excessive	to go be- yond, go past (verb); too, exceed- ingly (adverb)	to go beyond, ex- ceed; beyond, over, past; excessively, too (restricted)

Quantifiers

nhiều	be a large amount, much, many	to be much or many, be plentiful, much, a great deal, often (sta- tive verb); to have much or many; there is much, there are many (verb)	to be or have much; many; to abound with, teem with; there is much..., there are many; a great deal, a lot, lots of; to act much or often (restricted)
ít	be a small amount, little, few	to be little or few, to have little or few (stative verb)	little, small quantity; to be or have little/few; there is little..., there are few...; to act to a small degree (2nd verb in series); to act only rarely (1st verb in series)

đông	be many together, in a crowd (generally connoting people)	---	(of people) to be crowded; (of place) to be crowded with
------	--	-----	--

đầy	be full (of), filled (with)	---	to be full, filled; to have fully, be fully
-----	-----------------------------------	-----	---

Auxiliaries

bớt	diminish, be less	---	to lessen, reduce, lower, decrease
-----	----------------------	-----	---------------------------------------

có	exist, be defin- itely	(emphatic particle); to have, own, pos- sess; there is, there are (verb)	to exist; to have, possess, own; there is/are
----	------------------------------	--	---

còn	remain, be left; still	still (auxiliary verb)	to remain; to have left; there is (or are) left; still, yet, also, in addition
gần	be close, near; near- ly, almost	to be near, close by (stative verb)	to be near, close; to be about to (precedes main verb); nearly, almost
hết	be complet- ly finished, used up; no longer	to finish, exhaust; to be finished, be exhausted (verb)	to finish, com- plete; to end, cease, be finished, be completed
lâu	be a long time; (al- ready) for a long time (rare as a main predi- cate center)	to take a long time (stative)	to take a long time; to last; to last; to last long

it	be infrequent, uncommon; seldom	to be little or few, to have little or few (stative verb)	little, small quantity; to be or have little/few...; there is little...; there are few...; to act to a small degree (second verb in series); to act only rarely (first verb in series)
mau	be fast, quick; soon	---	to be quick, rapid, fast
nên	be appropriate; necessarily, must, obliged to	should, ought to, had better (auxiliary verb); so, that's why, consequently (conjunction); to become (functionive verb)	to develop into, result in, become; to be obliged (to do something), ought to, should (restricted)

thật	be real, true; really, truly	to be true, be real (stative verb); real(ly)	to be real, true, genuine, real(ly), very
thêm	to add, increase; more, in addition	to add; to do or have in addition (verb)	to add, increase; to do or have in addition, to act further (restricted)
thường	be common, frequent, ordinary; often, usually	---	to be ordinary, customary, usual, habitual; usually, ordinarily, as a rule, habitually, customarily, generally

(Thompson, 1965b, pp. 212-216;

Nguyen-Dinh-Hoa, 1966a, 1966b)

In Figure 5.6.10, Thompson's non-verbal predicatives are listed, and their treatment by Nguyen-Dinh-Hoa is also shown. In his grammar (Nguyen-Dinh-Hoa, 1966a), Nguyen-Dinh-Hoa classified the vocabulary given; while in his

dictionary (Nguyen-Dinh-Hoa, 1966b), definitions without classifications are given in most cases.

Although translation into English is not a good criterion for word categorization, it can be noted that most of the verbals are translated by Thompson into English verbs. Furthermore, nearly all of the verbals are explicitly labeled verbs by Nguyen-Dinh-Hoa. Some of the verbals are also given non-verb labels by Nguyen-Dinh-Hoa.

5.6.11 Thompson's Coterminous and Sequential Phrases. Thompson notes some types of serial verb constructions and points out some of the problems in analyzing them. "Coterminous Phrases are coordinate phrases presenting two or more actions obtaining at the same time. Extended state verbs are most common as heads although momentary action verbs also occur. There is no formal way of separating such phrases from sequential phrases..., and it may well be that only a semantic specialization is involved... Sequential Phrases are coordinate phrases presenting situations which follow one another. Heads vary from single verbals to lengthy clauses." (Thompson, 1965b, p. 230).

Despite Thompson's attempts in most sections of his grammar to define constructions in distributional terms, coterminous and sequential phrases are defined purely in semantic terms. This treatment of serial verbs shows that a linguist who is committed to a structuralist, i.e. purely distributional, approach, simply describes serial verbs outside the framework used in most of his work. Actually,

structural linguistics does not ignore semantics, but there is little application of structuralist principles to semantic problems.

With respect to sequential phrases, Thompson also comments on the phenomenon, observed in other languages, that the meaning of the verb may depend on its position in the phrase. "As common as the sequential construction is, it is not surprising that a number of high-frequency verbs appear with rather specialized meanings as second head in sequential phrases." (Thompson, 1965b, p. 231).

Figure 5.6.11 Thompson's Shifts in Verb meanings in Sequential Phrases

<u>Verb</u>	<u>Basic Meaning</u>	<u>Meaning as Second Head</u>
bằng	be equal, even, flat	as...as
cho	give	for the benefit of, that, for the fact that, so that, in order to
đến	go to, arrive at	all the way to, up to; concerning
đi	go	away, completely (destroyed)
lên	go up	raising, increasing

mát	lose; use up, take	completely
ra	go out	open, separate, changed
thấy	perceive	perceive (used mainly as second head in sequential phrases referring to perception via one of the physical senses)
theo	follow	after, according to, accompanying, along with
vào	go in	attached directly to, onto
về	return home	toward, concerning, about

(Thompson, 1965b, pp. 231-234)

Among the verbs appearing in sequential phrases, three semantic subclasses are distinguished.

For accompaniment and transport, "the main verb signals accompaniment or transport (often with a descriptive complement denoting the persons or objects involved), and it is followed by a verb (often with its own complement) stating the direction or more specific action involved; the

construction is sequential... Sometimes the second verb follows the first immediately, and the expression denoting the person or thing conveyed or accompanied appears as complement to his verb phrase." (Thompson, 1965b, p. 330).

"Causative-Resultive Expressions make use of the sequential construction... with a momentary action verb... in first position stating the causal action or condition, and another verb in second position (often an extended state verb) stating the result or effect, generally with a following complement specifying the person or thing affected. The most common verb in first position is làm 'do, make', but a variety of others also occur." (Thompson, 1965b, pp. 330-331).

"Purposive Expressions make use of the sequential construction ... with the verb cho 'give' in second position, usually followed by a complement specifying the person, thing or situation served. It not only states the responsibility for the action but also implies intention." (Thompson, 1965b, p. 331).

5.6.12 Nguyen-Dinh-Hoa's Verbs and Related Word Classes. The main outlines of Nguyen-Dinh-Hoa's treatment of verbs in his teaching text Speak Vietnamese (Nguyen-Dinh-Hoa, 1966a) and in the introduction to 201 Vietnamese Verbs (Nguyen-Dinh-Hoa, 1979) are similar, though one or the other generally has more detailed explanations of particular points. Both use semantic and syntactic criteria in defining verbs and other word classes.

"The verb is a syntactic word which denotes an action, a process, a state or a quality, and which can be preceded by the negative lexeme không 'not' or followed by the lexeme rồi 'already'." (Nguyen-Dinh-Hoa, 1979, p. i).

One case of the failure of this definition is the copula là 'to be so-and-so'. It may satisfy the semantic part of the definition of a verb, but it must be negated by the phrase không phải 'it is not correct (that)'.

Tôi không phải là người Việt-nam

I - not - correct - person - Vietnam

'I'm not (a) Vietnamese.'

"*Tôi không là người Việt-nam is ungrammatical."

(Nguyen-Dinh-Hoa, 1979, p. xxiv)

Adjectives are treated as a type of verb and will be discussed in 5.6.13.

The case of the adverbs is not clear. In one place, they are defined as a separate word class. "Adverbs (A) modify functive and stative verbs or other adverbs as in English. They follow the modified." (Nguyen-Dinh-Hoa, 1966a, p. 7). Later, the adverb is evidently considered as a particular occurrence of a type of verb. "A stative verb... can be analyzed as an 'adjective' if it follows a noun and the modified-modifier relationship is apparent. It can also serve as adverb modifying a verb, an adjective or another adverb." (Nguyen-Dinh-Hoa, 1966a, p. 20).

Ông ấy đúng

he - correct

'he is right.'

Ông ấy đọc đúng

he - pronounce - correct

'He pronounces it right.' (Nguyen-Dinh-Hoa, 1966a, p. 20)

The above examples show that the analysis of words such as đúng 'correct' depends on whether such sequences as đọc đúng 'pronounce correctly' are treated as verb series or as sequences of verbs and adverbs, or other verb modifiers.

A class of auxiliary verbs is not defined explicitly, but the term is used to label words which precede the main verb and indicate tense and intensity, among other things.

tôi sắp đọc sách Việt-nam

I - about to, going to - read- book - Vietnam

'I'm going to read a Vietnamese book.'

tôi khá bận

I - pretty, rather -busy

'I'm pretty busy.' (Nguyen-Dinh-Hoa, 1966a, p. 48)

In a later analysis, the term auxiliary verb appears to be replaced by preverb, which is not explicitly defined but is described as preceding the verb "to mark negation, aspect,

tense, degree, frequency, etc." (nguyen-Dinh-Hoa, 1979, p. 1x). Since the "Introduction" to 201 Vietnamese Verbs proposes to discuss the relationship between verbs, preverbs, and postverbs, it appears that preverbs are considered to be a separate class from verbs. Auxiliary verbs, however, are classified as verbs (see 5.6.13).

tôi đếm rồi, cô không phải đếm lại.

I - count - already - you - not - must - count - again

'I already counted them; you don't have to count again.'

(Nguyen-Dinh-Hoa, 1966a, p. 118)

The status of co-verbs, as noted in 4.3.2, is problematic, and this uncertainty is reflected in Nguyen-Dinh-Hoa's changing analysis. "A co-verb indicates a certain relationship between the main verb and an indirect object. It is comparable to an English preposition, and never receives stress in speech. The co-verb and its own object may follow or precede the main verb." (Nguyen-Dinh-Hoa, 1966a, p. 104). In the following examples, the main verb is in boldface and the co-verb is underlined.

Ông ấy có hiệu sách ở Cựu-Kim-Sơn

he - has - store - book - in - San Francisco

'He owns a bookstore in San Francisco.'

Ông ấy chụp cho tôi ba cái ảnh

he - photograph - for -I - three - classifier - picture

'He took three pictures for me.'

Ông nam khỏe hơn tôi

Mr. - Nam - strong - to be better than or more than - I

'Mr. Nam is stronger than I.'

(Nguyen-Dinh-Hoa, 1966a, pp. 104-105)

Tôi ở thư-viện về

I - in - library - return

'I'm coming from the library.'

(Nguyen-Dinh-Hoa, 1966a, p. 169)

In the glossary, ở is classified as both a verb and a co-verb (Nguyen-Dinh-Hoa, 1966a, p. LVI), while cho is only classified as a verb (Nguyen-Dinh-Hoa, 1966a, p. XLV). While hơn is described as a "verb" which "can be used as co-verb to indicate superiority" (Nguyen-Dinh-Hoa, 1966a, p. 105), in the glossary it is simply classified as a co-verb (Nguyen-Dinh-Hoa, 1966a, p. LI). Thus, it is not clear if co-verbs are distinct from verbs or are verbs with particular functions.

In a later analysis, co-verbs are identified with post-verbs and treated somewhat like Haas's secondary verbs, as discussed in 5.5.11. "The category of direction is ex-

pressed by means of postverbs or coverbs, that is to say, verbs which occur following the main verb and play a 'secondary' role. They are reduced to the status of morphemes by the mere fact of appearing after full verbs..." (Nguyen-Dinh-Hoa, 1979, p. xiii). In normal linguistic usage, a morpheme can be a full word as well as a bound form; hence the status of coverbs is not clear.

In the earlier analysis, only two examples of postverbs are given. The first được 'can, to be able to', was classified as a verb in the glossary, but labeled a postverb when it followed the main verb, either directly or after the object of the verb.

Tôi nói tiếng Việt-Nam được

I - **speak** - language - Vietnam - can

'I can speak Vietnamese.'

Tôi nói được tiếng Việt-Nam

I - **speak** - can - language - Vietnam

'I can speak Vietnamese.' (Nguyen-Dinh-Hoa, 1966a, p. 106)

The second, cả² 'at all', was labeled a particle in the glossary but called a postverb in the text.

Ai cũng đi cả⁷

who, everyone - also - go - at all

'Everyone is going.' (Nguyen-Dinh-Hoa, 1966a, p. 143)

The earlier analysis suggests that the term postverb covers any or some words or particles that follow the main verb, while the later analysis seems to restrict the term to a subclass of verbs.

5.6.13 Nguyen-Dinh-Hoa's Classification of Verbs.

The fundamental division of verbs is into the categories of functive verb and stative verb. These categories are defined by both syntactic and semantic criteria, where either the syntax alone or the semantics alone is sufficient to identify the class of a particular verb. A functive verb denotes an action and can follow the imperative markers hay 'do...', be sure to ...', đừng 'don't ...', or cho 'don't...'. A stative verb denotes a state or quality and can be preceded by the degree markers rất 'very', or hơi, khí, kha 'rather, pretty'. Each of the above set of markers can only occur with their respective class of verbs. (Nguyen-Dinh-Hoa, 1966a, p. 7; 1979, pp. ix-x). While the quotation about stative verbs being analyzed as adjectives (see 5.6.12) implies that only some stative verbs are also adjectives, the later analysis simply says that "stative verbs (cao 'to be tall', tốt 'to be good', etc.) are equivalent to adjectives in English." (Nguyen-Dinh-Hoa, 1979, p. x).

Nguyen-Dinh-Hoa divided verbs into several subclasses "through a semantic analysis of transitivity relations and the use of criteria of combinatory possibilities" (Nguyen-Dinh-Hoa, 1979, p. xviii). He included numerous examples

of each subclass, but in the following only one illustrative example will be given for each subclass.

Figure 5.6.13 Nguyen-Dinh-Hoa's Classification of Verbs

1. NON-ACTION VERBS - Verbs of static position
đứng 'to stand'
2. VERBS OF EXISTENCE, APPEARANCE AND DISSAPPEARANCE
có 'to exist'
3. AUXILIARY VERBS - modal verbs
phải 'must, to have to'
4. COPULA
là 'to be so-and-so, equal'
5. LINKING OR CLASSIFICATORY VERBS - verbs of becoming
thành 'to become'
6. QUOTATIVE VERBS - verbs of thinking, knowing and saying
nghĩ 'to think (that)'
7. ACTIVE VERBS
 - a. verbs of action: ăn 'to eat'
 - b. verbs of motion: ra 'to exit'
 - c. semi-active verbs: thích 'to like'
8. DITRANSITIVE VERBS I - verbs of giving and taking or receiving
đưa 'to hand'
9. DITRANSITIVE VERBS II - verbs of inserting
thọc 'to thrust'

10. DITRANSITIVE VERBS III -verbs of evaluation and
selection

coi 'to consider, regard'

11. CAUSITIVE VERBS -telescoping verbs

cho 'to let, allow, permit'

12. VERBS OF BODILY MOVEMENT

gật 'to nod'

13. STATIVE VERBS - adjectives

cao 'to be tall'

(Nguyen-Dinh-Hoa, 1979, pp. xxviii-xxx1)

The subclasses are then grouped into clusters, based on syntactic environments. Here subclasses 1, 2, 5, 7, and 12 are called single-object verbs, while in the previous listing they were not grouped as were the ditransitive verbs. Also in this analysis, the auxiliary verb muốn 'to want to' and the semi-active verbs thích 'to like' and được 'to get, obtain, receive' are labeled as being precedable by rất 'very', yet this contradicts the claim that only stative verbs can be so preceded. (Nguyen-Dinh-Hoa, 1979, p. xxxi). Nevertheless, this classification provides a good starting point for investigating the combinatory possibilities of verbs in Vietnamese.

5.6.14 Nguyen-Dinh-Hoa's Constructions Involving Verbs. There are various types of constructions involving verbs: some morphological, some syntactic, and some not labeled explicitly. First, there are reduplications, which

are treated as words. Second, there are verb-verb compounds, verb-noun compounds, and verb-complement compounds, where the complements may be either coverbs or adjectives. Third, there is the sequence auxiliary verb + main verb. Fourth, there are the sequences main verb + coverb of result, main verb + coverb of direction, main verb + adverb, and adverb + main verb.

Both syntactic and semantic criteria are used to analyze the above sequences. "To express repetition or extension, verbs (and adjectives, too) can be repeated, and reduplicative forms containing alliteration or rime help the language acquire more vividness since varied patterns of total or partial reduplication serve to emphasize reiteration, intensification, attenuation or even irony." (Nguyen-Dinh-Hoa, 1979, p. xii). In an earlier analysis, disyllabic reduplications were declared to be words because they occur freely in various constructions (Nguyen-Dinh-Hoa, 1966a, p. 212-213).

The constituents of compounds can be bound together to varying degrees. Consider the following examples.

1) đánh tiếng

to strike - noise, rumor, reputation

'to put out a feeler'

- 2) đánh máy
to hit - machine
'to type'
- 3) đánh cái máy này
to hit - classifier - machine - this
'to use this typewriter'

Both (1) and (2) are idiomatic in that the meanings of the compounds cannot be deduced simply by combining the meanings of the constituents. However, (1) may not be split by an intervening word, while (3) shows that (2) is not so tightly bound. (1) is called a lexical compound, but (2) is not explicitly labeled. (Nguyen-Dinh-Hoa, 1979, p. xix).

The above compounds were of the form verb + noun. There are also coordinate compounds, which are of the form verb+ verb, in which a pair of synonyms or antonyms are juxtaposed and the meanings generalized. "In the spoken language, and chiefly in the interrogative and the negative, rhetorical effects are achieved by inserting với (chàng/chả) 'and' between the two constituents of this type of compound:

Buôn với bán gì cái bà ấy!

to buy - with - to sell - anything - classifier - she -
that

'How can she be a businesswoman?'

(chàng and chả mean 'not')

(Nguyen-Dinh-Hoa, 1979, p. xviii)

In the earlier analysis, auxiliary verbs seemed to be any words which occurred in the frame : subject + ____ + main verb, and included tense markers before functionive verbs and intensity markers before stative verbs.

tôi sẽ đọc sách Việt Nam

I - will - read - book - Vietnam

'I will read a Vietnamese book.'

tôi khá bận

I - pretty, rather - busy

'I'm pretty busy.'

(Nguyen-Dinh-Hoa, 1966a, p. 48)

Later it is declared that "the auxiliary verb has predicative value, unlike a tense marker (đã, sẽ, vừa, mới, etc.)." (Nguyen-Dinh-Hoa, 1979, p. xxiii). Modal auxiliary verbs can occur both preceding main verbs and alone. In the following examples, the frame: có ____ không, questions the material that fills the blank, and the auxiliary verbs are underlined.

Anh có muốn đi không

you - there exists - want - go - not

'Do you want to go?'

anh có cần không

you - there exists - to need to - not

'Do you need to do it?'

cần

to need to

'Yes, I do (need to do it).'

(Nguyen-Dinh-Hoa, 1979, pp. xxiii-xxiv)

The above examples show that a word is considered an auxiliary verb even when it stands alone. The glosses for the utterances involving cần 'to need to' imply that there is an underlying or understood main verb 'to do'.

Coverbs were discussed in 5.6.12. They can be analyzed in both syntactic and semantic dimensions. Two types of coverbs are mentioned, coverbs of direction and coverbs of result, but the two groups are not mutually exclusive. The coverb shows a semantic relationship with the preceding main verb, but no clear syntactic distinction is made between compound words and phrases. The constituents of these verb + coverb sequences may be divided by negative words or by objects in some cases, but whether such words occur before the sequence, after the sequence, or in between the constituents has semantic consequences.

- 1) tôi đứng lên
I - stand - to go up
'I stand up.'
- 2) tôi giơ tay lên
I - to raise - hand - up
'I raised my hand.'
- 3) tôi tìm thấy rồi
I - to seek - to see, feel - already
'I found (it).'
- 4) không tìm thấy
not - to seek - to see, feel
'did not find'
- 5) tìm không thấy
to seek - not - to see, feel
'looked but could not find'

(Nguyễn-Dinh-Hoa, 1966a, pp. 161-162)

(1) through (5) are examples of resultative verb constructions, in which "two verbs may be used to describe an action, the second one denoting the result" (Nguyễn-Dinh-Hoa, 1966a, p. 161). In (1) the coverb of result is a verb of direction, and in (3) - (5) the coverb of result is a verb of perception; both of these semantic classes partici-

pate in many verb concatenations. In (2) the verb sequence is divided by a noun. Nguyen-Dinh-Hoa analyzed (1) by saying that tôi 'I' is the subject of both verb and coverb; while in (2) tôi 'I' is the subject of giở 'to raise', and tay 'hand' is both the object of giở and the subject of lên 'up' (Nguyen-Dinh-Hoa, 1966a, p. 161). Thus, (2) fits Chao's pivotal construction (see 4.3.1). (4) and (5) show the semantic difference resulting from the position of the negative word không. In (4) it seems that the sequence is negated, so that it is behaving as a unit, while in (5) only the result is negated, showing that the sequence is not tightly bound.

Some examples with the word lại further illustrate the effects of word order and the difficulties of analyzing verb strings.

- | | |
|---------------|-------------------------------------|
| 6) lại học | 'resumes studying' |
| again - study | |
| 7) học lại | 'reviews' |
| study - over | |
| 8) lại đếm | 'resumes counting' |
| again - count | |
| 9) đếm lại | 'counts again' |
| count - over | (Nguyen-Dinh-Hoa, 1966a, pp. 20-21) |

"The word lại, when preceding the (main) verb, means 'again' in the sense that the action is resumed after some interruption. But when it follows the verb, lại means 'over' with the understanding that the action was not successful or satisfactory the first time." (Nguyen-Dinh-Hoa, 1966a, pp. 20-21). In both positions, lại is labeled adverb (Nguyen-Dinh-Hoa, 1966a, p. 16), while as a main verb lại means 'to come, arrive' (Nguyen-Dinh-Hoa, 1966a, p. LII).

- | | |
|--|--|
| 10) đóng cửa lại
to close - door - ? | 'to close the door' |
| 11) đóng lại cửa
close - ? - door | 'to close the door again
(because the first time it was
not done right)' |
| 12) để sách lại
to place, put, let,
leave - book - ? | 'to leave the book behind,
not to take it' |
| 13) để lại sách
to leave - ? - book | 'to bequeath books
(to someone)' |

The individual meaning of lại is not given for any of these examples, but it is analyzed as a coverb in a verb-complement compound. (Nguyen-Dinh-Hoa, 1979, pp. xx-xxi). Be-

sides the change in terminology, (10) - (13) show that whether the object follows the verb compound or divides it has a major effect on the meaning.

5.6.15 Summary of Vietnamese Results. Emeneau and Vuong-Gia-Thuy do not define the verb, but simply refer to it. Thompson has a long chain of distributional definitions leading to that of the verb. Nguyen-Dinh-Hoa defines the verb as a word, with certain semantic properties, which can be negated by a preceding negative marker. Adjectives are generally considered a subclass of verbs, one that can be identified both semantically and syntactically. A major area of confusion is whether to treat sequences of verbs as compound words or as phrases. This issue is not addressed directly except in isolated cases. The main verb in a verb phrase can be preceded by modal verbs, auxiliary verbs, and pre-verbs, but the distinctions between these categories are not clear. There is no agreement as to which of these pre-main-verb elements are verbs themselves. Verb series are analyzed semantically rather than syntactically, even by the rigorously structuralist Thompson. Following the main verb can be verb-like entities which are called coverbs or prepositions in different analyses. There is no agreement on whether or not they are verbs or even what is included in the category of coverb. The resultative verb construction is generally recognized as involving an action verb followed by a verb of result. Verbs of motion also figure prominently in serial verb construc-

tions. However, there are only unsystematic observations of the consequences of switching word order or breaking up the verb sequences with nouns or with negative words. These transformations occur widely but not without restriction.

VI. SEMANTIC/SYNTACTIC PRINCIPLES OF ANALYZING VERB STRINGS.

(Note: if it is not otherwise clear, the language of any cited form will be indicated by the following abbreviations: (B) Burmese, (C) Cambodian, (I) Indonesian, (T) Thai, (V) Vietnamese)

6.1 Working Hypothesis for Verb Definition. A verb is any word that can be directly preceded by a negative marker. To be more explicit, the negative markers which define the verb in each language are:

Burmese - ma

Thai - mây

Cambodian - mân

Vietnamese - không

Indonesian - tidak

This definition is motivated by two considerations. First, most of the words which are given as verbs in my references satisfy the definition. The apparent counterexamples given by Noss for Thai (see 5.5.10) are considered unacceptable by native Thai speakers I asked. Similar difficulties with Vietnamese are discussed below. Second, this definition is operational; that is, it supplies an explicit method for determining verb-hood. The investigator simply needs to observe the putative verb following one of the above negative markers in a text or to ask a native speaker if the putative verb can be preceded by a negative

marker.

It is necessary to be explicit about the negative markers, because Indonesian has the marker bukan, which precedes nouns. For simplicity, other negative markers, such as (V) chưa 'not yet' and (I) tak 'not' are not included in the definition.

One important consequence of this definition is that the words often classified as adjectives or adverbs will be classified here as verbs. However, they may be distinguished as subclasses of verbs by various syntactic and semantic criteria.

The negatability criterion presents a problem for Vietnamese, because nouns, pronouns, and a few other expressions may be negated by không.

Figure 6.1 Negative Expressions in Vietnamese

- (V-1) không người nào đi ra phi-trường
 not - person - which - go - exit - airport
 'Nobody went (out) to the airport.'
- (V-2) không ai ngủ[?]
 not - who - sleep
 'Nobody slept.' (Vuong-Gia-Thuy, p. 114)
- (V-3) Ông ấy không tiền
 you - that - not - money
 'He has no money.' (Thompson, 1965b, p. 211)

(V-4) không sao

not - how?, what manner?, why

'no trouble, it does not matter'

(Nguyen-Dinh-Hoa, 1966b, p. 384)

Nguyen-Dinh-Hoa solves this problem by including semantics in the definition of the Vietnamese verb (see 5.6.12).

Despite the existence of such negative expressions as (V-1) -(V-4) in Vietnamese, the negatability criterion is a useful rule-of-thumb in distinguishing verbs from verb-like particles. There is usually no confusion between verbs and nouns. however, to be rigorous we should either adopt a semantic characterization of verbs, which is difficult in practice, or characterize the exceptions to the rule. Expressions of the form in (V-1) can be characterized by the frame : không + noun + nào 'not any noun'. Expressions such as (V-2) and (V-4) can simply be listed. The most difficult case is that exemplified by (V-3). Here we must be able to distinguish nouns from verbs, if we are to retain the negatability criterion. The only examples I have seen of không preceding a noun, other than (V-3), also include an indefinite marker, such as gì 'what', and I would want more data before attempting a precise characterization.

6.2 Corresponding meaning Shifts From Verb Head to Secondary Verb or Other Word Class. One line of evidence which supports a semantic basis for analyzing verb strings

consists of sets of corresponding meaning shifts as verbs change their function from verb head or main verb to various secondary functions. The classification of these secondary functions will be discussed later. The correspondences are not uniform between each pair of languages. The complexity of the linguistic situation in Southeast Asia is demonstrated by the fact that for different verbs the correspondences are between different pairs or sets of the five languages considered here. Sections 6.2.1 - 6.2.9 contain examples of verbs in primary and secondary positions, exhibiting systematic meaning shifts.

