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COVERBS AND CASE IN VIETNAMESE

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN LINGUISTICS MAY 1975

By
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COVERBS AND CASE IN VIETNAMESE

ABSTRACT

In Vietnamese there is a set of words which occur in exocentric construction with a noun phrase, having a prepositional function in the construction, and for which there is a set of corresponding homophonous and synonymous words which occur as main verbs in sentences. The words in this set having a prepositional function are called coverbs.

The coverbs identified for Vietnamese and discussed in this study are cho 'give to/for', Ở 'be in/at, qua/sang 'go across to', lại 'come back to', về 'return to', ra 'go out to', vào/vào 'go into', lên 'go up to', xuống 'go down to', đến/tới 'arrive at, (reach) to'. Đi 'go to' occurs, in limited circumstances, as a coverb.

The primary purpose of this study is to determine whether coverbs are verbs or prepositions and what the relationship is between them and their corresponding main verbs.

Coverbs in Vietnamese are described in terms of their role in a "lexicase" case grammar of Vietnamese, a model which states relationships between sentences and between verbs, prepositions, and nouns by means of inherent and contextual case features. Verbs are classified according to the case forms and relations with which they must or may occur. An important factor in this classification is the
distinction between "inner" cases (inner LOCATIVE and DATIVE) and "outer" cases (outer LOCATIVE and BENEFACTIVE). It is shown that coverbs must be defined as prepositions, not as verbs, in order to explain the facts of the language in a straightforward way. As [+D] and [+L] prepositions, they mark case forms and thus play an important role in the requirements and classification of verbs.

Because coverbs have corresponding homophonous and synonymous verbs, they constitute a special class of prepositions. It is claimed that coverbs are derived prepositions, related to their corresponding verbs by a synchronic derivation rule that operates on certain features of the verbs. The features which distinguish the class of verbs which can have corresponding prepositions relate to inherent semantic and syntactic properties of the verbs. For example, the verb cho 'give' has an inherent semantic feature [+dative] which allows it to occur with a non-subject DATIVE noun phrase. What distinguishes cho from other [+dative] verbs, which do not have corresponding prepositions, is the fact that cho's DATIVE phrase must occur in the Accusative case form, i.e., without a preposition. This characteristic is also true of the [+locative] verbs which have corresponding prepositions: They cannot take their inner LOCATIVES in the L case form. Thus, it is shown that coverbs are derived from verbs which have an especially close semantic and syntactic relation to a particular case.
A subsequent chapter applies the analysis used for Vietnamese to the case-marking systems of Khmer and Thai. The analysis turns out to be equally applicable to these two languages and reveals striking similarities in many details as well as in overall pattern.

Evidence is given to support the claim that coverbs in some languages are historically, as well as synchronically, related to their corresponding verbs, and to suggest that the coverb phenomenon represents a stage in a historical process of prepositions deriving from verbs.
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CHAPTER I
INTRODUCTION

1.1 Goals

In the Vietnamese language, there is a set of words which can occur as main verbs in a sentence but can also, in other sentences, occur in exocentric construction with a noun phrase, seeming to have a prepositional function in the construction. When these words occur in their prepositional function, they are called "coverbs" in this study.

The principal purposes of this study are as follows.
1. To describe and illustrate the behavior of coverbs in Vietnamese.
2. To determine the syntactic role of coverbs and their role in the classification of verbs in Vietnamese. In considering this problem, I will assume that a grammar that captures all syntactic generalizations will have to establish certain syntactic categories which may be labelled by such traditional terms as verb, preposition, and noun; and that these categories will be comparable across languages.

Further, as "preposition" is defined in this study, it functions as a case marker. The first question concerning coverbs is whether they should be categorized as verbs or prepositions. If they are verbs, it must be determined whether they are main verbs, embedded verbs, or verbs in series in a simple sentence, and whether a verb can function like a case marker and still be a verb. If they are
prepositions, it must be determined whether the corresponding verb and preposition are a single lexical item which can be marked both [+V] and [+P] in the lexical entry, two separate unrelated lexical items, or two lexical items related by derivation.

3. To determine how the syntactic role of coverbs can be stated in the grammar in a way that is both explicit and intuitively satisfying. To this end, to apply a case grammar framework which can

a. adequately describe the behavior of coverbs;

b. demonstrate the syntactic relationships between verbs, prepositions, and nouns;

c. yield a satisfying classification of verbs according to their occurrence with coverbs;

d. show the relation between coverbs and their corresponding verbs; and

e. predict the grammaticality of coverb sentences.

4. To make a cursory investigation into coverb phenomena in other Southeast Asian languages to see how such a comparison can give support to, or reveal weaknesses in, the proposed solution for Vietnamese, and to suggest directions for further comparative investigations.

A brief look at Chinese coverbs will illustrate their behavior (Sec. 4.1) and various solutions to the coverb problem given in analyses of Chinese coverbs (Sec. 4.3).

Previous solutions for Vietnamese coverbs will be given in Sec. 5.2. It will be hypothesized in this study that
coverbs are prepositions (as defined in Sec. 3.1) which are related by derivation to their corresponding verbs (Sec. 5.3). General theoretical claims will be made regarding the relationship between verbs and prepositions and regarding the verbal characteristics of prepositions (Secs. 2.2.2, 3.1, and 5.3). In this regard, it will be claimed that the derivation of coverbs from verbs is a stage in a general historical process in which certain kinds of verbs become prepositions (Chap. VII). Further claims will be made regarding the nature of derivation and derivation rules (Sec. 2.2.3).

The solution proposed in this study makes use of "lexicase", the theoretical model described in Chapters II and III. This model attempts to account for the facts within the framework of a case grammar in which relationships between sentences are shown by features on lexical items and whose generalizations are stated in the form of lexical derivation and redundancy rules which operate on these features. The model is tested for its ability to account for the coverb phenomenon (Sec. 3.2.2, Sec. 5.3, Sec. 5.4, and Chapter VI).

The Southeast Asian languages Khmer and Thai will be shown to share with Vietnamese the coverb phenomenon (Sec. 6.2). One intention here is to suggest the possibility of coverbs in Southeast Asia being an areal feature, that is, a characteristic spread through languages of the area by language contact (Sec. 6.1).

Pertinent literature on the topic of coverbs is
referenced throughout the text, especially in Chap. IV and Secs. 5.2 and 7.3.

1.2 The Languages

Vietnamese is generally believed to be a member of the Austroasiatic language family (see, for example, Haudricourt 1953 and 1966). It is closely related to Muong, a language spoken in mountain areas of parts of northern Viet-Nam (Thompson 1967). Vietnamese is spoken by approximately 24 million people in the country of Viet-Nam, along the eastern and southern coastal area of the Indochinese peninsula. There are three major dialect areas: North, North-Central, and South (including South-Central), though dialect differences are not great. The dialect used in this study is generally the Southern dialect, although it is assumed that the problem under discussion does not exhibit significant dialect difference.

Khmer (Cambodian), the official language of the Kingdom of Cambodia, is a member of the Mon-Khmer language group of the Austroasiatic languages. It is spoken by almost six million people in Cambodia and in parts of northeastern Thailand and southern Viet-Nam (Huffman 1970: ix).

Thai (Siamese) is a Tai language. It is generally supposed that the Tai languages are related to the Kam-Sui languages. Whether the Kam-Tai group belongs to the Sino-Tibetan language family is uncertain. The works of Paul Benedict (e.g., 1966) place it in a group he calls
Thai-Kadai, which, with Austronesian, belongs in a larger group, Austro-Thai. Thai, the official language of the Kingdom of Thailand, is spoken by approximately twenty million people in the country of Thailand.

Mandarin Chinese is the Chinese language used in this study. The Chinese languages belong to the Sino-Tibetan language family. "Mandarin Chinese is, indeed, a notion difficult to define, as it represents a group of dialects, of which the most prominent is Pekinese" (Liang 1971: 4). It is the official language in both mainland China and Taiwan and is spoken by some 500 million people in China and elsewhere.

1.3 Transcriptions Used in This Study
1.3.1 Vietnamese Orthography

Standard Vietnamese orthography is used in the Vietnamese examples. Below is given approximate pronunciation of the written alphabet (information taken largely from Nguyen D-H 1966: ix-xiv). Unless otherwise noted, characterizations are Southern pronunciation. Northern and Central pronunciations are indicated by "No" and "Cen", respectively.
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Tone diacritics:

<table>
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<td>a</td>
<td>high-mid level</td>
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<td>ã</td>
<td>high rising Cen: mid rising</td>
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<td>ã</td>
<td>mid rising No: with glottal stop</td>
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<td>ã</td>
<td>mid rising No: with glottal stop</td>
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<td>a</td>
<td>low falling mid falling/high-mid level</td>
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<tr>
<td>a</td>
<td>low dipping with glottal stop low (falling)</td>
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Hyphenated words in Vietnamese sentences are either Sino-Vietnamese compounds, e.g., *ky-niêm* 'souvenir' and *phi-trường* 'airport', or what are glossed for the sake of convenience as syntactic units. The latter group includes *ông-áy* ('grandfather, Sir, Mr.' + 'that') = 'he (respectful)', *cô-áy* ('paternal aunt, Miss, female teacher' + 'that') = 'she', and *bao-giờ* ('how much' + 'hour') = 'when'.

1.3.2 Khmer, Thai, and Mandarin Transcriptions


There exist several widely-used romanizations of Chinese written characters. The one used here is the one which is widely used on the Chinese mainland (DeFrancis 1963: xviii) and called *pinyin*. (DeFrancis 1963: 461-466 gives a comparative transcription table for *pinyin* and the Yale and Wade-Giles romanizations.)

1.4 Sources for Language Data
1.4.1 Sources for Vietnamese Language

The Vietnamese dialect used in this study is generally the Southern dialect, although sentences from Northern and
Central speakers are also used. As stated in Sec. 1.2 above, dialect differences in Vietnamese seem not to be syntactically significant.

My five-and-a-half year's residence in Viet-Nam--two and one half in Saigon and three in Hue--and extensive association with Vietnamese speakers provided a sound basis for a speaking knowledge of the Vietnamese language. Specific data for this study was drawn from my own observations; from references listed in the bibliography and cited in the text of this work, especially the works of Nguyễn-Dăng Liễm, Nguyễn Đình-Hòa, and Laurence C. Thompson; from letters from Vietnamese friends; and from direct assistance from individuals, principally Mr. Nguyễn-Dăng Liễm and Mrs. Diệp Nguyễn-Dăng-Liễm, both native speakers of Saigon dialect, Ms. Tôn-nữ Kim-Chí, a native speaker of Hue dialect, and Mrs. Hương Crumpton, a Hue dialect speaker.

Extensive use was made of Nguyễn Đình-Hòa's Vietnamese-English Dictionary (1966), for sentences and grammatical information as well as for glosses.

1.4.2 Sources for Khmer Language

The primary source for Khmer sentences was Franklin Huffman's teaching manual of modern spoken Cambodian (1970), which was also very useful for grammatical analysis. Also used were Madeline Ehrman's grammatical sketch of Cambodian (1972); Huffman's comparison of Thai and Cambodian syntax (1973); and, to a lesser extent, Judith Jacob's
Introduction to Cambodian (1968).

Personal assistance in analysis of sentences came from Ms. Saveros Pou (Lewitz) of the Centre National de la Recherche Scientifique of Paris, a professional linguist and a native speaker of Phnom Penh Khmer, who was in Honolulu for two months doing research work. Data was also obtained from Thach Sarun of the Center for Vietnamese Studies at Southern Illinois University during the summer of 1972.

1.4.3 Sources for Thai Language

The Thai dialect used in this study is that of central Thailand, officially considered to be the national language of Thailand (Kullavanijaya 1974: 15).


By far the greatest amount of data and grammatical analysis came from consultation with Dr. Pranee Kullavanijaya, a professional linguist on leave from Chulalongkorn University in Bangkok and a native speaker of Bangkok Thai.

1.4.4 Sources for Mandarin Chinese

No separate analysis of Mandarin Chinese coverbs is attempted here; simply a description of them and an
exposition of other analyses are set forth.

Most of the data came from the sources discussed in Sec. 4.3, Analyses of Coverbs in Chinese. Also helpful was John DeFrancis' *Beginning Chinese* (1963). Some sentences were taken from Charles Hockett and Chaoying Fang, *Spoken Chinese* (1945).
2.1 Theoretical Background

This study will assume to be correct Fillmore's claim that there is a finite and universal set of relationships holding between a predicate and its associated nominals such that every nominal constituent of a sentence is related in a particular way to the predicate; "for the predicates provided in natural languages, the roles that their arguments play are taken from an inventory of role types fixed by grammatical theory" (Fillmore 1971a: 376). These relationships he calls case relationships. He states (1968: 27) that lexical entries for verbs contain 'frame features' which "will indicate the set of case frames into which the given verbs may be inserted. These frames have the effect of imposing a classification of the verbs in the language."