6.2.1 to live - continuing action

(B-1) yan-goun-hma nei ba de

Rangoon - place - live - politeness particle - actual mode

'live in Rangoon' (Cornyn & Roop, p. 76)

(B-2) htamin: sa: nei de

rice - eat - remain - actual mode

'he remains eating rice, he is at his meal'

(Stewart, p. 46)

(C-1) siewphaw naw lee tok

book - to be located, to reside, to remain - on - table

'the book is on the table' (Huffman, 1970a, p. 36)

- (C-2) kōāt nāw rian nāw srok-qaameriic
 he - still - study - in - America
 'He's still studying in America.'
 (huffman, 1970a, p. 89)
- (T-1) phii-chaay kamlan rian nānsu^u thii nān
 older brother - in the process of study - book -
 place - that
 'Older brother is studying there' (Noss, p. 138)
- (T-2) dīnsǎ^o yuu thii nīi
 pencil - be. stay - place - this
 'the pencil is here' (Intrakomhaeng, p. 59)
- (T-3) nāa hūŋ khāaw yuu
 auntie - boil - rice - be, stay
 'Auntie's boiling some rice' (Panupong, p. 130)
- (T-4) khaw kamlan kin 'aray yuu
 he - be doing - eat - what - to stay
 'What is he eating?' (Gosa Arya, TG, p. 31)

6.2.2 to get - to have the chance to - ability

- (B-1) maun lu hsi-ga. ya. de
 Mr. - Lu - presence + source - get - actual mode
 'I got it from Mr. Lu' (Stewart, p. 11)

- (B-2) di hma hpana' si: ya. dha - la:
 this - place - sandal - wear - may - actual mode -
 question particle
 'Is it all right to wear sandals here?'
 (Okell, 1969, p. 456)

- (B-3) go, kou kala', twei. ya. da qin-matan wun: tha ba de
 oh - Mr. - Clark - meet - have the opportunity -
 nominalization particle - very (much) - be happy -
 politeness particle - actual mode
 'I'm very pleased to meet you, Mr. Clark'
 (Cornyn & Roop, p. 159)

- (C-1) look caŋ baan chəə-kuh tee
 you - want - to have, to get - match - question
 particle
 'Do you want (to have) some matches?'
 (Huffman, 1970a, p. 74)

- (C-2) kñom baan tɔw pii daaŋ
 I - have, have had the chance to - go - two - time
 'I've gone (been able to go) twice'
 (Huffman, 1970a, pp. 74-75)

- (C-3) kñom tɿw baan pii daaŋ
 (same meaning as (C-2); this change in position with
 little or no meaning change can occur in sentences
 involving past time and a numerical phrase)
 (Huffman, 1970a, p. 75)

- (C-4) kñom sdap baan
 I - understand - can
 'I can understand' (Huffman, 1970a, p. 75)

- (I-1) kamu mendapat tujuh untuk ulanganmu
 you - get - seven - for - repetition + you
 'You got seven for your repetiton' (Kwee, p. 42)

- (I-2) orang buta tidak dapat melihat
 man - blind - not - can - see
 'A blind man cannot see' (Johns, pp. 104-106)
 [Note that dapat does not have the verb prefix in
 secondary position]

- (T-1) dây nɔn léɛw
get - money - already
 'I got the money' (Intrakomhaeng, p. 66)

- (T-2) phỏm yindii thii đây rúucàk khun khráp
 I - happy - that - get, get to - to be acquainted
 with - you - politeness particle
 'I'm pleased to meet you' (Haas & Subhanka, p. 79)
- (T-3) phỏm pay wâaynâam mây đây phrɔʔ fỏn tòk
 I - go - swim - not - can - because - rain - fall
 'I can't go swimming, because it's raining'
 (Haas & Subhanka, p. 348)
- (V-1) 7 anh được học-bỏng
 he - receive, get - scholarship
 'He received a scholarship' (Vuong-Gia-Thuy, p. 109)
- (V-2) Cỏ được mua xe-hỏi mới
 she be allowed - buy - car - new
 'She is (or was) allowed to buy (a) new car'
 (Vuong-Gia-Thuy, p. 109)
- [Note that with the meaning 'allowed to', được is used for beneficial actions, while the word bị 'to suffer' is used for negative actions (Vuong-Gia-Thuy, p. 109)]

6.2.3 to give - for - cause

(B-1) se'ku ne. khe:dan pei: ba
 paper - with - pencil - give - politeness particle
 'Give me paper and pencil' (Stewart, p. 12)

(B-2) hote si-zin- pei: de
 hotel - arrange - for - actual mode
 '(he) fixed up a hotel for (us)'
 (Okell, 1969, p. 382)

(C-1) gaoy barəy mə-kəñcəp məɔk haəy-niŋ chəə-kuh pii
 prəqəp phaəŋ
give - cigarette - one + package - orientation
 toward speaker - and - match - two - box - too
 'Give me a pack of cigarettes and two boxes of
 matches too' (Huffman, 1970a, p. 45)

(C-2) baək twiə gaoy kñom phaəŋ
 open - door - for, on behalf of (familiar) - I -
 please
 'Open the door for me, will you?'
 (Huffman, 1970a, p. 134)

- (C-3) look gaoy kee yɔɔk qəywan tɪw
Mr. - give - one, they - take - things, luggage -
go
'Mr. ____ is having his luggage taken away.' (Jacob,
p. 141)
- (C-4) sliəq-pěəq gaoy sqaat-baat
to dress - to cause, make, let, allow, - careful
'Dress carefully (making it careful)'
(Huffman, 1970a, p. 153)
- (T-1) phǒm hây nən kháw síp bàat
I - give - money - he - ten - baht
'I gave him ten bahts' (Haas & Subhanka, p. 484)
- (T-2) kháw sən nǎnsǎu hây phǒm
he - send - book - to - I
'He sent a book to me' (Haas & Subhanka, p. 484)
- (T-3) kháw sǎu nǎnsǎu hây phǒm
he - buy -book - give - I
'He bought a book for me' (Haas & Subhanka, p. 484)
- (T-4) khun sǔn hây phǒm náp
you - teach - to, so that - I count
'You teach me to count' (Intrakomhaeng, p. 77)

- (V-1) Ông làm ơn cho tôi hai đồng
 you - please - give - I - two - piastre
 'please give me two piastres'
- (V-2) tôi sẽ làm cho ông
 I - will - do - for - you
 'I'll do (it) for you'
- (V-3) chia hai bánh này cho đều
 divide - two - cake - this - so that - equal
 'Divide these two cakes equally'
 (Thompson, 1965b, p. 232)
- (V-4) Xin ông viết thư cho tôi biết
 please - you - write - letter - give - I - know
 'Please write and let me know.'
 (Thompson, 1965b, p. 332)

6.2.4 correct - to meet - to get - to have to - to
hit - passive

- (B-1) le'hma' ya. ya. me
 ticket - get - must - potential mode
 '(he) must get a ticket' (okell, 1969, p. 457)

- (C-1) traw haəy
correct - already
'that's right (correct)' (Huffman, 1970a, p. 27)
- (C-2) pii-msəl-məñ miən mənuh mənəəq traw krūəh-tnaq bok
laan
yesterday - there is - man - one + person - to be
subjected to, to meet with - collide with - car
'Yesterday there was a man who had (met with) an
automobile accident' (Huffman, 1970a, p. 292)
- (C-3) pii-msəl-məñ kñom traw ckae kham
yesterday I - to be subjected to - dog - bite
'Yesterday I was bitten by a dog. (I was subjected
to a dog biting.)' (Huffman, 197a, p. 302)
- (C-4) wiə crəluəh mɔɔk traw cəŋkuəŋ wiñ
it - slip - come - hit - knee - back
'It slipped and (came and) hit my knee.'
(Huffman, 1970a, p. 302)
- (C-5) kñom traw tiñ qəŋkaə pii kilou
I - must - buy - uncooked rice - two - kilo
'I have to buy two kilos of rice'
(Huffman, 1970a, p. 43)

- (I-1) tembakan tidak kena rusa yang lari
 shot - not - to hit (a target) - deer - which - run
 'The shot did not hit the running deer.'

(Echols & Shadily, 1963, p. 178)

- (I-2) paberik itu kena bom
 factory - that - to be hit, struck - bomb
 'The factory was struck by a bomb.'

(Echols & Shadily, 1963, p. 178)

- (I-3) sepatu saya kotor kena lumpur
 shoe - I - dirty - to be hit, struck - mud
 'My shoes are dirty with mud.' (Johns, p. 318)

- (I-4) terkaanku mengana
 guess + I - to be correct
 'My guess was correct.' (Echols & Shadily, 1963,
 p. 178) [Note that the root word is still kena but
 a verb prefix is added, and the k is deleted.]

- (I-5) parlemen berdidang mengenai krisis keuangan negara
 parliament - convene - in connection with, concern-
ing - crisis - finance - country
 'Parliament convened in connection with the
 country's financial crisis.'

(Echols & Shadily, 1963, p. 178)

- (T-1) tɔ̌n (verb) 'to touch, catch, get (usually in a figurative sense)' (Haas, 1964, p. 189)

[I could find no example in the literature to illustrate this main verb.]

- (T-2) phỏm tɔ̌n pay bân

I - have to, must - go - home

'I have to go home' (Haas, 1964, p. 189)

- (T-3) thùuk lếw kháp

to be right or correct - already - politeness
particle

'That's right.' (Haas & Subhanka, . 7)

- (T-4) thùuk 1) to touch, to come in contact with;

2) to hit (as a target) (Haas, 1964, p. 219)

[I could find no example in the literature to illustrate this main verb.]

- (T-5) sàtruu thùuk kamcàt lếw

enemy - passive marker - to eliminate - already

[Note: One reference pointed out that "Thai has a restriction about the Passive Transformation that only the transitive verb which causes a disadvantage to the Nom₂ can be transformed to a Passive sentence." (Intrakomhaeng, p. 113). In non-trans-

formational terms, this statement means that thùuk is only used before verbs with some disadvantageous effect on the recipient of the action.]

(V-1) phải rồi

to be correct, right - already

'right' (Nguyen-Dinh-Hoa, 1966a, p. 27)

(V-2) cô ấy không phải trả

she - not - must - pay

'She doesn't have to pay'

(Nguyen-Dinh-Hoa, 1966a, p. 111)

(V-3) X. ăn phải trứng ung

X. - eat - (1) to suffer from, catch, contract disease), sustain; to meet with, encounter, be affected by (something unpleasant, unfortunate);
(2) to one's misfortune/chagrin - egg - rotten

'X. ate (was served) a rotten egg'

(Nguyen-Dinh-Hoa, 1979, p. 151)

(V-4) nó phải bắt, bị phạt

he - suffer, sustain, be adversely affected by -
catch - arrest, punish

'He was caught and punished'

(Thompson, 1965b, p. 357)

- (V-5) bạn tôi phải bệnh nên nằm nhà thương
 friend - I - contract - disease - so - lie down -
 hospital
 'My friend contracted a disease, so [he's] (lying)
 in the hospital.' (Thompson, 1965b, p. 357)

- (V-6) đi đến nhà hát lớn thì rẽ tay phải
 go - reach - theatre - big - then - turn - hand -
right
 'you go as far as the municipal theatre, then turn
 right' (Thompson, 1965b, p. 356)

6.2.5 return - again - back - arrive - resume -
 moreover.

- (B-1) mane' hyi' na-yi ma'tin: qalou' ka. pyan de
 morning - 8 - o'clock - less + a + quarter - work
 (noun) - from - return - actual mode
 'I came back from work at 7:45 a.m.'
 (Cornyn & Roop, p. 109)

- (B-2) qatan: pyan te' ya. de
 class - return - attend - must - actual mode
 '(they) had to attend classes again'
 (Okell, 1969, p. 395)

- (B-3) lou' nei - byan - bi
do - stay - back - verb-sentence marker
'(he)'s at (it) again' (Okell, 1969, p. 396)
- (I-1) kapan mereka akan kembali
when - they - will - return
'when will they return?'
(Echols & Shadily, 1975, p. 483)
- (I-2) Ia harus malai kembali
he - must - begin - again
'he has to start over again'
(Echols & Shadily, 1963, p. 177)
- (V-1) Ông muốn gặp tôi, tôi sẽ lại nhà ông
you - want - meet - I - I - will - come [to],
arrive [at] - house - you
'[If] you want to see ["meet"] me I'll come to
your house' (Thompson, 1965b, p. 348)

- (V-2) anh muốn thi đỗ thì anh lại học một năm nữa
 you - want - pass an examination - then - you -
resuming, continuing, extending (activity which has
been interrupted, or is threatened with
interruption), accomplishing (another act of the
same sort) - study - one - year - more
 'if you want to pass your exams you should continue
 studying another year' (Thompson, 1965b, p. 348)
- (V-3) anh nói lại, tôi không nghe rõ
 you - say - repeating, doing over [generally with
notion of attempted improvement], continuing [un-
interruptedly] - I - not - hear - clearly
 'Say it again, I didn't hear it clearly'
 (Thompson, 1965b, p. 348)
- (V-4) nó đã không cho tôi làm, nó lại dọa đánh tôi
 he - past tense - not - allow - I - do - he - on
the other hand, changing decision, in contrast,
contrary to expectation; moreover, besides -
 threaten - hit - I
 'he didn't allow me to do it; moreover he threatened
 to hit me' (Thompson, 1965b, p. 349)

(V-5) chị ²ấy đóng cửa ⁷lại

she - close - door - back, behind, reduced to original condition or position, to closed position, tight together

'She closed the door' (Thompson, 1965b, p. 349)

6.2.6 reach - arrive - until - to - about - when

(C-1) dəl peel ñam baay haəy

to reach, arrive at - time, occasion - to eat or
drink - food - already

'It's time to eat (already)'

(Huffman, 1970b, p. 14)

(C-2) dəl look chup riən, taa, kít twəə-kaa qwəy

when - you - stop - study - question particle -
think (about), plan (to) - to work - what

'what do you plan to do when you finish school?'

(Huffman, 1970b, p. 100)

(C-3) baat, rəḁəw-pliəŋ miən pram khæe, kii taŋ-pii
 khæe-mithonaa rəhout dal khæe-tolaa
 yes - season+rain - has - five - month - being -
 from - June - throughout, all the way to - to,
until, reaching to - October
 'The rainy season last (has) five months, (that is)
 starting from the month of june up to the month of
 October' (Huffman, 1970b, p. 116)

(I-1) saya tak dapat sampai pada langit-langit kamar itu
 I - not - able - reach - to ceiling - room - that
 'I couldn't reach the ceiling of the room.'
 (Echols & Shadily, 1963, p. 313)

(I-2) ia berjalan sampai Bogor
 he - walk - as far as, to - Bogor
 'He walked as far as Bogor.'
 (Echols & Shadily, 1963, p. 313)

(T-1) thư weelaa kin laahāan lēw khráp
to reach - time - eat - food - already - polite-
 ness particle
 'It's (it has reached) time to eat.'
 (Haas & Subhanka, p. 18)

- (T-2) sùn thòot nán chaaw thay mây phawon thấn
 as for - harm - that - people - Thai - not - worry -
about
 'As for the (resulting) harm, Thai people don't
 think about it.' (Haas, 1964, p. 217)

- (T-3) cim khĩen còtmăay thấn ceen
 Jim - write - letter - to - Jane
 'Jim wrote a letter to Jane.'
 (Intrakomhaeng, p. 109)

- (V-1) máy bay đã đến
 machine - fly - past tense marker - arrive
 'The plane has arrived.'
 (Vuong-Gia-Thuy, p. 116)

- (V-2) ông ở đây đến thứ tư
 he - to stay - here - until - Wednesday
 'He (will) stay here until Wednesday.'
 (Vuong-Gia-Thuy, p. 116)

6.2.7 follow - according to/after

- (C-1) taam is defined as a transitive verb meaning 'to
 follow' (Huffman, 1970a, p. 424; Jacob, p. 77), but
 I could find no example of this usage.

- (C-2) soum thaa taam kñom
 please - say - according to, after - I
 'Please say after me.' (Huffman, 1970a, p. 29)
- (C-3) haay srual mæl rəbəh pseij-pseij nɪw taam mōt-
 tūŋlee phaŋ
 and - easy - see - thing - different - to be situ-
 ated - follow - side+river - too
 'And it's easy to see different things along the
 river-bank too.' (Huffman, 1970a, p. 183)
- (C-4) kəpal nuh dək-nōəm simaŋ, daek, haay-nɪŋ səmpūət
 tɪw lūəq taam khaet
 boat - that - carry - cement - steel - and - cloth -
 go - sell - follow - province
 'That boat is carrying cement, steel, and cloth to
 sell in the provinces.' (Huffman, 1970a, p. 183)
- (I-1) saudara turut saja jalan ini
 you - follow - only street - this
 'You just follow this street.'
 (Echols & Shadily, 1963, p. 416)

- (I-2) menurut perkabaran dengan teliti
follow - news - with - careful
 'to follow the news closely'
 (Echols & Shadily, 1963, p. 416)
- (I-3) menurut kata orang ia kaya
according to - word - person - he - rich
 'According to what people say, he's rich.'
 (Echols & Shadily, 1963, p. 416)
- (T-1) tề mả tua nìi, man taam phỏm maa sàmvỏ
 but - dog - classifier - this - it - follow -
 I - come - always
 'But this dog [of mine] follows me around all the
 time.' (Haas, 1964, p. 531)
- (T-2) taam phỏm maa
follow - I - come
 'follow me!' (Intrakomhaeng, p. 218)
- (T-3) phứt taam phỏm
 say - following, according to - I
 'Say it after me.' (Noss, p. 150)

- (V-1) Có ba đứa theo chúng ta
 there are - three - rascal - follow - we
 'There are three rascals following us.'
 (Thompson, 1965b, p. 233)

- (V-2) anh làm theo mẫu này
 you - make - according to - model - this
 'Make [it] according to this model.'
 (Thompson, 1965b, p. 233)

6.2.8 go - to - away/off - go and ... (hortatory)

- (B-1) be-gou thwa: ma le:
 where - go - potential mode - question particle
 'Where are you going?' (Cornyn & Roop, p. 75)

- (B-2) se'bein si: thwa: de
 bicycle - ride - go (off) - actual mode
 '(He) rode off on (his) bicycle.'
 (Okell, 1969, p. 438)

- (B-3) nei hti. yin hnyou. ma thwa: bu: la
 sun - strike - if - wilt - not - go - negative -
 particle - question particle
 'Doesn't (it) wilt in the sunlight?'
 (Okell, 1969, p. 439)

(B-4) pyei: ma thwa: bu: la:

run - not - go - negative particle - question
particle

auxiliary compound: 'Didn't (you) run away?'

pre-verb compound: 'Weren't (you) going at a run?'

[Note: The same structure is interpreted by Okell as either V_h + thwa: (aux verb) or as pre-verb + thwa: (main verb). If possible, the auxiliary compound is identified by the voicing of the /th/, while the pre-verb compound is identified by the voicelessness of /th/.]

(Okell, 1969, p. 439)

(C-1) look qəñcəəñ tɿw naa

you - word of polite invitation - go - where
'Where are you going?' (Huffman, 1970a, p. 13)

(C-2) yɔɔk qəywan nih tɿw bəntup

take - thing - this - go - room
'Take these things to the room.'
(Huffman, 1970a, p. 138)

(C-3) yɔɔk qəywan nih tɿw

take - thing - this - go
'Take these things away.' (Huffman, 1970a, p. 138)

(C-4) yɔk tɔw

take - go

'(Go ahead and) take [some].'

(Huffman, 1970a, p. 151)

(C-5) sliəq-pěəq qaoy sqaat-baat tɔw

to dress - to cause - careful - go

'(You'd better) dress carefully.'

(Huffman, 1970a, p. 151)

(I-1) Siapa pergi kesana

who - go - to+there

'Who goes there?' (Echols & Shadily, 1975, p. 272)

(I-2) Hasan pergi mandi

Hasan - go - to shower, to bathe

'Hasan goes to have a shower.' (Johns, p. 17)

(T-1) khun·khəy pay hūahĩn mǎy

you - ever - go - Huahin - question particle

'Did you ever go to Huahin?' (Haas, 1964, p. 319)

(T-2) kháw aw takráa pay

he - take - basket - go

'He takes the basket away.' (Intrakomhaeng, p. 122)

- (T-3) kháw dæən pay rooŋriən
 he - walk - go - school
 'He walks to school.' (Intrakomhaeng, p. 12)
- (V-1) Tôi đi chợ
 I - go - market
 'I'm going to market.' (Thompson, 1965b, p. 343)
- (V-2) Xin anh đem cái va-li này đi
 please - you - take - classifier - suitcase -
 this - go
 'Please take this suitcase away.'
 (Thompson, 1965b, p. 343)
- (V-3) anh nói đi
 you - speak - go
 'Go ahead and talk!' (Thompson, 1965b, p. 344)

6.2.9 to be located - at, in

- (C-1) siəwphiw nɪw ləə tok
 book - be - on - table
 'The book is on the table.' (Huffman, 1970a, p. 36)

(C-2) səsei piəq nih nɪw ləə kdaa-khiən
 write - word - this - be - on - blackboard
 'Write this word on the blackboard.'

(C-3) kɔət nɪw riən nɪw srok-qaamerɪc
 he - still - study - be - America
 'He's still studying in America.'
 (Huffman, 1970a, p. 36)

(V-1) Tɔi ɔ̌ Vɔŋ-Cáç
 I - live - Bangkok
 'I live (am) in Bangkok.'
 (Vuong-Gia-Thuy, p. 105)

(V-2) Tɔi ðə̌ quən cây dù ɔ̌ nhà Bửu-Điện
 I - forget - classifier - umbrella - at -
 post office
 'I forgot (left) (an) umbrella at the post office.'
 (Vuong-Gia-Thuy, p. 97)

6.3 Discussion of Meaning Shifts and Summary of Syntactic Positions.

6.3.1 Methodology. The examples in 6.2 were chosen simply because they were noticeable during my study of the individual languages. Once a meaning shift was noted in one language, I systematically searched through my references on the other languages to determine if corresponding

shifts existed. A blank in any of the following figures indicates that I found no example of the possible meaning shift under consideration. However, further research could fill in some of these gaps.

If we examine the individual meaning shifts, we can see that the meaning of a word as a single verb or as a verb head is extended in a straight forward way to the secondary functions. Historical work would have to be done to discover how this extension actually occurred, and here my interest is in determining synchronic patterns.

6.3.2 to live - continuing action. In 6.2.1, the primary verbs are variously translated as 'to live', 'to stay', 'to remain', 'to be located', and 'to be'. Burmese, Cambodian, and Thai each use these words, in conjunction with another verb, to indicate continuing action of the other verb. Indonesian and Vietnamese, on the other hand, use words whose only function is to indicate continuing action and which cannot occur without another verb. As the Thai examples in 6.2.1 show, Thai has both methods of showing continuing action, and can even use both in the same sentence. Whether or not we have one word which changes its meaning in different positions or we have a pair of homonyms which have a common origin may be debatable. In any case, there is the same pattern, at least in Burmese, Cambodian, and Thai. The concrete action of living or being located is modified to the relatively abstract idea of continuing action; that is, the action is what

remains or exists.

The syntactic structures are a bit confusing, because Burmese has the basic order Subject + Object + Verb, while the other four languages have the order Subject + Verb + Object. Also, in Burmese there is a dispute about which verb in a sequence is the main verb. Stewart claims that enclitic verbs like nei, as in Figure 6.2.1 (B-2), are "subjoined" to other verbs (Stewart, p. 42), while Cornyn & Roop say that the last verb in a sequence is the main verb (Cornyn & Roop, p. 215). This is a case in which a cross-linguistic comparison can be useful. Since scholars looking only at Burmese data arrive at different conclusions, we can decide between the alternative analyses by observing which pattern prevails clearly in the other languages. In Cambodian and Thai nɛw and yuu, when they co-occur with other verbs, are classified as auxiliaries rather than as main verbs. Indonesian and Vietnamese have unrelated auxiliaries to indicate continuing action of the main verb, and Thai has an auxiliary unrelated to yuu. Thus, the simplest analysis is that nei in Burmese is also a secondary or auxiliary verb when it co-occurs with an unambiguous verb.

To summarize the above information, I will use the notation used by Matisoff to denote versatile verbs (see 4.5.2) without committing myself to his interpretations. Hence V_h = verb head or main verb, $_vV$ = secondary or auxiliary verb which precedes a V_h , and V_v = secondary or auxiliary verb which follows a v^h .

Figure 6.3.2

<u>Language</u>	<u>to live</u>	<u>continuing action</u>
B	V _h	V _v
C	V _h	v ^V
I	V _h	unrelated word
T	V _h	V _v (and unrelated word)
V	V _h	unrelated word

6.3.3 to get - to have the chance to - to be able toFigure 6.3.3

<u>Language</u>	<u>to get</u>	<u>to have</u> <u>the chance to</u>	<u>to be able to</u>
B	V _h	V _v	V _v
C	V _h	v ^V , V _v (restricted contexts)	V _v
I	V _h	-	v ^V
T	V _h	v ^V	V _v
V	V _h	v ^V	V _v

The extension of meaning from to get with a nominal object to to have the chance to with a verbal object shows a shift from the concrete to the abstract. The syntactic evidence implies that this shift is small, because the position of the secondary verb with respect to the verb head is the same as that of the primary verb with respect to the direct object. The only exception to this pattern

is the Cambodian $V_h + V_v$ (see 6.2.2) which can replace the pattern $vV + V_h$ with no meaning shift in sentences involving past time and a numerical phrase. The shift to to be able to can be interpreted as greater than the first shift in that the action of the primary verb is potential rather than actual. For Cambodian (other than the above-mentioned exception), Thai, and Vietnamese, the secondary verb with this meaning can be distinguished from the first shift by appearing on the opposite side of the V_h . Burmese presents a problem in that both meaning shifts result in V_v . The examples were obtained from different sources, and this may have affected the translations. Indonesian, with a vV , also does not fit the pattern, but there are not additional secondary meanings for this verb.

6.3.4 to give - for - cause

Figure 6.3.4

<u>Language</u>	<u>to give</u>	<u>for</u>	<u>cause</u>
B	V_h	V_v	-
C	V_h	V_v	pivotal
I	V_h	-	-
T	V_h	V_v	pivotal
V	V_h	V_v	pivotal

The shift from to give as V_h to for as V_v occurs in all but Indonesian. Burmese again presents a problem in that

its Subject + Object + Verb basic sentence order does not result in vV . Cambodian, Thai, and Vietnamese exhibit the further shift to cause. In Chao's terms (see 4.3.1) there is a pivotal construction in which one nominal element is simultaneously the object of a preceding verb and the subject of a following verb (see Figure 6.2.3 (T-4)). In fact, the main difference between for and cause is that the former precedes a noun or noun phrase, while the latter precedes a verb or clause.

6.3.5 correct - to meet - to get - to have to - to hit
- passive

Figure 6.3.5

Language	<u>correct</u>	<u>to meet</u>	<u>to get</u>	<u>to</u>	<u>to</u>	<u>passive</u>
				<u>have</u>	<u>hit</u>	
				<u>to</u>		
B	-	-	V_h	V_v	-	-
C	V_h	V_h	-	vV	V_h	vV
I	V_h	-	-	-	V_h	V_h
T	V_h^*	-	V_h	vV	V_h^*	vV^*
V	V_h	V_v	-	vV	-	vV, V_v

The asterisk * in the Thai entries indicates that we are dealing with two distinct forms and two meaning shifts: one form shifting from correct to to hit to passive and the other from to get to to have to. The analysis of kena in Indonesian seems to depend on the semantic context, since

there is no overt syntactic cue which distinguishes active from passive interpretations. Throughout Southeast Asia, there is a preference for the right-hand over the left-hand. As Figure 6.2.4 (V-1) shows, Vietnamese shares one pattern shift with English, i.e. right and phải both mean 'correct' and 'right-side'.

6.3.6 return - again - back - arrive - resume - moreover

Figure 6.3.6

Language	<u>return</u>	<u>again</u>	<u>back</u>	<u>arrive</u>	<u>resume</u>	<u>more-over</u>
B	V_h, V	-	V_v	-	-	-
C	-	-	-	-	-	-
I	V_h	V_v	-	-	-	-
T	-	-	-	-	-	-
V	-	V_v	V_v	V_h	v^V	v^V

The semantic shift here is basically from returning to a physical location to returning to an action. These concepts can be expressed in Cambodian and Thai, but different words are used for each concept. However, the V_h in Vietnamese means 'arrive' or 'come'. Also, Vietnamese has a wider range of more subtle shifts than do Burmese and Indonesian.

6.3.7 reach - arrive - until - to - about - when (conjunction)

Figure 6.3.7

<u>Language</u>	<u>reach</u>	<u>arrive</u>	<u>until</u>	<u>to</u>	<u>about</u>	<u>when</u>
B	-	V _h	-	-	-	-
C	V _h	V _h	-	V _v	-	v _v V
I	V _h	-	-	V _v	-	-
T	V _h	-	-	V _v	v _v V	-
V	-	V _h	V _v	-	-	-

The sentences in 6.2.6 show the blurring between the categories of verb and preposition. The words with the meanings 'until', 'to', and 'about' are labeled V_v in Figure 6.3.7, because they follow the main verb in their respective sentences. As head verbs, these words can refer to physical objects moving until they come to a destination or contact with other objects. However, Figure 6.2.6 (C-1), (T-1) show that the destination is a time, which is also the case for 'until' in Vietnamese. In Cambodian and Indonesian the V_v cases show spatial destinations. In Thai, the V_v occurrence becomes more abstract, e.g. worry reaching the topic of concern. Finally, there is a Cambodian conjunction, which was labeled v_vV because it preceded the verb head in the following clause. Here I interpret when as 'reaching the time of the occurrence described in the clause' in order to fit the scheme of a semantic shift. This interpretation needs to be checked with a native informant.

6.3.8 follow - according to/after

Figure 6.3.8

<u>Language</u>	<u>follow</u>	<u>according to/after</u>
B	V _h	-
C	V _h	V _v
I	V _h	preposition(?)
T	V _h	V _v
V	V _h	V _v

Burmese is the only language which does not show this shift. In Figure 6.2.7 (I-3) according to retains the verbal prefix me-, but its position is not necessarily fixed before the main verb of the sentence.

6.3.9 go - to - away/off - go and...(hortatory)

Figure 6.3.9

<u>Language</u>	<u>go</u>	<u>to</u>	<u>away/off</u>	<u>go and...</u>
B	V _h	-	V _v	-
C	V _h	V _v	V _v	V _v
I	V _h	-	-	-
T	V _h	V _v	V _v	-
V	V _h	-	V _v	V _v

Among go, to, and away/off, there is not really a semantic shift, but a syntactic shift. Only with the hortatory function is a move toward abstraction made.

6.3.10 to be located - at/in

Figure 6.3.10

<u>Language</u>	<u>to be located</u>	<u>at/in</u>
B	-	-
C	V _h	V _v
I	-	-
T	-	-
V	V _h	V _v

In this set, Cambodian and Vietnamese show examples of what are often referred to as co-verbs (see 5.6.12).

6.4 Manner Adverbials.

6.4.1 Introduction. In 6.3, we saw that there exist a number of cross-linguistic semantic shifts, in which the meaning changes undergone by a given word as it changes its position within a sentence are paralleled by the meaning changes undergone by corresponding words in one or more other languages. These data support the hypothesis that there are semantic principles which transcend individual languages and which therefore can be profitably incorporated into areal or other cross-linguistic descriptions.

Detailed analyses were not given in 6.3, nor were the secondary occurrences of the verbs categorized. What I will refer to here as manner adverbials begins with a type of verb concatenation in Cambodian, Thai, and Vietnamese, and can be considered as an abstract extension of verb concatenation in Burmese and Indonesian. These patterns follow from those of 6.3 in that we will be examining words which can occur as verb heads and as adverbial modifiers of verbs.

6.4.2 Cambodian, Thai, and Vietnamese Adjectival Verbs.

Figure 6.4.2 Cambodian, Thai, and Vietnamese Adjectival Verbs

(C-1) srəy lqaa 'pretty girl'
 girl - pretty, good

- (C-2) srəy nuh lqaa 'That girl is pretty.'
girl - that - pretty, good
- (C-3) srəy nuh twəə-kaa lqaa 'That girl works well.'
girl - that - work - pretty, good
- (C-4) srəy nuh min lqaa tee 'That girl is not pretty.'
girl - that - not - pretty, good - negative particle
- (C-5) srəy nuh lqaa nah 'That girl is very pretty.'
girl - that - pretty, good - very
(Huffman, 1970a, pp. 56-57)
- (T-1) kháw pen khon dii 'He is a good person.'
he - be - person - good
- (T-2) wan níi aakàat dii 'The weather is fine today.'
day - this - weather - good (Haas, 1964, p. xx)
- (T-3) khun riən dii māk 'You learn very well.'
you - learn - good - very (Intrakomhaeng, p. 59)
- (T-4) chán mây di 'I am not good.'
I - not - good (Intrakomhaeng, p. 142)

- (T-5) aah^haan th^hai n^hi đii m^haak
 food - place - this - good - very, much
 'The food here is very good.'
 (Haas & Subhanka, p. 48)
- (V-1) Tôi mua cái nhà đep đ^o
 I - buy - classifier - house - pretty - that
 'I bought that beautiful house.'
- (V-2) Cô đep 'She (is) pretty.'
 she - pretty (Vuong-Gia-Thuy, p. 108)
- (V-3) Áo này tôi bạn coi không đep
 coat - this - I - to wear, to dress - see, look at -
 not - pretty
 'It doesn't look good on me.'
 (Nguyen-Hy-Quang, p. 36)
- (V-4) Cô không đep 'She (is) not pretty.'
 she - not - pretty (Vuong-Gia-Thuy, p. 108)
- (V-5) Cô rất đep 'She (is) very pretty.'
 she - very - pretty
- (V-6) Ông trễ 'He (is) late.'
 he - late

(V-7) Ông đến trễ 'He came late.'

he - arrive - late (Vuong-Gia-Thuy, p. 117)

Each of the above words (C) lạ 'pretty', (T) đi 'good', and (V) đẹp 'pretty' satisfies the negatability test of verb-hood (C-4, T-4, V-4). In (C-1), (T-1), and (V-1), each word modifies the immediately preceding noun, the traditional function of adjectives. In (C-5) and (T-5), the words are followed by the words meaning 'very', which is one formal way of distinguishing the class of adjectives or stative verbs from action verbs. The names of the two classes show the semantic distinction between them. In (V-5), rất 'very' precedes the stative verb. Nguyen-Dinh-Hoa uses this criterion to distinguish stative from functive verbs, because rat never precedes functive verbs (Nguyen-Dinh-Hoa, 1966a, p. 7). Thompson separates Vietnamese verbs semantically into momentary action verbs and extended state verbs (Thompson, 1965b, p. 220), but doubts that the rất criterion is adequate, though no specific objections are given (Thompson, 1965b, p. 219). In addition, Thompson's extended state verbs include verbs referring to mental precesses such as biết 'know' (Thompson, 1965b, p. 218), which Nguyen-Dinh-Hoa classifies as a functive verb (Nguyen-Dinh-Hoa, 1966a, p. XLII). In Vietnamese, there is also a word lắm 'to a great extent, very much', but it follows both action and state verbs.

Con chó la lắm 'The dog barks a lot.'

classifier - dog - bark - much

Cô ấy đẹp lắm 'She's very beautiful.'

she - pretty - much (Thompson, 1965b, p. 272)

Next, we have examples illustrating the adverbial function of adjectival verbs. Since I am not eliciting sentences directly from informants, there may be gaps in my data, which could be filled. Nevertheless, the patterns are sufficiently clear to form a basis for conclusions.

(C-3) shows that lạ can directly follow an action verb. The meaning of lạ does not change from (C-1) to (C-3) because of the change in word context. The word has a range of meaning: 'to be pretty, good' (Huffman, 1970a, p. 57), 'beautiful, nice, lovely, good' (Jacob, p. 305), and so the different glosses may be due to the translation process and not to differences in Cambodian. Thus, there is not a semantic shift from (C-1) to (C-3); rather, there is a shift in grammatical function: from modifying a noun to modifying a verb.

Similarly, (T-3) shows that đi 'good' can directly follow and modify an action verb. Again, there is not a meaning shift, but rather a shift in grammatical function.

For Vietnamese, direct elicitation would probably produce a simpler sentence with đẹp 'pretty' than (V-3). the sentence structure is complicated by the presence of two

verbs: b^{an} 'to wear' and coi 'to see', preceding dep 'pretty'. Whether dep modifies one or both of the preceding verbs requires further analysis, yet it clearly is modifying some preceding verb structure, at least superficially. In any case, (V-6) and (V-7) show unambiguously how the adjectival verb tr^ẽ 'late' modifies the preceding action verb đ^ã 'arrive'.

6.4.3 Indonesian Adjectival Verbs. As was seen in 5.4, there are both morphological and syntactic grounds for separating the class of adjectives from the class of verbs, although Omar (5.4.3, 5.4.5) subsumes both verbs and adjectives in the class of verbals. The examples below show that the distributional properties of Indonesian adjectives are the same as those of the adjectival verbs in 6.4.2, thus justifying the term adjectival verbs for this class of Indonesian words.

Figure 6.4.3a Indonesian Adjectival Verbs

- (1) kamar besar 'big room'
room - big (Johns, p. 66)

- (2) kamar itu besar 'The (that) room is big.'
room - that - big (Johns, p. 64)

- (3) kamar besar itu 'that big room'
room - big - that (Johns, p. 66)

- (4) kamar itu tidak besar 'The (that) room is not big.'
 room - that - not - big (Johns, p. 64)
- (5) Ia bodoh sekali 'He is very stupid.'
 he - stupid - very (Kwee, p. 91)
- (6) Harus sungai itu deras
 current - river - that - swift
 'The current of the river is swift.'
- (7) kereta berjalan deras
 car - travel - swift
 'The car travels swiftly.' (Lewis, p. 94)

The position of itu 'that' in (2), (3), (4), and (6) indicates the scope of the noun phrase in each expression. Thus, besar 'big' simply modifies the noun kamar 'room' in (3), while it has a predicative function in (2). (4) shows that besar can be negated, which is the strongest argument for considering it a verb. As was discussed in 5.4.9, Indonesian has another negative word, bukan 'not', which precedes primarily nominal expressions. The adverbial function of adjectival verbs is shown in (6) - (7). In (7) the assignment of the structure: noun + verb + modifier, where the modifier may be labeled adjective or adverb, is facilitated by the presence of the verbal prefix ber-.

Figure 6.4.3b Indonesian Adjectival Verbs: Word Order Variants

- (1) babu baru datang
servant - new - come
'The servant has just come.' or 'The new servant came.'

 - (2) Babu itu baru datang
servant - that - new - come
'The servant has just come.'

 - (3) Babu baru itu datang
servant - new - that - come
'The new servant came.'

 - (4) Bensin itu gampang terbakar
benzine - that - easy - to burn
'Benzine burns easily.'

 - (5) Soal gampang itu sukar bagi murid bodoh itu.
matter - easy - that - difficult - for - student -
stupid - that
'The easy sum is difficult for the stupid student.'
- (Kwee, p. 92)

(1) is ambiguous, and Kwee showed in (2) and (3) how the ambiguity can be removed by inserting itu 'that' in the appropriate place. Likewise, the functions of gampang

'easy' in (4) and (5) are clarified by the presence of itu 'that'. In contrast to the order: verb + modifier of Figure 6.4.3a (7), we have the order: modifier + verb in Figure 6.4.3b (2), (4).

6.4.4 Burmese Adjectival Verbs and Verbal Modification of Nouns. Before investigating the adverbial functions of Burmese verbs, the grammatical background picture can be filled out by checking if Burmese adjectival verbs pattern as do the adjectival verbs of 6.4.2 and 6.4.3.

Okell is the only scholar who makes the distinction between functive and stative verbs in Burmese. The semantic criterion for classifying a verb is whether it denotes an action or function, or a quality or state. In addition, about fifty pairs of verbs each consist of a functive member beginning with an aspirated consonant and a stative member beginning with the corresponding unaspirated consonant, e.g. hkwe: 'split, separate'; kwe: 'be split, separated'. "Functive verbs do not normally occur with the formative prefix" hka 'rather'. Okell concludes with several examples whose classification is unclear. (Okell, 1969, pp. 42-44).

The distributional patterns of verbs modifying nouns are not clear. Okell first says that in attributive expressions, the functive verb precedes the noun, e.g.

thau yei 'drinking water'

drink - water

while stative verbs usually follow the noun, e.g.

yei qagei: 'cold water'

water - cold

yei gei: 'cold water'

water - cold (Okell, 1969, p. 43)

Here, ga- is a prefix which forms nouns from both functive and stative verbs. Later, Okell adds that a stative verb may precede the noun it modifies. Thus, both of the following structures exist and have the same meaning.

gapya qein:ji 'blue shirt'

blue - shirt

qein:ji gapya 'blue shirt'

shirt - blue (Okell, 1969, p. 81)

Cornyn & Roop claim that "When a verb modifies a noun it regularly follows." (Cornyn & Roop, p. 46).

htamin: jo 'fried rice'

rice - fry (Cornyn & Roop, p. 46)

myou. ji: 'big city'

city - big (Cornyn & Roop, p. 280)

These examples show that both active and stative verbs may follow the noun they modify.

Stewart correlates the verb position with respect to the noun with grammatical and semantic functions. "When verb is used as an attribute it follows the noun." (Stewart, p. 78).

qein kaun: 'a good house'

house - good

lu lein 'a liar, cheat'

person - to twist, lie (Stewart, p. 78)

The above examples show that both stative and active verbs may be noun attributes following the noun.

"When verb expresses the use to which a thing is put or causal relation, it precedes the noun." (Stewart, p. 79).

thau' yei 'drinking water'

drink - water

pyi sa 'an anonymous letter'

to throw - writing

mai' loun: 'lump of folly, foolishness, depravity'

be foolish - round thing (Stewart, p. 79)

The first example is identical to one of Okell's, but simply the fact that thau 'drink' is an active verb does not justify its position before the noun, according to Stewart. The meaning of the second item seems to be more abstract than a simple concatenation of the individual meanings of the components. It is not clear to me how the third item satisfies the condition given for the verb to precede the noun.

6.4.5 Burmese and Indonesian Adverbial Modifiers. It was shown in 6.4.2 that Cambodian, Thai, and Vietnamese adjectival verbs may function as adverbial modifiers of action verbs and that in this function the adjectival verbs occur after the action verbs. In the examples given, the adjectival verbs directly followed the action verbs, so we have a clear case of verb concatenation. In Figure 6.4.3a (7) was an example of an Indonesian adjectival verb functioning as an adverbial modifier of a directly preceding action verb, another clear case of verb concatenation if one accepts the argument that Indonesian adjectives are also verbs.

Next, we have Burmese and Indonesian structures which exhibit transitional features from verbal to nominal categories. The function of these verbal/nominal structures, as suggested by the English translations, is the same adverbial modification discussed earlier. While there is no doubt that these structures are derived from verbs, the question is whether to analyze them as verbs or as members

of other categories.

Figure 6.4.5 Burmese and Indonesian Adverbial Modifiers

(B-1) yau'ca: thoun: yau' kou to-do kaun:gaun: thi. ba de
man - three - classifier - object marker - rather,
quite - well - know - politeness particle - actual
mode

'I know the three men fairly well.'

kaun: 'to be good', to 'to be suitable'

(B-2) mein:ma. gou do. ne:ne: be: thi. ba de
woman - object marker - as for - a little, not much
- emphasis - know - politeness particle - actual
mode

'But I only know the woman slightly.'

ne: 'to be few' (Cornyn & Roop, p. 129)

(B-3) yain:yain: pyo:
be rude - be rude - speak
'speak rudely' (Okell, 1969, p. 135)

(B-4) yain:yain: ne. pyo:
be rude - be rude - manner - speak
'speak rudely' (Okell, 1969, p. 137)

(B-5) ganye: nyin:

permanence - argue

'argue constantly' mye: 'be permanent'

(Okell, 1969, p. 156)

(I-1) Baik-baiklah membaca buku itu!

good - good - emphatic suffix - read - book - that

'Read that book properly (carefully).'

(Johns, pp. 117-118)

(I-2) Berjalan baik-baik, jalan ini subuk

walk - good - good - road - this - busy

'Walk carefully, this road is busy.'

(I-3) Kalau dia bercakap perlahan-lahan saya boleh faham.

if - he - speak - slowly - I - can - understand

'If he speaks slowly, I can understand.'

(Sulaiman, p. 117)

(I-4) Anak-anak itu menyanyi dengan gembira.

child - child - that - sing - with - happy

'The children sang happily.'

(I-5) Rina menyapa saya sambil tersenyum.

Rina - greet - I - while - to smile

'Rina greeted me smilingly (while smiling).'

(Kwee, p. 92)

- (I-6) Dengan senang sahaja dia cabut baji itu.
 with - easy - only - he - pull out - wedge - that
 'He pulled out the wedge quite easily.'
 (Lewis, p. 94)

- (I-7) benar 'true' (Lewis, p. 95)
 sebenar 'truly' (Lewis, p. 95)
 benar-benar 'truly' (Johns, p. 341)

- (I-8) boleh 'to be allowed, may' (Johns, p. 341)
 dengan seboleh-bolehnya 'with all his might'
 (Lewis, p. 96)

- (I-9) mudah 'easy'
 dengan mudhnya 'easily' (Lewis, p. 96)

Both Burmese and Indonesian employ doubled verbs as adverbial modifiers, directly preceding the head verb in Burmese (B-3) and directly following the head verb in Indonesian (I-2), (I-3). If these were the only such structures, we would simply have a case of verb concatenation in which doubling one verb indicates that it modifies the head verb. However, there is also evidence suggesting that nominalization is occurring.

The Burmese particle ne, 'with, manner' is classified as a noun particle by Cornyn & Roop (Cornyn & Roop, p. 146) and also by Okell (Okell, 1969, pp. 56-57, 364-366). (B-5)

shows that a verb which has been nominalized by the prefix ga- can function as an adverb in Burmese. By analogy, following the doubled verb with ne, 'with, manner' in (B-4) implies that nominalization is occurring here also. The emphatic particle be: in (B-2) is classified as a sentence-medial postposition, able to follow nouns or verbs, by Okell (Okell, 1969, pp. 294-295) and as a general particle, also able to follow verbs or nouns, by Cornyn & Roop (Cornyn & Roop, p. 501). Thus, its presence does not affect our analysis.

Dengan 'with' is an Indonesian preposition which precedes nouns (Sulaiman, p. 129). Nya 'his, her, its; him, her' is a pronominal suffix which is attached to Indonesian nouns (Kwee, pp. 21-22). Adverbial phrases consisting of dengan plus single or duplicated adjectival verbs are shown in (I-4), (I-6), (I-8), and (I-9). (I-1) and (I-6) show that the adverbial expression may precede the modified head verb. Superficially, the structure of (I-5) resembles that of (I-4), and both are translated with adverbs in English, yet sambil 'while' is a conjunction. In addition to dengan, the suffix nya in (I-8) and (I-9) show the nominal characteristics of the adjectival verbs used adverbially.

6.4.6 Summary. In 6.4.2 - 6.4.5 we examined distributional data for manner adverbials. These data consist of examples of verbs in different contexts, along with the meanings of the phrases or sentences which make up those contexts. In making generalizations about the data, it is

necessary also to make decisions about theoretical approaches. The starting point of the analysis is the sequence action verb + adjectival verb found in Cambodian, Thai, and Vietnamese. The surface structure consists of two verbs, which are unmarked morphologically. In each case, the gloss tells us that the adjectival verb is modifying the action verb, i.e. telling how the action occurs. Thus, I am using semantics to interpret the grammatical or syntactic relation between the two members of the sequence. Both words are identified as verbs by being negatable, i.e. they can be directly preceded by the respective negative words of each language. The distinction: action vs. adjectival is both syntactic and semantic. Syntactically, the adjectival verbs can be identified by co-occurrence with the word 'very', while semantically they describe states or qualities. While there are problems with these criteria, as pointed out in the above sections, they work in general.

Now, the Indonesian and Burmese data complicate the above picture, yet these very complications are what highlight the theoretical decisions, to be made. In 6.4.3 we saw that Indonesian has adjectival verbs, by the same criteria as in Cambodian, Thai, and Vietnamese, and in Figure 6.4.3a (7) we saw that the adverbial modification described above also occurs in Indonesian. To that extent, the previous analysis of verb concatenation holds. In Figure 6.4.3b, there are examples of adjectival verbs in Indonesian which precede the action verbs they modify.

There is no semantic information given in the source of these examples which distinguishes these structures from those of reversed order. In 6.4.5, there are examples of adverbial modification of the head verb in both Burmese and Indonesian by means of duplicating adjectival verbs. On the surface, this is verb concatenation. The co-occurrence of these adverbial modifiers with the Burmese noun particle ne. 'with, manner' and the Indonesian preposition dengan 'with' raises the question of whether these adverbial modifiers should be considered as noun expressions or as verb expressions.

The data can be analyzed more less abstractly. If we choose to be guided strictly by surface structures, then we have verb concatenation only when no other word, such as ne. 'with, manner' or dengan 'with', are present. When these words exist, we do not have verb concatenation but have noun expressions which modify the head verb. However, this approach ignores the evident identity of meaning of the Burmese expressions with and without ne. 'with'. The Indonesian structures are more variable than the Burmese, but there is also some freedom of choice among the use of adjectival verbs, doubled adjectival verbs, the prefix se-, the suffix -nya, and dengan 'with' in conjunction with various combinations of the above listed devices. Another relevant point is whether the potential co-occurrence of a given marker is sufficient to categorize a word or structure or whether the actual co-occurrence is necessary.

Even if we rely on the negatability test to determine verb-hood, we do not require that every occurrence of a verb be negative. By analogy, the adverbial expressions are nominal even if the overt nominal markers are absent.

The difficult task of assigning a definite category may be avoided by appealing to Thompson's notion of category-hood being variable and cross-linguistic evidence being permissible (see 3.5). I prefer this approach, because I think it more accurately reflects what is going on. The Burmese and Indonesian manner adverbials are clearly derived from adjectival verbs. Comparison with adverbial modification by means of verb concatenation in Cambodian, Thai, and Vietnamese suggests that a similar process occurs in Burmese and Indonesian. The optional co-occurrence of Burmese and Indonesian nominal markers suggests that the adverbial expressions may be considered as noun expressions also. Hence, I will compromise by analyzing the Burmese and Indonesian as abstract or underlying cases of verb concatenation, in which the adverbial modifiers are in a transitional state between verb-hood and noun-hood in the surface structures. This analysis is illustrated in Figure 6.4.6.

Figure 6.4.6 Manner Adverbials

Underlying Structure: action verb + adjectival verb

$V_h + V_{adj}$

Grammatical Function: adverbial modification of action
verb by adjectival verb

Surface Structure: $V_h + V_{adj}$ (C, D, V, I)

$V_{adj} + V_h$ (I)

dengan + $V_{adj} + V_h$ (I)

$V_h + [V_{adj} \times 2]$ (I)

$V_h + \text{dengan} + V_{adj}$ (I)

forms with se- and -nya (I)

$[V_{adj} \times 2] + (\text{ne-}) + V_h$ (B)

Note: $[V_{adj} \times 2]$ = doubled adjectival verb,

(***) denotes that the expression inside the
parentheses is optional

6.4.7 Implications and Unresolved Problems. The above analysis shows that verb strings involving adverbial modification can be identified without overt markers because of the distributional and semantic properties of the participating verbs. Starting from surface structures which were

identical across Cambodian, Thai, and Vietnamese, we were led to more abstract structures in order to encompass the Burmese and Indonesian data. So far, we have been focusing on a simple, essentially two-unit structure, which we have generalized to five languages. In what other ways can or should this analysis be generalized? Consider the following Thai sentence.

(T) kháw phûut phaasǎa thay dây dii

he - speak - language - Thai - able - good

'He can speak Thai well.' (Haas, 1964, p. xx)

Here we have phûut 'speak', an action verb, and dii 'good', an adjectival verb, but the two words are not contiguous. What is the scope of dii 'good'? Does it modify phûut 'speak', dây 'able', or a larger phrase? Thus, we must consider adverbial modification in complex sentences, especially with several verbs. Next can we be sure that every sequence of action verb + adjectival verb is associated with the grammatical function of adverbial modification? Furthermore, can action verbs function as adverbial modifiers? A generalization which is beyond the scope of a study of verb concatenation is the structure of all adverbial expressions. For example, adverbs of time and place exist in all the languages under consideration, but they are clearly not verbs. We will keep the unanswered questions in mind as we proceed to other cases of verb concatenation.

6.5 Modal Verbs.

6.5.1 Introduction. One fact that led me to search for a cross-linguistic category called modal verbs is that this term appeared in at least one reference for each language: Burmese : Allot (5.2.9), Cambodian: Huffman (5.3.6), Indonesian: Omar (5.4.6), Thai: Noss (5.5.5), Vietnamese: Vuong-Gia-Thuy (5.6.6). Various overlapping classes were also called auxiliary verbs, enclitic verbs, initiating verbs, and helping verbs.

The term modal is derived from mood, and grammatical mood is defined in Webster's Dictionary as "in many languages, that aspect of verbs which has to do with the speaker's attitude toward the action or state expressed, indicating whether this is regarded as a fact (indicative mood), as a matter of supposal, desire, possibility, etc. (subjunctive mood), as a command (imperative mood), etc.: mood is shown by inflection, as in Latin and Greek, or by auxiliaries, as English may, might, should, or by both." (Webster's, p. 955). The morphological inflection of Latin and Greek has no counterpart in the Southeast Asian languages under consideration here. To justify the establishment of a Southeast Asian areal category of modal verbs, therefore, it is necessary to find syntactic and semantic criteria which characterize a set of auxiliary verbs in some precise way.

6.5.2 Criteria for Modal Verbs. Scattered throughout the literature and Chapter V are various sets of criteria

for distinguishing various sets of auxiliary verbs. These criteria are not applied uniformly within languages by different scholars, nor across languages. Some scholars simply provide a list of modal or auxiliary verbs without definition or explanation. Some present a semantic characterization, which usually includes an imprecise "etc.", and generally mentions such features as the ability, possibility, necessity, or desirability of doing the action of the verb head. These semantic features support the use of the term modal.

The syntactic criteria present a more chaotic picture. The fact that the modal verbs in English occur following the subject and preceding the main verb evidently suggests a similar category in some Southeast Asian languages. Thus, Huffman's modal verbs (5.3.4) and Jacob's initiating verbs (5.3.17) are verbs which precede and modify other verbs in Cambodian. Omar's modal verbs in Malay (5.4.6) are implicitly defined in terms of both semantics and position. That is, both aspect verbs and modal verbs occur before other verbs, and semantics or grammatical function appears to distinguish between these two classes. Noss's modal verbs in Thai (5.5.5) are defined as verbs which can take predicative objects. Haas defined adverb-auxiliaries (5.5.12) as any words which could follow the subject and precede the nuclear verb of a sentence. Vuong-Gia-Thuy's modal verbs (5.6.6) are evidently defined semantically. The subordinate role played in his analysis by syntax is

shown by သွံ့ခဲ 'to be able to' being classified as a modal verb, although it follows the associated verb, in contrast to the other modal verbs, which precede their associated verbs.

If modal verbs is to be a cross-linguistic category, then the syntactic criteria must be modified or made more abstract in order to include Burmese. The semantic notion of modality is expressed by items included in Stewart's enclitic verbs (5.2.5), Cornyn & Roop's auxiliary verbs (5.2.6), Okell's auxiliary verbs (5.2.7), and Allot's modal verbs (5.2.9). The verbs in all of these classes directly follow the verb head.

6.5.3 Related Form Classes and the Position of the Negative Word. In each of the languages under consideration, there is the problem of distinguishing verbs from members of form classes that share some properties with verbs. The possibility of being directly preceded by a negative word identifies that word as a verb, and several scholars use the position of the negative word in a sequence of verbs to subcategorize the verbs.

The details of the distributions of the respective negative words in each language are given in Chapter V. Outside of Burmese, the candidates for modal verbs occur before the main verb or head verb. Generally, the negative word precedes the sequence: putative modal verb + verb head. In fact, in 5.5.10, there is an example of two homonyms (according to Noss) in Thai, which are distin-

guished by the negative word may preceding one, which was thus identified as a modal verb, and following the other, which was identified as a modal.

In Cambodian, Thai, and Vietnamese, various words are identified syntactically as resultative or completive verbs on the basis of following the verb head and of being directly preceded by the negative word in negative constructions: verb head + negative + completive verb.

The Burmese situation is somewhat different. What are variously referred to as enclitic verbs (Stewart), auxiliary verbs (Cornyn & Roop, Okell, Allot), follow rather than precede the head verb. The negative word generally precedes the sequence of verb head and auxiliary verb: negative + verb head + auxiliary verb. However, for a class of auxiliary words, those which Allot refers to as modal verbs, the negative word comes between the verb head and the modal verb: verb head + negative + modal verb. The Burmese verb heads are universally accepted by relevant scholars as verbs, by being directly negatable and by directly preceding verb particles in other contexts. Therefore, the position of the negative word does not affect the grammatical status of the verb head. The contrast between the Burmese and non-Burmese word order raises the question of how the position of the negative word affects the grammatical status of the auxiliary verb. That is, should the scope of the negative word be considered to include only the word directly following or should it

include the entire sequence of following verbs?

Before answering the above question, let us consider the cross-linguistic pattern discussed in 6.2.2 and 6.3.3. Semantically, Cambodian baan, Thai dây, and Vietnamese được in the post verb head position and with the meaning 'to be able' all satisfy the semantic criteria of modal verb sketched in 6.5.2. In negative constructions, each occurs in the sequence: verb head + negative + modal verb. Each of these auxiliary words can also occur before the verb head, though with a different meaning. In these constructions, if there is negation, the negative word still precedes the auxiliary verb, making the sequence: negative + auxiliary verb + verb head. These data suggest that, at least in some cases, in negative constructions, the word to be negated directly is more important than the position of that word in a sequence, in determination of the scope of negation.

6.5.4 Phrase Structure and Discourse. In Thai, Noss (see 5.5.4) uses substitutability for a larger constituent as a test for identifying modal verbs (Noss, p. 114) and for identifying adjectives (Noss, p. 118). Other scholars do not use this test, but they provide examples of discourse in which certain words included in a larger constituent of a question, may be extracted and used as an answer to the question. Consider the following examples.

Figure 6.5.4 Words in Questions, Extracted and Used in Answers.

(Extracted words are underlined, constituents of compounds are joined by +)

(B-1) hkamya. nyi-qakou + maun-hnama. + wun:gwe:dei zaga:
 hna myou: thoun: myou: pyo: da' me, htin de
 you - cousins of persons's own generation -
 language - two - kind - three - kind - speak -
ability - potential mode - think - actual mode
 'I suppose your cousins must be able to speak two or
 three languages.'

(B-2) hou'ke., ta' pa de
 uh huh - ability - politeness particle - actual
 mode
 'Yes, they can.' (Cornyn & Roop, p. 143)
 (Note: the change from da to ta is purely
 phonological)

(C-1) look sdap baan tee?
 you - listen -able - question particle
 'Can you understand?'