He listed (1968: 24-25) the following cases as probably necessary:

Agentive: "the case of the typically animate perceived instigator of the action identified by the verb;"

Instrumental: "the case of the inanimate force or object causally involved in the action or state identified by the verb;"

Dative: "the case of the animate being affected by the state or action identified by the verb;"

Factive: "the case of the object or being resulting from the action or state identified by the verb, or understood as part of the meaning of the verb;"
Locative: "the case which identifies the location or spatial orientation of the state or action identified by the verb;"

Objective: "the semantically most neutral case, the case of anything represented by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself...The term is not to be confused with the notion of direct object, nor with the name of the surface case synonymous with accusative."

Except for Factive, these cases are discussed in detail in Sec. 3.2.1, Vietnamese Case Relations. Also considered relevant and discussed in Sec. 3.2.1 are other cases which Fillmore has suggested in other works and lectures: Benefactive, Comitative, Time, Source, Goal, Direction, and Extent. Other possible cases, such as Manner, Purpose, etc., are not investigated in this study.

Case relationships, hereafter referred to as case relations (CR), may be realized overtly in a variety of ways. The ways include 1) affixation or suppletion of the noun or pronoun, 2) addition of prepositions or postpositions, 3) sequential ordering, and 4) marking on verbs (Fillmore 1968: 32). It is normal for a single case relation to be realized in different ways, and for a single realization to be associated with different CR's; that is, for instance, CR's may be neutralized, as in subjectivalization, which "results in a neutralization of underlying case distinctions to a single form, usually called the 'nominative'" (Fillmore 1968: 49). Although Fillmore uses the term "case form" to refer only to case markers of types 1 and 2 above, I will consider a case form (CF) to be a feature which characterizes
a syntactically significant set of one or more case markers in a given language, and CF features to be drawn from a finite universal set.

Fillmore states that verbs are distinguished from each other not only by specification of case frames but also by "transformational properties". He gives the following examples (1968: 28-29):

"(a) the choice of a particular NP to become the surface subject, or the surface object, wherever these choices are not determined by a general rule;

(b) the choice of prepositions to go with each case element, where these are determined by idiosyncratic properties of the verb rather than by general rule; and

(c) other special transformational features, such as, for verbs taking complements, the choice of specific complementizers..."

2.2 Lexicase

2.2.1 The Model

The syntactic model used in this study to describe and explain the facts of Vietnamese coverbs is one called "lexicase", a framework which has been developed by Stanley Starosta and Harvey Taylor, applied by Taylor in his dissertation on case in Japanese (Taylor 1971), and refined by Paul Li (1973) and Pranee Kullavanijaya (1974).

The lexicase model consists of a language-specific base component composed of Phrase Structure (PS) rules, a lexicon, and a phonological component. The lexicon consists of lexical entries which are specified for grammatical
category features, case form features (where appropriate), idiosyncratic syntactic features, semantic features, and phonological representation; and lexical subcategorization rules, redundancy rules, and derivation rules, which operate on lexical entry matrices to produce lexical items. Case frame and all other syntactic features are specified for lexical items by redundancy rules which operate directly or indirectly on semantic features. The lexical items are inserted into the trees generated by the phrase structure rules giving syntactic representations which provide the phonological component with "all the syntactic and lexical information necessary for it to produce from them the appropriate phonological representations" (Taylor 1971: 10-11).

At the present state of linguistic theory, language universals are far from being fully determined. However, it is expected that, in time, we will be able to write grammars which state only those features and rules which are language specific, leaving out those which are specified in the universal grammar and are therefore redundantly specified in particular grammars. I assume that the concepts of case relation and case form and the categories, features, and many of the rules pertaining to case belong to a universal grammar.

Acceptability or nonacceptability of sentences on the basis of situational context, presupposition, and one's belief or knowledge about the real world is considered to be
outside the realm of the lexicase model, that is, outside the realm of syntax. Only those semantic properties which affect grammatical relationships are considered to be syntactically relevant: "This model treats as 'grammatical' or syntactic only those language generalizations which can be described as the direct consequence of relationships obtaining between lexical categories" (Taylor 1971: 9).

2.2.2 Properties of Case Frames

The lexical item matrices of verbs contain grammatically relevant selectional features, which include the set of case frames into which a given verb may be inserted. A lexicase model case frame differs substantially from a Fillmore case frame in several ways:

1) Instead of a single case frame feature such as $+[_0(I)(A)]$ for the verb open (Fillmore 1968: 27), lexicase has a separate feature for each sister case relation, as shown in the following case frame.

\[
\text{open} \\
\begin{array}{c}
+ [+\text{OBJ}] \\
+ ([+\text{INS}]) \\
+ ([+\text{AGT}])
\end{array}
\]

This type of formulation permits separate manipulation in terms of cooccurrence restrictions; for example, separate statements can be made regarding the different case forms with which Instrumental and Agentive can occur. It also permits ordering restrictions to be stated in the redundancy rules, which allows the universal rules to generate strings.
in any order and language-specific rules to exclude bad orders, showing that case configurations are universal but word order is language-specific. This eliminates the need for establishing an artificial underlying word order and unmotivated scrambling transformations. Finally, such a formulation captures important generalizations. Generalizations include a) prediction of the occurrence of one case in terms of the presence of others so that only unpredictable ones must be listed in the lexicon; b) statement in derivational rules of those parts of the case frame that get altered, with assumption that the rest are unchanged; and c) ordering of topicalization and subjectivization without transformations.

2) Not only does a lexical case frame indicate the possible and required case relations contracted by each verb, it also indicates the case forms with which they may occur. For example, if the Agentive of the verb open can occur in the Nominative (NM) case form or with the I case marker by, these possibilities are indicated in the case frame:

\[ [+\_([\{+NM,+I\},+AGT\}]]. \]

3) Case frames are in the form of selectional features, and apply not to relational "categories" but to features on heads of sister constituents; that is, case relations and case forms are marked on heads of NP and PP constituents. (See Taylor 1971, especially p. 26; cf. Fillmore 1968: 27ff.) Since prepositions or postpositions realize case forms
(CF), they are marked with a single CF feature and, like verbs, with a frame indicating the case forms and relations of the nouns with which they occur. See Secs. 3.1 and 3.2.2 for fuller discussion of prepositions and case forms and for case frames of Vietnamese prepositions. For verb case frames in Vietnamese, see Sec. 3.3.

With case features and semantic features marked on lexical items and the relations between lexical items shown by derivation and subcategorization rules, the surface structure alone contains enough information to show the grammatical relationships between sentences, and constitutes a (systematic) semantic representation which serves as input to contextual semantic interpretation. Such a framework eliminates the necessity for a distinct deep structure and a transformational component, thus radically simplifying the grammar. Furthermore, if each lexical item is specified only for those features which are inherent in the item and for those which state precisely the immediate syntactic cooccurrence restrictions for that item, and if the rules operate only on those features, the power of the grammar is significantly reduced from that of a transformational grammar. It has been found unnecessary to resort to transformations to handle the distinctions called "transformational properties" by Fillmore and listed above in Sec. 2.1. Instead, cooccurrence restrictions stated as features in the lexical matrix of a verb can specify what case relations a particular verb can take in its grammatical
subject, whether it takes an object case relationship, what complement types and complementizers it allows, and what idiosyncratic case realizations are demanded by a particular verb. General rules are in the form of lexical derivation rules (DR: a rule which serves as a pattern for introducing new members of a class of lexical items based on the members of another class), subcategorization rules (SR: a rule which subcategorizes lexical items, defining the possible classes and subclasses of lexical items), and redundancy rules (RR: a rule which predicts the presence of one feature on the basis of another feature). For examples of SR's and RR's, see Sec. 3.3.4.1.

2.2.3 Properties of Derivation Rules

A particular type of redundancy rule is the lexical derivation rule (DR), by means of which lexical items are added to the lexicon. A given DR will apply to a class of lexical items identified by certain shared features to produce new members of another class of lexical items. The output items are marked as being derived ([+DERV]); they carry over certain features of the input items and add or delete certain other features.

For example, if it should be found in English that any noun can function as a verb, a lexical DR such as

\[
\text{DR. } \begin{bmatrix} +N \\ \alpha F_i \end{bmatrix} \rightarrow \begin{bmatrix} +V \\ +\text{DERV} \\ \alpha F_i \end{bmatrix}
\]

can capture that generalization. Examples of such derived
items might be 'put it in a box for me': 'box it for me', 'he likes to lie in the sun': 'he likes to sun', etc. (This over-simplified rule fails to account for the fact that the derived verbs box and sun, for instance, have quite different grammatical properties.) If a certain class of verbs in English corresponds to a semantically related class of nouns (e.g., act: actor, teach: teacher, etc.), then in the grammar there must be a rule to state this fact. If such a class is defined by the feature [+activity], the following DR can be postulated:

\[
\text{DR. } \begin{align*}
\text{G} & \quad \begin{align*}
[+V & ] \\
[+\text{activity} & ] \quad \alpha F_i
\end{align*} \quad \leftrightarrow \quad \begin{align*}
[+N & ] \\
[+\text{DERV} & ] \\
[+\text{actor} & ] \quad \alpha F_i
\end{align*}
\end{align*}
\]

There must be included in the output of the rule some feature which will allow the derived lexical item to undergo any necessary morphophonemic rule; thus, the feature [+actor] here, in addition to having a semantic function, can be used to condition the morphophonemic rule that adds -er/-or to the phonological representation of the nouns derived by this rule. (Cf. P. Li 1973: 279.)

Conventions concerning DR's are: Features which appear on both sides of a fletched arrow (\(\rightarrow\)) are those which are carried over to the new item; features which are specified on the left-hand side of the arrow but not on the right are those which are absent in the new item; features which appear on the right-hand side but not on the left are those which are added to the new item. All other features not mentioned
by the rule are carried over and indicated by the symbols \( aF_i, \beta F_j \), etc. (See remarks below regarding predictability.) DR's state generalizations about lexical relations and apply to classes of lexical items, not to individual lexical items.

P. Li (1973: 234) gives the following characteristics as being typical of derivation.

1. An item changes syntactic class.
2. A derivational affix can be carried over from one part of speech to another.
3. The form, meaning, and semantic properties of derived items are often not completely predictable.
4. A derived form may be subject to further derivation or inflection.
5. The new class already contains some underived members.

Regarding the predictability of derived items, Starosta (1971b: 204) adds, "regularly derived words may undergo secondary shifts in meaning which requires them to be separately listed in the lexicon." This characteristic of derived items raises problems regarding the actual nature of DR's and the synchronic/diachronic productivity of derivation. For one aspect of this productivity, see Sec. 7.4, Conditions for the Derivation of P from V.

For a derivation rule used in this study, see Secs. 5.3.3 and 5.4.
CHAPTER III
CASE IN VIETNAMESE

3.0 Introduction

The case grammar presented here does not pretend to be a full grammar of Vietnamese. It is merely an outline grammar to serve as background for the problems discussed in this study. Many details of Vietnamese grammar and many problems of current theory are omitted as being beyond the scope of this work.

3.1 Phrase Structure

The following PS rules are a minimal representation of Vietnamese sentence order and constituency. PS rules in the lexicase model are language-particular representations of surface structure.

\[
S \rightarrow (\left\{ \begin{array}{l}
\text{NP} \\
\text{PP} \\
\text{Adv} \\
\text{S}
\end{array} \right\})^n V (\left\{ \begin{array}{l}
\text{NP} \\
\text{PP} \\
\text{Adv} \\
\text{S}
\end{array} \right\})^n \quad (FP)
\]

\[
\text{PP} \rightarrow P^{\left\{ \text{NP} \right\}}
\]

\[
\text{NP} \rightarrow \left( \text{Qu} \right) \text{N} \left( \left\{ \text{NP} \right\} \left( (\text{Rel}) \text{S} \right) \text{Det} \right)
\]

Parentheses indicate optionality of occurrence; braces indicate obligatory choice of one of the elements within the braces. Explanations of terms follow.

\[S : \text{Sentence} : \text{the basic unit of syntactic analysis; in this study, the maximum domain of grammatical relations which can be defined in terms of syntactic structure.}\]
NP : **Noun Phrase**: an endocentric construction of which a noun is the head.

PP : **Prepositional Phrase**: an exocentric construction composed of a P and an NP or a P and an S. The case form of the construction is marked by the P; the case relation of the PP as a whole is the one marked on the head noun of the NP. Case relations in P^S (if any) are not considered here.

Adv : **Adverb**: a lexical category which is the syntactic attribute of a verb, a non-obligatory sister element of the verb.

V : **Verb**: the lexical head of a sentence, classified by its attributes (non-obligatory sisters).

FP : **Final Particle**: is used here as a cover term, not a grammatical category, for the Negatives **không** 'not' and **chưa** 'not yet' which serve as question markers; for the imperative marker; and for final particles such as **nhé** 'OK?', **à** 'oh!', and **à** (polite particle). The final particles (distinguished from FP) can co-occur with the question markers and with the imperative marker.

P : **Preposition**: the word that occurs in exocentric construction with an NP, forming a PP, and which marks the case form of the PP. By this definition of P, particles which modify the direction or positional relationship of the verb but do not form a construction with an immediately following NP are not P's.
(For example, in nó chạy lên (he, run, upward) 'He ran up', lên is an adverb (Adv), not a P.) As shown here, P is a category of the base, and therefore substantially different from the P of Fillmore and others who derive P's transformationally. For further discussion of P, see Sec. 3.2.2.0. For discussion of the distinction between P's and V's, see Sec. 5.3.3.

Qu: Quantifier: is a cover term for restrictive modifiers of N, such as Numerals (Nu), Plurals (P1), and Classifiers (Cl). (Descriptive modifiers follow N.) (Cl occurs obligatorily when a noun takes Nu; its selection is determined by the semantic class of the noun with which it occurs.)

N: Noun: the lexical head of an NP, which is marked for a case relation and has an external referent.

Rel: Relative Pronoun

Det: Determiner

3.2 Vietnamese Case Relations and Case Forms

3.2.0 Introduction

Following Starosta's 1973 presentation of case relations and case forms in Sora, in the following sections I will present: first, a brief discussion of each case relation and the case forms in which it can be realized; then, each form with its case markers and the case relations it can realize, with examples; a chart summarizing the cooccurrence of case relations and case forms; and, finally, going beyond
Starosta's presentation for Sora, a rough classification of Vietnamese verbs based on their case frames.

3.2.1 Case Relations
3.2.1.0 Introduction

Following Fillmore, Tran and Liem have both given the same case relations for Vietnamese:

- Agentive
- Objective
- Dative
- Instrumental
- Benefactive
- Comitative
- Locative
- Directional
- Source
- Goal
- Extent
- Time

(Tran 1971: 6-10; Liem 1973: 2-3)

These cases seem to be adequate to handle the problems of coverbs, and I recognize the same case relations with these exceptions: I will consider Locative to be a case relation which can be realized by one of a set of sub-CF's: Location (which is Tran's and Liem's Locative), Source, Goal (their Directional), and Terminus (their Goal). These sub-CF's will be shown (Sec. 3.2.2.4) to behave as a set in realizing Locative and Time case relations. Furthermore, "the existence of unique ('surface') case-realization forms (case markers) is not sufficient justification by itself for positing a 'new' case relationship" (Taylor 1971: 31; also see pp. 31-32, 34-37). Besides the sub-CF Terminus (cf. Taylor 1971: 34, 399), I have posited a feature [+path] (cf. Fillmore 1971b: 259; Stratton 1971), which is a feature marked on Goal by subcategorization rules (see Sec. 3.3.4.1). Direction is also a feature implied by the same subcategorization rules which, with redundancy rules, give
the following tree of locative semantic features:

![Locative Feature Tree]

Fillmore (1968: 25) also suggests that the distinction between these locative cases is not a major one: "There is a certain amount of evidence...that locational and directional elements do not contrast but are superficial differences determined either by the constituent structure or by the character of the associated verb." However, as Fillmore himself indicates (1968: 26, fn 34) and as will be seen below (Secs. 3.3.2, 3.3.5.2.1-3, and 3.3.5.4-6), location and direction do contrast sufficiently to subcategorize verbs within larger classes. The subcase analysis adopted here allows for the necessary subcategorization of verbs while at the same time capturing the complementary relation between location and direction noted by Fillmore.

Tran and Liem give as the realization of Extent the "preposition" duyéc, as in

(3.1) tôi ngu' duyéc hai gi'ő. (Tran 1971: 10)
   I sleep for two hour
   'I slept for two hours.'

However, I consider duyéc here to be not a preposition but rather the verb 'get' and the subject and verb tôi ngu'
to be a subordinate clause. Such structures are not uncommon for Vietnamese sentences. In fact, Liem (personal communication) now suggests this structure for all such occurrences of *được*. The structure of (3.1) is given here:

\[
\begin{array}{c}
\text{S} \\
\text{NP} \quad \text{V} \quad \text{NP} \\
\text{N} \quad \text{đécoute} \quad \text{hài} \quad \text{giờ} \\
\text{Tôi} \quad \text{sleep} \quad \text{get} \quad \text{two} \quad \text{hour} \\
\end{array}
\]

'(When) I slept, (it) took two hours.'

Extent in time and space can be shown by the use of sub-CF's Source ... Goal/Terminus, as in (3.2).

\[
\begin{array}{c}
\text{S} \\
\text{NP} \quad \text{V} \\
\text{N} \quad \text{đécoute} \\
\text{Tôi} \quad \text{lam viét từ} \quad \text{hài} \quad \text{đến} \quad \text{năm} \quad \text{giờ} \\
\end{array}
\]

'I worked from two o'clock to five o'clock.'

In fact, unless otherwise specified, Extent is implied by a feature of direction on verbs and prepositions, and does not exhibit syntactic behavior. Therefore, there is no valid reason for positing a case or sub-CF of Extent. It may ultimately prove to be necessary, but so far I have found no evidence for that conclusion.

The case relations given here are posited on purely syntactic evidence in Vietnamese, primarily evidence of the way CR's classify and subclassify predicates.

CR labels are represented in full capital letters, in full form when used in prose, in three-letter abbreviated form when used as features of lexical items, e.g. DATIVE,
Most CF's are customarily labeled by the first letter (in upper case) of the label of the case relation most closely associated with the CF, whether in prose or as features, e.g., D, [+D]. The Nominative CF is represented by NM; Accusative is represented by AC. In prose, sub-CF's are labeled by having the first letter capitalized, e.g., Goal. As features, sub-CF's are labeled by three-letter abbreviations (all lower case), e.g., Goal: [+gol], Location: [+lcn].

3.2.1.1 AGENTIVE

The AGENTIVE case is the instigator of the event described by the verb, and as such is the normal unmarked subject of transitive verbs in accusative languages (cf. Starosta 1973b: 4, 7). OBJECTIVE occurs obligatorily with AGENTIVE unless marked otherwise in the lexical entry of a verb; INSTRUMENTAL occurs optionally.

AGENTIVE can be realized only in the NM case form in Vietnamese.

3.2.1.2 OBJECTIVE

The OBJECTIVE case is the basic indispensable argument with every verb—"the entity that moves or changes or whose position or existence is in consideration" (Fillmore 1971a: 376). It is considered by Fillmore to be the most neutral case. The UCLA English Syntax Project does, in fact, call this the NEUTRAL case and notes that it is "the case associated most closely with the verb itself, and least
interpretable independently of the verb" (Stockwell et al. 1968: 9). As Taylor (1971: 19) states, it is "a sort of 'basic' case relationship by virtue of its occurrence with all predicate types." It occurs obligatorily with all AGENTIVE-subject verbs and optionally with all DATIVE-subject verbs. With all other verbs, it occurs as grammatical subject, an aspect of Lexicase grammar which is significantly different from usual Fillmorean practice, which considers OBJECTIVE to be inanimate and—notwithstanding the Fillmore definition cited above—does not assign the OBJECTIVE case to subjects of intransitive verbs of action.

OBJECTIVE is realized most frequently in the AC or NM case forms, but can also occur in the L case form.

3.2.1.3 DATIVE

The DATIVE case is the experiencer or recipient of the event described by the verb, usually the goal of the action described by the verb. It occurs as grammatical subject with a set of verbs which have optional OBJECTIVE and the feature [+psych] in their lexical entries, and with a subset of stative verbs which take optional OBJECTIVE.

DATIVE is realized as D, AC, L, or NM.

3.2.1.4 LOCATIVE

The LOCATIVE case relation is the orientation in (abstract) space of the state or event described by the verb. As such, it can occur, with certain sub-CF restrictions, with every verb type. LOCATIVE also subclassifies AGENTIVE-subject and OBJECTIVE-subject verbs into LOCATIVE
and non-LOCATIVE. The LOCATIVE subclassification of verbs is discussed fully in Sec. 3.3.4.1.

LOCATIVE is realized in the L and AC case forms. In the sentence

(3.3) Phòng này là nh ̣h ́ 'This room is cold.' (Liem 1973: 8)

room this be cold

Liem considers phòng to be LOCATIVE and in the NM case form. I consider (3.3) to have two readings. In one reading,

(3.3) is equivalent to

(3.4) ĕ phòng này  là nh ̣h ́ 'It's cold in this room.'
in room this be cold

a type of subjectless LOCATIVE-atmospheric (see Platt 1971: 38) sentence which is beyond the scope of this study. By this reading, phòng in (3.3) is [+AC, +LOC], i.e., not a Nominative LOCATIVE. In the second reading, phòng is treated as an object rather than a location and là nh ̣h as an attribute of this object, so that phòng is in the NM case form but is OBJECTIVE instead of LOCATIVE.

3.2.1.5 INSTRUMENTAL

The INSTRUMENTAL case is that means by which the event described by the verb is accomplished or the substance with which the OBJECTIVE of the verb is made, that which is necessary to the performance of an action without being directly affected by it. INSTRUMENTAL may occur with all [+voluntary] verbs except those which are marked [-___[+INS]] in their lexical entries. INSTRUMENTAL may be the grammatical subject of AGENTIVE verbs when AGENTIVE is not
INSTRUMENTAL may be realized in the I, AC, and NM case forms, and, when preposed to the grammatical subject, may occur as C.

3.2.1.6 COMITATIVE

The COMITATIVE case relation expresses parallel association between two NP's, usually in the activity described by the verb. It can occur with all [+voluntary] verb types.

COMITATIVE is realized only in the C case form.

3.2.1.7 BENEFACTIVE

The BENEFACTIVE case identifies the noun designating the entity on behalf of which or in place of which the action of the verb is performed. It can occur with all [+voluntary] verb types.

BENEFACTIVE may be realized in the B case form, but occurs more frequently in the D case form.

3.2.1.8 TIME

The TIME case relation identifies the orientation in time of the state or event described by the verb. It can occur with all verb types.

TIME does not have a case form particularly associated with it. It is realized in the L and AC case forms, in both of which it is frequently preposed to the grammatical subject. Every TIME phrase must contain a noun lexically marked [+time].
3.2.2 Case Forms

3.2.2.0 Characteristics of Case Forms

As defined in Sec. 2.1 for this study, a case form (CF) is a feature which characterizes a syntactically significant set of one or more case markers, which are overt realizations of case relations (CR). Case markers in Vietnamese are word order and prepositions. A CF is a feature of nouns and prepositions: An NP gets its CF and CR from the head N, and a PP gets its CF from the P and its CR from the head N of the NP.

Every P is marked in its lexical entry with a single case form and with a case frame indicating the case forms and case relations it can take in the head N of the NP which occurs with that P. It is assumed here that, for Vietnamese, the case relation of that N always occurs in the Accusative case form. That is, [+NM] and [+AC] are the only case forms possible for nouns in Vietnamese and the rule

$$\text{RR. } \begin{align*}
\{[+P]\} & \rightarrow [-\neg[+NM]] \\
{[+V]} &
\end{align*}$$

accounts for the fact that, in Vietnamese, no noun following the verb or a preposition can be in the Nominative case form. Therefore, it is unnecessary to mark the case form for case relations in individual P case frames. One class of P's, like some V's, can occur in construction with an embedded sentence containing a non-finite verb. This type of occurrence is not discussed in this study.
In the sections below, for those case forms which have P case markers, the case frame of the P is given, as well as an approximate English gloss. The D case marker and most of the L case markers are coverbs, and these are discussed in detail in succeeding chapters. In this chapter, for the sake of simplicity, they are treated as ordinary prepositions.

3.2.2.1 The Nominative Case Form: [+NM]

The Nominative case form marks the grammatical subject of the sentence. Nominative occurs immediately preceding the verb and never takes a preposition. The Nominative case form realizes AGENTIVE, INSTRUMENTAL, DATIVE, and OBJECTIVE case relations. In Vietnamese, DATIVE and OBJECTIVE can be subject only of DATIVE-subject and OBJECTIVE-subject verbs, respectively (see Clark 1971a regarding "passive" in Vietnamese). Therefore, there is a subject choice hierarchy only between AGENTIVE and INSTRUMENTAL; that is, with AGENTIVE-subject verbs, if AGENTIVE is present in a sentence, it will be subject; if it is not present, INSTRUMENTAL will be subject. Examples of these CR's in the NM case form are given here.

[+NM,+AGT]

(3.5) Tôi cắt thịt bằng dao này. 'I cut the meat with this knife.'

[+NM] [+AC] [+I] [+INS]
3.2.2.2 The Accusative Case Form: [+AC]

The Accusative case form occurs postverbally and without a P. Since all non-NM nouns are AC, AC can realize all case relations except AGENTIVE. When an AC NP is not part of a PP, it can realize all CR except COMITATIVE, so that there is a rule [+V] $\rightarrow$ [-___[+AC,+COM]]. DATIVE, BENEFACTIVE, and INSTRUMENTAL occur without a preceding P only when they immediately follow the verb. Examples of these cases realized as AC are given below.