- (C-2) baat, (kñom sdap) baan
 yes - I - hear - able
 'Yes, (I) can (understand).' (Huffman, 1970a, p. 46)
 (Note: the words in parentheses are optional.)
- (C-3) (baat) tee, (kñom) sdap min baan tee
 polite response - negative particle - I - listen -
 not - able - negative particle
 '(Response) no, (I) don't undersand.'
 (Huffman, 1970a, p. 47)
- (I-1) Bolehkah saya bermain?
may - question suffix - I - play
 'May I play?'
- (I-2) Ya, boleh.
 yes - may
 'Yes you may.'
- (I-3) Tidak, tidak boleh.
 no - not - may
 'No, you may not.'
- (I-4) Bisakah Tuan berbicara Bahasa Indonesia?
can - question suffix - you - speak - language -
 Indonesia
 'Can you speak Indonesian?'

(I-5) Ya, bisa.

yes - can

'Yes, I can.'

(I-6) Tidak, tidak bisa.

no - not - can

'No, I can't.'

(I-7) Maukah engkau belajar Bahasa Indonesia?

want - question suffix - you - learn - language -

Indonesia

'Do you want to learn Indonesian?'

(I-8) Ya, mau.

yes - want

'Yes, I do.'

(I-9) Tidak, tidak mau.

no - not - want

'No, I don't.'

(I-10) Sukahkah mereka bernyanyi?

like - question suffix - they - sing

'Do they like singing?'

(I-11) Ya, suka.

yes - like

'Yes, they do.'

(I-12) Tidak, tidak suka.

no - not - like

'No, they don't.' (Johns, pp. 37-38)

(I-13) Apa Hasan makan?

question word - Hasan - eat

'Is Hasan eating?'

(I-14) Ya.

yes

'Yes.'

(I-15) Apa Hasan sedang makan?

question word - Hasan - continuing action marker -

eat

'Is Hasan eating?'

(I-16) Ya.

yes

'Yes.'

(I-17) Apa Hasan masih makan?

question word - Hasan - still - eat

'Is Hasan still eating?'

(I-18) Ya, masih.

yes - still

'Yes, he is.'

(I-19) Apa Hasan sudah makan?

question word - Hasan - already - eat

'Has Hasan eaten?'

(I-20) Ya, sudah.

yes - already

'Yes, he has.' (Johns, pp. 20-21)

(I-21) Belum.

not yet.

'No.!'

(I-22) Belum, Hasan belum makan.

not yet - Hasan - not yet - eat

'No, Hasan has not eaten yet.' (Johns, p. 25)

(T-1) kháw tân pay máy

he - must - go - question word

'Does he have to go?'

(T-2) tɔ̃ŋ

must

'Yes, he does.'

(T-3) mây tɔ̃ŋ

not - must

'No, he doesn't.' (Noss, p. 114)

(T-4) kháw chɔ̃p wɨŋ máy

he - like - run - question word

'Does he like to run?'

(T-5) chɔ̃p

like

'Yes, he does.'

(T-6) kháw chɔ̃p sɨi dɛtŋ máy

she - like - color - red - question word

'Does she like red?'

(T-7) chɔ̃p

like

'Yes, she does.'

(T-8) tôn dii máy

must - good - question word

'Must it be good?'

[Note: this utterance is considered strange by
a native Thai speaker.]

(T-9) tôn

must

'Yes, it must.' (Noss, p. 114)

(T-10) khun pay wát bòy máy

you - go - temple - often - question word

'Do you go to the temple often?'

(T-11) bòy

often

'Yes, often.'

(T-12) máy bòy

not - often

'No, not often.' (Noss, p. 118)

(T-13) khun kheay hěn carùet máy

you - ever - see - rocket - question word

'Have you ever seen a rocket?'

(T-14) khăy or khăy hén
ever ever - see
 'Yes, I have seen it.'

(T-15) mây khăy or mây khăy hén
 not - ever not - ever - see
 'No, I've never seen it.' (Intrakomhaeng, p. 292)

(V-1) Đi được không?
 go - can - question word
 'Can (one) go?'

(V-2) Được.
can
 'Yes.'

(V-3) Anh nhớ mua hộ tôi một cái áo+mũ thật tốt nhé!
 you - remember - buy - for - I - one - classifier -
 raincoat - really - good - O.K.?
 'Remember to buy for me a real good raincoat, O.K.?'
 "yes"

(V-4) Nhớ
remember
 'I'll remember.' (Nguyen-Dinh-Hoa, 1966a, p. 170)

- (V-5) Anh có muôn đi tới nhà kia không?
 you - exist - want - go - reach - house - that -
 question word
 'Do you want to go to that house?'
- (V-6) Vâng, tôi muôn (đi).
 yes - I - want - go
 'Yes, I want to (go).' (Le-Ba-Kong, p. 25)
- (V-7) Ông có + thể chỉ cho tôi nhà ông không?
 you - can show - give - I - house - you -
 question word
 'Can you show me your house?'
- (V-8) Vâng (tôi có + thể).
 yes - I - can
 'Yes, I can.' (Le-Ba-Kong, p. 29)
- (V-9) Người đàn + ông kia có muôn - bán căn + nhà nhỏ
 không?
 person - man - that - exist - want - sell - house -
 small - question word
 'Does that man want to sell the small house?'
- (V-10) Vâng, ông + ấy muôn.
 yes - he - want
 'Yes, he does.' (Le-Ba-Kong, p. 38)

(V-11) Anh có biết chơi + đàn dương + cầm không?

you - exist - know - play - piano - question word

'Can you play the piano?'

(V-12) Không, tôi không biết; nhưng em + gái tôi biết
chơi khá lắm.

no - I - not - know - but - younger sister - know -
play - rather - quite

'No, I cannot; but my sister can play very well.'

(Le-Ba-Kong, p. 47)

(V-13) Tôi có + thể gọi điện + thoại ở trong phòng tôi
được không?

I - can - call - telephone - be - in - room - I -
can - question word

'Can I phone from my room?'

(V-14) Thưa + ông, được; mỗi phòng có máy + điện + thoại
và máy + đầu + thanh.

sir - can - each - room - exist - telephone -
and - radio

'Yes, sir; every room has a telephone and a radio
set.'

(Le-Ba-Kong, pp. 94-95)

In each of the questions of Figure 6.5.4, there is a sequence of at least two verbs (except in some of the Indonesian examples), out of which one verb is extracted and used in an answer to the question. What does this phenomenon reveal about the structure of the verb phrase? Without further study, all that can be said is that under some circumstances of discourse, part of a verb phrase may be deleted and there are regularities concerning the choice of the remaining verbs. The data of Figure 6.5.4 show, as will be explained below, that more than one class of word may be extracted and repeated. Nevertheless, this test can be useful, in conjunction with other tests, for identifying word classes. A systematic discussion of Figure 6.5.4 will clarify the above points.

(B-1) is not formally a question, yet the following remark (B-2) shows the desired extraction and repetition of a verb from a verb series in (B-1).

(C-3) shows that baan 'able' is the verb which is directly negated, as well as the one which is extracted and repeated in (C-2).

In (I-1), (I-4), (I-7), and (I-10), the underlined words are explicitly questioned. This is indicated by the question suffix -kah. That the underlined words in these questions are verbs is shown by their negatability in (I-3), (I-6), (I-9), and (I-12). (I-17), (I-18), (I-19), and (I-20) show that the aspect words masih 'still' and sudah 'already' may be extracted and repeated in answers. How-

ever, they are not verbs, because they fail the negatability test. (I-21) and (I-22) show that if a question with sudah is answered in the negative, belum 'not yet' must be used and sudah itself is not negated. These Indonesian data reiterate the point that word classes may share some but not all properties, and by choosing different defining properties we arrive at different word classes.

(T-1), (T-2), and (T-3) show the first verb in a sequence, tâṇ 'must', being extracted and repeated in the answers to a question, the verb-hood of the extracted word shown by the negation in (T-3). (T-4) and (T-5) show the same pattern for the verb châṇ p 'like' preceding the verb wîṇ 'run'. (T-6) and (T-7) show châṇ p 'like' again in the same pattern, but this time preceding a noun phrase rather than a verb. This pattern suggests the generalization that modal verbs may be defined as verbs which can take either nominal or verbal "objects". (T-8) and (T-9) show tâṇ 'must' extracted from a series with the stative verb dii 'good' in contrast to the action verb pay 'go' of (T-1), (T-2), and (T-3). However, (T-8) was judged to be a strange sentence by a native Thai speaker. (T-10), (T-11), and (T-12) exhibit the second verb bây 'often' in a series as the one extracted and repeated. (T-12) shows that bây is in fact a verb, but Noss classifies it as an adjective rather than a modal verb, because it is the second and not the first of the verb series (Noss, p. 118). In fact, when a stative verb in Thai is the only verb in a question, it

may always be repeated as an answer. With any reasonable definition of modal verb, we would want simple stative verbs to be excluded.

(V-1) and (V-2) show that được 'can' in Vietnamese behaves like baan 'can' in Cambodian. Although I could not locate analogous Thai example with đây 'can' in the literature, I have observed many such examples in conversations with native Thai speakers. (V-7) and (V-8) show có thể 'can' (literally 'have ability'), which precedes the other verb (or verbs, depending on how cho 'give' is classified) in a verb series and is also extracted and repeated in the answer. (V-13) contains both có thể and được, the combination still meaning 'can'. In this case, (V-14) shows that được is the extracted verb. (V-3) - (V-6) and (V-9) - (V-12) show that the words nhớ 'remember', muốn 'want', and biết 'know' can each appear as the first in a verb series and be extracted and repeated in the answer.

6.5.5 Definition of Modal Verbs. When we look over the data in 6.5.1 - 6.5.4, we see that a unitary word class is not well-defined. Various syntactic and semantic properties are used explicitly or implicitly by each scholar to characterize more or less inclusive classes. Despite the cross-linguistic variation, I think that there are some general patterns which can be subsumed in a cross-linguistic category of modal verbs. I will propose a semantic definition of modal verb and then describe the syntactic and discourse features associated with the class so de-

fined.

I define a modal verb to be a verb which comments on the action or state denoted by another verb in the same sentence, without presupposing or asserting that the action or state occurs.

While modal verbs are defined as participants in a particular sort of verb concatenation, the words so defined may occur in utterances without other verbs. Most of the underlined words in Figure 6.5.4 satisfy the definition of modal verb, and they can also be extracted from the verb series of a question and be repeated in an answer to that question. Nevertheless, the verbs in these answers are related to the main verbs of the preceding questions in a unit of discourse, and so can still be considered as modal verbs by a straight forward extension of the definition. Examples such as Figure 6.5.4 (V-6) show that the main verb may appear optionally along with the modal verb in the answer, suggesting the postulation of an underlying main verb in the answers which may be optionally deleted.

My data imply that all modal verbs can be extracted from the verb series of a question and repeated in an answer to the question, but this conjecture needs to be investigated further with native speaker informants, especially for Burmese, which presented little evidence on this point. Figure 6.5.4 shows that the extractability criterion alone is too powerful in that words other than modal verbs satisfy it. Figure 6.5.4 (I-19) - (I-20) show that

sudah 'already' can be extracted and repeated, but it is not a verb because it cannot be negated. Figure 6.5.4 (T-10) - (T-12) show that bày 'often' is a verb and can be extracted and repeated, but it fails the definition of modal verb, because going often implies that the action of going does indeed take place.

The superficial word order of modal verb phrases is verb head + modal verb in Burmese and modal verb + verb head in Cambodian, Indonesian, Thai, and Vietnamese. By not using word order as a defining criterion, a single cross-linguistic category of modal verbs can be set up. Also, Cambodian baan 'can', Thai dây 'can', and Vietnamese được 'can' all satisfy the semantic definition of modal verb even though they violate the general word order for modal verbs in their respective languages, i.e. they each follow the verb head when having the meaning 'can'.

Modal verbs may be subclassified in various ways. Some, but not all, modal verbs can take nominal objects. While this is important in a complete description, it is not relevant to our basic problem of determining what information is necessary to analyze verb strings.

6.5.6 Modal Adjectives. To avoid confusion with manner adverbials (6.4), it is tempting to add the criterion that a modal verb cannot be an adjectival verb. However, this would exclude what Noss calls modal adjectives (5.5.6). In Thai, these are adjectives that precede verbs in verb phrases. In Cambodian, these words correspond to

Huffman's modal verbs which are also classified as adjectival verbs (see Figure 5.3.6). Burmese, Indonesian, and Vietnamese also have such words. Here, I define a modal adjective to be a word which is both a modal verb and an adjectival verb.

Figure 6.5.6 Modal Adjectives

(Note: modal adjectives are underlined)

(B-1) di neiya hma thei' hma: lwe de
 this - place - at - very - go wrong - be easy -
 actual mode
 'It is very easy to go wrong at this point.'

(B-2) di neiya hma thei' hma: lou. lwe de
 this - place - at - very - go wrong - "ing" -
be easy - actual mode
 'It is very easy to go wrong at this point.'

(B-3) di neiya hma thei' hma: bou. lwe de
 this - place - at - very - go wrong - to -
be easy - actual mode
 'It is very easy to go wrong at this point.'

- (B-4) di sa-qou' hma hya ya. lwe de
 this - book - in - seek - have to - be easy -
 actual mode
 'It is easy to look (things) up in this book.'
- (B-5) di sa-qou' hma hya ya. da lwe de
 this - book - in - seek - have to - thing -
be easy - actual mode
 'It is easy to look (things) up in this book.'
 (Okell, 1969, p. 350)
- (B-6) qin:galei' sa hsou do. thei' sa: ma kaun: bu:
 English - food - say - as - very - eat - not -
be good - negative particle
 'As (it) is English food (it) is not very good to
 eat - not very tasty.'
- (B-7) qin:galei' sa hsou do. thei' sa: lou. ma kaun: bu:
 English - food - say - as - very - eat - "ing" -
 not - be good - negative particle
 'As (it) is English food (it) is not very good to
 eat - not very tasty.' (Okell, 1969, p. 320)
- (B-8) mi:bou-jaun gou thwa: ci. jin dha la:
 kitchen - object marker - go - see - want - actual
 mode - question particle
 'Do you want to see the kitchen?'

- (B-9) cano qakhu. mo: thwa: bi
 I - now - tired - go - perfective mode
 'I'm tired now.' (Cornyn & Roop, p. 230)
- (C-1) kñom kɕl ŋuut-tɕk nah tɕay-nih; krɔ̃n-tae lup
 muk tee.
 I - lazy - bathe - very - today - only - wash -
 face - emphatic particle
 'I don't feel like bathing today; (I'll) just wash
 (my) face.' (Huffman, 1970a, p. 148)
- (C-2) phiəsa-kmae pibaag riən tee?
 language - Cambodian - difficult - study -
 question particle
 '(Did you find) Cambodian difficult to learn?'
- (C-3) mɛn pibaag ponmaan tee
 not - difficult - much, to any extent -
 negative particle
 '(It's) not so difficult.' (Huffman, 1970a, p. 66)
- (C-4) look kaa pukae niyiəy phiəsa-kmae dae
 you - reference to preceding statement - to be
good (at), skillful (at) - speak - language -
 Cambodian - also
 'You're (reference to preceding statement) good at
 speaking Cambodian too.' (Huffman, 1970a, p. 66)

- (C-5) phiasaa-gaŋglee pibaaq nah
 language - English - difficult - very
 'English is very difficult.'
- (C-6) phiasaa-cən srupl niyisəy, tae pibaaq səsei nah.
 language - Chinese - easy - speak - but -
difficult - write - very
 'Chinese is easy to speak, but difficult to write.'
 (Huffman, 1970a, p. 67)
- (I-1) murid itu malas sekali.
 student - that - lazy - very
 'The student is very lazy.'
- (I-2) Saya malas pergi menonton malam ini.
 I - lazy - go - watch - evening - this
 'I don't feel up to going to the movies tonight.'
 (Echols & Shadily, 1963, p. 234)
- (I-3) Anak itu pandai dikelas.
 child - that - clever - in+class
 'The child's clever in school.'
- (I-4) Anak itu pandai membuat layang-layang.
 child - that - capable - make - kite
 'The child's capable of making a kite.'
 (Echols & Shadily, 1963, p. 265)

(T-1) khon khii-kiat

person - lazy

'A lazy person.'

(T-2) khaw khii-kiat ca pay

he - lazy - hypothetical particle - go

'He's (too) lazy to go.' (Noss, p. 123)

(Nguyen-Dang-Liem, p. 9)

(V-1) Tại+sao ông không mời cô Thu cùng đi?

why - you - not - invite - Miss - Thu - with - go

'Why didn't you invite Miss Thu to come along?'

(V-2) Tại hôm nay cô ấy bận học thi.

because - day - this - miss - that - busy -

study - take an exam

'Because today she's busy studying for her exam.'

(Nguyen-Dinh-Hoa, 1966a, p. 92)

(B-1), (B-4), and (B-6) are clear cases of verb concatenation. While the presence of thei 'very' complicates the analysis of some of the complete sentences, it does not obscure the phenomenon of modal adjectives. (B-2) and (B-3) have the same meaning as (B-1), but the first two have nominalizing elements lou '-ing' and bou 'to' following the verb hma 'go wrong'. Thus, the structure of the verb string reflects the basic SOV word order of Burmese, with

the first verb, the action verb hma: 'go wrong' in (B-1), (B-2), and (B-3), in the role of "subject" or "object", and the adjectival verb, lwe 'be easy', predicating something about the subject or object. Without an explicit marker, it is difficult to determine whether a subject or object is present. The same analysis applies to (B-4) and (B-5), although here the subject or object itself is composed of an action verb hya 'seek' and a modal verb ya. 'have to'. In (B-5), there is another nominalizing element da 'thing' setting off the subject or object of lwe 'be easy'. (B-6) and (B-7), with different verbs, show the same pattern of action verb + (optional) nominalizer + adjectival verb, but here the adjectival verb is directly negated. (B-8) and (B-9) are part of a larger discourse about buying a house. A more literal translation of (B-9), and one that better fits the context, might be 'I am (too) tired to go now.'

(C-1) exhibits the structure: noun + adjectival verb + action verb. Superficially, (C-2) has the same structure as (C-1), but the English gloss implies that there is an underlying you. (C-3) shows that pibaag 'difficult' in (C-2) can be extracted and repeated in an answer. (C-5) shows pibaag 'difficult' as a simple adjectival verb. (C-6) is similar to (C-2). Superficially, (C-4) is similar in structure to (C-1); both have subject + adjectival verb + action verb. (C-4), however, is on the border of the semantic domain of definition for modal verbs. To be good at speaking implies that the action of speaking does occur

at some time, although the modal verb definition is satisfied if we accept that no particular act of speaking is being presupposed or asserted in (C-4). (I-1) shows malas 'lazy' as an adjectival verb, and (I-2) shows malas 'lazy' as a modal adjective, with two action verbs following. In (I-3), pandai 'clever' is an adjectival verb, and in (I-4), pandai 'clever' is a modal adjective. We can note that malas 'lazy' and pandai 'clever' do not take the common Indonesian verbal prefix me-.

(T-1) shows khii-kiat 'lazy' as a simple adjectival verb, and (T-2) shows khii-kiat 'lazy' as a modal adjective. Noss claims that in such constructions as (T-2), the hypothetical particle ca usually follows the modal adjective and precedes the action verb (Noss, p. 123). However, in my personal conversational experience in Thailand, I usually heard such constructions without ca.

I could find no simple cases of modal adjectives in Vietnamese. The sequence (V-1) - (V-2) contains a verb sequence which can be analyzed in terms of a modal adjective construction. The adjectival verb ban 'busy' precedes the two action verbs hoc 'study' and thi 'take an exam'. Since the act of studying is asserted by (V-2), ban 'busy' fails the definition of modal adjective. However, the act of taking an exam is not asserted or presupposed, so that the sequence ban hoc 'busy studying' may be analyzed as a modal verb sequence preceding and commenting on the action verb thi 'take an exam'. On the other hand, if hoc thi

'studying for an exam' is taken as a unit, then that action is asserted, and bận 'busy' again fails the definition of modal adjective. More data is needed to decide between these analyses.

6.5.7 Summary. Modal verbs, and the subclass of modal adjectives, are defined semantically. There is some syntactic variation, but generally modal verbs seem to be extractable from verb series in questions and then repeatable in answers to those questions. Modal adjectives are generally distinguishable from manner adverbials in that they appear on opposite sides of the main verb. Because word order is variable, the semantic distinction is taken here to be primary. That is, modal adjectives, like modal verbs generally, comment on the action or state of the main verb without asserting or presupposing the action or state. Manner adverbials modify the action or state of another verb and do assert or presuppose that state or action.

6.6 Sequences of Action Verbs.

6.6.1 Introduction. The main goal of this study is to identify semantic and syntactic principles by which verb strings can be analyzed. Using cross-linguistic data, I concluded in 6.4 and 6.5 that one type of verb series consists of action verb + manner adverbial and another type consists of modal verb + action verb. The cross-linguistic categories of manner adverbial and modal verb were defined on the basis of syntactic (i.e. distributional) and semantic features which were observed in the data. The justification of these syntactic/semantic categories is that within each language they facilitate analyzing verb strings that are not overtly signaled by grammatical markers, and that cross-linguistically they facilitate the contrast between underlying correspondences and superficial variation.

As heterogeneous as the above verb series are, sequences of action verbs are possibly more so. These are the sequences that make the greatest appeal to semantic information for their analysis. Various types of action verb + action verb series are mentioned in Chapter IV and Chapter V. The various types are introduced in each language without regard for overall patterns and the relationships between different types are not considered. In this section, I will concentrate on two-verb sequences; more complicated structures will be dealt with later.

Whereas in 6.4 and 6.5, the analyses of verb series

were accomplished by means of setting up word classes, for action verb series this is not always possible. Often the relationship among members of a sequence can only be deduced from the meanings of the individual verbs in the sequence. In addition, contextual information may be necessary to interpret sequences which are otherwise ambiguous. Another problem is distinguishing between verb compounds and other structures. There is no general consensus on this issue in the literature, and there seems to be more a continuum of more tightly bound to less tightly bound constructions than a clear-cut distinction between morphology and syntax.

As in the treatment of manner adverbials and modal verbs, the task in this section is to search for syntactic and semantic patterns which can be generalized across languages. It turns out that action verb + action verb sequences can be grouped according to different criteria, resulting in overlapping classes. In these cases, I will assume that there is nothing intrinsically wrong with alternative descriptions, as long as the basis of each description is clear and the relationship between descriptions is explained.

In the next few sections I will first introduce the relevant grammatical terms and the syntactic and semantic relationships between action verbs. Before going into details and specific examples in each language, I think it will be helpful to see the general relationships among

various descriptive principles. Because I cannot simultaneously introduce each concept and show how it interacts with every other concept, each section will include loose ends which will eventually be tied up.

6.6.2 Definition of Action Verb. In 6.4, action verbs were contrasted with adjectival verbs, with the emphasis on identifying the latter class. Roughly, an action verb is a verb which denotes an action, that is, a change brought about by an agent. Thus, the definition is semantic, after the initial definition of verb by negatability. In a negative way, action verbs could be defined as those verbs which are not adjectival verbs, as described in 6.4. However, there is still a possible overlap with the class of modal verbs. In isolation, many modal verbs are action verbs. A distinction is only important in verb series. Thus, I will simply add the restriction that modal verbs will be excluded from the discussion of action verb + action verb sequences.

6.6.3 Temporal Sequences and Syntactic Structure. While each language has the capacity to use various time words or other grammatical markers to indicate the temporal relationship between the actions denoted by two verbs in a sentence, there is commonly a sequence of two juxtaposed verbs for which the temporal relationship is not overtly indicated. If there is a temporal relationship, what are the theoretical possibilities? Two actions can either be simultaneous or one can precede the other. In the latter

case, the first verb in the sequence always represents the first action. This adds further support to Diffloth's concept of iconicity in language (4.4.1).

If the actions are simultaneous, they can still be related in different ways, which would have to be reflected in different grammatical descriptions. The simplest case would be that in which the two actions share the same time and the same agent and otherwise do not interact. This could be described as co-ordination. Next, one action could somehow modify the other; this would be subordination.

6.6.4 Purpose and Result. Resultative or completive verb constructions were discussed for Cambodian (5.3.7), Thai (5.5.8), and Vietnamese (5.6.11). I have been unable to find any examples of this type of construction attested in Burmese or Indonesian, though some Burmese constructions (shown below) may be characterized in this way. Essentially, the first verb in this type of sequence initiates an action, and the second verb expresses the result, purpose or completion of the first action. While there exist explicit causative constructions, as noted in 6.2.3 and 6.3.4, the verb series discussed here have no overt grammatical markers. Hence, the meanings of such series must be deduced from the constituent meanings or must be arbitrarily memorized. To the extent that the latter condition holds, the sequences may be considered as compounds or idioms. If completive verb series are to be considered as

compounds, they are separable compounds. Whenever such a series is negated, the negative word comes between the two verbs.

As with temporal sequences, iconicity seems to play a role in completive verb series, in that the initiating action is denoted by the first verb and the result or completion is denoted by the second verb. Thus, a temporal relationship parallels the cause and effect relationship.

6.6.5 Movement, Direction, and Location. As was shown in 6.2.5 - 6.2.9 and 6.3.6 - 6.3.10, verbs dealing with movement, direction, and location exhibit systematic changes in meaning and grammatical function as they change position with respect to other verbs in a sentence. In Burmese, Okell (5.2.7) distinguished verbs of motion as the one coherent subgroup of pre-verbs. In Cambodian, Huffman (5.3.8) set up a class of directional verbs, and Jacob's minor verbs (5.3.18) express the idea of position or motion. In Thai, many of Noss's specific completive verbs (5.5.8) are verbs of motion. In Vietnamese, Thompson (5.6.11) considered a semantic class of verbs for accompaniment and transport among verbs appearing in sequential phrases.

While it is easy to identify these verbs semantically, does this justify a cross-linguistic category which is relevant to analyzing verb strings? Syntactically, verbs of movement, direction, and location cross-cut other categories. However, it is precisely the semantics of these

verbs which gives them their importance in various constructions. Their ease of identification and their systematic cross-linguistic correspondences render them invaluable for the analysis of verb concatenation.

As primary verbs, verbs of motion denote such action as coming and going, or ascending and descending, in which motion is combined with direction. Directional verbs are cited as completive verbs when they follow primary motion verbs which do not indicate direction. More abstractly, motion verbs can indicate orientation towards or away from someone or something, in time as well as in space. As in English constructions such as go and study or go study, the status of verbs such as go may be ambiguous between concrete motion and more abstract urging. Some verbs of motion or location function as co-verbs, which are classified by some scholars as verbs and by others as prepositions.

As well as involving judgements of concreteness and abstraction, verb series with motion verbs require consideration of temporal relationships and purpose and result.

6.6.6 Come and Go. Come and go seem to be grammatically versatile verbs in most languages, certainly in European as well as Southeast Asian. Some of the functions of go have been illustrated in 6.2.8 and 6.3.9, and come has parallel functions. In the Southeast Asian languages under consideration, both words appear as primary verbs, denoting movement of an agent or subject towards or away from a reference point. In verb series, come and go sometimes denote the physical direction denoted or implied by another verb in the series. Sometimes, the orientation is more abstract and may refer to time rather than space. At a further level of abstraction, these words may function as hortatory words or particles.

Figure 6.6.6 Come and Go

(come, go, and concatenated action verbs underlined)

(B-1) win la ba

enter - come - politeness particle

'Come in.'

(B-2) win thwa:

enter - go

'Go in.'

(Cornyn & Roop, p. 162)

(B-3) thwa: ci. jin dha la:

go - look - want - actual mode - question particle

'Do you want to go take a look?'

(B-4) thwa: ma ci. bu:

go - not - look - negative particle

'doesn't go and look.'

(B-5) la ci. ba

come - look - politeness particle

'Come and take a look.'

(B-6) la ma ci. bu:

come - not - look - negative particle

'doesn't come and look.' (Cornyn & Roop, p. 216)

(B-7) cano pyan la qaun tahsei' saun. ba

I - return - come - purpose - a little bit - wait -
politeness particle

'Please wait for me to come back.'

(B-8) pyan ma la bu:

return - not - come - negative particle

'does not return or come back'

(Cornyn & Roop, p. 232)

(B-9) maung lu so: zo: ga. htwe' thwa: de
 Mr. - Lu - early - from - emerge - go - actual mode
 'Mr. Lu went out early.'

(B-10) ming: lan: gou mei: thwa: ba
 you - road - object marker - ask - go -
 politeness particle
 'You go and ask the road (as you go).'

(B-11) hkwei: hko thwa: me
 dog - call - go - potential mode
 'I will take the dog with me.'
 (Stewart, p. 13)

(B-12) nau' yahta: hnin. lai' la me
 later - carriage - with - follow - come -
 potential mode
 'I will follow by the next train.'
 (Stewart, p. 19)

(C-1) som barəy muəy mɔɔk
request - cigarette - one - come (orientation
 of action toward speaker)
 'Could I have a cigarette?'

(C-2) mɔɔk tiw ñam baay niw haan̄ nih məpleet sən
come on and - go - eat - rice - be situated - shop -
 this - one moment, for awhile - first, do
 (polite imperative)
 'Let's get something to eat in this shop for awhile,
 (shall we?).'