\([+AC,+OBJ]\)

The AC case form is most closely associated with OBJECTIVE, which is not usually preceded by a P. OBJECTIVE either follows the verb immediately, as in (3.9) and (3.10),
(3.9) nó làm việc này. 'He does this work.'
3p do work this

(3.10) tôi hiểu nó. 'I understand him.'
I understand 3p

or follows another NP or PP which follows the verb:

(3.11) tôi cho nó hai cuốn sách. 'I gave him two books.'
I give 3p two Cl book

OBJECTIVE can also be topicalized:

(3.12) nhà này tôi bán. 'This house I'm selling.'
house this I sell

[+AC,+DAT]

The DATIVE can occur as [+AC] without a P when it immediately follows the verb, as in (3.13), not when the OBJECTIVE comes between it and the verb.

(3.13) nó gởi tôi một bức thư. 'He sent me a letter.'
3p send I one Cl letter

It obligatorily occurs without a P with the verb cho 'give', which it immediately follows, as in (3.11) above and (3.14).
(3.14)  tao cho máy. máy cái tá† bây giờ.
I give you several Cl slap now (Truong &
(familiar) (fam) Nguyen
1963: 267)

[+NM] [+AC] [+DAT] [+OBJ] [+AC] [+TIM]

'I'm going to give you some slaps right now.'

[+AC,+BEN]

(3.15)  mua tôi cái áo 'Buy me a dress.' (Le 1960: 261)
buy I Cl dress

[+AC] [+BEN] [+OBJ]

[+AC,+LOC]

LOCATIVE can occur as [+AC] without a P, immediately
following a class of OBJECTIVE-LOCATIVE verbs (OBJECTIVE-
subject verbs which have LOCATIVE in their lexical entries).

(3.16)  nó đi Sài Gòn rồi 'He went to Saigon already.'
he go already

[+NM] [+AC] [+OBJ] [+LOC]

AGENTIVE-subject verbs with inherent locatives can take
their LOCATIVES without P's when the LOCATIVE noun is a
relator noun. (See Sec. 3.2.3 for locative relator nouns
and Sec. 3.3.5.2 for AGENTIVE-LOCATIVE verbs.) (3.17) has
a locative relator noun.

(3.17)  nó để cái but trên bàn 'He put the pen on
he put Cl pen top table the table.'

[+NM] [+AGT] [+AC] [+OBJ] [+AC] [+LOC] [+relation]
[+AC,+TIM]

TIME is distinguished from LOCATIVE by the fact that every TIME phrase must contain a noun lexically marked [+time]. [+AC,+TIM] can occur with every verb type.

(3.18) Tôi mua gạo hôm qua 'I bought rice yesterday.'
I buy rice day past

(3.19) Ngày thứ hai tôi mua gạo 'I'll buy rice on second day I buy rice Monday.'

[+AC,+INS]

INSTRUMENTAL occurs as [+AC] with only a small class of OBJECTIVE-subject verbs.

(3.20) Nó sẽ đi xe vào. 'He'll go by bus.'
he Fut go vehicle ferry

3.2.2.3 The [+D] Case Form

Case marker: cho 'to, for'

The D case form realizes DATIVE and BENEFACTIVE. The case marker cho is discussed in detail in Sec. 5.4.

[+D,+DAT]

DATIVE as [+D] occurs with AGENTIVE-subject verbs which have Goal DATIVE in their lexical entries (AGENTIVE-DATIVE-
Goal verbs). It either precedes or follows the OBJECTIVE. When DATIVE immediately follows the verb, the case marker is optional.

(3.21) nó gởi (cho) tôi một bút th exceedingly
he send to I one Cl letter
\[ [+\text{NM}] \quad [+\text{D}] \quad [+\text{AC}] \quad [+\text{OBJ}] \]

'He sent (to) me a letter.'

With AGENTIVE-DATIVE verbs, the sentences with the D case marker are ambiguous since the noun could also be [+BEN].

(3.22) nó gởi tôi cho tôi
he send letter to I
\[ [+\text{NM}] \quad [+\text{AC}] \quad [+\text{D}] \quad [+\text{AC}] \]

'He sent letters to me.'
(or 'He sent letters (to somebody else) for me. ')

[+D,+BEN]

As stated above, when [+D,+BEN] occurs with AGENTIVE-DATIVE-GOAL verbs, the sentence is ambiguous since the noun, e.g., tôi in (3.23), could also be DATIVE.

(3.23) nó bán trái đó cho tôi
he sell fruit that for I
\[ [+\text{NM}] \quad [+\text{AC}] \quad [+\text{D}] \quad [+\text{AC}] \quad [+\text{BEN}] \]

'He sold that fruit for me.'
(or 'He sold that fruit to me. ')

The ambiguity is removed if a DATIVE cooccurs with the BENEFECTIVE, as in (3.24).
(3.24) nó bán cỏ-áy trái đỏ cho tôi
he sell she fruit that for I

\[\begin{array}{lllll}
+NM & +AGT & +AC & +OBJ & [+D] +AC & +BEN \\
\end{array}\]

'He sold her that fruit for me.'

Since mua, chạy, and hiểu cannot take Goal DATIVE, (3.25), (3.26), and (3.27) are unambiguously BENEFACTIVE.

(3.25) nó mua trái đỏ cho tôi
he buy fruit that for I

\[\begin{array}{lllll}
+NM & +AGT & +AC & +OBJ & [+D] +AC & +BEN \\
\end{array}\]

'He bought that fruit for me.'

(3.26) nó chạy mau cho tôi 'He ran fast for me.'
he run fast for I

\[\begin{array}{lllll}
+NM & +OBJ & [+D] +AC & +BEN \\
\end{array}\]

(3.27) anh hiểu cho tôi nhé
elder understand for I OK?
bro.

\[\begin{array}{lllll}
+NM & +DAT & [+D] +AC & +BEN \\
\end{array}\]

'Please try to understand for me.'

3.2.2.4 The [+L] Case Form

The L sub-CF's are a group of syntactically distinguished prepositions. They realize LOCATIVE, TIME, and, for two sub-CF's, DATIVE and OBJECTIVE. Of the four sub-CF L's so far posited, the Location sub-CF is [-direction]. The [+direction] sub-CF's are Source, Goal, and Terminus. (See Sec. 3.3.4.1 for SR's and RR's for subclasses of [+locative].) The sub-CF's are given here with examples.
3.2.2.4.1 The Location Sub-CF: [+lcn]

Case markers: 'in, at'

The Location sub-CF marks the place in space in which the
event of the verb occurs and, as such, occurs with all verb types. The Location sub-CF does not occur with the CR TIME in Vietnamese. Location in time can be indicated by the use of the relator noun trong 'inside' (see Sec. 3.2.3).

\[ [+L,+lcn,\text{+LOC}] \]

(3.28) ông-áy dạy toàn tại trường dó
he teach math in school that

\[
\begin{array}{c}
\text{+NM} \\
\text{+AGT} \\
\text{+AC} \\
\text{+OBJ} \\
\text{+lcn} \\
\text{+AC} \\
\text{+LO}
\end{array}
\]

'He teaches mathematics in that school.'

(3.29) nó đứng ở đường Lê-Lợi
he stand in street

\[
\begin{array}{c}
\text{+NM} \\
\text{+OBJ} \\
\text{+lcn} \\
\text{+AC} \\
\text{+LO}
\end{array}
\]

'He's standing in Le-Loi Street.'

(3.30) ông sờ chứng tôi làm việc nhiều
in office Pl I do work much

\[
\begin{array}{c}
\text{+L} \\
\text{+AC} \\
\text{+lcn} \\
\text{+AC} \\
\text{+AGT} \\
\text{+OBJ}
\end{array}
\]

'We work hard in the office.'
In that village, I usually hear bells.

The case marker ṭ and a LOCATIVE noun can occur preceding a verb of direction, as in (3.32), where Liem (1973: 11) gives three possible analyses, as shown. (I have interpreted Liem's analysis in terms of the formalization used in this study.)

(3.32) ṭong-āy ṭ Mī qua 'He came over from America.'

(1) [+NM] [+L] [+V] [src]

(2) [+L] [+1cn] [+V]

(3) [+V] [+AC] [+LOC] [src] [+V]

If ṭ in (3.32) is a verb, as in solution (3), then one would expect a different translation since the analysis of verbs in series suggests sequential action. If ṭ is in fact a P, as in solutions (1) and (2), then it shares with the [-gol] Source P the ability to occur before a [+gol] OBJECTIVE-subject verb (see the following section on the Source sub-CF), which is the only instance in Vietnamese of PP occurring after NM and before V. Since [src] implies [dir], the [-dir] Location P cannot be a [src] case marker, as in solution (1). Further, Liem now feels
(personal communication) that \( \partial \) is always [+lcn], never [+src]. Therefore, his solution (2) for (3.32) is the correct one.

3.2.2.4.2 The Source Sub-CF: [+src]

Case markers: \( t`v \) 'from' \( kh\`o\) 'out of'

\[
\begin{array}{c|c}
\text{+P} & \text{+P} \\
\text{+L} & \text{+L} \\
\text{-gol} & \text{-gol} \\
\text{+extent} & \text{-extent} \\
\text{+[+locus]} & \text{+[+interior]} \\
\text{+[+LOC, +TIM]} & \text{+[+LOC]} \\
\end{array}
\]

The [+extent] Source sub-CF marks the locus in space or time from which the action of the verb is directed. The P \( t`v \) frequently occurs preceding Goal or Terminus, expressing specific Extent in space or time. The [-extent] Source P \( kh\`o\) cannot occur expressing Extent and cannot occur with TIME. It is very specific in its use: It marks the interior space out of which the action of the verb is directed. The [-gol] P's are marked [+src] by a redundancy rule (see Sec. 3.3.4.1 below).

[+L,+src,+ext,+LOC]

When realizing LOCATIVE, the Source P \( t`v \) occurs with verbs of direction, as in (3.33) and (3.34), and with certain motion verbs, as in (3.35), where it precedes the [+gol] P.

(3.33) \( t`\o\i\ \`o\`i\ n`\o\ m`\o\t\ bu\`u-`\\`\`\h\ \ `v\ .\ B\`a\`n\g\`\o\k\ \)
I send he one postcard from

\[
\begin{array}{c|c|c|c|c|c|c}
\text{+[NM]} & \text{+[AC]} & \text{+[AC]} & \text{+[L]} & \text{+[AC]} & \\
\text{+[AGT]} & \text{+[DAT]} & \text{+[OBJ]} & \text{+[src]} & \text{+[LOC]} & \text{+[ext]}
\end{array}
\]

'I sent him a postcard from Bangkok.'
(3.34) ติว. ปักกิ่ง, ต่อไป ณ ชีเน่-มา
from I go
 [+L] [+AC] [+NM] [+AC]
[src] [LOC] [OBJ] [LOC]

'From Bangkok I went to Chiang-Mai.'

(3.35) นี่ ล่า เซเว่น ติว ฮกเกอ เลน ดาล่าต
he drive vehicle from up to
 [+NM] [+AC] [+L] [+AC] [+L] [+AC]
[AGT] [OBJ] [LOC] [src] [goal] [LOC]

'He drove the car from Saigon to Dalat.'

As shown in (3.34), (3.36), and (3.37), the Source ติว
precedes OBJECTIVE-subject Goal verbs.

(3.36) ต่อไป ติว ปักกิ่ง ไป ณ ชีเน่-มา
I go
 [+NM] [+L] [+AC] [+V] [+AC]
[OBJ] [LOC] [goal] [LOC]

'I went to Chiang-Mai from Bangkok.'

(3.37) นี่ ติว ฮกเกอ เลน
he go up
 [+NM] [+L] [+AC] [+V]
[OBJ] [LOC] [goal]

'He came up (here) from Saigon.'

As may be expected from the specificity of its interpre-
tation, the P ข้อ is more limited in its use than the P ติว.
It most frequently occurs with Source verbs, as in (3.38),
and with the adverb หา 'out'. It can also occur with Goal
verbs such as หา 'go out' and ไป 'go', as in (3.39).
(3.38) She pulled the plant out of the pot.

(3.39) Go about three kilometers beyond Nha-Trang.

(3.40) I'll work from 8 a.m.

(3.41) Since that day, I understand him.

As with Source LOCATIVES and Goal verbs, Source TIME phrases precede Goal TIME phrases.
He slept from 3 o'clock to 5 o'clock.'

3.2.2.4.3 The Goal Sub-CF: [+gol]

Case markers: qua/sang 'across (to)'; lại 'back to'

The Goal sub-CF marks the path or goal toward which the action of the verb is directed; that is, the noun associated with a Goal sub-CF names the path or intended terminal point of the action of the verb, never the point of origin. Through subcategorization and redundancy rules, these P's can mark either [+terminus] or [+path] on their LOCATIVE nouns. (Ref. Chart III-1 in Sec. 3.2.1.0 above and Sec. 3.3.4.1 below.)