(C-3) dəl maon̄ kñom̄ trələp tiw twəə-kaa haəy
 reach - hour - I - reverse, turn around - go -
work - already
 'It's time for me to go back to work.'
 (Huffman, 1970a, p. 45)

(C-4) kñom̄ dəə tiw psaa
 I - walk - go - market
 'I walk to (go to) the market.'
 (Huffman, 1970a, p. 56)

(C-5) kñom̄ plɛc yɔɔk chat mɔɔk
 I - forget - take - umbrella - come
 'I forgot to bring an umbrella.'
 (Huffman, 1970a, p. 115)

(C-6) mɔɔk dəə taə tiw tiət
come - walk - continue - go - further
 'Let's continue walking. (Let's walk on.)'
 (Huffman, 1970a, p. 118)

- (C-7) ruac kee twəə-kaa taa tiw tiət
 then - they - work - continue - go - further
 'Then they continued working.'
 (Huffman, 1970a, p. 127)
- (C-8) yɔɔk qəywan nih tɪw bəntup
take - things, luggage - this - go - room
 'Take these things to the room.'
- (C-9) yɔɔk qəywan nih tɪw
take - things, luggage - this - go
 'Take these things away.'
- (C-10) yɔɔk qəywan nih mɔɔk taam
take - things, luggage - this - come - follow
 'Bring these things along.'
- (C-11) look daə tɪw taam pləw prəḥh-baat məniwũəŋ nih
 you - walk - go - follow - street - Preah-Bath
 Monivong - this
 'Walk (away) along Preah-Bath Monivong street here.'
 (Huffman, 1970a, p. 138)
- (C-12) yɔɔk tɪw
take - go
 '(Go ahead and) take (some).'
- (Huffman, 1970a, p. 151)

- (C-13) kōət tɿw mɿn tōən rətɛh-pləəŋ
 he - go - not - be on time - train
 'He missed the train.'

(Huffman, 1970a, p. 189)

- (C-14) haəy mian pnum muəy yəəŋ laəŋ tɿw leen kə-baan
 and - there is - mountain - one - we - climb - go -
play - be possible
 'And there's a mountain (which) we can climb
 (for fun).' (Huffman, 1970a, p. 201)

- (C-15) sliəg-pēəg qaoy - sqaat-baat tɿw
dress - give - careful - go
 '(You'd better) dress carefully.'
 (Huffman, 1970a, p. 151)

- (I-1) Dari mana, Min?
 from - where - Amin
 'Where have you been, Amin?'

Dari toko. Saya pergi berbelanja dengan Suarni.
 from - shop - I - go - go shopping - with - Suarni
 'To the shops (lit. from the shop). I've been
 shopping with Suarni.' (Johns, p. 126)

- (I-2) malam itu Hadi harus pergi memimpin sebuah rapat.
 night - that - Hadi - must - go - lead, chair (a
meeting) - one+classifier - meeting

'That night Hadi had to go and chair a meeting.'

(Johns, p. 146)

- (I-3) Amir berdiri dan pergi membuka pintu.
 Amir - stand up - and - go - open - door

'Amir got up and went to open the door.'

- (I-4) Tidak berapa lama Robert duduk, masuk adik Amir
membawa teh dan kue di atas baki.
 not - much, many - long (of time) - Robert - sit -
come - younger sibling - Amir - carry, bring -
 tea - and - cake - on - top - tray

'Robert had not been seated long before Amir's
 younger sister brought in some tea and cake on a
 tray.' (Johns, pp. 205, 206)

- (I-5) Ketika Dewi keluar membawa kue besar dengan 15
 buah lilin di atasnya, ...
 when - Dewi - go out, come out - carry, bring -
 cake - big - with - 15 - classifier - candle - on -
 top+its

'When Dewi came out carrying a big cake with 15
 candles on it...' (Johns, pp. 224, 225)

- (I-6) Hasnah, saya mau pergi tidur sekarang, karena saya sudah mengantuk.

Hasnah - I - want - go - sleep - now - because -
I - already - sleepy

'Hasnah, I want to go to bed now because I'm
sleepy.'
(Johns, pp. 245, 246)

- (I-7) Kami bawa Hadi masuk dan kami perkenalkan dia kepada tamu.

we - bring - Hadi - come - and - we - introduce -
he - to - guest

'We took Hadi in and introduced him to the guests.'
(Johns, p. 277)

- (I-8) Jim berdiri, pergi mendekati Zainuddin lalu duduk di sebuah kursi dan berkata...

Jim - stand (up) - go - approach - Zainuddin -
then - sit in - one+classifier - chair - and - say
'Jim stood up and went over to Zainuddin, sat down
on a chair and said,...' (Johns, pp. 290, 292)

- (I-9) Polisi datang mengamankan daerah itu.

police - come - make safe, secure - area - that
'The police came to make the area secure.'

(Johns, pp. 306, 307)

(I-10) Tukang kayu ada? Suruh dia masuk.

artisan - wood - exist - order - he - come

'Is the carpenter there? Tell him to come in.'

(Lewis, p. 71)

(I-11) Lepas makan, ia masuk tidur.

after - eat - he - come - sleep

'After his meal, he went to bed.'

(Lewis, pp. 86, 398)

(T-1) khun ca pay duu năŋ

you - will - go - see - movie

'You will go to the movie.' (Intrakomhaeng, p. 34)

(T-2) khǎ̌ thòot na khráp phǎm thâa ca tǎŋ riip pay

excuse me - politeness particle - politeness

particle - I - guess - will - must - rush - go

'Excuse me, I think I'd better go now.'

(Intrakomhaeng, p. 30)

(T-3) kháw pay kin khâaw maa

he - go - eat - rice - come

'He ate (his) meal. (Literally: He went to eat and came back)'

(Intrakomhaeng, p. 67)

(T-4) ʔɔɔk pay

leave - go

'Go away.' or 'Get out.'

(T-5) khâw maa

enter - come

'Come in.' (Intrakomhaeng, p. 68)

(T-6) kháw dään maa roongriən

he - walk - come - school

'He walks here to school.'

(T-7) kháw dään pay roongriən

he - walk - go - school

'He walks to school.' (Intrakomhaeng, p. 121)

(T-8) khun maa hăa khray kháʔ

you - come - seek - who - politeness particle

'Who did you come to see?'

(Haas & Subhanka, p. 131)

(T-9) khon sák phâa yān mây ʔaw sâaphâa maa sòŋ

person - wash - cloth - yet - not - take -

clothing - come - send

'The laundryman hasn't sent (my) clothes back yet.'

(Haas & Subhanka, p. 227)

(T-10) phỏm yuu nay 1amerikaa maa sảm pii lếw
 I - live in - America - come - three - year -
 already

phỏm yuu nay 1amerikaa maa lếw sảm pii
 I - live - in - America - come - already -
 three - year
 'I've been in America for three years.' or
 'I have lived in America for three years.'
 (Intrakomhaeng, p. 181)

(T-11) 7ổ>, khun prasit, hầy pay nầy. mây hễn maa yiam
 naan lếw
 oh - Mr. - Prasit - disappear - go - where - not -
see - come - visit - long (time) - already
 'Where have you been keeping yourself, Prasit?
 You haven't been to see us for a long time.'
 (Haas & Subhanka, p. 396)

(V-1) Sáng mai, tôi phải đi có việc sớm
 morning - tomorrow - I - must - go - have -
 business - early
 'Tomorrow morning I have to go out early on
 business.' (Vuong-Gia-Thuy, p. 70)

- (V-2) Sáng nay chúng+ta đi xem tòa thị-sá⁷nh.
 morning - this - we - go - see - building -
 city hall
 'This morning we (will) go see the Town Hall.'
 (Vuong-Gia-Thuy, p. 75)

- (V-3) Tôi (đi) vô nhà
 I - go - enter - house
 'I went into the house.' (Vuong-Gia-Thuy, p. 107)

- (V-4) Ông đi vô ngồi đợi.
 he - go - enter - sit (down) - wait
 'He went in, sat (down), waited.'

- (V-5) Ông đi ra kiếm cô H^uòng
 he - go - go out - look for - Miss - Huong
 'He went out to look for Miss Huong.'
 (Vuong-Gia-Thuy, p. 112)

- (V-6) Xin ba viết đi.
ask - you (to married woman) - write - go
 'Please go ahead and write.'
 (Nguyen-Dinh-Hoa, 1966a, p. 149)

(V-7) Ông ấy đưa tôi đến vườn Bách-Thảo.

you - that - take, bring - I - come - garden -
one hundred plants

'He took me to the Botanical Gardens.'

(Nguyen-Dinh-Hoa, 1966a, p. 105)

(V-8) Anh nên đến chào ông ấy.

you - should - come - greet - you - that

'You should go and say hello to him.'

(Nguyen-Dinh-Hoa, 1966a, p. 118)

(V-9) vào đến nhà

enter - come - house

'come into the house'

(Nguyen-Dinh-Hoa, 1966a, p. 161)

(V-10) Cả đến mấy cái bàn họ cũng lấy đi.

even - come - few classifier - table - they -

also - take - go

'They even took those few tables.'

(Nguyen-Dinh-Hoa, 1966a, p. 233)

(V-11) Thôi, trưa nay chúng+ta đi ăn cơm tây đi.

well - afternoon - this - we - go - eat - rice -
west - go

'Well, this afternoon, let's go and eat Western-
style food.' (Vuong-Gia-Thuy, p. 70)

(V-12) Anh đi đầu về

you - go - where - return

'Where have you been?' Thompson, 1965a, p. 319)

The sentences and phrases in Figure 6.6.6 exhibit come and go in various verb concatenations. Because I am concentrating on action verbs in this section, only action verbs are underlined in Figure 6.6.6. As in 6.2 and 6.3, these data first show that there exist cross-linguistic patterns of verb concatenation. I will show that, at least in some cases, the meaning of the verb series can be deduced from the position of come or go with respect to the other verbs in the series.

The first pattern we will examine is:

$$\left\{ \begin{array}{l} \underline{\text{come}} \\ \underline{\text{go}} \end{array} \right\} + \underline{\text{action verb}}$$

Examples are in (B-3) - (B-6), (C-2), (C-3), (C-6), (C-13), (I-1) - (I-6), (I-8), (I-9), (I-11), (T-1), (T-3), (T-8), (T-11), (V-1) - (V-5), (V-8), (V-11), (V-12). Often, analysis is complicated by the occurrence of additional verbs in the series. These complications will be handled in a later section, after further simple cases have been analyzed.

The English translations are of the form:

Come (go) and verb

Come (go) to verb

Come (go) verb

I claim that this structure is ambiguous in the Southeast Asian languages under consideration, just as it is in English. That is, the structure may be interpreted as a temporal sequence of actions or as a purposive sequence, with the motion of the first verb having the purpose of enabling an actor to do the action of the second verb. Both interpretations fit most contexts, and more subtle data than I have would be needed in any attempt to decide if either interpretation were preferred. In (C-2), (C-6), the Cambodian word ឆ្លុក 'come' appears to have a hortatory function rather than to denote physical motion. The evidence is that in (C-2), ឆ្លុក 'come' is directly followed by ត្រូវ 'go', and in (C-6), ឆ្លុក 'come' is followed by 'continue walking', which involves the word ត្រូវ 'go'. We will see more definite examples of hortatory functioning of go later.

If two verbs in a sentence are separated by intervening words, do we still have a verb series? If each verb is in an explicitly separate clause, then I do not consider them to constitute a verb series. In many other cases, various other words may be optionally inserted between two verbs

without changing the relationship between the verbs. In these cases, I will consider the structures to be discontinuous verb series. (B-4) and (B-6) show the negations of (B-3) and (B-5), respectively, and the negative word splits the verb series. As has been discussed in earlier sections, the position of the negative word is sometimes restricted and sometimes variable. In resultative or completive constructions, the negative word is usually required to come between the two verbs, even if the scope of negation includes both verbs. In (C-13), the verb series tāw mīn tōōn (go - not - be on time) is glossed as 'miss', but the construction might be better understood if it is rendered as 'went, but too late to be on time', indicating that here only the second verb is actually negated. The relationships between the verb of motion and the verb 'carry, bring' in (I-4) and (I-5) appear the same, even though the agent in (I-4) separates the verbs. The translations imply different grammatical structures: in (I-4), masuk...membawa (come - bring...carry) is translated 'brought in' while in (I-5), keluar membawa (go out, come out - bring, carry) is translated 'came out carrying'. Thus, the discontinuous Indonesian construction in (I-4) is treated as a main verb 'bring', modified by the directional preposition 'in', while in (I-5) 'carry' is translated as a participial modifier of the main verb phrase 'go out'. I see no structural difference in Indonesian corresponding to the differences in translation. These examples, taken from

the same book, show that both word-by-word and free translations must be considered in attempts to assign grammatical structures to sentences in the source language, and that additional checks may be required in doubtful cases.

(T-3) and (V-12) show structures which require other words between the verbs. Both examples fit the pattern:

go + {place } + return
 {do action}

In (T-3), pay kin (go - eat) fits into the first pattern, while the pattern pay...maa 'go...come' is similar to the pattern of (V-12). Actually, there is a gap in my Thai data. While I could not find an example in the literature, from personal experience in Thailand, I often heard the sentence

pay năy maa

go - where - come

'Where have you been?' or 'Where are you coming from?'

This is analogous to the Vietnamese pattern, except that the latter uses 'return' rather than 'come'. This pattern shows a clear temporal sequence of action, but the purposive interpretation also holds.

Some of the Indonesian and Vietnamese examples of the come (or go) + action verb pattern imply that the actions

of the two verbs can be interpreted as simultaneous rather than sequential. I claim that this interpretation is suggested by the intrinsic semantics of the action verb, as there is no overt grammatical marking of time. In (I-1), (I-4), (I-5), (I-8), the temporal simultaneity is indicated by the translations, although I pointed out above that translations must be used with care. For example, in (I-1), pergi berbelanja (go - go shopping) is translated 'been shopping'. The past tense comes from the context, as shown by the question + answer situation. the act of shopping usually involves motion, so that one can shop while going. However, the sequential and purposive interpretation is also possible for (I-1). Again, in (I-4), (I-5), the act of carrying or bringing entails motion, so that a simultaneous interpretation is possible, though not necessary. In (I-8), approach entails motion, and the above arguments apply. (V-3) - (V-5) involve directional verbs following go, and these will be discussed below.

The next general pattern has a semantic restriction that the first pattern did not have. The pattern is

motion verb + $\left\{ \begin{array}{l} \text{come} \\ \text{go} \end{array} \right\}$

Examples are in (B-1), (B-2), (B-9), (B-12), (C-4), (C-5), (C-8), (C-9), (C-14), (I-7), (T-2), (T-4) - (T-6), (T-9), (T-10), (V-7), (V-9), (V-10). Here, the general

meaning is clear, but a detailed analysis is ambiguous. Come or go gives an orientation to the motion of the first verb, respectively towards or away from a particular point of view. The point of view is usually that of the speaker of the utterance, but context is often necessary to determine the point of view in each case.

In (B-1), and (B-2), win 'enter' denotes the action of moving from outside an enclosure to inside the enclosure; in (B-1), la 'come' shows that the speaker is inside and is requesting the addressee to move towards him (the speaker), while in (B-2), thwa: 'go' shows that the speaker is outside and is requesting the addressee to move away from him. (T-5) and (V-9) have the same structure and meaning as (B-1). (B-9) shows that just as the come and go can be varied, so can enter and emerge. (T-4) is analogous to (B-9).

Bring and take do not denote motion precisely, but they entail motion. In (C-8), (C-9), (V-10), take is followed by go, and in (C-5), (C-10), (I-7), (T-9), (V-7), take is followed by come. In contrast to the enter and emerge constructions described above, a nounphrase must separate take and the following come or go. Here we have Chao's (4.3.1) pivotal construction: take + noun phrase + go (or come), in which the noun phrase is simultaneously the object of take and the subject of go (or come). Despite the syntactic difference, the semantic relationship is the same: come and go give an orientation to the action of the first verb in the series.

In the above examples, in which come and go follow other motion verbs, the English translations often involve prepositions. In these constructions, the second verbs are often referred to as co-verbs (4.3.1, 4.3.2, 5.6.12, 5.6.14). How much the status of co-verbs is an artifact of English rather than the source language is an open question. For example, in (B-12), come does not even appear in the translation. In (C-4), (C-8), go can conveniently be translated into the English preposition to, implying that go is less than a full verb. In (T-2), must - rush - go is rendered as 'better go', though according to the pattern of most of the examples given, one might expect 'must rush away'. (T-6) and (T-7) show the same structure as (C-4); come and go follow walk and give orientation to the walking. Come is recognized in the English translation by the word here, while the sentence with go is unmarked. Thus, rather than declare verbs which are translated as prepositions to be co-verbs, we can conclude from examples such as (C-4), (T-6), and (T-7) that the prepositions do not occur in the source language sentences, but are required by English grammar. Unfortunately, this leaves the syntactic status of come and go unclear. (V-9) corresponds to (B-1) and (T-5) and shows the reverse order from that of (V-3) and (V-4), although the meaning seems unchanged.

I will postpone final conclusions about co-verbs until further patterns have been discussed. Come and go have been singled out here, because their roles are important in

each language and because their ranges of functions illustrate the semantic/syntactic variations that verbs can undergo. In 6.6.7, we will generalize the pattern:

motion verb + come (or go)

to the pattern:

motion verb + directional verb.

When we attempt to generalize the pattern to:

action verb + come (or go),

we find that there is not a uniform semantic relationship. It was suggested above that come in Cambodian might have a hortatory function. (C-12), (C-15), (V-6), and (V-11) show that go definitely has a hortatory function in Cambodian and Vietnamese. The English translation of (C-12) indicates the meaning of tɿw 'go' as 'go ahead and...'. Take in (C-12) may entail motion, and in fact we are given no means of distinguishing the abstract hortatory interpretation of (C-12) from the adverbial interpretation of tɿw 'go' as 'away' in (C-9). However, in (C-15), slɿɔg-pɛɔq 'dress' does not entail motion, and the hortatory function of tɿw 'go' is clear. In (V-6), the translation again suggests that di 'go' has purely a hortatory function, as write does not entail motion. (V-11) is interesting because it contains di 'go' both as a main verb denoting motion and as a horta-

tory word at the end of the sentence.

In Burmese, (B-10) and (B-11) show unpredictable relationships between an action verb and following go. The translation of (B-10) indicates simultaneous action. A more literal translation of (B-11) might be '(I) will call (the) dog (and) go.' Evidently, context and extralinguistic knowledge are required to interpret this sentence, since dog is not marked as subject or object (though Burmese has the capability of doing so, as shown in (B-10)). If my translation is acceptable, then the action of call precedes the action of go, in contrast to (B-10).

In (C-1), come follows the action verb request. the given translation interprets mock 'come' as 'orientation of action toward the speaker'. A more literal translation might involve a pivotal interpretation '(I) request (that) one cigarette come (to me)', in which cigarette is the object of request and the subject of comes. Request is not a motion verb, and does not entail motion in the sense that carry or bring does. Nevertheless, motion is involved in cases of requesting or asking for an object, because such a request usually expresses a desire for the object to be physically moved. Hence, we have established an extension of the motion verb + come pattern.

(I-10) shows the importance of context in analyzing the relationships between the words of a sentence. Superficially, we have the pattern: action verb + noun phrase + come, and we might expect the usual interpretation of come

giving orientation to the action verb. Order, the action verb in question, is certainly semantically related to request. Also, we again have a pivotal construction, with dia 'he' being the object of suruh 'order' and the subject of masuk 'come'. The difference between the above Cambodian example and this case is that the former involves the motion of an object, while the latter only implies that an action be done. the fact that this action is to come is incidental; this type of order could be for any type of action, e.g. read a book, pick up a pen. Hence, come in (I-10) is a full verb, whereas the syntactic status of come in (C-1) is less clear. I have no definite evidence, but I suspect that m_k can not be negated in (C-1), while masuk could be in (I-10).

(T-11) illustrates several interesting complexities. The phrase hăay pay năy (disappear - go - where) fits the pattern: action verb + go, and disappear usually implies moving away from sight. When our scope of analysis widens to include năy 'where', pay 'go' attains more of the status of an independent verb in the construction pay năy 'where are you going?' rather than simply an orientation giving word, subordinate to disappear. The second sentence of (T-11) really belongs in a following section on complex verbal constructions. It, like the preceding sentence in (T-11), shows that simply fitting any two words into a convenient pattern is an inadequate approach. Contextual information is required to deduce the change of subject: '(we have) not

seen (you) come to visit (us) (for a) long time already.' Thus maa yiam (come -visit) fits into the regular pattern: come (or go) + action verb. maa 'come' does not give an orientation to hěn 'see'; rather, the sequence hěn maa seems to be what Matisoff (4.5.2) refers to as a fortuitous concatenation, in which the two verbs belong to different underlying verb phrases.

(T-10) shows a further abstraction of the Thai word maa 'come'. The orientation is in time rather than space. While this usage could simply be dismissed as an isolated idiom, in an extended fashion we do have the pattern: action verb + come, in which the action of the first verb is given a temporal orientation from the past to the present.

6.6.7 Directional Verbs. The class of directional verbs is a semantic generalization of the class of come and go. As primary verbs, or as the only verbs in a clause, they denote motion with some sort of orientation or direction. As members of verb series they behave analogously to come and go. That is, their functions range from denoting various sorts of specific physical motions to abstract extensions of those motions.

Directional verbs are treated in a number of ways by different scholars. Okell included verbs of movement among his Burmese pre-verbs (5.2.7). Huffman defined directional verbs in Cambodian as those which follow and give direction to the action of primary verbs (5.3.4). Jacob referred to the same group in Cambodian as minor verbs (5.3.18). Haas included directional verbs, but not as an explicit subgroup, among the secondary verbs of Thai (5.5.11). Noss included them, again not as a distinct subgroup, among the completive verbs of Thai (5.5.8). Nguyen-Dinh-Hoa referred to them as co-verbs of direction in Vietnamese (5.6.14). I have seen no explicit or implicit grouping of directional verbs in Indonesian.

As membership in the class of directional verbs is semantically determined, and lexical semantics is not a precise nor a well-established field, the status of some words is problematic. The prototypical members are come and go. Other non-controversial members are enter, exit, ascend, and descend. In addition to such complementary

pairs, I would include such words as return, follow, accompany, and reach. Both as a transitive and an intransitive verb, return entails motion towards an earlier position. Follow and accompany entail motion which is oriented with respect to the motion of another object. Reach can be interpreted to mean 'move so as to make contact with a goal'. The meaning shifts corresponding to position shifts of the directional verbs return, reach, and follow are depicted in 6.2.5 - 6.2.7 and 6.3.6 - 6.3.8.

Figure 6.6.7 Directional Verbs

(action verbs underlined)

(B-1) lai' pya. hnain ba de

accompany - show - able - politeness particle -
actual mode

'I can go along and show it.'

(B-2) lai' ma pya. bu:

accompany - not - show - negative particle
'doesn't go along and show'

(Cornyn & Roop, p. 216)

(B-3) pyan pyo: ba qoun:

return - speak, say - politeness particle -
continuance, repetition

'Please repeat. Please say it again.'

(Cornyn & Roop, p. 232)

(B-4) ne'hpyin-ga pyan pei: me

tomorrow - return - give - potential mode

'I will pay you back tomorrow.'

(Stewart, p. 13)

(B-5) qamei ka. min: kou gayu. sai' lei te

mother - subject marker - you - object marker -
care - set up - emphatic marker - actual mode

'Your mother cared for you well.'

thu.kou pyan ci. ya. me

you - return - look - must - potential mode

'You must look after her in return.'

(Stewart, p. 41)

(B-6) pahtama. qapo-da' kou te' ci. ja.zou.

first - upper floor - object marker - ascend -
look - 1st person plural imperative

'First let's go upstairs and take a look.'

(B-7) qauhta' kou hsin: ci. ja.zou

lower floor - object marker - go down, descend -
look - 1st person plural imperative

"Let's go downstairs and see."

(Cornyn & Roop, p. 229)

(B-8) hkana. nei yin la ge. me

moment - stay - when - come - back - potential mode

'(I)'ll be back in a moment.'

(B-9) bama zaga: hou gade:ga. thin ge. da la:

Burmese - language - there - ever since - learn -
and come - actual mode - question particle

'Did (you) learn Burmese back there (before coming here)?' (Okell, 1969, p. 276)

(C-1) bæcaw yɔɔk rɔbah cəŋ pii thaət-tuu nuh down nɛŋ
khəŋ nah

if - grandson - take - thing - go out - from -
drawer - that - grandmother - will - angry - very

'If you (grandson) take any things out of that
drawer, I (grandmother) shall be very angry.'

(Jacob, pp. 129, 273)

- (C-2) kōt trəw riən cəmnuən bəy cnam tiət, təp cən
twəə-kaa

he - must - study - number, total - three - year -
further - then, after which - go out - work
'He has to study for three more years, after which
(he can) go out and practice.'

(Huffman, 1970a, p. 147)

- (C-3) gei, kraok laən nəh! pliə haəy!

hey - rise, get up - upward, up - hortatory
particle - be bright, light, late (in the morning) -
already
'Hey get up! It's late already.'

(Huffman, 1970a, p. 147)

- (C-4) nuh kənlaeŋ lūəq san; coul chup kənlaeŋ nuh

there - place - sell - gasoline - enter - stop -
place - that
'There's a place (where they) sell gas; go in and
stop there.' (Huffman, 1970a, p. 216)

- (I-1) Bolehkah saya ikut main tenis?

able+question particle - I - follow - play -
tennis
'Can I join your tennis game?'

(Echols & Shadily, 1963, p. 151)

- (I-2) Sebentar-sebentar dia pindah duduk dan melihat keluar.
again and again - she - move - sit - and - look -
go out
'Again and again she changed seats and looked out.'
- (I-3) Dia berbaring kembali di tempat tidurnya.
she - lie down - return - in - place - sleep+her
'She lay down again in her bed.'
(Johns, pp. 269, 270)
- (T-1) kháw tòk lon càak nâataaŋ
he - fall - descend - from - window
'He fell out of the window.'
- (T-2) kháw tòk lon ca pay tham ɲaan phrûŋnii
he - fall - descend - will - go - do - work -
tomorrow
'He agreed to go to work tomorrow.'
(Haas & Subhanka, p. 212)
- (T-3) nân lon thəʔ, rótraaŋ rəəm ʔòk lɛ́w
sit -descend imperative word - streetcar - begin -
leave - already
'Sit down! The car's starting off now.'
(Haas & Subhanka, p. 278)

- (T-4) mua khun yók hũu thoórásàp khén, naaythoorásàp ca
thăam bæ khun

'When you pick up the receiver, the girl will ask
what number you want ('your number').'

(Haas & Subhanka, p. 365)

- (T-5) duu ʔòk

look - leave

'to ascertain, be able to tell just by looking'

- (T-6) núk ʔòk

think - leave

'to recall, remember'

- (T-7) núk mây ʔòk

think - not - leave

'can't recall, can't think of it'

(Haas, 1964, p. 609)

- (T-8) khít ʔòk

think - leave

'to figure out, solve'

- (T-9) khít mây ʔòk

think - not - leave

'cannot figure (it) out, cannot solve (it).'

(T-10) khít tòk

think- fall

'to have solved (a thinking problem), have gotten over (a life problem)'

(T-11) khít thần

think - reach

'to think of, to miss'

(T-12) hũn khít

go back, turn back - think

'to think back, recall'

(Haas, 1964, p. 92)

(T-13) hãa...maa

seek - come

'to find, procure' (Haas, 1964, p. 582)

(T-14) phũt mây đỏk

speak - not - leave

'to be struck dumb, speechless'

(Haas, 1964, p. 375)

(V-1) Tôi đứng lên

I - stand - ascend

'I stand up.'

(V-2) Ông ^hấy ^hngồi ^hxuống
gentleman - that - sit - descend
'He sat down.'

(V-3) Tôi giơ tay lên
I - raise - hand - ascend
'I raised my hand.'

(V-4) Tôi ⁱmở [?]cửa ra
I - open - window - exit
'I opened the window.'
(Nguyen-Dinh-Hoa, 1966b, p. 161)

(V-5) kiếm ^hra
seek - exit
'to find'

(V-6) nhìn ra
look (at) - exit
'to recognize' (Nguyen-Dinh-Hoa, 1979, p. 160)

(V-7) nghe ra
listen - exit
'to understand'

(V-8) nghe không ra
listen - not - exit
 'cannot understand'

(V-9) không nghe ra
 not - listen - exit
 'did not understand (what was being said)'
 (Nguyen-Dinh-Hoa, 1979, p. 137)

(V-10) ngồi lên
sit - ascend
 'to sit up'

(V-11) kêu lên
shout - ascend
 'to cry out' (Nguyen-Dinh-Hoa, 1979, p. 123)

(V-12) nghĩ ra
think - exit
 'to figure out' (Nguyen-Dinh-Hoa, 1966b, p. 305)

The directional verbs follow the patterns, to a certain extent, set by come and go. Thus, we have: directional verb + action verb, exemplified by (B-1), (B-2), (B-6), (B-7), (C-2), (C-4), (I-1), (I-2), and the analysis of come (or go) + action verb given in 6.6.6 can be directly extended to these cases. Similarly, we have the pattern: motion

verb + directional verb, exemplified by (C-1), (C-3), (I-3), (T-1), (T-4), (V-1) - (V-4), and to which we can apply the analysis of: motion verb + come (or go), given in 6.6.6.