[+L,+gol,+LOC]

The Goal sub-CF realizes LOCATIVE for AGENTIVE- and OBJECTIVE- subject verbs which have obligatory or optional LOCATIVES in their lexical entries.

He wrote a line on that paper.'
(3.44) nó gởi thư qua tôi
I send letter across I

\[[+NM] [+AGT] [+AC] [+OBJ] [+L] [+gol] [+LOC]\]

He sent a letter to/through me.'

Qua in (3.44) can be interpreted as [+ter] or [+path].

(3.45) nó đi lên Đà lạt
I go up to

\[[+NM] [+OBJ] [+L] [+gol] [+LOC]\]

"He went up to Dalat.'

\[[+L, +gol, +TIM]\]

TIME can occur as [+gol] with most verb types.

(3.46) tôi (sẽ) mua gạo vào ngày thứ hai
I (Fut) buy rice into day second

\[[+NM] [Past] [+AGT] [+AC] [+OBJ] [+L] [+gol] [+TIM]\]

'I'll buy / I bought rice on Monday.'

(See Sec. 3.3.5.2 regarding discussion of vào's [+entering] feature allowing [+surface] or [+enclosed]. Vào could be glossed in (3.46) as 'within'.)

(3.47) qua đầu năm tôi trở về nhà
across head year I return house

\[[+L] [+AC] [+gol] [+TIM] [+NM] [+OBJ] [+AC] [+LOC]\]

'After the beginning of the year, I'll return home.'

\[[+L, +gol, +DAT]\]

The Goal P's can occur with the DATIVE of some verbs.
(3.48) nó gởi hai bức thư về tôi (Liem 1969: 101)
he send two letter to I
\ [+NM] [-AGT] [+AC] [+L] [+DAT] [+AC]

'He sent two letters to me.'
\ [+L,+gol,+OBJ]

Some of the Goal case markers can occur with what is analyzed provisionally as the OBJECTIVE of a class of [+information] verbs.
(3.49) tôi hiểu về việc đó
I understand to matter that
\ [+NM] [+L] [+AC] [+gol] [+OBJ]

'I understand about that.'
(See Liem 1969: 98-99 regarding this use of [+L] case markers.)

3.2.2.4.4 The Terminus Sub-CF: [+ter]

Case markers: đến/tới 'to, until, at'
\ [+p] [+L] [+ter] [+gol] [+OBJ] [+AC] [+LOC, +TIM, +DAT, +OBJ]}

The terminus sub-CF marks the terminal point of the action of the verb, the achieved end. It has many of the same characteristics as the Goal sub-CF, although the Terminus sub-CF cannot mark [+path] on its LOCATIVE nouns.
\ [+L,+ter,+LOC]

The Terminus sub-CF realizes LOCATIVE for AGENTIVE- and OBJECTIVE-subject verbs which have obligatory or optional LOCATIVE in their lexical entries.
(3.50) họ đón nhà đến khu đại học
they arrange house to area university

[+NM] [+AGT] [+OBJ] [+L] [+AC] [+AC] [+LOC]

'They moved to the university compound.'

(3.51) nó chạy đến trường 'He ran to the school.'
he run to school

[+NM] [+L] [+AC] [+OBJ] [+ter] [+LOC]

Terminus is frequently preceded by Source to indicate the boundaries of extent in time or space.

(3.52) nó chạy từ đường Lê-Loi qua cầu này đến
he run from street across bridge this to

[+NM] [+L] [+AC] [+OBJ] [+ter] [+src] [+L] [+AC] [+LOC] [+gol] [+AC] [+L] [+LOC]

chợ đó
market that

'He ran from Le-Loi Street across the bridge to the market.'

[+AC] [+L] [+LOC]

[+L,+ter,+TIM]

TIME can occur as [+ter] with all major verb types.

(3.53) đến khi đó nó sẽ hiểu rõ
at time that he Fut understand already

[+L] [+AC] [+L] [+ter] [+AC] [+NM] [+DAT]

'By that time, he'll understand already.'

The [+ter] sub-CF marks extent in time, preceded or not by [+L,+src].
(3.54) Tôi đã làm việc đến cuối tháng
Past do work until end month

\[
\begin{array}{cccc}
+NM & +AGT & +OBJ & +AC & +L & +AC & +TIM \\
\end{array}
\]

'I worked until the end of the month.'

(3.55) Nói ngồi yên từ 2 giờ đến 3 giờ.
he sit quiet from hour until hour

\[
\begin{array}{cccc}
+NM & +OBJ & +L & +AC & +L & +AC & +TIM & +TIM \\
\end{array}
\]

'He sat quietly from 2 o'clock to 3 o'clock.'

\ [+L,+ter,+DAT] 

The Terminus P's can occur with the DATIVE of some verbs.

(3.56) Con chuyển đạt đến cô-áy nhưng lời thăm
child convey to miss P1 word visit

\[
\begin{array}{cccc}
+NM & +AGT & +L & +AC & +AC & +L & +OBJ \\
+ter & +DAT & +TIM \\
\end{array}
\]

của bá
property father

'Give her my regards, my child.'

\ [+L,+ter,+OBJ] 

Like some of the Goal case markers, the Terminus P can occur with what is provisionally analyzed as the OBJECTIVE of a class of [+information] verbs.

(3.57) Tôi nhớ đến cô-áy nhiều
I recall to she much

\[
\begin{array}{cccc}
+NM & +DAT & +L & +AC & +OBJ \\
+ter & +AC \\
\end{array}
\]

'I think about her a lot.'
Liem (1969: 98-99) states that these direction markers are used to "mark the great distance or social difference between the speaker and the person spoken to, thus expressing the speaker's respect and humility."

3.2.2.5 The [+I] Case Form

Case Marker: 

\[
\begin{array}{c}
+P \\
+I \\
+[+INS]
\end{array}
\]

The I case form realizes only INSTRUMENTAL.

\[ [+I,+INS] \]

(3.58) Tôi cắt thịt bằng dao này.  
I cut meat by knife this

\[
\begin{array}{c}
[+NM] \\
[+AGT] \\
[+AC] \\
[+OBJ] \\
[+INS]
\end{array}
\]

'I'll cut the meat with this knife.'

(3.59) Nó đi Mỹ-Tho bằng xe đó 'He went to My-Tho by bus.'
he go by bus

\[
\begin{array}{c}
[+NM] \\
[+OBJ] \\
[+AC] \\
[+LOC] \\
[+INS]
\end{array}
\]

In some instances, INSTRUMENTAL as [+I] can be preposed.

(3.60) Bằng máy-bay chúng ta có thể đi nhanh được by airplane P1 we able go fast possible

\[
\begin{array}{c}
[+I] \\
[+INS] \\
[+NM] \\
[+OBJ]
\end{array}
\]

'We were able to travel fast by air.' (Liem 1969: 158)

3.2.2.6 The [+C] Case Form

Case Marker: 

\[
\begin{array}{c}
+P \\
+C \\
+[+COM,+INS]
\end{array}
\]
The C case form realize COMITATIVE and INSTRUMENTAL. There are many problems with the C case form in Vietnamese, problems involving N-N relationships, reciprocal nouns, and [+C,+COM] predicates. These problems will not be handled in this study.

[+C,+COM]

(3.61) tôi làm việc với ông-áy 'I work with him.'
   I do work with he

\[
\begin{array}{cccc}
\text{+NM} & \text{+AGT} & \text{+C} & \text{+COM} \\
\text{+OBJ} & \end{array}
\]

(3.62) em nó đi với nó 'His brother went with him.'
   young he go with he

\[
\begin{array}{cc}
\text{+NM} & \text{+C} \\
\text{+OBJ} & \text{+COM} \\
\end{array}
\]

(3.63) ai cùng nói-chuyện với nó 'Everyone talks with him.'
   who also converse with he

\[
\begin{array}{cccc}
\text{+NM} & \text{+OBJ} & \text{+C} & \text{+COM} \\
\end{array}
\]

The COMITATIVE can be preposed, as in (3.64).

(3.64) với nó, ai cùng thích nói-chuyện (Liem 1969: 158)
   with he who also like converse

   'With him, everyone likes to talk.'

[+C,+INS]

The C case form can realize INSTRUMENTAL when INSTRUMENTAL is topicalized.

(3.65) với tiền. ấy tôi dâ mua hai đĩa hát
   with money that I Past buy two disk sing

\[
\begin{array}{cccc}
\text{+C} & \text{+INS} & \text{+NM} & \text{+OBJ} \\
\text{+AGT} & \text{+COM} & \\
\end{array}
\]

'With that money, I bought two records.'
3.2.2.7 The [+B] Case Form

Case markers: ಗිෂුම්/හො 'for, on behalf of'

\[
\begin{align*}
\text{+P} \\
\text{+B} \\
\underline{+[+BEN]} \\
\end{align*}
\]

The B case form realizes only the BENEFACTIVE case relation. All the [+D,+BEN] sentences in Sec. 3.2.2.3 above may, instead, be [+B,+BEN], in which case they are all unambiguously BENEFACTIVE.

\([+B,+BEN]\)

(3.66)  ගිෂුම්/හො කාර්මික මාතා කළා මෙය Singh
he sell fruit that for I

\[
\begin{align*}
\text{+[NM]} \\
\text{+AGT} \\
\underline{+[B]} \\
\underline{+[AC]} \\
\underline{+[BEN]} \\
\end{align*}
\]

'He sold that fruit for me.'

(3.67)  මාස් යොක්කා ගිෂුම්/හො කළා මෙය young run fast for I

\[
\begin{align*}
\text{+[NM]} \\
\underline{+[B]} \\
\underline{+[AC]} \\
\underline{+[BEN]} \\
\end{align*}
\]

'Please run fast for me.'

(3.68)  ගිෂුම්/හො කාර්මික මාතා කළා මෙය he hand fruit to she for I

\[
\begin{align*}
\text{+[NM]} \\
\text{+AGT} \\
\underline{+[B]} \\
\underline{+[AC]} \\
\underline{+[AC]} \\
\underline{+[DAT]} \\
\underline{+[BEN]} \\
\end{align*}
\]

'He handed the fruit to her for me.'

(3.69)  මාස් යොක්කා ගිෂුම්/හො කළා මෙය (Nguyen D-H 1966: 194)
elder write for I go 
bro. (Imper)

\[
\begin{align*}
\text{+[NM]} \\
\text{+AGT} \\
\underline{+[B]} \\
\underline{+[AC]} \\
\underline{+[BEN]} \\
\end{align*}
\]

'Please write it for me.'
3.2.3 Locative Relator Nouns

There is a set of locative-type words which, for the moment, I will call trong-class words. They occur in LOCATIVE or TIME phrases, following verbs or prepositions and preceding nouns, as in the example sentences given below. The set includes the following words, with approximate meanings.

trong  inside
ngoài  outside
tên    above, top
dưới  beneath, bottom
truông  before, front
sau    after, behind
ghiòng  between, the middle
quan  surrounding
ngang  across
quâng, khoăng  space, interval
tân    all the way, extreme point
dằng  side, direction
bên  side

(3.70) Ùt bo kẹo (ơ) trong hộp
put candy in inside box
'Út put the candy away in the box.'

(3.71) Lan ngồi trên xe đi Nha-Trang
sit top vehicle go
'Lan was (sitting) on the Nha-Trang bus.'

(3.72) nó thọc tay (vào) dưới griông tìm hộp nũ-trang
3p thrust hand into under bed seek box jewelry
'He stuck his arm under the bed looking for the box of jewelry.'
(3.73) Huế bị (họ) pháo-kích bên tỉnh-duưng
suffer they shell side province headquarters
'Hue suffered shelling (they shelled) at the Province headquarters.'

(3.74) Lan đi trong tháng năm
go inside month five
'Orchid is going in May.'

Thompson (1965: 200-202) includes all of these words
but quãng, tên, dằng, and bên in a list of what he calls
"relator nouns", nouns which "express position (in space or
time) or some vaguer dimension in relation to something
else" (p. 200), which "clarify relative position" (p. 316),
and which he considers to be head nouns in a phrase
(p. 318).

Cadiere (1958: 121) includes some trong-class words in
a list of words he calls prepositions. He also includes
the noun nơi 'place, location'. He gives an example with
nơi from Vĩnh, a North Central dialect, (3.75), which is
not an acceptable use of nơi for those Southern speakers
questioned.

(3.75) ..đi nơi nhà trường 'live at school'
be in place house school (Cadiere 1958: 122)

Liem (1969: 154-155) analyzes trong-class words as
Location Prepositions, which are the initial nucleus of a
Location-Direction Relator Axis Phrase. He calls what I
have called prepositions in Sec. 3.2.2.4 above (i.e., vô
in (3.76)) Defective Verbs and includes them in the Predicate
instead of in the locative phrase, as in (3.76) (vertical
lines indicate phrase boundaries).
In his 1973 paper, Liem refers to the `trong'-class words as a special class of nouns which occur in the [+NM,+LOC] slot, but gives no examples.