Whenever generalizations are made from simple cases, one must check for possible complications arising from the generalization itself. In 6.6.6, the members of the explicitly defined class {come, go} are clearly distinguishable from any other motion verbs or directional verbs. With the somewhat vaguely defined semantic class of directional verbs, the situation is no longer clear. In fact, many of what I referred to as motion verbs in the previous paragraph contain elements of direction as well as motion. Thus, in (C-3), (T-1), (T-3), (T-4), (V-1) - (V-3), the directional verb, which is second in each series, may be considered redundant, in which there is no clear distinction between motion verb and directional verb. In particular, we also have the possibility of sequences of directional verbs, which would include all the examples following the pattern: motion verb + come (or go), given in 6.6.6.

Just as I appealed to semantics to set up the class of directional verbs, so I will appeal to semantics to analyze sequences of directional verbs. We can divide such sequences into two sub-classes. First, we have the sequences in which the orientational information is the same in each verb, and so the second verb is redundant. Examples are (C-3), (T-1), (T-3), (T-4), (V-1) - (V-3). Second, we have

sequences in which the two verbs do not share the same orientational information. A convenient test for the orientational independence of the two directional verbs in a sequence is the existence of such pairs as (B-1) - (B-2), (C-9) - (C-10), (T-6) - (T-7) in Figure 6.6.6, and (V-2), (V-10) in Figure 6.6.7., in which one directional verb is followed by a second directional verb of one polarity in one member of the pair and of the opposite polarity in the other member of the pair.

Before considering such issues as co-ordination or subordination for sequences of directional verbs, we must be aware of how the semantics of the individual words can lead to idiomatic meanings for the sequences. The sequence tɔk lon 'fall - descend' in Thai behaves in the expected fashion in (T-1). However, in (T-2), the sequence is extended in a figurative way to express the idea 'agree'. We may want to classify the second sequence as a compound. For analytic purposes, the important point is that the situation or linguistic context is required to identify the proper interpretation. The word return was treated in 6.2.5 and 6.3.6. (B-3) - (B-5) show that the word can be extended in various idiomatic ways in Burmese. Incidentally, some of these semantic extensions are not restricted to Southeast Asian languages. Spanish has the construction volver a + infinitive, literally, 'return - to - infinitive', with the meaning 'to infinitive again', which is analogous to the construction and interpretation of (B-3)

and (T-12). Superficially, these Burmese and Thai examples fit the pattern: directional verb + action verb, but it appears that contextual information is more important than a general pattern in interpreting sequences with return. In all four examples, return appears to modify the main action of the second verb, which is not the case in (B-1), (B-2), (B-6), (B-7). In (B-8), (B-9), ge. (also written hke., depending on the phonological context) 'back there' seems to be subordinate to a preceding directional verb or to a preceding non-directional action verb.

There are a number of Thai and Vietnamese examples, (T-5) - (T-9), (V-6) - (V-9), (V-12), in which the word leave or exit follows a verb of perception or thinking. The preceding action verbs in each sequence do not involve physical motion, but a figurative interpretation allows thoughts or sensations to 'move'. The various sequences are idiomatic in that the meaning of each sequence cannot be predicted simply by assigning a figurative direction to the preceding action verb. The data do not provide a basis for distinguishing lexical compounds from verb phrases, except that (T-7), (T-9), (V-8) show that the two verbs may be divided by the negative word.

The Thai verb khít 'think' can be given figurative orientations by other directional verbs, as shown in (T-10) - (T-12).

The word seek is followed by different directional verbs in Thai (T-13) and in Vietnamese (V-5) to produce

sequences with the meaning 'find'. Thus, cross-linguistic generalization may be of use in searching for words which can be expected to co-occur with particular semantic classes, e.g. directional verbs, but there remains language-specific idiosyncrasy.

Directional verbs can modify such verbs as speak (T-14) and shout (V-11). this is analogous to English constructions such as speak up, shout out, speak out, though the second element in each English expression is an adverb rather than a verb.

6.6.8 Quotative Verbs and Particles. As far as I know, every language has some means of reporting speech, directly and indirectly. In some Southeast Asian languages, this function is carried out by means of verbs of saying. What is relevant here is that these verbs occur in series with other verbs of saying, as well as with verbs of thinking, reading, etc. From indicating quotations, these quotative verbs generalize their functions to setting off embedded units of various types, including clauses. Hence, we have the familiar pattern of a concrete action verb becoming more abstract, more of a grammatical marker than a verb, when it appears in verb series. To be explicit, I will define a quotative verb as a verb with the meaning 'say' as a primary verb and with the grammatical function of setting off embedded units when it occurs in a verb series.

Figure 6.6.8 Quotative Verbs and Particles

- (B-1) sei' ma pa bu: yelou. ma hsou jin ba bu:
 mind - not - be in - negative particle - as such -
 not - say - want - politeness particle - negative
 particle
 '(I) wouldn't exactly say (I)'m not interested.'
 (Okell, 1969, p. 459)

- (B-2) mane'hpan ma a: bu: hsou
tomorrow - not - be free - negative particle - say
'Didn't (you) say (you) wouldn't be free tomorrow?'
- (B-3) ge:di hma qalun pyo zaya kaun: de hsou be:
there - at - exceedingly - enjoy - thing - be good -
actual mode - say - indeed
'It's said that (one) has lots of fun there.'
(Okell, 1969, p. 307)
- (B-4) nwei qahka hsou yin, nei. dain: hcau' nei da be:
warm - time - say - if, - day - every - be dry -
in the process of - thing - indeed
'As for the hot season, it gets hotter day by day
and dries up.' (Cornyn & Roop, p. 180)
- (B-5) sin:za qoun: me lou. pyo: de
think - further - potential mode - quoted - say -
actual mode
'(She) said (she) would think (it) over.'
(Okell, 1969, p. 344)

(B-6) da gou bama lou hke:dan lou. hko ba de
 that - object marker - Burmese - way - pencil -
quotation - call - politeness particle -
 actual mode

'That's called a pencil in Burmese.'

(Cornyn & Roop, p. 61)

(B-7) nau'kou thu hsaya-wun lou' me de.
 in the future, sometime - he - doctor - work -
 potential mode - quotation

'Some day he'll be a doctor, he says.'

(Cornyn & Roop, p. 109)

(C-1) look thaa məc
 you - say - what

'What did you say?' (Huffman, 1970a, p. 34)

(C-2) rəbəh nih kee haw thaa qwəy
 thing - this - they - call - say - what
 'What's this thing called?'

(Huffman, 1970a, p. 35)

(C-3) kñom nɿj prae kliə nih
 I - will - translate - sentence - this
 'I'll translate this sentence.'

(Huffman, 1970a, p. 36)

- (C-4) kliənuh prae thaa məc
 sentence - that - translate - say - what
 'How is that sentence translated?'
 (Huffman, 1970a, p. 35)
- (C-5) kñom məəl siəwphiw
 I - read - book
 'I'm reading a book.'
- (C-6) piəq nih məəl thaa məc
 word - this - read - say - what
 'How is this word pronounced?'
 (Huffman, 1970a, p. 36)
- (C-7) dəl look chup riən, tae, kit twəə-kaa qwəy
 when - you - stop - study - question particle -
 think, plan - work - what
 'What do you plan to do when you finish school?'
- (C-8) kñom kit thaa twəə kruu-pəət lqəə ciəy
 I - think - say - work as - doctor - good - more
 'I think it would be better to be a doctor.'
 (Huffman, 1970a, p. 100)

(I-1) maka sahut Raja Suran, "Bahwa alam ini terlalu banyak pelbagai jenis ada di dalamnya."
 then, so - answer - Raja - Suran - verily - world -
 this - exceedingly - many - of all sorts - kind,
 sort - there are - in - inside+it
 'Raja Suran answered: "Verily in this world there are all sorts of things."' (Lewis, p. 231)

(I-2) Ia berkata, "Saya sakit."
 she - say - I - ill
 'She said, "I am ill."'

(I-3) Ia berkata bahwa ia sakit
 she - say - that - she - ill
 'She said (that) she was ill.' (Kwee, p. 131)

(I-4) "Ya, Kak," jawab Dewi.
 yes - older sister - answer - Dewi
 '"Yes", answered Dewi.'

(I-5) Dewi menjawab: "Ya, Kak."
 Dewi - answer - yes - older sister
 'Dewi answered, "Yes."' (Johns, p. 238)

(T-6) mây waa

not - say

'not to mind, not to complain; no matter,
regardless of' (Haas, 1964, p. 503)

(V-1) Anh ta bảo rằng: Cứ yên-tâm.

he - say - that - continue - have peace of mind

'He said: "Don't worry."'

(Thompson, 1965b, p. 272)

(V-2) Anh ấy bảo tôi rằng hôm nay anh ấy mệt, không đi làm.

he - tell - I - that - day - this - he - tired -
not - go - work

'He told me that he is tired today and won't go to work.'

(V-3) Anh ấy bảo tôi: "Hôm nay tôi mệt, không đi làm."

he - tell - I - day - this - I - tired - not -
go - work

'He told me: "Today I am tired, and I won't go to work."' (Nguyen-Dinh-Hoa, 1966b, p. 262)

(V-4) Tôi xin kết-luận rằng tiếng Việt-Nam khó hết sức.

I - request - conclude - that - language -
Vietnamese - difficult - exhaust - strength

'May I conclude then that the Vietnamese language is
extremely difficult?'

(Nguyen-Dinh-Hoa, 1966b, p. 248)

(V-5) Tôi cho rằng bút "nguyên-tử" vừa rẻ lại vừa tiện.

I - think - that - pen - atom - both... - cheap -
also - ...and - practical

'I think a ball-point pen is both cheap and
practical.' (Le-Ba-Kong, p. 184)

My definition of quotative verb is satisfied by hsou (Burmese), thaa (Cambodian), and waa (Thai). The other underlined words in Figure 6.6.8 are either particles with a quotative function or are words whose verbal status is doubtful.

That hsou is a verb is demonstrated by its negatability in (B-1). In (B-1), hsou is an ordinary primary verb, and the subordinate clause is set off by the particle yelou. 'as such'. This particle is related to the particle lou. 'quotation', which sets off subordinate elements in (B-5) and (B-6). In (B-7), de. 'quotation' is another quotative particle. While de. is translated as 'he says' in (B-7), it appears to have no verbal status. The particles, de., lou., and yelou., unlike hsou do not function as verbs.

The word hsou seems to straddle the line between full verb and quotative particle. In (B-2), hsou is not followed by a verb particle, as Burmese verbs ususally are. In (B-4), the construction hsou yin 'say - if', could be semi-literally rendered as 'if one talks about...'. According to Okell, hsou can also occur at the end of a dependent clause without being followed by any other marker (Okell, 1969, p. 175). One semantic footnote shows a relationship between Burmese and Thai. In Judson's Burmese-English Dictionary, hsou is defined as a verb meaning 'to say, speak, tell, ..., to speak with some degree of displeasure or disapprobation; to talk to , by way of reproof' (Judson, p. 418). Similarly, one meaning of Thai wâa, as shown in (T-6) is 'complain'.

Cambodian thaa and Thai wâa pattern almost analogously, both syntactically and semantically. As primary verbs, as in (C-1), (T-2), they mean 'say'. Even as a main verb, Thai wâa has additional meanings, 'complain' in (T-6) and 'plan to' (Intrakomhaeng, p. 32) in (T-1). As secondary verbs, both thaa and wâa directly follow verbs of saying, thinking, reading, etc. to introduce subordinate elements which may be words or clauses. (T-3) shows that wâa can have a quotative function without being preceded by another verb; here it appears to be a simple particle. From personal observation in Thailand, I note that wâa is both frequent in conversation as a secondary verb and is highly productive, that is, occurring after many other verbs.

The status of Vietnamese rặ̀ng is not agreed upon. Thompson classifies it as a particle with the meaning 'to the effect that, as follows, saying' and 'which is used in modern prose to introduce direct or indirect quotations and other similar elements. Earlier literary usage suggests that it was originally a verb meaning something like "to say (that), speak as follows."' (Thompson, 1965b, p. 272). (V-1) shows rặ̀ng introducing a direct quotation. Nguyen-Dinh-Hoa labels it a verb meaning 'to say as follows, to say that' and states that it only introduces indirect quotations (Nguyen-Dinh-Hoa, 1966b, p. 262). (V-2) and (V-3) are corresponding indirect and direct quotations in this view. (V-4) and (V-5) show examples of other verbs which may precede rặ̀ng.

Superficially, Indonesian bahwa fulfills the function of introducing indirect quotations, as in (I-3), and synchronically it has no verbal attributes. Its history is interesting in that Lewis claims that it comes from a Sanskrit word meaning 'existence' and that 'the real meaning of bahawa is: "the facts are thus" or "the truth is this". He also claims that bahwa can introduce both direct and indirect quotations, but no examples of the former are given, unless Lewis is referring to (I-1), in which bahwa is the beginning of the direct quotation. (Lewis, p. 231). Another difference between Indonesian and the other languages discussed is that while a verb of speaking precedes a direct or indirect quotation, (I-2), (I-3), (I-5), the

verb is replaced by a noun, (I-4), if the direct quotation comes first.

Functionally, quotative verbs and particles present no difficulties. They clearly set off direct quotations, indirect quotations, and other subordinate elements of a sentence. Grammatically, the problem of distinguishing verbs from particles is made difficult by the apparently transitional state of the quotative verbs. Burmese, Cambodian, Thai, and Vietnamese all seem to have chosen particular verbs of saying which have become less verb-like in the function of marking subordinate elements. Burmese, in addition, has quotative particles without any verbal attributes. Indonesian followed a different historical process to arrive at a similar surface structure. Since bahwa is not a verb, the Indonesian structures are actually outside the scope the verb concatenation, but are included for a more complete treatment of quotative constructions. Vietnamese rằng, despite Nguyen-Dinh-Hoa's classification, functions as a conjunction and subordinate element marker. I have found no data showing it to be a verb. Hence, it can be included in verb series only if we allow historical considerations to play a role in grammatical analysis. Thus, we have two types of transition: diachronic from verb to particle, and synchronic from verb to particle. The data of this section show that semantics interacts with grammatical function. Wherever we draw the line between verb and particle, the quotative element is subordinate to

any verb of saying, thinking, reading, etc. which precedes it, or in the case of Burmese, follows it.

6.6.9 Benefactive and Causative Constructions. The basic cross-linguistic pattern for benefactive and causative constructions was introduced in 6.2.3 and 6.3.4. There it was shown that verbs meaning 'give' in Burmese, Cambodian, Thai, and Vietnamese can indicate the beneficiary of an action when following another verb, and they can indicate a causative relationship in Cambodian, Thai, and Vietnamese. In this section I will present more data to show that the situation is somewhat more complicated and that different semantic extensions can lead to similar grammatical functions and syntactic structures.

Figure 6.6.9a Benefactive and Causative Constructions

- (B-1) ta yau' pi: ta yau' hko pei: de
 one - person - finish - one - person - call -
 give - actual mode
 'He called and paid one man after another.'
 (Stewart, p. 27)
- (B-2) di maun:galei: ha hou hkalou' ma te' sei nain bu:
 la:
 this - little lever - subject marker - that - knob -
 not - rise - cause - be able - negative particle -
 question particle
 'Can't this little lever make that knob come up?'

- (B-3) cun-do gou nau'-hsoun pyo: zei jin de htin de
 I - object marker - last - speak - cause - want -
 actual mode - think - actual mode

'(I) think (they) want me to speak last.'

(Okell, 1969, p. 403)

- (B-4) qien:ji hcu' hcin yin huc' pa zei bo.
 shirt - take off - want - if - take off -
 politeness particle - let - of course
 'If (he) wants to take off (his) shirt let (him) do
 so by all means.' (Okell, 1969, p. 403)

- (B-5) thwa: ba zei
 go - politeness particle - let
 'Let him (them) go.' (Cornyn & Roop, p. 377)

- (C-1) hael-tik twəə qaoy kñom kliən nah
 swim - make, do - give - I - hungry - very
 'Swimming (to swim) makes me very hungry.'
 (Huffman, 1970a, p. 208)

- (C-2) qañ mìn qaoy qaen̄ daə-leen̄
 I - not - give - you - walk
 'I don't let you go for walks.'

(C-3) kñom khəm twəə-kaa gaoy qəwpuk kñom sapbaay-cət
 I - try hard - work - give - father - I - pleased
 'I am working hard so that my father will be
 pleased.' (Jacob, p. 141)

(I-1) Ia berbuat rumah
 he - make - house
 'He's building a house.'

(I-2) Ia membuat anaknya takut
 he - make - child+his - be afraid
 'He frightened his son.'
 (Echols & Shadily, 1963, p. 63)

(I-3) Ia memberi hadiah
 he - give - prize, gift, reward
 'He gave a gift.' or 'He gave a reward.'

(I-4) Ia memberi dia lari
 he - give - he - run, flee, escape
 'He let him escape.'
 (Echols & Shadily, 1963, p. 53)

(I-5) Beritahu kepadanya
give+know - for+him
 'Tell him.'

(I-6) Beri dia tahu

give - he - know

'Tell him.'

(I-7) Beritahu dia

give+know - he

'Tell him.' (Lewis, p. 80)

(T-1) khố³ hây phỏm yuəm sàk khâu, đây mây khrát

request - give - I - borrow, lend - as little as -
pair - able - question particle - politeness
particle

'Can you lend (let me borrow) a pair?'

(Haas & Subhanka, p. 230)

(T-2) yàak ca hây kháw tət phỏm lé' sà' phỏm hây

want - will - give - they - cut - hair - I - and -
wash - hair - give

'I want to get a haircut and a shampoo.' or, more
literally, '(I) want to have them cut and shampoo
(my) hair for (me).' (Haas & Subhanka, p. 232)

- (T-3) nŏkcaak nán, khláun lúuk too too tham hây phǎm
tòkcaay sǎmǎ
besides - that - wave - classifier - big - big -
make - give - I - frightened - always
'Besides, (those) big waves scare me.' or more
literally, 'cause me to be frightened.'
(Haas & Subhanka, p. 340)

- (T-4) yàa tham chaam tǝk
don't - make - dish - be broken
'Don't break the dishes!'
(Haas & Subhanka, p. 518)

- (T-5) karunaa tham hây phǎm nǝy
please - do - give - I - a little
'Please do it for me.' (Intrakomhaeng, p. 64)

- (T-6) tham hây khít pay wáa
make - give - think - go - say
'to make one think that'
(Haas, 1964, p. 237)

- (V-1) Cho chúng tôi xem thực-đơn.
give - we - see - menu
'Show us the menu.' (Vuong-Gia-Thuy, p. 71)

- (V-2) Cho phép tôi chụp hình ông để làm kỷ-niệm.
give - permission - I - take pictures - picture -
 you - in order to - make - souvenir
 'Allow me to take a snapshot of you for a
 souvenir.' (Vuong-Gia-Thuy, p. 76)
- (V-3) Ông có bàn trống cho bốn người không?
 you - have - table - unoccupied - give - four -
 person - question particle
 'Do you have a vacant table for four persons?'
 (Vuong-Gia-Thuy, p. 71)
- (V-4) Tôi làm cho con mèo đau.
 I - do - give - classifier for animals - cat - hurt
 'I hurt the cat (on purpose).'
- (Thompson, 1965b, p. 232)
- (V-5) hét to làm ai+cũng sợ
 yell - large, much - do, make - everyone -
 be afraid
 'yelled so loudly as to scare everyone'
 (Nguyen-Dinh-Hoa, 1979, p. 118)
- (V-6) Đê xe^đđạp^đ đây.
leave - bicycle - here
 'Leave your bicycle here.'
 (Nguyen-Dinh-Hoa, 1966a, p. 129)

(V-7) Ông Hai đ³ể (cho) c³ỏ lái xe-hỏi.

Mr. - Hai - let - (let) - she - drive - car

'Mr. Hai let her drive the car.'

(V-8) Ông Hai đ¹ể cho c³ỏ thức khuya.

Mr. - Hai - let - let - she - to be awake - be

late at night

'Mr. Hai did let her stay up late.'

(Vuong-Gia-Thuy, p. 108)

(V-9) Chị l¹àm gì đ¹ấy?

elder sister - do - what - question particle

'What are you doing?'

(Nguyen-Dinh-Hoa, 1979, p. 118)

Complicated though the details may be, the general pattern of benefactive and causative constructions is clear. Words with the primary verb meanings 'send', 'make/do', 'give', or 'leave' express more abstract relationships in verb series. As with the constructions of previous sections, the semantic extensions from concrete actions to abstract relationships are not surprising.

While I am arguing that certain semantic/syntactic patterns are so general that they occur in genetically unrelated or distantly related languages, I will first point out some counterexamples to show that similar surface structures do not necessarily entail similar underlying

structures. In 6.2.3, (B-2) exhibits the Burmese benefactive pattern: verb - pei: 'give', which can be interpreted as 'to verb for...'. However, in Figure 6.6.9a, (B-1) has the same superficial structure: hko 'call - pei: 'give', yet here the interpretation is 'called and paid'; i.e. pei: is concrete rather than abstract. Presumably, contextual information of some sort is required to choose the appropriate analysis. Likewise, we will see that in Thai, the combination tham hây 'make - give' is usually interpreted as 'cause', whereas it has the interpretation 'do for' in (T-5). Here, the context of the rest of the sentence provides sufficient information to assign the correct analysis.

Before going into detailed remarks, I will summarize in Figure 6.6.9b the meanings in verb series of various verbs which enter into benefactive and causative constructions.

Figure 6.6.9b Verb Meanings: Primary Verbs vs. Concatenated Verbs

<u>primary</u>	send	give	make	make+give	leave
<u>meaning</u>					

concatenated
meaning

(B)	cause	for
	let	

(C)	for	cause
	let	
	cause	

(I)	let	cause
	cause	

(T)	for		
	let		
	cause	cause	cause

(V)	for			
	let	cause	cause	let

In Burmese, sei and zei are the same word, with the initial consonant determined by phonological context. In

Figure 6.6.9a sei is translated as 'cause' or 'let', because it was thus given in the cited sentences. However, the individual word is defined as 'to send', with the note 'rarely used singly, in this sense' (Judson, 1953, p. 382) and as 'send, dispatch, command' with the note 'obsolescent' (Okell, 1969, pp. 403-406), while Cornyn & Roop divide its occurrences into auxiliary verb and secondary particle (Cornyn & Roop, pp. 376-377). Historically, we can see the process by which a word has lost or almost lost its status as a simple verb, while it has retained its extended status as an abstract auxiliary verb or particle. Synchronically, the grammatical range of sei in Burmese is indicated by the presence of following de 'actual mode' in (B-2) - (B-3) and the lack of that particle in (B-4) - (B-5).

The Cambodian and Thai patterns are almost identical, except that in Thai tham 'make, do' can have a causative function without hay 'give', as in (T-4), while Cambodian twəə 'make, do' evidently can have a causative function only in conjunction with gaoy 'give'. It was pointed out above that in (T-5) the combination tham hay 'make - give' means 'do for' rather than 'cause'. The causative interpretation requires a following action, and so the lack of such an action forces the interpretation of tham 'make, do' as the main action and of hay 'give' as an abstract benefactive marker.

Indonesian indicates causation through verbal affixes

in addition to the verb concatenation shown in Figure 6.6.9a. Since this verbal morphology is language-specific and does not involve verb concatenation, it is beyond the scope of this dissertation. The details of the verbal prefixes are irrelevant to our discussion except that their presence in (I-2) and (I-4) show that buat 'make' and beri 'give' are full verbs. On the other hand, the lack of verbal prefixes does not necessarily imply lack of full verb-hood. In Indonesian, both bual 'make' and beri 'give' can be causative, but they cannot appear in a single concatenation. (I-5) - (I-7) show the lack of a clear boundary between syntax and morphology. In the dictionary memberitahu is a compound verb meaning 'to report, inform' (Echols & Shadily, 1963, pp. 51-52). (I-5) contains the preposition kepada 'for' before the recipient of the knowledge, while (I-7) has no preposition. IN (I-6), the two elements of the verbal sequence are separated by the recipient of the knowledge, producing a pivotal structure. Informant work would be required to determine how abstract beri 'give' is in these sentences. At the most concrete level, we have the possible interpretation 'give (information) (to) him (so that) he (will) know (the information)'. More abstractly, the interpretation could be 'let him know'.

In Vietnamese, also, the relative abstraction of the interpretation of cho 'give' is not clear. In (V-1), a literal interpretation might be 'give (the menu) to us (so

that) we (can) see (the menu)'. More abstractly, cho can mean 'let'. In (V-2) cho is more concrete, because we have cho phép 'give permission'. (V-3) is ambiguous between the concrete interpretation 'Do you have a vacant table to give to four people?' and the benefactive translation given. In (V-7) either đê 'let' or cho 'let' can occur alone. In (V-8) the sequence đê cho adds emphasis (Vuong-Gia-Thuy, p. 108).

I claim that the difficulty in determining the level of abstraction in many of the examples is not actually a problem. Rather, it reflects the process by which concrete verbs acquire abstract, grammatical functions.

6.6.10 Summary & Additional Remarks. The categories of directional verbs, quotative verbs, benefactive verbs, and causative verbs are defined primarily in semantic terms, yet these categories were selected for analysis because of their syntactic importance and frequency. While there are other combinations of action verbs, the vast majority of the cases I have observed fall into the categories discussed. The overall pattern is that concrete action verbs become systematically abstract in verb concatenations. The semantic information contained in the individual verb, plus information about a limited number of word order patterns, is sufficient to provide a basis for analyzing a large number of action verb sequences. The counterexamples I have cited show that a simple mechanical analysis cannot be automatically applied to each general pattern. One must also consider contextual information, either in terms of the syntax of the sentence containing a specific pattern or of the surrounding discourse situation.

Temporal and purposive interpretations may be assigned to some sequences of action verbs, but not in an unambiguous, context-free way. Hence, the semantics of key action verbs was chosen as a more fruitful basis for analysis than temporal or purposive patterns.

I checked some of my conclusions informally with educated native speakers of Thai, and I found that their linguistic behavior agreed with my analyses, though it contradicted their conscious explanations. For example, I

asked one university English instructor if khâw maa (enter - come) 'come in' (Figure 6.6.6 (T-5)) was a correct Thai sentence and how it was used. She replied that it was correct and then volunteered the judgement tha maa was redundant and that the essential information was contained in khâw. An appropriate situation for this utterance would be for a person in a room to invite another person in. I then asked her what she would say if she were outside the room and were directing another person to enter. She replied, "khâw pay" (enter - go) 'go in'. Thus, maa 'come' is not redundant with respect to khâw 'enter' but with respect to the situational context, in which the orientation of speaker and listener is the salient item. Similar questions need to be asked for other directional verbs to determine the presence or absence of redundancy.

Another example bears on the question of how to distinguish verbs from particles. I asked a second university English instructor about the function of wâa 'say' in the sentence

kham wâa "book" plɛ̌ wâa laray khráp

word - say - book - translate - say - what - politeness
particle

'What does the word "book" mean?' (Figure 6.6.8, (T-3))

She first apologized that she would be a poor informant, because she was too heavily influenced by English. I asked

how she would translate the given sentence into English and she began with "the word saying 'book'". In my opinion, this construction is not standard English but is a literal translation from Thai. Whatever the grammatical function of wāa 'say', this translation illustrates the semantic and verbal attributes of the word wāa in the mind of at least one native speaker of Thai.

The category on non-directional action verbs which follow and modify other action verbs seems worthy of consideration, but I found too little data to reach any conclusions. I searched for secondary verb entries (see 5.5.11) among action verbs in the Thai-English Student's Dictionary (Haas, 1964), and some examples are listed in Figure 6.6.10a. Unfortunately, I was unable to find any sentences in which these verbs appeared with their secondary functions.

Figure 6.6.10a Secondary Action Verbs in Thai

<u>verb</u>	<u>primary meaning</u>	<u>secondary meaning</u>
(1) kranəm	to hit, strike, shoot repeatedly	repeatedly
(2) kriitkraay	1) to swing arms slowly, at- tempting to look gracious 2) shun work	ostentatiously
(3) klɔ̌mkɔ̌m	to mumble, speak indistinctly	1) incompletely (of chewing) 2) indistinctly (of speaking)
(4) kaphlòok kaphlèek	to limp	with a limp
(5) rin	to decant, pour out	slowly, little by little

These Thai examples raise the question of whether the manner adverbials (6.4) can be extended to include action verbs.

Other sequences of action verbs in Burmese are found in Okell's ordinary compound verbs (5.2.7). These sequences seem to be lexical compounds rather than syntactic phrases, since the meaning of each sequence is more than a simple concatenation of the meanings of the constituents.