Ha (1970: 30-31) keeps the constraint of a single P for each PP by considering `trong'-class words to have the "basically nominal" nature described by Thompson and considering them to be nouns modified by other nouns (the following noun) when they occur after a Direction preposition. However, when they occur immediately after a directional verb, she proposes that they undergo a "co-prep" derivation rule and become L-prepositions. She gives the examples (3.77) and (3.78).

(3.77) Tôi đi vào trong nhà. (Ha 1970: 31)
'I went into/inside the house.'

(3.78) Tôi vào trong nhà. (Ha 1970: 31)
'I went inside the house.'

However, it seems wrong and unnecessary to say that `trong` in (3.77) is different grammatically from `trong` in (3.78). Further, `vào` in (3.77) is a P, according to Ha and
according to my definition of P in Sec. 3.1 above. (Also, see Sec. 3.2.2.4.3 for more "váо-class" words as [+L,+g01] P's.) If the trong-class words are also analyzed as P's, the cooccurrence of a váo-class word and trong-class word (as in (3.77)) would violate a proposed universal constraint against P^P in a grammar. As defined in Sec. 3.1 in this study, P is one of the obligatory elements of a PP and marks the case form of the PP. A PP cannot have more than one case form. In marking the case form of the PP, the P functions in satisfying the requirements of verbs, whose case frames specify case form and case relation co-occurrences. The definition of P as a case marker disallows P^P.

It would be possible instead to consider the váo-class words to be adverbs. E.g., lèn in (3.79), instead of a P, could be a postverbal adverb emphasizing the direction on the verb treo, thus allowing the trong-class word tän to be analyzed as a P.

(3.79) ...treo. lèn tän tren ngọn cây (Nguyen D-H 1966: 411)
'climb all the way up to the treetop'

However, if all trong-class words are claimed to be P's, then both tän and tren in (3.79) would be P and again the P^P constraint is violated.

If we consider Thompson's analysis of trong-class words to be correct—that these words are head nouns "clarifying relative position," these restrictions can be accounted for.
That is, as shown in the PS rules in Sec. 3.1 and by ngọn cây in (3.79) itself, there is no N^N constraint. In fact, there is no grammatical limit on the number of nouns occurring together. The structure of (3.79), with tận and trên as nouns, would be as follows.

(3.79)

Furthermore, if both trong-class words and vào-class words are called P's, the distinction would be lost between noun-type P's (trong-class), which can follow vào-class P's, and real P's (vào-class), which cannot.

Following Thompson, I shall call trong-class words "relator nouns" (Nr) and consider their feature matrices to have the following features:

\[
\begin{align*}
&+N \\
&+\text{place} \\
&+\text{relation} \\
&\{+N\} \\
&\{+\text{Det}\} \\
\end{align*}
\]

Nr's are different from other [+place] nouns, such as đây 'here', nhà 'house', Sài gòn, and Nha-Trang, in that they
are bound; that is, they require either a noun or a
determiner following. In (3.71), repeated here,

(3.71) Lan ngồi trên xe đi Nha-Trang
sit top vehicle go

\[
\begin{align*}
\text{[+N]} & \quad \text{[+N]} \\
\text{[+place]} & \quad \text{[+place]} \\
\text{[+rel]} & \quad \text{[+rel]}
\end{align*}
\]

'Lan was (sitting) on the Nha-Trang bus.'

both trên and Nha-Trang are [+place] nouns but trên must
be followed by another noun or a determiner.

The Nr bèn is not as clearly a relator noun as the
others. Thompson states (1965: 200) that relator nouns never
occur as heads of numerative phrases; bèn does, as in cả
hai bèn ('all, two, side') 'both sides', but bèn also
functions as Nr, as in (3.73), repeated here, where an Nr is
needed, in the absence of a [+L] P (such as ở 'in'), to
fulfill the requirements on tinh-duong as the inalienable
LOCATIVE of Huế.

(3.73) Huế bị pháo-kích bèn tinh-duong
suffer shell side prov. hqtrs

\[
\begin{align*}
\text{[+NM]} & \quad \text{[+AC]} \\
\text{[+OBJ]} & \quad \text{[+LOC]} \\
\text{[+rel]} & \quad \text{[+rel]}
\end{align*}
\]

'Hue suffered shelling at the Province Headquarters.'

Another argument in support of trong-class words
being nouns instead of prepositions is their ability to
take determiners which cannot themselves act as full NP's
elsewhere, as này in (3.80) and kia in (3.81).
Starosta (1971b: 195-200) discusses relator nouns in Sora, an Austroasiatic language of the Munda family of India. He calls them Noun Auxiliaries in that work and states that they are bound nouns used to mark case, that they "act as heads of Noun Phrases when this is necessary to satisfy the selectional requirements of a verb" (p. 195). He discusses the DATIVE noun auxiliary in detail, showing the selectional restrictions of animate and inanimate with DATIVE and OBJECT. In his 1973 paper on Sora (1973b), he gives three noun auxiliaries for LOCATIVE and four for TIME.

In Vietnamese, too, Nr's, as well as fulfilling a
function of specifying spatial orientation, are necessary in some instances to satisfy the selectional requirements of a verb. This is shown in Secs. 3.3.5.2 (AGENTIVE-LOCATIVE verbs) and 3.3.5.4 (OBJECTIVE-LOCATIVE-Goal verbs). The classification as a noun of trong in (3.77) and (3.78) above, both from Ha 1970: 31 and reanalyzed here,

(3.77) tôi đi vào trong nhà.
I go into inside house
\[
\begin{array}{c c c}
+NM \\
+OBJ \\
+L \\
+go\text{I} \\
+AC \\
+LOC
\end{array}
\]
'I went into the house.'

(3.78) tôi vào trong nhà.
I enter inside house
\[
\begin{array}{c c}
+NM \\
+OBJ \\
+AC \\
+LOC
\end{array}
\]
'I went inside the house.'

is consistent with the requirements of verb case frames. That is, the verb đi can take [+L,+LOC], whereas the verb vào, in (3.78), must take [+AC,+LOC], a requirement which would not be met if trong were a P.

Finally, an Nr occupies the position of the head noun in an NP, i.e., the first noun. This argument carries more weight when one looks at Chinese, which has prepositions but whose head noun is final in the NP, so that there is no chance of confusion between head nouns and P's. Chinese has a set of Nr's (called "localizers" by Chao (1968), Chu (1972), and Tang (1972), and "place words" by DeFrancis (1963)), and they occur in phrase-final head-noun position.
Furthermore, Chu (1972: 86-92, 103), in a discussion of locative marking on locative phrases, gives evidence that in what he suggests is Late Archaic Chinese there was a genitive marker between the Nr and its modifying noun—the same construction as the genitive construction in Modern Mandarin: Possessor - Genitive Marker - Possessed (Head Noun). Later, the genitive marker dropped out of usage with Nr's (as with other inalienably possessed heads), and Modern Mandarin has Noun - Nr, with the Nr occupying the position of head noun.

Most locative Nr's in Vietnamese, like the locative coverbs discussed in Chapter V (see Sec. 5.1.3), can occur as adverbs following verbs of location or direction, but this aspect of Nr's will not be investigated in this work. For example, see Jones & Thong 1960: 139-142.
3.2.4 Summary of CR and CF Cooccurrences

<table>
<thead>
<tr>
<th>CF:</th>
<th>Case Markers:</th>
<th>CR: AGT</th>
<th>OBJ</th>
<th>DAT</th>
<th>LOC</th>
<th>INS</th>
<th>COM</th>
<th>BEN</th>
<th>TIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM</td>
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<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>AC</td>
<td>Position</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>P: <em>cho</em></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L1cn</td>
<td>P: <em>/her</em></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>src,+ext</td>
<td>P: <em>tú</em></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>src,-ext</td>
<td>P: <em>khój</em></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>gol</td>
<td>P: <em>qua,</em></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ter</td>
<td>P: <em>đón/tái</em></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>P: <em>báng</em></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>P: <em>vój</em></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>P: <em>giùm/hô</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

CHART III-2 CR and CF Cooccurrences

These cooccurrences have restrictions related to verb classes. For example, OBJ and DAT can occur as NM only with OBJECTIVE-subject and DATIVE-subject verbs, respectively. INS, for the present analysis, can occur as NM only with
AGENTIVE-subject verbs. BEN can occur as AC only with certain AGENTIVE-subject verbs, and INS can occur as AC only with OBJECTIVE-subject verbs of locomotion. LOC occurs as AC only with a particular set of OBJECTIVE-subject verbs and with locative AGENTIVE-subject verbs if the LOCATIVE noun is [+place,+relation] (see the preceding section on relator nouns).

The following sections set forth various verb classes and their cooccurrence restrictions with respect to CR's and CF's.

3.3 Classification of Verbs
3.3.0 Introduction

As stated in the preceding section, cooccurrence restrictions for case forms (CF) and case relations (CR) are directly related to verb classes. In this section, an attempt is made to elucidate those verb classes which appear to be relevant to a discussion of Vietnamese coverbs.

3.3.1 Basis of Classification

Verbs may be defined according to the cases with which they can or must occur. As noted in Sec. 2.1, Fillmore (1968: 27) states that the case frames of verbs "have the effect of imposing a classification of the verbs in the language." They may also be defined in terms of inherent semantic features. Ramos (1973: 110) states that the array of cases is not sufficient in itself to subclassify verbs.
She considers the verb to be central and the semantic and selectional features of the verb to predict the types of cases that may occur with it. "Ultimately these semantic and selectional features subclassify the verbs."

The approach in this study has been to determine verb classes on the basis of the CR's and CF's with which they occur. This type of classification has been done previously by Taylor in his case grammar of Japanese (1971), by P. Li in his grammar of Rukai (1973), and by Kullavanijaya in her study of Thai verbs (1974). Taylor states, "The case-frame features assigned to lexical items...indicate both the case relationships and the case markers with which these items may occur; items which have any such features in common are members of the same subclass. It should be noted that such verb classification results in many verbs being members of a number of subclasses by virtue of the kinds of actants with which they may occur" (p. 26).

It has also been possible in this study to postulate semantic features which group the verbs into classes which coincide with the classes formed by the case cooccurrence restrictions. In fact, it seems reasonable to suppose that it is the semantic properties of verbs that ultimately determine their CR and CF cooccurrences, as claimed by Ramos. In the sections below, for each verb class, inherent semantic features are given in addition to the defining case frame of that class. The basis of the classification, however, is the cooccurrence of CR's and CF's.
The classification presented here is only a broad classification of certain verb classes and excludes many other classes of Vietnamese verbs. Only those classes and those distinctions within the classes which are relevant to the study of coverbs are presented. The semantic feature tree of verb classes in Sec. 3.3.6, for example, does not show that there are [+voluntary] verb classes not accounted for here.

3.3.2 [+voluntary] Verbs

In Vietnamese, and possibly in the verbs of all languages, there is a major division between those verbs which I will give the feature [+voluntary] and those which are [-voluntary]. That is, while all verb types (with minor exceptions) can take TIME and a non-Direction LOCATIVE, only [+voluntary] verbs can take INSTRUMENTAL, COMITATIVE, and BENEFACTIVE. Thus, we can have these redundancy rules:

\[
\begin{align*}
\text{RR 1} & \quad [+V] \quad \rightarrow \quad +([+LOC]) \\
& \qquad \quad \quad \quad \quad \quad \quad +([+TIM]) \\
\text{RR 2} & \quad [+V] \quad [+volun] \quad \rightarrow \quad +([+INS]) \\
& \qquad \quad \quad \quad \quad \quad \quad +([+COM]) \\
& \qquad \quad \quad \quad \quad \quad \quad +([+BEN]) \\
\text{RR 3} & \quad [+V] \quad [-volun] \quad \rightarrow \quad -([+INS]) \\
& \qquad \quad \quad \quad \quad \quad \quad -([+COM]) \\
& \qquad \quad \quad \quad \quad \quad \quad -([+BEN])
\end{align*}
\]
Verbs which are [-voluntary] include copulative verbs, the existential-possessive verb, some classes of stative verbs, and some classes of non-stative DATIVE-subject verbs. This study is concerned with some of the classes of [+voluntary] verbs. The classes of [+voluntary] verbs not discussed in this study include some DATIVE-subject verbs and some statives.

3.3.3 Semantic Features and Case Frames

The classes of [+voluntary] verbs which are discussed in this section can be shown by a tree of semantic features. Below are given the case frame features assigned to verb lexical entries by the semantic features. Additional case frame features for individual verb classes are shown in Sec. 3.3.5.

![Verb Semantic Feature Tree](chart)

CHART III-3 Verb Semantic Feature Tree

\[
\text{[+agentive]} : \quad [+\text{NM}, +\text{AGT}]\_ \\
\quad [+\_\text{AC}, +\text{OBJ}] \\
\]

Cf. Ramos (1973: 123). Taylor (1971) uses what he calls "pseudo-features", abbreviations for case frames. This case frame in Taylor has the
pseudo-feature 'transitive' (p. 175). Since DATIVE-subject verbs are also transitive, [+agentive] seems a more appropriate term.

[-agentive] : [+ [+NM,+OBJ] ]
Taylor (1971: 175) uses the term 'intransitive'.

[+locative] : [ +([+LOC])]  
Taylor (1971: 175) uses the term 'movement'; however, my [+locative] verbs include location verbs, which are not movement verbs.

[-locative] : [- [+dir,+LOC]]

[+direction] : [+([+dir,+LOC]])
Taylor (1971: 175) uses the term 'locomotion'. My 'direction' includes his 'locomotion' and 'transfer'.

[-direction] : [+location ][- [+dir,+LOC]]
Taylor 1971 does not distinguish these [+location] classes.

[+dative  
+goal ] : [+([+DAT])]  

[-dative  
-goal ] : [+([+DAT] ]

[-goal] : [+source]

In Sec. 3.3.5, the subclasses are given with their case frames and with example verbs and sentences. In Sec. 3.3.6, the semantic tree is given again with verb-class labels and an example verb for each class.
3.3.4 Inner and Outer Cases

3.3.4.1 Inner LOCATIVE and Outer LOCATIVE

Fillmore (1968: 26, fn 34) suggests a distinction between an "inner" highly restricting LOCATIVE, often associated with directional expressions, which is "inside the VP" and an "outer" weakly restricting LOCATIVE (associated with non-directional locational expressions) which is "outside the VP." Teng (1972), in his dissertation, "A Semantic Study of Transitivity Relations in Chinese", develops the distinction between inner and outer LOCATIVE, noting that, whereas "the outer Locative occurs freely... with all Action verbs,...inner Locative divides all action verbs into Locative and non-Locative" (p. 60).

Platt (1971: 30-33), following Fillmore, also discusses different LOCATIVES in terms of "distance". He posits three degrees of location for English, as follows:

"Inner Locative: The Agent, if any, is not usually located at the Location indicated.

Outer Locative: The Agent is usually located at the Location indicated.

Far Outer Locative: There need be no Agent; it is freely permutable, independently of the other Locatives, to clause beginning or final position" (p. 33).

He further specifies that an inner LOCATIVE is obligatory and/or directional. It has been found for Vietnamese that, in terms of verb classes, a distinction between Outer and Far Outer LOCATIVE is not relevant. Outer LOCATIVE can be selected for any verb by RR 1 above. It has also been
found that, although inner LOCATIVES—whether obligatory or optional—are usually directional, they can also occur with location markers with certain verbs. A directional and a locational inner LOCATIVE are shown in (3.82) and (3.83), respectively. (3.84) gives an outer LOCATIVE.

(3.82) no līng sê! giapy qua sông
3p throw C1 rope across river

\[ +NM \quad +AGT \quad +AC \quad +L \quad +AC \quad +LOC \]

'He threw the rope across the river.'

(3.83) Lan bô kẹo ṣ trong hōp
put candy in inside box

\[ +NM \quad +AGT \quad +AC \quad +L \quad +1cn \quad +AC \quad +LOC \]

'Lan put the candy in the box.'

(3.84) Lâm làm việc ṣ Sài gòn.
'do work in

\[ +NM \quad +AGT \quad +AC \quad +L \quad +1cn \quad +AC \quad +LOC \]

'Lam works in Saigon.'

Kullavanijaya (1974: 56) makes a distinction for Thai between strict inner locative, which is required by a specified group of verbs, and non-strict inner locative, which is optional but is implied by the lexical content of some verbs.

Inner LOCATIVE is usually associated with the OBJECTIVE case relation, whether OBJECTIVE is in the AC case form (as in (3.82) and (3.83) above) or the NM case form, as in (3.85).
Lâm ngồi vào xe đến
sit into car black

\[
\begin{array}{c}
\text{[+NM]} & \text{[+OBJ]} & \text{[+L]} & \text{[+AC]} & \text{[+LOC]}\\
\end{array}
\]

'Lâm sat in the black car.'

That is, inner LOCATIVE states the location, goal, or source of OBJECTIVE.

Inner LOCATIVE subclassifies [+voluntary] OBJECTIVE verbs and AGENTIVE verbs into locative and non-locative subcategories. Locative verbs have \([+__(+[LOC])]] specified for their lexical entries by the semantic feature \([+locative]\), and are further subclassified, according to the semantic feature tree in the preceding section, into Location, Source, and Goal verbs. Locative semantic features on locative V's and [+L] P's are related by the following subcategorization and redundancy rules:

\[
\begin{align*}
\text{SR 1} & \quad [+loc] \rightarrow [+dir] \\
\text{SR 2} & \quad [+dir] \rightarrow [+goal] \\
\text{SR 3} & \quad [+goal] \rightarrow [+ter] \\
\text{RR 4} & \quad [-ter] \rightarrow [+path] \\
\text{RR 5} & \quad [-goal] \rightarrow [+src] \\
\text{RR 6} & \quad [-dir] \rightarrow [+lcn]
\end{align*}
\]

giving the locative feature tree, as shown in Sec. 3.2.1.0:
In Vietnamese, the distinction between [+gol] 'toward' and [+path] 'along, via' is not overtly marked by any difference in case marker. This is frequently true of the distinction between [+gol] 'toward' and [+ter] 'to, reaching', although [+ter] can be made explicit by the use of the [+ter] sub-CF. This feature tree shows the close relationship between Goal and Terminus. It also shows the primary dichotomy between Location and Direction and the secondary dichotomy between Goal and Source.

3.3.4.2 DATIVE and BENEFACTIVE

The DATIVE and BENEFACTIVE cases play roles somewhat similar to those played by Inner and Outer LOCATIVE, respectively. Whereas DATIVE and Inner LOCATIVE subcategorize verbs in a rather strict sense, BENEFACTIVE subcategorizes verbs only very broadly and Outer LOCATIVE can be said not to subcategorize verbs at all.

Fillmore (1968: 26, fn 34) states that Outer LOCATIVE "is in some respects similar in its 'selectional' properties to what might be called the benefactive case B." However, he discusses this in terms of "dependency relations between cases" rather than in terms of what a particular verb
allows in its case frame.

Teng (1972: 59) includes DATIVE and Inner LOCATIVE in a group of cases which he says define case frames. He includes BENEFATIVE and Outer LOCATIVE in a group which he states is "dependent" on the first group--again, dependency relations between cases.

Platt (1970: 47-51) discusses Benefactive as the "perceived beneficiary of an action or state." His Benefactive includes my DATIVE, but he makes a distinction between Factitive Benefactives with verbs like build, make, cook, and bake, which occur with for in English (my BENEFATIVE), as in

(3.86) Joe is building a house for Fred.

and Benefactives which imply change of ownership with verbs like give, show, and donate, which occur with to in English (my Goal DATIVE), as in

(3.87) George showed a book to Mary.

In both of these Benefactives, the beneficiary becomes an Alienable Possessor. Another Benefactive involving Alienable Possession is the possessive, which is Agentless, as in

(3.88) Fred has a car.

Platt considers all three of these Benefactives to be inner Benefactives (p. 50). Benefactives not involving Alienable Possession, as in (3.89), are outer Benefactives.

(3.89) I'll walk the dog for you.

My distinction between inner (DATIVE) and outer
(BENEFACTIVE) differs from Platt and has to do with case frames of verbs in Vietnamese. DATIVE is subject of the verb of possession có 'have', but my non-subject DATIVE is more restricted than Platt's Agent inner Benefactive, being available only to certain AGENTIVE verbs of direction and occurring only with the verb/preposition cho 'to' and some [+L] prepositions, not the [+B] prepositions. BENEFACTIVE is available to many classes of verbs, and may occur not only with cho but also with the prepositions gìum/hô 'for', with the same meaning.

An explicit classification of verbs on the basis of inner LOCATIVE and DATIVE can be more clearly demonstrated in Chinese because of the position of these case relations relative to the verb. Inner LOCATIVE may occur before or after the verb; Outer LOCATIVE occurs only before the verb. Goal DATIVE may occur before or after the verb; BENEFACTIVE occurs only before the verb. (See Secs. 4.1 and 4.3.8, and Hashimoto 1971: 19, Liang 1971: 90-95, and Teng 1972: 305.) Liang, Teng, and Y-C Li (1970) make verb classifications on the basis of postverbal occurrences of LOCATIVE and DATIVE.

The D case form in Chinese (also a coverb) is gãi 'give; to, for'. Sentence (3.90), taken from Hashimoto 1971: 19, with the AGENTIVE-DATIVE-Goal verb sòng 'send, give', has both BENEFACTIVE and DATIVE marked by the [+D] coverb; the proper interpretation depends on the ordering restriction mentioned above.
Since *xiě 'write' is an AGENTIVE-DATIVE verb, (3.91), with the *gěi phrase before the verb, is ambiguous.

(3.91) wǒ *gěi nǐ *xiě *xìn. (Liang 1971: 15)

a) 'I write a letter on your behalf.'
b) 'I write a letter to you.'

It may be disambiguated by replacing *gěi with the P *tì, 'on behalf of' for BENEFACITIVE, as in (3.92), or by having the *gěi phrase follow the verb for DATIVE, as in (3.93).

(3.92) wǒ *tì. nǐ *xiě *xìn. (Liang 1971: 15)

(3.93) wǒ *xiě *xìn. *gěi nǐ (Liang 1971: 15)

The verb *mǎi 'buy' is not an AGENTIVE-DATIVE-Goal verb, so (3.94) is unambiguously BENEFACITIVE.

(3.94) tā *gěi wǒ *mǎi shū (Liang 1971: 34)

'She buys a book on my behalf.'

If the *gěi phrase occurs after the verb *mǎi, as in (3.95), *gěi cannot be a P, but instead can only be a verb which,
with màl, expresses sequential action.

(3.95) tà màl shū gěl wǒ (Liang 1971: 35)

3p buy book give I

\+[NM] [+V] [+AC] [+V] [+AC] [+DAT]

'He buys books and gives them to me.'

The verb gěl, like Vietnamese cho, takes its DATIVE in the AC case form. Chao (1968: 318) states, "The verb gěl 'give' itself does not take gěl 'to' ... It is, however, quite common to have two verbal expressions in series using gěl in both expressions." He gives the following example.

(3.96) gěl qián gěl tà 'give money to him' (Chao 1968: 318)

He does not explain the contradiction between his first statement and his gloss of (3.96). Should (3.96) be translated 'give money, give (it) to him'?

Nguyen D-H (1973: 2) compares DATIVE (indirect object) and BENEFACTIVE in Vietnamese. His underlying structures for the ambiguous sentence (3.97) might be construed as support for the inner-outer notion. The cho of his DATIVE phrase (structure 1) shares main-verb status with the other verb, whereas his BENEFACTIVE (structure 2) is a separate embedded sentence which is attributed to the other verb and is therefore presumably optional and more "outer".

(3.97) ông ẩy bán nhà cho bà ẩy (Nguyen 1973: 1)

grand- that sell house give grand- that father mother

'He sold a house to/for her.'
When _cho_ marks BENEFACTIVE, (3.97) can be disambiguated by using the [+B] P giùm or họ instead of _cho_, as mentioned above.

For a further distinction between DATIVE and BENEFACTIVE, Nguyen D-H (1973: 3) points out that when the object of _cho_ is "second person" and _cho_ marks BENEFACTIVE, the object of _cho_ can be omitted when the sentence is "in a causative frame." For example,

(3.98) ông ấy bán nhà cho bà
grand- that sell house give grandmother
father
'He sells a house to/for you.'
which is ambiguous, can be

(3.99) de ông ấy bán nhà cho

let he sell house give

'Let him sell a house for you.'

only when cho marks BENEFACTIVE: "The indirect object noun phrase can be deleted only...when it denotes the benefactive, ...and not when it denotes the goal, the receiver, the recipient" (p. 3).

On the basis of the foregoing statements, it can be hypothesized that the distinction between DATIVE and BENEFATIVE, like that between Inner and Outer LOCATIVE, belongs to the properties of a universal grammar, and that different languages show this distinction in different ways. One of the ways, shown for Vietnamese, Chinese, and English, is the optional use of distinct prepositions.

3.3.5 The Verb Classes in Vietnamese

3.3.5.1 AGENTIVE-DATIVE Verbs

As shown in the semantic feature tree in Sec. 3.3.3, there are two major classes of AGENTIVE-DATIVE (A-D) verbs: A-D-Goal verbs and A-D-Source verbs.