Figure 6.6.10b Ordinary Compound Verbs in Burmese

- | | |
|-----------------------------------|---------------|
| (1) hse' thwe | 'be in touch' |
| connect + connect by thread, etc. | |
| (2) yaun: we | 'trade' |
| sell + buy | |
| (3) tai' tun: | 'urge' |
| dash against + push | |
| (4) qou' hcou' | 'govern' |
| cover + draw together, control | |

(Okell, 1969, pp. 25-26)

Without more data, and probably detailed work with native speakers, it is difficult to distinguish clearly between lexical compounds and syntactic phrases.

6.7 Adjectival Verb + Directional Verb. Adjectival verbs were discussed in 6.4, and directional verbs were treated in action verb sequences in 6.6. For certain directional verbs, the pattern: adjectival verb + directional verb has the meaning 'be more (less) adjectival verb'.

Figure 6.7 Adjectival Verb + Directional Verb

- (C-1) look rit-tae chiɿɿ laɿŋ
 he - increasingly - ill - ascend
 'He is becoming more and more ill.'
 (Jacob, p. 77)
- (C-2) mun-dəmbouŋ, kʰom krōŋ-tae cok pūh bəntəc
 before+in the beginning - I only - have a pain -
 stomach - - a little
 'At first, I only had a little pain in the stomach.'
- haɿy bəntōp mɔk, kəɬ cok pūh klaŋ laɿŋ
 then - next - come - then - have a pain - stomach -
strong - ascend
 'Then later, the pain in my stomach got worse
 (increasingly strong).'

(C-3) chap-chap laən!

quick - quick - ascend

'Hurry up! (increasingly fast!).'

(Huffman, 1970a, p. 300)

(T-1) phỏm lưan khên mầak, tồ sủ sủakaankee mầy

I - fat - ascend - much - must - buy - suit - new

'I'm getting fat (and I) have to buy a new suit.'

(Haas & Subhanka, p. 280)

(T-2) dii khên

good - ascend

'to get better'

(T-3) yen lọ

cool - descend

'to get cool' or 'to get cooler' or

'to cool off' or 'to cool down'

(T-4) chaa lọ

slow - descend

'to get slower' or 'to slow down'

(Haas & Subhanka, p. 288)

(V-1) béo/mập ra

fat - fat - exit

'to get fat' (either of the first two words may occur singly, or they may both occur)

(V-2) đẹp ra

pretty - exit

'to become prettier'

(V-3) trắng ra

white - exit

'(of complexion) to become lighter'

(Nguyen-Dinh-Hoa, 1979, p. 161)

This pattern is not extensive, and I could find no examples in Burmese or Indonesian, which have other means of expressing the idea of a qualify or state increasing or decreasing. What is significant is that there is a cross-linguistic pattern. The similarity between Cambodian and Thai is greater than that between either one with Vietnamese, in that the Vietnamese directional verbs lên 'ascend' and xuống 'descend' do not participate in this construction.

Copulas. Copulas tend to be in a class by themselves in every language which contains them. A copula may be defined as a word which equates or identifies two constituents of a sentence. Among the languages studied here, Burmese has no copula, and while Indonesian does have copulas, they do not enter into verb concatenations. In Cambodian, Thai, and Vietnamese, copulas retain their equative function when co-occurring with other verbs, but their own status as verbs may be lessened. Copulas are almost always, as far as I have seen, classified as verbs, possibly because they are verbs in European languages, But Southeast Asian copulas are not always directly negatable.

Figure 6.8a Copulas

(copulas and related items are underlined)

(C-1) qəwpuk kñom ciə nəəq-twəə-srae
 father - I be - person+work+field
 'My father is a farmer.'

(C-2) kñom mɛn dəŋ ciə prakət tee
 I - not - know - be - be sure - negative particle
 'I don't know for sure (being sure).'

- (C-3) kñom mɛn dɛŋ ciə daŋ kənlaeŋ naa tee
 I - not - know - be - put - place - which - negative
 particle
 'I don't know where (we'll) put (them). (I don't
 know that (we'll) put (them) what place.)'
- (C-4) haet qwəy baan ciə kmien kambət nɛw lætok
 reason - what - have - be - there is not - knife -
 be situated - on - table
 'Why are there no knives on the table? (What reason
 is it that there are no knives on the table?)'
 (Huffman, 1970a, p. 221)
- (C-5) nuh kii ciə siəwphɛw
 that - is, being, as follows - be - book
 'That's a book.' (Huffman, 1970a, p. 30)
- (C-6) kñom mien kmae mənɛŋq ciə kruu
 I - have - Khmer - one+person - be - teacher
 'I have a Cambodian as my teacher.'
- (C-7) kñom mɛn dɛŋ ciə mien pliəŋ mɔɔk craən ponnɔh tee
 I - not - know - be - exist - rain - come - much -
 like that - negative particle
 'I didn't know heavy rain like that had fallen!'
 (Jacob, p. 140)

(C-8) kōət qah kamləŋ!

he - consume - strength

'He's tired!

koət mɛn ciə qah kamləŋ tee!

he - not - be - consume - strength - negative
particle

'He doesn't seem tired to me!' (Jacob, p. 141)

(C-9) mdaay nəŋq ciə riɛ tee

mother - you - be well - or - question particle

'Is your mother well?' (Jacob, p. 140)

(C-10) look sok+səpbaay ciə tee

you - be well and happy - be well - question
particle

'How are you? (Are you well?)'

(C-11) kñom mɛn-səw ciə tee

I - not so very - be well - negative particle

'I'm not so well.' (Huffman, 1970a, p. 221)

(T-1) kháw pen khruu

he - be - teacher

'He is a teacher.' (Haas, 1964, p. 323)

- (T-2) kamlaŋ sɔ̌ɔŋ khɔ̌ɔŋ sɔ̌ɔŋ khau si
 mathematical power - two - of - two - be - four
 'The square of two is four.' (Haas, 1964, p. 93)
- (T-3) kháw hán núa pen chín lék lék
 they - cut up (into pieces) - be - piece -
 small - small
 'They cut the meat into small pieces.' (lit., 'to
 become small pieces')
- (T-4) kháw tàt phóm pen ʔaachíp
 'He cuts hair for a living.' (lit., 'to be a
 living')
- (T-5) kháw rápprathaán khay tòm káp khànǎmpaŋ pen
 ʔaahǎan cháaw
 he - eat - egg - boil - with - bread - be -
 food - morning
 'He ate boiled eggs and bread for breakfast.' or
 'as (his) breakfast' (lit., 'to be (his)
 breakfast') (Haas & Subhanka, p. 261)
- (T-6) mây pen ray
 not - be - what
 'It doesn't matter.' or 'That's all right.' or
 'Not at all.' or 'It's nothing.'
 (Haas, 1964, p. 327)

- (T-7) nĩi mây chây dĩa³ pen paaakkaa
 this - not - be so - pencil - be - pen
 'This is not a pencil, it's a pen.'

(Haas, 1964, p. 323)

- (T-8) waaaynaam mây pen
 swim - not - able to, know how to
 'can't swim' (Haas, 1964, p. 399)

- (V-1) Tôi là bạn Ông Nam.
 I - be - friend - Mr. - Nam
 'I'm Mr. Nam's friend.'
 (Nguyen-Dinh-Hoa, 1966a, p. 49)

- (V-2) Tôi không phải là người nghèo
 I - not - correct - be - person - poor
 'I'm not a poor person.' (Thompson, 1965b, p. 237)

- (V-3) Ông lái xe-hơi như vậy là (rất) tốt.
 you - drive - car - like - that - be - (very) -
 good
 'Your driving the car like that is (very) good.'
 (Vuong-Gia-Thuy, p. 105)

(V-4) Chỉ còn một tuần-lẽ nữa là tầu đi.

only - there is left - one - week - further -
be - boat - go

'It's just one more week until the boat leaves.'

(V-5) Điều mà các ông chú-trọng đến nhất là đem theo
 máy ảnh và máy quay phim đi.

matter - which - plural marker - he - pay attention
 to - and - machine - turn - film - go

'The matter they paid the most attention to was
 taking along a (regular) camera and moving-picture
 camera.'

(V-6) Tôi hút thuốc là tôi làm giàu cho hãng thuốc.

I - smoke - tobacco - be - I - make - rich -
 give - company - tobacco

'I smoke (and the result is) I make the tobacco
 companies rich. (sarcastic)'

(Thompson, 1965b, p. 236)

(V-7) Cũng như các sinh-viên khác, hai ông được giáo-sư
cho tên Việt là Lê Vy và Trần Dong.

also - like - plural marker - student - other -
two - he - get - teacher - give - name -
Vietnamese - be - Le Vy - and - Tran Dong

'Just like the other students the two of them had
been given Vietnamese names by the teacher - Le Vy
and Tran Dong.'

(V-8) Vị thần ấy gọi là Ông Tơ-hồng

classifier - spirit - that - call - be -
Mr. - thread - pink

'That benevolent spirit is called Mr. Pink-Thread.'

(V-9) Con chó này tôi thích lắm, vì là tôi dạy nó công-phu
lắm.

classifier - dog - this - I - like - much -
because - be - instruct - it - toil - much

'This dog I like a lot because I spent a lot of
effort training him.'

(V-10) Hôm nay đã là mồng mười tết.

day - this - past tense marker - be - day - ten -
new Year

'Today is already the tenth day of the New Year.'

(Thompson, 1965b, p. 237)

(V-11) Ông nói rằng (là) ông không muốn đi Huế.

he - say - that - (that) - he - not - want - go -
Hue

'He said that he does not want to go to Hue.'

(Vuong-Gia-Thuy, p. 120)

In most of the examples given in Figure 6.8, the different translations of the copulas in English reflect facts of English grammar rather than differences in meaning among the occurrences of copulas in Cambodian, Thai, and Vietnamese. Thompson points out that the traditional treatment of Vietnamese là as the verb 'to be' is "somewhat misleading" and calls it an identificational marker instead (Thompson, 1965b, pp. 236-237). Vuong-Gia-Thuy claims that the là of (V-11) is different from the là which is the copula verb 'to be equal' (Vuong-Gia-Thuy, p. 120). In Cambodian, kii is defined by Huffman as a copulative particle (Huffman, 1970a, p. 411) and by Jacob as a verb (Jacob, p. 141) and as a marker (Jacob, p. 294). Huffman defines ci as an adjectival verb 'to be well', a copulative verb 'to be', and a conjunction 'that', depending on the context (Huffman, 1970a, p. 407). Jacob defines cia as a verb 'to be' or 'to be well', as a pre-nominal particle 'as, being' or 'in a ___ manner', and as a marker 'that' (Jacob, p. 140). In Thai, pen is defined as a verb 'to be, exist, become (something)', 'to be live, alive, living', as a secondary verb 'as, for, into', 'able to, knows how to'

(Haas, 1964, p. 323). In Thai, khau is defined as a verb 'to be (as follows, as defined); namely' (Haas, 1964, p. 93).

In (C1), (C-5), (T-1), (T-2), (V-1), the underlined copulas equate two noun phrases and function as predicates in traditional grammar, with the complication of two copulas occurring in a sequence in (C-5).

By the negatability criterion, the verbal status of copulas is unclear. Cambodian cio can be directly negated, as in (C-8), but in this case it "expresses a personal opinion, differing from that of a previous speaker" (Jacob, p. 141). Thai pen is directly negated in the idiomatic expression of (T-6), but generally the negation of an identificational predicate involves the expression mây chây (not - be so) 'it is not the case that' as in (T-7). (T-8) shows another instance of the direct negation of pen, but here pen follows another verb and has the meaning 'able to, know how to'. In Vietnamese, là can only be negated by being preceded by the expression không phải (not - correct) 'it is not correct that', as in (V-2). I found no examples relating Cambodian kii or Thai khau with negation. The past tense marker đã, in (V-10), gives supporting evidence for the verb-hood of Vietnamese là.

By definition, the copulas of Cambodian, Thai, and Vietnamese share the same basic meaning. As was pointed out above, Thai pen has the additional meaning 'able to, know how to', which is signaled by the position of pen

following an action verb. Cambodian ciə is extended semantically in two ways. First, there is the subjective dimension shown in (C-8). A rather different meaning 'be well' is illustrated in (C-9) - (C-11). Here, the identificational function is ruled out by the lack of two items to be identified. Vietnamese là has no additional meanings.

If the copulas are considered as verbs, then (C-2) - (C-4), (C-6), (C-7), (T-3) - (T-5), (V-3) - (V-11) all contain verb concatenations of various sorts, in each of which the copula has an equative or identificational function.

The varying treatments of Southeast Asian copulas in the literature result from varying theoretical perspectives. If the nature of the constituents immediately surrounding the copula is taken as the defining criterion, then the various occurrences of copulas can be divided into verbs and particles of various sorts. I believe that such a division ignores the underlying unity of meaning and function. However, to maintain the underlying simplicity sometimes requires setting up abstract, though straight forward, underlying forms. In Figure 6.8b, I will not attempt to justify a particular abstract form; I will merely indicate what items are being equated. The following structures are derived from the cited items of Figure 6.8a.

Figure 6.8b Abstract Structures with Copulas

('=' represents the function of the copula, items in parentheses (**) are postulated abstract elements, the colon ':' precedes subordinated elements)

- (C-2) I don't: know = be sure
or I don't know: (it) = (a) sure (fact)
- (C-3) I don't know: (it) = put it in what place
- (C-4) there is what reason for: (it) = there are no
knives on the
table
- (C-6) I have: one Cambodian = teacher
- (C-7) I don't know: (it) = there is much rain like that
- (T-3) they cut: meat = small pieces
- (T-4) he: cuts hair = living
- (T-5) he eats: boiled eggs and bread = breakfast
- (V-3) you drive the car like that = (a) good (thing)

(V-4) only one more week = (the time) the boat leaves
 or there is left: one more week = (the time) the
 boat leaves

(V-5) the matter they paid = taking along a regular
 most attention to camera and a movie camera

(V-6) I smoke = I make tobacco companies rich

(V-7) Like the other students both were given by the
 teacher: Vietnamese names = Le Vy and Tran Dong

(V-8) that spirit is called: (name) = Mr. Pink-Thread

(V-9) this dog I like much because :
 (the fact) = I trained it with much toil

(V-11) He said: (it) = he does not want to go to Hue

For a complete grammatical description of each language, it is necessary to specify what items can be joined by copulas. From Figure 6.8b, we can see that in terms of verb concatenation, the general pattern is:

main verb: object + copula + object

There is some overlap in function with the quotative verbs

and particles of 6.6.8. In particular, in (V-8), the sequence gọi là (call - be) 'is called' exhibits the surface structure found with quotative verbs and particles. Indeed, in (V-11), the quotative verb rằng and the copula là are interchangeable after the verb nói 'say'. Hence, from different semantic starting points, we may arrive at the same grammatical/functional result. Both aspects are important, and I have chosen a semantic emphasis for my descriptive organization because it seems more revealing to me in the area of verb concatenation.

6.9 Complex Concatenations.

6.9.1 Introduction. Up till now, we have considered various sorts of two-verb concatenations, sometimes with other words intervening. In fact, many of the examples cited contained more than two verbs, and my analyses implied that in many cases, but not all, the relationship between two verbs in a sentence could be considered in isolation from other verbs in that sentence. I will now define a complex concatenation to be any verb concatenation involving more than two verbs. As before, the basic problem will be to determine what semantic and syntactic principles govern the relationships among the units of complex concatenations. In particular, if there is any subordination, how do we know what is subordinate to what?

The existence of three or more verbs in a sentence allows the possibility of subgrouping in various ways. My objective is to establish enough elementary concatenations, such as those described in previous sections, so that any complex concatenation can be analyzed as a combination of the more elementary concatenations.

6.9.2 Method of Analysis. As in previous sections, my data consist of sentences with word-by-word and free translations. For each sentence, I show what syntactic and semantic information is available to explicate the function and relationship of the verbs. To a large extent, I need only assemble pieces from various preceding sections. The emphasis is on the search for cross-linguistic patterns.

6.9.3 Analyses of Complex Concatenations with Three Verbs.

(B-1) thwa: ci: jin dha la:

go - look - want - actual mode - question
particle

'Do you want to go take a look?'

(Cornyn & Roop, p. 216)

On the basis of intrinsic lexical semantics, thwa: 'go' is a directional verb and ci: 'look' is an action verb. jin 'want' is a modal verb because it modifies the preceding action verbs without presupposing or asserting the denotated actions. I claim that the first two verbs are in the scope of the third. Thus, the first two verbs follow the analysis of 6.6.6 ("Come and Go"), and then the modal verb modifies the preceding sequence. Since a free translation into English may obscure the grammatical relationships in the source language, I have examined many examples to guide my judgements of scope. The ambiguities of previous analyses remain.

(B-2) lai' pya. hnain ba de

accompany - show - able - politeness particle -
actual mode

'I can go along and show it.'

(Cornyn & Roop, p. 216)

Repeating the arguments for (B-1) , we have the pattern:

(directional verb + action verb) + modal verb

- (B-3) nou. mahou' qasei-gan tayau' ka. hyin. qatwe'
hyo pei: hnain de
 otherwise - servant - one+classifier - agent
 marker - you - on account of - wash - give -
able - actual mode
 'Or else one of the servants can wash them for
 you.' (Cornyn & Roop, p. 279)

The verb concatenation is:

(action verb + benefactive verb) + modal verb

The benefactive classification of pei: 'give' is reinforced by the phrase hyin. qatwe' (you - on account of) 'on account of you'.

- (C-1) kñom plɛc yɔk chat mɔk
 I - forget - take - umbrella - come
 'I forgot to bring an umbrella.'
 (Huffman, 1970a, p. 115)
 modal verb + (action verb + directional verb)

This sentence raises several issues. The action verb and directional verb are separated by chat 'umbrella'. I include these two verbs in one concatenation, because the directional verb modifies the action verb by providing an orientation for the action. Is there more than one grammatical subject in this sentence? If not, then kñom 'I' is the subject of all three verbs, which justifies treating the sequence as one concatenation. Superficially, we have a pivotal construction, in which chat 'umbrella' is the object of yock 'take' and the subject of mock 'come'. I claim that this relationship is also intimate enough to justify a single concatenation. In 6.6.6 and 6.6.7, we have seen that directional verbs can be interpreted at various levels of abstraction, and the data I have do not permit such discrimination. Next, why is plac 'forget' a modal verb? The crucial defining criterion of a modal verb is that it comments on the action of another verb without asserting or presupposing that action. In fact, forget implies that the action does not take place. It may seem to be a subtle point, but this case is allowed by the definition. It is important, because the main distinction between modal verbs and manner adverbials is that the latter do presuppose the action of a verb, at least within the scope of the sequence: action verb + manner adverbial.

(C-2) cuay hoc sabuu haay-nɛŋ kənsasen-cuut-kluən gaoy
 kʰom phaən

help - hand - soap - and - towel - give - I -
 please

'Please hand me the soap and a towel.'

(Huffman, 1970a, p. 158)

modal + (action + benefactive)

(For brevity, I will now omit the word verb in my summary descriptions of verb concatenations.)

We will see below that cuay 'help' belongs to a cross-linguistic class which might be termed requestive verbs. Other words in various languages have the primary meanings 'help', 'request', or 'try'. In verb concatenations, the meaning is extended and is usually translated as 'please' in English. The requestive verbs satisfy the criteria for modal verbs and so form a sub-class of the latter. To highlight the more general pattern, I will continue to label requestive verbs as modal verbs.

(C-3) look gaoy kee yɔɔk qaywan tɛw

Mr. - give - one, they - take - things, luggage -
go

'Mr. ____ is having his luggage taken away.'

(Jacob, p. 141)

causative + (action + directional)

Superficially, there is a double pivotal construction, and a causative construction will usually involve a change of subject.

(I-1) Hasnah, saya mau pergi tidur sekarang, karena saya sudah mengantuk.

Hasnah - I - want - go - sleep - now - because -

I - already - sleepy

'Hasnah, I want to go to bed now because I'm sleepy.' (Johns, pp. 245, 246)

modal + (directional + action)

I exclude mengantuk 'be sleepy' from the verb concatenation, because it is part of a separate clause and has no direct relationship with any of the other verbs.

(I-2) Dia baru belajar baca.

he - new - learn - read

'He is only just learning to read.'

(Lewis, p. 97)

manner adverbial + (modal + action)

Belajar 'learn' is semantically an action verb, but it is classified here as a modal verb because the action of reading is not necessarily accomplished. The scope of baru 'new' is difficult to determine, because when this word functions as an adverb it has much freedom of movement with

an indeterminate effect on its scope. In the following, baru is in a different position, but has the same meaning.

Baru saja saya tahu di mana dia tinggal.

new - only - I - know - at - where - he - live

'I have only just learned where he lives.' (Lewis, p. 97)

(I-3) Coba (lah) duduk baik-baik!

try+emphatic particle - sit - good+good

'Do sit properly!' (Johns, p. 236)

modal + (action + manner adverbial)

Coba 'try' is another example of a requestive verb.

(T-1) chæn khâw maa sí? khráp

invite - enter - come - hortatory particle -
politeness particle

'Come on in!' (Haas & Subhanka, p. 181)

modal + (directional + directional)

chæn is a requestive verb.

(T-2) phom ca pay pəət pratuu hây

I - will - go - open - door - give

'I'll go open the door for (you).'

(Haas & Subhanka, p. 200)

direction + action + benefactive

Here, there is insufficient evidence to choose which two verbs can be grouped into a sub-unit. It would be useful to check if differences in actual utterances, say a pause between pay 'go' and pàet 'open' or between pratuu 'door' and hây 'give', would result in differing interpretations by native speakers. As in earlier discussions of directional verbs, we still have the ambiguity of temporal and purposive interpretations. I believe that such ambiguities are difficult to resolve because most conversational contexts do not require a choice of interpretation. Hence, the above schema for (T-2) exhibits the essential verbal relationships, when combined with the previous generalizations about directional verbs.

- (T-3) khun phûut phaasǎa thay dây đii thiidiaw
 you - speak - language - Thai - able - good - very
 'You speak Thai very well.'

(Haas & Subhanka, p. 107)

(action + modal) + manner adverbial

dây 'able' is a modal verb because being able to do the action of speaking does not assert or presuppose that the action is taking place. The position of the modal verb suggests that it is modifying the entire phrase phûut phaasǎa thay 'speak Thai'. Thiidiaw 'very' modifies đii 'good', and that unit modifies the preceding two-verb concatenation.

(V-1) Tôi không biết kêu món gì ăn cả

I - not - know - order - dish - what - eat - at all

'I don't know what dish to order (to eat).'

(Vuong-Gia-Thuy, p. 71)

modal + (action + action)

The situational context implies a purposive relation between the two action verbs. This is not a pivotal construction, because món 'dish' is the object of both kêu 'order' and ăn 'eat'.

(V-2) Mời ông vào đúng cơm với chúng+tôi.

invite - you - enter - eat - rice - with - we

'Please come in and have dinner with us.'

(Vuong-Gia-Thuy, p. 73)

modal + (directional + action)

Mời 'invite' is a requestive verb.

(V-3) Tôi để quên cây dù ở nhà Bưu-Điện.

I - leave - forget - classifier - umbrella -

be located - classifier - post office

'I forgot (left) (an) umbrella at the post office.'

(Vuong-Gia-Thuy, p. 97)

(action + action) + directional

I was unable to find the combination để quên 'leave -

forget' in any dictionary, so I have no direct evidence that it is a lexical compound. The situation suggests that quên 'forget' modifies đé 'leave', in which case we have an action verb functioning as a manner adverbial. Another possible analysis is that the two actions occur simultaneously and neither verb is subordinate to the other. I labeled ở 'be located' as a directional verb. According to the definition of directional verb, this would have to be a limiting case, in that simply being located involves no motion or direction. However, the verb ở 'be located' does provide an orientation for the action of the action verbs, which is why I included it among the directional verbs. I could set up an additional class of locative verbs, which could either be included in an extended class of directional verbs or be a related but distinct class. The function of such locative verbs is usually debated under the heading of co-verbs. As with the copulas, the semantic function is clear, and the main issue is whether such words are less verb-like in the presence of other verbs.

6.9.4 Analysis of Complex Concatenations and Sentences with More Than Three Verbs. Most of the isolated examples of verb concatenation which I have observed consist of two-verb or three-verb sequences. In extended discourse, longer sequences may occur. In particular, I have observed that in written Thai, e.g. a linguistics text, it is often difficult to divide paragraphs into sentences, and complicated structures involving many verbs are common. I conjecture that a serious study of such discourse would show that the principles being developed in this dissertation would still apply, with verbs being grouped into larger units, which in turn are related to each other according to the same patterns.

As the number of verbs in a sentence increases, the problems of assigning scope of modification and deciding how all the verbs are related to each other become more difficult. The fact that long verb sequences commonly occur indicates that they are interpretable, and so analyses should be possible.

In various cases, I have pointed out that it was necessary to look beyond the immediate sequence of verbs in order to arrive at an analysis. The relevant information may be found in other parts of the same sentence, in nearby sentences in a discourse, or in the situational context. Since I am allowing discontinuous verb concatenations, that is, concatenations in which the constituent verbs are separated by other other words, I must set up criteria for the

limits of a single verb concatenation. If verbs are separated by unambiguous clause or sentence boundaries, then they do not belong to a single concatenation. Such boundaries may be indicated by pauses, or, in written form, by punctuation. Each language also has its own repertoire of grammatical markers, such as the quotative verbs and particles of 6.6.8, which set off various sorts of phrases or other subordinate units from the rest of the sentence. One of the motivating problems for this study was to find what semantic and syntactic information was available to enable verb strings to be interpreted in the absence of overt grammatical markers. Thus, grammatical markers may be useful boundaries for verb concatenations. To some extent, this issue goes into grammatical areas beyond the scope of this study, but some examples will be included.

To further illustrate the range of problems and analytic techniques involving verb concatenation, I have selected one sentence in each of the five languages studied, each sentence containing more than three verbs.

(B-1) nou. ma hou' yin, di. pyin hsain ga. qahsin mya:
 gou le: yu pya. zei hnain ba de
 that - not - be correct, so - if - , - this -
 outside - shop - from - pattern - be many -
 object marker - also - bring, take - show -
send, cause - able - politeness particle -
 actual mode
 'Or I can have some patterns brought from another
 shop to show you.'

(Cornyn & Roop, p. 373)

((action + action) + causative) + modal

In (B-1), I have underlined six words as potential members of a verb concatenation, but the above schema shows only four verbs in the concatenation. The first underlined word hou' 'be correct, be so' is clearly a verb, because it is negated. It is separated from the other verbs in the sentence by the subordinating particle yin 'if', and in written form by Burmese punctuation roughly corresponding to a comma. I underlined mya: 'be many', because it does occur as a verb, but in (B-1) it has actually been grammaticalized into a plural marker. The nominal nature of the unit qahsin mya: 'pattern ~ be many' is shown by the object marker gou, which only follows noun phrases. The particle le; 'also' is an additional separation between the following verb concatenation and the preceding parts of the sentence. The translation indicates a purposive relation

between the two action verbs, and the intrinsic nature of the actions indicates a temporal sequence of the actions, with the temporal order corresponding to the order of occurrence. The double embedding is partly motivated by the translation and partly by the general verb final, Subject + Object + Verb ordering of Burmese. Thus, the two action verbs form one unit by virtue of the above mentioned relationships. This unit becomes the object of the causative verb, and the resulting sequence becomes in turn the object of the modal verb.

(C-1) kñom kít thaa twəə kruu-péet lqaa ciəŋ

I - think - say - work as - doctor - good - more

'I think it would be better to be a doctor.'

(Huffman, 1970a, p. 100)

action + (quotative + (action + modal))

The subordinate structure of this complex concatenation is indicated by the quotative verb thaa 'say'. In the subordinate clause, lqaa 'good' is classified as a modal verb, more precisely a modal adjective, because it comments on the action twəə kruu-péet 'work as a doctor', without asserting or presupposing that the action takes place. In fact, the given translation of the sentence implies that the action is at most a possible alternative.

Another analysis is that twəə kruu-péet 'work as a doctor' can be considered as a nominal element, in which

case lqaa 'good' is simply an adjectival verb. More data is needed to resolve this issue.

(I-1) Dari waktu anak-anak mulai bangun sampai mereka berangkat ke sekolah, memang ramai rumah Nyonna Harun.

from - time - child+child - begin - wake up,
get up - reach - they - leave - to - school - , -
 certainly - noisy, bustling, lively - house -
 Mrs. - Harun

'From the time the children begin to get up until they leave for school, Mrs Harun's house is full of hustle and bustle.' (Johns, pp. 169-170)

(modal + action) / (directional + action) / adjectival

I classify mulai 'begin' as a modal verb, because to begin an action does not assert or presuppose that the action is carried out. Sampai 'reach' is a directional verb which here has an abstract temporal interpretation. It is in fortuitous concatenation (4.5.2) with bangun 'get up'. To see this, the entire sentence must be examined. First, the "object" of sampai 'reach' is superficially mereka berangkat ke sekolah 'they leave to school', but we could postulate an underlying waktu 'time' to parallel the initial structure dari waktu 'from time'. This overall sentence structure allows us to choose the temporal inter-

pretation for sampai 'reach'. The adjectival verb, ramai 'noisily, bustling, lively' is predicated of the following noun phrase rumah Nyonya Harun 'house - Mrs. Harun', and it is not directly related to any of the other verbs in the sentence. In terms of verb concatenation, I claim that we have three separate verb phrases, which I indicate by the slash (/) in the above descriptive summary.

(T-1) chûay sòn sabuu lé? phâachéttua maa hây phôm thii
help - send - soap - and - towel - come - give -
 I - hortatory particle

'Hand me the soap and a towel, (please).'

(Haas & Subhanka, p. 229)

modal + (action + directional + benefactive)

Note that this sentence is almost identical to the Cambodian sentence (C-2) in 6.9.3. As in (C-2), chûay 'help' is a requestive, modal verb. maa 'come' provides an orientation for the action son 'send', that is, toward the speaker phôm 'I'. In an abstract sense, sòn 'send' has both directional and causative components, because it implies that the direct object, in this case sabuu lé? phâachéttua 'soap and towel', will move away from the sender and this motion is caused by the sender. Generally, I am using directional verb for verbs whose subjects move, and causative verb for verbs for which the action of another verb is caused. It might be possible to assign hây

'give' its literal interpretation of giving, because this would fit with the idea of sending. Then we could have either a purposive relationship 'send the soap and towel towards (me) (in order to) give them to me' or a temporal relationship 'send the soap and towel towards (me) (and then) give (them to) me'. However, by analogy with many other Thai sentences in which hây 'give' follows action verbs which do not entail actual giving, I prefer the benefactive interpretation. In his treatment of gaoy 'give' in Cambodian, Huffman classifies this usage as directional (Huffman, 1970a, p. 139). Giving does entail the motion of the object given, and with this interpretation, we would have a redundant sequence of directional verbs. Also, one of the secondary meanings of hây, according to Haas, is 'to' (Haas, 1964, p. 596), which would also allow a directional interpretation. Without informant work, it is difficult to choose among the literal, directional, and benefactive interpretations of hây in (T-1). It is possible that the ambiguity cannot be resolved, because in the context in which (T-1) would be uttered, the same essential request would be made under all three interpretations.

(V-1) Hễ thầy giáo nói là anh phải nghe cho kỹ.

as soon as - master - teach - say - be - you -
should - listen - give - be done with care

'Each time the teacher says something you should
 listen carefully.'

(Nguyen-Dinh-Hoa, 1966a, p. 280)

action + copula +

{modal + (action + causative + adjectival)}

I did not underline giáo 'teach', because thầy giáo is given in the dictionary as a compound meaning 'teacher' (Nguyen-Dinh-Hoa, 1966b, pp. 167-168). The copula là 'be' separates the preceding dependent clause from the following independent clause. If we assigned a quotative function to là, the result would be a complex dependent clause: 'Each time the teacher says that you should listen carefully...'. Phải 'should' is a modal verb because it does not assert or presuppose the following sequence which it modifies. Following the cross-linguistic causative pattern discussed in 6.6.9, the final three-verb concatenation has the literal interpretation 'listen so as to give care'. The given translation for (V-1) shows that the cho kỹ 'give - be done with care' sequence can be treated as a manner adverbial, modifying nghe 'listen'. I chose the causative rather than the manner adverbial interpretation, simply because the former reflects the Vietnamese structure while the latter may be an artifact of translation into English.

VII CONCLUSION

7.1 Summary. This study began with a two-fold problem. First, sentences were observed with strings of verbs with no overt grammatical markers to show how the verbs were related to one another. Second, similar patterns of verb concatenation were noted in different Southeast Asian languages, including those belonging to different genetic families. The picture was complicated by differing theoretical perspectives, accompanied by various sets of terminology.

In Chapter I, the purpose and scope of the study were made specific. A cross-linguistic study of verb concatenation would be carried out using data from Burmese, Cambodian, Indonesian, Thai, and Vietnamese. I would search for a semantic and syntactic characterization of verbs and for the semantic and syntactic information which would permit analysis of verb strings. I would try to determine to what extent verb concatenation patterns could be generalized across language boundaries, at least to Southeast Asian areal features.

In Chapter II, the facts of genetic affiliation, historical contact, and language typology were discussed in order to provide a justification for a cross-linguistic approach, aside from the previously noted similarities in isolated examples of verb concatenation.

In Chapter III, various theoretical orientations and methodologies related to the study of verbs were compared.

While many of the approaches were shown to be irrelevant to Southeast Asian grammar, I adapted whatever ideas I found useful.

In Chapter IV, results of studies of verb concatenation in languages other than Burmese, Cambodian, Indonesian, Thai, and Vietnamese were summarized in order to find hypotheses and analytical techniques which I might be able to apply.

In Chapter V, there was a language by language analysis of previous results in verb concatenation in Burmese, Cambodian, Indonesian, Thai, and Vietnamese. Here, different studies of each language were compared in terms of lexical categories, characterizations of verbs, subcategories of verbs, and remarks on verb concatenation.

In Chapter VI, I developed semantic and syntactic principles for analyzing verb strings. Aside from a set of clearly distinguishable exceptions, words which can be directly preceded by their respective language's negative words are classified as verbs. Cross-linguistic patterns were established in several ways. First, there are systematic meaning shifts corresponding to position shifts of verbs in the presence of other verbs.

Next, I searched for cross-linguistic verb sub-classes which could easily be defined by semantic and/or syntactic criteria, such that membership in those sub-classes would facilitate predicting the function of the member verbs in verb concatenations. Manner adverbials are adjectival

verbs which modify action verbs. Modal verbs are verbs which modify or comment on the action of action verbs but which do not assert or presuppose the carrying out of the action. I found that sequences of action verbs could be analyzed conveniently by setting up a small number of semantic verb classes and then considering the range of syntactic function and semantic variation within each class in verb concatenation. The classes set up are directional verbs, quotative verbs, benefactive verbs, and causative verbs. Sequences of action verbs can be interpreted in terms of temporal sequences of actions or of one action being the purpose or result of another action, but these interpretations are usually ambiguous and possibly unresolvable.

After considering the various possibilities for two-verb concatenations, I defined complex concatenations to be any verb concatenations containing three or more verbs. If the verbs in a given sentence were not directly related to each other, they were divided into separate verb phrases. Examples in each language were analyzed to demonstrate how the previously developed principles are actually applied to complex sentences with many verbs.

7.2 Theoretical Implications. I have solved the principal problem of analyzing Southeast Asian verb concatenations by showing that sufficient information is available in each language to predict the range of verb function in concatenations. This information includes semantic infor-

mation intrinsic to the individual verb and to distributional information of the verb in various contexts. In addition, other contextual information may need to be invoked.

I have established that verb concatenation is a cross-linguistic phenomenon, at least an areal feature of Southeast Asia. Moreover, by comparing the range of semantic variation and syntactic function of verbs across languages, I was aided in each language-specific study. While many verb concatenations are translatable word-by-word from one Southeast Asian language to another, most are not. What is significant is not that any given pattern can be generalized to more than one language, but that there is a range of semantic/syntactic patterns which are shared by different languages, and this total range can only be seen when a number of languages are investigated.

In languages with little word morphology, lexical categories cannot be established with the ease that is possible for European languages. In particular, I think that there is a continuum from verb to particle in which any boundary is apt to be arbitrary. In this study, I relied primarily on negatability to distinguish verbs from other lexical classes, but it was not always possible to determine which occurrences of words could be negated. The Vietnamese case (6.1) shows that either semantic or other syntactic criteria should also be considered.

Another aspect of linguistic theory which bears on this

study is the relationship between syntax and semantics. I have not attempted to incorporate any of the traditional, structural, or generative models of grammar into this study, but I have borrowed useful ideas from all sources. I have found that verb concatenation is most easily studied by inextricably intertwining semantic and syntactic features.

I consider semantics and syntax both from the viewpoint of the native speaker and from that of the linguist. In interpreting or producing an utterance containing a verb concatenation, the native speaker is equipped with the knowledge of the meanings of the constituent words and the meanings of various word sequences in which the individual words may participate. The linguist has the task of searching for syntactic and semantic information which will allow verb concatenations to be analyzed. With this approach, I found that neither syntax alone, that is formal word classes or word sequences, nor semantics alone was adequate to characterize verb concatenations.

7.3 Future Research. While I am satisfied with the results of the research carried out here, I am also aware of limitations. One obvious, but time-consuming, extension would be to include more languages, in particular Chinese. I chose to obtain data in the form of previously translated sentences and phrases in published grammars and dictionaries, because these data were available and to avoid introducing any possible bias of my own into the interpre-

tation of verb concatenations. Since verb concatenation was usually not treated extensively or systematically in my references, there were gaps in the data. Also, when I checked some of the examples with native speakers of Thai, I was told that the examples were strange or artificial. Hence, it would be invaluable to do detailed informant work with native speakers of each language. Nevertheless, I believe that the approach I have followed is necessary as a first step, in order to outline the questions which deserve further study.

Although I noted possible explanations for cross-linguistic similarities in verb concatenation, my data were insufficient to provide any conclusive information. In this regard, I would envisage studies of bilingual communities or other language contact situations to examine how verb concatenations may be transmitted. Similarly, dialect geography studies would be relevant.

This dissertation was partly motivated by a more modest cross-linguistic study of numeral classifiers (Goral, 1978). This approach could be further extended to other areas of grammar. I have focused on the cross-linguistic patterns of verb concatenation, that is, what patterns are shared by different languages. A related question is how these general patterns are modified by language-specific features, such as word order, morphology, and particle systems.

Beyond Southeast Asia, verb concatenation exists in

African languages (4.2) and possibly others. A comparison of different systems of verb concatenation could help in the search for linguistic universals. Along these lines, verb sequences in languages with verb inflection could also be compared, thus investigating how such syntactic systems interact with the semantic relations observed among Southeast Asian verbs.

VIII BIBLIOGRAPHY

- Allison, G.H. (1973) Jumbo English-Thai Dictionary, Professional Services, Bangkok.
- Allott, A.J. (1965) "Categories for the Description of the Verbal Syntagma in Burmese", G.B. Milner & E.J.A. Henderson (ed.), Indo-Pacific Linguistic Studies Part II: Descriptive Linguistics, North-Holland Publishing Co., Amsterdam, pp. 283-309.
- Barton, M.I. (1971) "Recall of Generic Properties of Words in Aphasic Patients", Cortex, Vol. VII, No. 1, pp. 73-82.
- Beeler, M.S. (1970) Indoeuropean Phonology: A Syllabus, syllabus for class: Introduction to Indoeuropean Linguistics, University of California, Berkeley.
- Bloomfield, L. (1933) Language, Holt, Rinehart and Winston; New York, Chicago, San Francisco, Toronto.
- Brown, G. & Yules, G. (1983) Discourse Analysis, Cambridge University Press; Cambridge, London, New York, New Rochelle, Melbourne, Sydney.
- Brown, J.M. (1967) AUA Language Center Thai Course: Book 1, American University Alumni Association Language Center; Bangkok.
- (1968) Book 2.
- (1969) Book 3.

- Burling, R. (1965) hill Farms and Padi Fields: Life in Mainland Southeast Asia, Prentice-Hall, Inc.; Englewood Cliffs, New Jersey.
- Cady, J.F. (1964) Southeast Asia: Its Historical Development, McGraw-Hill Book Co.; New York, San Francisco.
- Campbell, S. & Shaweevongse, C. (1957) The Fundamentals of the Thai Language (2nd Edition), Thai Australia Co.; Dist. by Paragon Book Gallery, New York; F.W. Cheshire Pty, Ltd, Melbourne, Australia.
- Capsule Facts for the Armed Forces: Republic of Vietnam (1968), U.S. Dept. of Defense.
- Catford, J.C. (1965) A Linguistic Theory of Translation, Oxford university Press, London, New York, Toronto.
- Chao, Y.R. (1968) A Grammar of Spoken Chinese, University of California Press, Berkeley & Los Angeles.
- (1970) Language and Symbolic Systems, Cambridge University Press, London, New York.
- Chatterji, B.R. (1967) History of Indonesia: Early and Medieval, Meenakshi, Prakashan, Meerut, Delhi, Calcutta.
- Chomsky, N. (1965) Aspects of the Theory of Syntax, The MIT Press, Cambridge.
- (1957) Syntactic Structures, Mouton & Co., The Hague.
- Ciardi, J. & Williams, M. (19??) How Does a Poem Mean?, Houghton Mifflin Co., Boston.

- Codes, G. (1968) The Indianized States of Southeast Asia, Vella, W.F. (ed.); Cowing, S.B. (trans.); East-West Center Press, Honolulu.
- (1966) The Making of Southeast Asia; Wright, H.M. (trans.), University of California Press, Berkeley & Los Angeles.
- Cornyn, W.S. & Musgrave, J.K. (1958) Burmese Glossary, American Council of Learned Societies, New York.
- Coprny, W.S. & Roop, D.H. (1968) Beginning Burmese, Yale University Press, New Haven & London.
- Diffloth, G. (197?) "Resultative Verb Pairs and the Optative in Some Mon-Khmer Languages", manuscript.
- Dowty, D.R. (1972) "Studies in the Logic of Verb Aspect and Time Reference in English", Ph.D. Dissertation, University of Texas, Austin.
- Echols, J.M. & Shadily, H. (1963) An Indonesian - English Dictionary (2nd edition), Cornell University Press, Ithaca & London.
- (1975) An English - Indonesian Dictionary, Cornell University Press, Ithaca & London.
- Ehrman, M.E. & Kem Sos (1972) Contemporary Cambodian: Grammatical Sketch, Foreign Service Institute, Washington, D.C.

- Emeneau, M.B. (1962) "Bilingualism and Structural Borrowing", in Emeneau, M.B. (1980) Language and Linguistic Area, Stanford University Press, Stanford, pp. 38 - 65.
- (1965a) "Diffusion and Evolution in Comparative Linguistics", *ibid.*, pp. 66 - 84.
- (1965b) "India and Linguistic Areas", *ibid.*, pp. 126 - 166.
- (1980) "Linguistic Area: Introduction and Continuation", *ibid.* pp. 1 - 18.
- (1954) "Linguistic Prehistory of India", *ibid.*, pp. 85 - 104.
- (1956) "India as a Linguistic Area", Language, Vol. 32, No. 1, pp. 3 - 16.
- (1951) Studies in Vietnamese (Annamese) Grammar, University of California Publications in Linguistics, Vol. 8, University of California Press, Berkeley.
- Emeneau, M.B. & Von Den Steinen, D. (1944) A Course in Annamese: Lessons in the Pronunciation and Grammar of the Annamese Language, for Army Specialized Training Program, University of California.
- Foley, W.A. & Van Valin Jr., R.D. (1984) Functional Syntax and Universal Grammar, Cambridge University Press, Cambridge, London, New York, New Rochelle, Melbourne, Sydney.
- Frank, M. (1972) Modern English: A Practical Reference Guide, Prentice-Hall, Inc., Englewood Cliffs.

- Franklin, V. & Rodman, R. (1983) An Introduction to Language, (3rd edition), Holt - Saunders International Edition, Japan.
- Givon, T. (1975a) "Prolegomena to Any Creology", preliminary draft, prepared for Heine, B. et al. (ed.), African Based Pidgins and Creoles.
- (1975b) "Serial Verbs and Syntactic Change: Niger - Congo", in Li, C. (ed.) Word Order and Word Order Change, University of Texas Press, Austin & London, pp. 49 - 112.
- (1977) "Verb Typology and Basic Sentence Patterns", in Shopen et al. (ed.), Syntactic Typology and Field Work.
- Gleason, H.A. (1961) An Introduction to Descriptive Linguistics, (revised edition), Holt, Rinehart & Winston, New York, Chicago, San Francisco, Toronto, London.
- Goral, D.R. (1974) "The Particles of Burmese", manuscript.
- (1978) "Numeral Classifier Systems: A Southeast Asian Cross - Linguistic Analysis", Linguistics of the Tibeto-Burman Area, Vol. 4, No. 1, pp. 1-72.
- Gosa Arya, Thai Grammar (date and publisher not given).
- The Structure of the Thai Language (date and publisher not given).
- Graff, E. (1967) Southeast Asia: History, Culture, People, Cambridge Book Co., Inc., Bronxville.

- Greenberg, J.H. 1963) "Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements", in Greenberg, J.H. (ed.) Universals of Language, MIT Press, pp. 58 - 90.
- Haas, M.R. (1969) The Prehistory of Languages, Mouton, The Hague, Paris.
- (1964) Thai - English Student's Dictionary, Stanford University Press, Stanford.
- Haas, M.R. & Subhanka (1945), Spoken Thai, Book 1, H. Holt, New York.
- Hall, D.G.E. (1955) A History of Southeast Asia, Macmillan & Co., Ltd., London.
- Hashimoto, M.J. (1975) "Language Diffusion on the Asian Continent: Problems of Typological Diversity in Sino - Tibetan", 8th Annual Meeting of the International Conference on Sino - Tibetan Language Studies and Linguistics, Berkeley.
- Henderson, E.J.A. (1952) "The Main Features of Cambodian Pronunciation" Bulletin of the School of Oriental and African Studies, Vol. 14, pp. 149 - 174.
- (1965) "The Topography of Certain Phonetic and Morphological Characteristics of Southeast Asian Languages", in Milner, G.B. & Henderson, E.J.A. (ed.), Indo-Pacific Linguistic Studies Part II: Descriptive Linguistics, North - Holland Publishing Co., Amsterdam, pp. 400 - 434.

- Hope, E.R. (1974) The Deep Syntax of Lisu Sentences: A Transformational Case Grammar, Pacific Linguistics Series B - No. 34, Dept. of Linguistics, Research School of Pacific Studies, The Australian National University.
- Hou, J. (1973) "Constraints on the Verbs-in-Series Construction in Chinese Syntax", Sixth International Conference on Sino-Tibetan Language and Linguistic Studies.
- Huffman, F.E. (1970a) Modern Spoken Cambodian, Yale University Press, New Haven & London.
- (1970b) Cambodian System of Writing and Beginning Reader, Yale University Press, New Haven & London.
- (1973) "Thai and Cambodian - A Case of Syntactic Borrowing?", Journal of the American Oriental Society, Vol. 93, Oct., pp. 488 - 509.
- Intrakomhaeng, P. (1968) Thai for Foreigners, Charas Publishing Limited Partnership, Bangkok.
- Jacob, J.M. (1968) Introduction to Cambodian, Oxford University Press, London.
- Jeffers, R.J. (1976) "Syntactic Change and Syntactic Reconstruction" , in Christie, Jr., W.M. (ed.) Current Progress in Historical Linguistics, North - Holland Publishing Co., Amsterdam, New York, Oxford.

- Jespersen, O. (1938) Growth and Structure of the English language, (9th edition), Doubleday Anchor Books, Doubleday & Co., Inc., Garden City, New York.
- (1921) Language: Its Nature, Development and Origin, The Norton Library, W.W. Norton & Co., Inc. New York.
- (1965) (first published 1924) The Philosophy of Grammar, The Norton Library, W.W., Norton & Co., Inc., New York.
- Johns, Y. (1977) Bahasa Indonesia, Langkah Baru: A New Approach, Australian National University Press, Canberra.
- Judson, A. (1945) A Grammar of the Burmese Language, (revised), The A.B.M. Press (Rangoon), India.
- (1953) Judson's Burmese - English Dictionary, (revised and enlarged by Stevenson, R.C. & Eveleth, F.H.), Baptist Board of Publication, Rangoon.
- Keyes, C.F. (1977) The Golden Peninsula: Culture and Adaptation in Mainland Southeast Asia, Macmillan Publishing Co. Inc., New York.
- Kwee, J.B. (1965) Teach Yourself Indonesian, The English Universities Press, Ltd., London.
- Lakoff, G. (1970) "Linguistics and Natural Logic", Synthese, 22, pp. 151 - 271.
- Lass, R. (1980) On Explaining Language Change, Cambridge University Press, Cambridge.

- Le-Ba-Khanh & Le-Ba-Khong, Tu-Dien Anh-Viet & Viet-Anh,
[English-Vietnamese & Vietnamese-English Dictionary],
 (1968 Eng-Viet), (1969 Viet-Eng), Zien Hong, Saigon.
- Le-Ba-kong 1965) Teach Yourself Colloquial English,
 Zien - Hong, Saigon.
- Lehmann, W.P. (1962) Historical Linguistics: An
Introduction, Holt, Rinehart, & Winston, New York,
 Chicago, San Francisco, Toronto, London.
- Lenneberg, E.H. (1967) Biological Foundations of Language,
 John Wiley & Sons, Inc., New York.
- Lewis, M.B., (1957) Teach Yourself Malay, David McKay
 Co., Inc., New York.
- Li, C.N. & Thompson (1973a) "Serial Verb Constructions in
 Mandarin Chinese: Subordination or Co-ordination?",
 in You Take The High Node And I'll Take The Low Node,
 Papers from the Comparative Syntax Festival, The
 Differences Between Main and Subordinate Clauses,
 Paravolume to Papers from the Ninth Regional Meeting,
 Chigago Linguistics Society, pp. 96 - 103.
- (1973b) "Co-verbs in Mandarin Chinese: Verbs or
 Prepositions?", reprint for the Sixth International
 Conference on Sino-Tibetan Language and Linguistics,
 University of California, San Diego.
- Liddell, S. (1975) "Sit and Think: in Thai, English,
 Mojave, and Chinese", preliminary version, manuscript.

- Loeb, E.M. (1935) (reprinted 1972) Sumatra: Its History and People, Oxford University Press, Kuala Lumpur, Jakarta.
- Matisoff, J.A. (1973a) The Grammar of Lahu, University of California Press, Berkeley, Los Angeles, London.
- (1973b) "Tonogenesis in Southeast Asia", Offprint from Hyman, L.M. (ed.) Consonant Types and Tone, Southern California Occasional Papers in Linguistics, No. 1, pp. 73 - 95.
- (1974) (written 1963-64) "Verb Concatenation in Kachin", Linguistics of the Tibeto-Burman Area, Vol. 1, No. 1, pp. 186 - 207.
- McCawley, J.D. (1982) Thirty Million Theories of Grammar, Croom Helm, London & Canberra.
- McFarland, G.B. (1944) Thai - English Dictionary, Stanford University Press, Stanford.
- Mikami, N. (1981) "Serial Verb Construction in Vietnamese and Cambodian", Journal of the Linguistic Society of Japan, No. 79, pp. 95 - 117.
- Mulyana, S. (1957), Kaidah Bahasa Indonesian [Principles of Indonesian], Sambatan, Jakarta.
- Needleman, R. (1973) Tai Verbal Structures and Some Implications for Current Linguistic Theory, UCLA Ph.D. dissertation.
- Nguyen-Dan-Liem (1971) Intermediate Vietnamese, Vol. 1, 2, Seton Hall University Press, South Orange, New Jersey.

- Nguyen-Dinh-Hoa (1973) "Notes on Vietnamese Verbs in Series", handout for the Sixth International Conference on Sino-Tibetan Language and Linguistics, University of California, San Diego.
- (1966a) Speak Vietnamese (revised edition) Charles E. Tuttle Co., Rutland, Vermont & Tokyo, Japan.
- (1966b) Vietnamese - English Dictionary, Charles E. Tuttle Co., Rutland, Vermont & Tokyo, Japan.
- (1979) 201 Vietnamese Verbs, Barron's Educational Series, Woodbury, New York.
- Nguyen-Hy-Quang (1975) English - Vietnamese Phrasebook with Useful Word List, Center for Applied Linguistics, Arlington, Virginia.
- Noss, R.B. (1964) Thai Reference Grammar, Foreign Service Institute, Washington, D.C.
- Okell, J. (1965) "Nissaya Burmese: A Case of Systematic Adaptation to a Foreign Grammar and Syntax", in Milner, G.B. & Henderson, E.J.A. (ed.), Indo-Pacific Linguistic Studies Part II: Descriptive Linguistics, North - Holland Publishing Co., Amsterdam, pp. 186 - 227.
- (1969) A Reference Grammar of Colloquial Burmese, Part I & Part II, Oxford University Press, London, Bombay, Kuala Lumpur.
- Omar, A.H. (1968) "Word Classes in Malay" Anthropological Linguistics, Vol. 10, No. 5, pp. 12 - 22.

- Panupong, V. (1970) Inter-Sentence Relations in Modern Conversational Thai, The Siam Society, Bangkok.
- Panupong, V. & Tanwanchon (1967) "The Characteristics of Grammatical Words in Thai" (copy without bibliographical information), pp. 355 - 376.
- Pavio, A. & Begg, I. (1981) Psychology of Language, Prentice - Hall, Inc., Englewood, New Jersey.
- Phillips, R.L. (1973) "A Mnong Pedagogical Grammar: The Verb Phrase and Constructions with Two or More Verbs", in Thomas, D.D. & Nguyen-Dinh-Hoa (ed.) Mon-Khmer Studies IV, Center for Vietnamese Studies & Summer Institute of Linguistics., pp. 129 - 138.
- Rajadon, P.A. (1971) "The Nature and Development of the Thai Language", Thai Culture New Series, No. 10, The Fine Arts Department, Bangkok.
- Robins, R.H. (1980) General Linguistics: An Introductory Survey, (3rd edition), Longman, London & New York.
- (1967) A Short History of Linguistics, Indiana University Press, Bloomington & London.
- Roop, D.H. (1972) An Introduction to the Burmese Writing System, Yale University Press, New Haven & London.
- Ross, J.R.R. (1967a) "Auxiliaries as Main Verbs" (copy without bibliographical information), pp. 77 - 102.
- (1967b) Constraints on Variables in Syntax, MIT Ph.D. dissertation, Available from Indiana University Linguistics Club.

- Sapir, E. (1921) Language: An Introduction to the Study of Speech, A Harvest Book; Harcourt, Brace & World, Inc.; New York.
- Setti, L.J. (1977) "Notes on Thai Modal Verbs", class paper for J. Matisoff, University of California, Berkeley.
- Smeall, C. (1975) "Grammaticalized Verbs in Lolo-Burmese", Linguistics of the Tibeto-Burman Area, Vol. 2, No. 2, pp. 273 - 287.
- (1974) "Identity Crisis: A Verb / Particle Squish in Burmese", manuscript.
- Stewart, J.A. (1955) Manual of Colloquial Burmese, Luzac & Co., Ltd., London.
- Sulaiman, O.B. (1975) Bahasa Malaysia for Everyone, Penerbitan Pustaka Al - Hilal, Petaling Jaya Selangor.
- Sweet, H. (1891) (printed 1960) A New English Grammar: Logical and Historical, Part I: Introductory, Phonology, and Accidence, Oxford University Press, London.
- (1898) (printed 1958) A New English Grammar: Logical and Historical, Part II: Syntax, Oxford University Press, London.

- Thompson, L.C. (1965a) "Endocentricity in Vietnamese Syntax", in Milner, G.B. & Henderson, E.,J.A. (ed.), Indo-Pacific Linguistic Studies Part II: Descriptive Linguistics, North - Holland Publishing Co., Amsterdam, pp. 17 - 31.
- (1965b) A Vietnamese Grammar, University of Washington Press, Seattle & London.
- Thompson, S.A. (1980) "The Discourse Basis for the Manifestation of Linguistic Categories", Lecture given for the Linguistics Group Meeting, Dept. of Linguistics, University of California, Berkeley, April.
- Thurgood, G. (1977) "Burmese Historical Morphology", Proceedings of the Third Annual Meeting of the Berkeley Linguistics Society, Whistler, K. et al. (ed.), BLS, Institute of Human Learning, University of California, Berkeley, pp. 685 - 691.
- Tran-Trong-Hai (1975), "Verb Concatenation in Vietnamese" Linguistics of the Tibeto - Burman Area, Vol. 2, No. 2, pp. 243 - 272.
- Vuong-Gia-Thuy (1975) Vietnamese in a Nutshell, Funk & Wagnalls, New York.

- Warotamasikkkhadit, U. (1976) "Complications in Temporal Preverbs and their Semantic Interpretation", presented at 9th International Conference on Sino-Tibetan Languages and Linguistics, Copenhagen.
- (1977) "Peculiarities of the Thai Substantive Verb pen ' ' ", (copy without bibliographical information).
- (1972) Thai Syntax: An Outline, Mouton, The Hague & Paris.
- Warutamasintop, W. (1977) "Evidence for the Structure of Verbs in Series in Thai", (copy without bibliographical information), University of California, Los Angeles.
- Webster's New World Dictionary of the American Language, College Edition, (1964) Guralnik, D.B. & Friend, J. (general ed.) The World Publishing Co., Cleveland & New York.
- Wheatley, J.K. (1982) "The Development of Verb Serializaion in the Yi (Lolo) Languages of Southwestern China", manuscript.
- Wojowasito, S. (1972) Pengantar Sintaksis Indonesia (Dasar² Ilmu Kalimat Indonesia) [Introduction to Indonesian Syntax (Basis of the Science of Indonesian Sentences], Shinta,Dharma, Bandung, Indonesia.
- Yen, S.L. (1977) "the Origin of the Copoula Shih in Chinese", manuscript, The University of Texas, Austin.