3.3.5.1.1 AGENTIVE-DATIVE-Goal Verbs

A-D-Goal verbs are those AGENTIVE verbs which can take a goal DATIVE, i.e., the animate goal or recipient of the action of the verb, in addition to their OBJECTIVE. These verbs are frequently called distransitive verbs in other studies. In general, A-D-Goal verbs have the following
semantic and case frame features.

\[
\begin{array}{c}
{+\text{voluntary}} \\
{+\text{agentive}} \\
{+\text{locative}} \\
{+\text{direction}} \\
{+\text{dative}} \\
{+\text{goal}} \\
{[+\text{NM}, +\text{AGT}]} \\
{[+\text{AC}, +\text{OBJ}]} \\
{[+\text{D, L, go1}, +\text{DAT}]} \\
{[+\text{AC, OBJ}, +\text{DAT}]} \\
{[+L, +\text{dir}, +\text{LOC}]} \\
\end{array}
\]

As shown in the feature matrix, DATIVE can occur in the AC case form only immediately following the verb. Most of these case frame features are predictable in terms of semantic features and are specified for lexical items by lexical redundancy rules on verbs. They are given here in the verb matrix to more clearly show the distinctions between the verb classes discussed here.

**A-D-Goal verbs include the following.**

- *cho* give
- *gồí/gủí* send
- *đemm* carry, take
- *măng* carry
- *khiếng* (of two or more persons) carry a heavy thing
- *phạt* distribute
- *tính* inform, send news
việt write
dưa hand, take
tặng present, offer as a gift
trao/giao deliver, entrust
tra/glả pay, give back
bán sell
dạy teach
kể relate, narrate, cite
bào say, tell
hỏi ask
trình report
báo-cáo report
chuyển(-đạt) convey, transmit
truyền transmit, order
chỉ point out, indicate
chỉ-thị give directive

Some of the verbs, e.g., bán 'sell', dạy 'teach', and kể 'relate', cannot take inner LOCATIVES and cannot take their DATIVES in the L case form. Since an optional directional LOCATIVE is specified for A-D-Goal verbs by RR, verbs such as bán, dạy, and kể must have in their case frames the feature [-__[+dir,+LOC]]. They must also have [-__[+L,+DAT]].

Example sentences with some of the A-D-Goal verbs follow.

The DATIVE of the verb cho always occurs next to the verb and in the AC case form, as in (3.100).
I'll give you a sweet cake, my child.'

With other A-D-Goal verbs, DATIVE immediately following the verb can occur in either the D or the AC case form, as in (3.101), and sometimes the order difference corresponds to a change of meaning (Nguyen D-H 1973: 14).

(3.101) Lan ighest (cho) tôi một món quà ngon
send to I one Cl gift taste good

'Lan sent me a tasty gift.'

(3.102) Lan ighest quà qua tôi
send gift across I to

'Lan sent a gift over to me.'

(3.103) Lan ighest quà sang Mỹ
send gift across to America

'Lan sent a gift across to America.'

(3.104) Lan ighest quà sang Mỹ cho tôi
send a gift to America to me.

'Tôi in (3.104) can also be [+BEN]: 'Lan sent a gift to America (to somebody else) for me.'
An A-D-Goal verb can take a Source LOCATIVE, as in

(3.105) em có gái chi một bức ảnh từ Hoa-thịnh-dơn
  young have send elder one postcard from Washington
  sib

[+NM] [+AGT] [+DAT] [+OBJ] [+src] [+LOC]

'I sent you a postcard from Washington.'

(3.106) con đem cái dao này cho cô ngoài hiện đi
  child carry Cl knife this to miss outside veranda Imper

[+NM] [+AGT] [+OBJ] [+D] [+DAT] [+LOC]

'Take this knife to the girl out on the veranda, my child.'

The LOCATIVE in (3.106) is not an inner LOCATIVE of the verb
  đem but is a LOCATIVE attribute of the DATIVE noun cô.

(3.107) con sẽ... đem xác ba xuống giữa sông (Shum 1965: 93)
  child Fut take body father down middle river

[+NM] [+AGT] [+OBJ] [+L] [+AC] [+LOC]

'I'll bring your body, father, (as you ask, and throw
  it) into the middle of the river.'

(3.108) khi biết ngày, đi tôi sẽ tin cho cô rõ.
  time know day go I Fut inform to Miss clear

[+AC] [+AC] [+NM] [+D] [+AC] [+DAT] [+AGT]

'When I know the day I'm going, I'll let you know
  exactly.'

(3.109) nó tin việc này về Sài gòn. (Nguyen-Dang Liem)
  3p inform matter this back to

[+NM] [+AGT] [+OBJ] [+L] [+gol] [+LOC]

'He sent the information about this matter back to
  Saigon.'
(3.110) ông-áy viết thư cho cô-áy
he write letter to she

[+NM] [+AC] [+D] [+AC] [+DAT]

'He wrote letters to her.'

(3.111) ông-áy viết thư về Sài Gòn.
he write letter back to

[+NM] [+AC] [+L] [goi] [+AC] [+LOC]

'He wrote letters back to Saigon.'

(3.112) em sẽ trả lời cho người đó trước
young Fut return word to person that first sib

[+NM] [+AC] [+D] [+AC] [+DAT]

'I'll answer that person first.'

(3.113) ông-áy bán hai cái nhà cho tôi
he sell two Cl house to I

[+NM] [+AC] [+D] [+AC] [+DAT]

'He sold two houses to me.'

(3.114) cô Xuân dạy toán cho Huong
miss teach math to

[+NM] [+AC] [+D] [+AC] [+DAT]

'Miss Xuan teaches mathematics to Huong.'

(3.115) ông Phong báo cáo tin tức cho tôi
sir report news to I

[+NM] [+AC] [+D] [+AC] [+DAT]

'Mr. Phong reported the news to me.'
Some of the A-D-Goal verbs allow optionality of OBJECTIVE, as shown in (3.116).

(3.116) ...bao-cáo lên Tổng-thống (Nguyen D-H 1972: 407) report up to national president

\[
\begin{array}{c}
\text{[+L]} \\
\text{[+gol]} \\
\text{[+AC]} \\
\text{[+DAT]}
\end{array}
\]

'report to the President of the Republic'

(3.117) thi-sĩ Xuan chuyển-dặt đến có những lời khen thành-thật poet convey to miss PI word praise sincere

\[
\begin{array}{c}
\text{[+NM]} \\
\text{[+AGT]} \\
\text{[+L]} \\
\text{[+ter]} \\
\text{[+AC]} \\
\text{[+AC]} \\
\text{[+OBJ]}
\end{array}
\]

'The poet Xuan sends you words of sincere praise.'

3.3.5.1.2 AGENTIVE-DATIVE-Source Verbs

Some of the AGENTIVE-DATIVE (A-D) Source verbs are

- mua buy
- nhận receive
- thu collect
- tranh take away
- lấy take from
- ăn cắp steal
- cướp rob
- mượn borrow
- vay borrow

These verbs are discussed in Nguyen D-H 1973 (9-13) as Verbs of Taking.

The source nouns of A-D-Source verbs in many languages are marked with [+[L,+src)] case markers; cf. English 'buy the book from her', Japanese (Taylor 1971: 412), Khmer (Sec.
6.2.1.4 in this study), and Thai (Sec. 6.2.2.4). This is not possible in Vietnamese; i.e., (3.118) is ungrammatical.

(3.118) * tôi mua sách từ ông Lam
   I buy book from sir

'I bought books from Mr. Lam.'

Source DATIVES in Vietnamese are commonly marked with a Genitive construction using the noun cua 'property, possession of' (Nguyen 1973: 11), as in (3.119) and (3.120).

(3.119) tôi mua sách cua ông Lam
   I buy book property sir

'I bought books of Mr. Lam.'

(3.120) ông thư ký lấy cái quạt cua cô y tá
   clerk take Cl fan property female
   'The clerk took a fan from the nurse.'

(3.120) could also have the meaning 'the clerk took the nurse's fan', in which case (3.120) would have the structure shown in (3.121),

(3.121) S
     /    
   V NP
     /   / NP
    /   / N NP
   /   / N N
  /   / N N
 "ông thư ký lấy cái quạt cua cò y tá"
sir sec'y take thing fan property miss nurse

in which the Genitive phrase cua cò y tá modifies the noun quạt. However, for the first meaning given for (3.120),
the structure of (3.120) is quite different from (3.121):

\[ \text{C\`ua c\`o y-t`a does not modify the noun qu\`at but is a separate NP constituent from the NP of which qu\`at is the head, as is shown in (3.122), in which the Genitive phrase precedes the OBJECTIVE noun qu\`at.} \]

(3.122) \[ \text{\`On\`g thu-k`y l\`ay c\`ua c\`o y-t`a c`a\`i qu\`at} \]

'\(\text{The clerk took a fan from the nurse.'}\\

Also, the OBJECTIVE phrase, e.g., in (3.119), can be topicalized, leaving the Genitive phrase behind:

(3.123) \[ \text{c\`u\`on s\`ach n\`ay. t\`o\`i mua c\`ua \`On\`g L\`am cl\`o\`o book this I buy property sir} \]

'\(\text{This book I bought from Mr. Lam.'}\\

We can say that the structure of (3.120) with the meaning given in (3.120) is (3.124).

(3.124) \[
\begin{array}{c}
S \\
NP \quad V \quad NP \\
N \quad NP \quad C1 \quad N \quad NP \quad N \\
\text{\`On\`g thu-k`y l\`ay c\`a\`i qu\`at c\`ua c\`o y-t`a} \\
\text{sir sec'\text{y} take thing fan property miss nurse} \\
\text{\([+NM] \quad [+AC] \quad [+AC] \quad [+AC] \quad [+DAT] \quad [+AGT] \quad [+OBJ] \quad [+OBJ] \quad [+poss] \quad [+poss]} \end{array}
\]

'\(\text{The clerk took a fan from the nurse.'}\\

\[ \text{C\`ua} \text{ indirectly states a Genitive relationship between two nouns, the possessor (e.g., c\`o y-t`a) and the possessee} \]
(e.g., c'ai quạt). Further, the possessor by definition always has a DATIVE case relation with the noun c'ua. Relationships between nouns are outside the scope of the verb-noun case relationships discussed in this study. However, it can be stated that, because of coreferentiality between the Genitive noun c'ua and the possessee (in the above examples, the OBJECTIVE noun), c'ua has the same case relation with the verb as the possessee, and the following partially specified case frame can be hypothesized for the mua-type A-D-Source verbs.

\[
\begin{align*}
\text{mua} & \ 'buy' \\
[+source] & \\
[+NM,+AGT] & [+] \\
[+AC,+OBJ] & [+] \\
[+AC,+OBJ,+poss] & [+] \\
\end{align*}
\]

The lexical entry for c'ua will have the feature [+possessive] and will be specified for an obligatory following DATIVE noun.

However, this does not account for all the A-D-Source verbs in Vietnamese. Nguyen (1973: 15) states that with certain verbs c'ua is left out. He gives examples with the verbs mượn 'borrow' and vay 'borrow', one of which follows.

(3.125) tôi mượn anh cuồng sách này nhè (Nguyen 1973: 15)
'I borrow elder Cl book this OK?' bro.

\[
\begin{align*}
[+NM] & \\
[+AGT] & [+AC] \\
[+DAT] & [+] \\
[+OBJ] & [+] \\
\end{align*}
\]

'May I borrow this book from you?'

The case frames for mượn-type subclass of A-D-Source verbs include the following features.
mươn 'borrow'

\[
\begin{aligned}
\{+\text{source} & \} \\
\{+[\text{+NM},+\text{AGT}] & \} \\
\{+[\text{+AC},+\text{OBJ}] & \} \\
\{+[\text{+AC},+\text{DAT}] & \} \\
\{+[\text{+OBJ}][+\text{DAT}] & \}
\end{aligned}
\]

Since the D case form in Vietnamese marks only DATIVES occurring with A-D-Goal verbs, the D case form occurring with A-D-Source verbs unambiguously marks BENEFACTIVE, as in (3.126).

(3.126) tớl mua sách cho ông Lâm
I buy book for sir

\[
\begin{aligned}
\{+\text{NM} & \} \\
\{+\text{AGT} & \} \\
\{+\text{OBJ} & \} \\
\{+\text{D} & \} \\
\{+\text{AC} & \}
\end{aligned}
\]

'I bought books for Mr. Lam.'

Ông Lâm in (3.126) can be DATIVE if cho ông Lâm is considered to be a conjoined or subordinated sentence and cho an A-D verb: 'I bought books and gave them to Mr. Lam'/ 'I bought books to give to Mr. Lam'. When a noun precedes the OBJECTIVE of a non-mươn-type A-D-Source verb and is unmarked with a preposition, it also is unambiguously BENEFACTIVE, as tớl in (3.127).

(3.127) cô-áy mua tớl sách \{'She bought me books.'\}

\[
\begin{aligned}
\{+\text{NM} & \} \\
\{+\text{AGT} & \} \\
\{+\text{BEN} & \} \\
\{+\text{OBJ} & \}
\end{aligned}
\]

\{'She bought books for me.'\}
3.3.5.2 AGENTIVE-LOCATIVE Verbs

3.3.5.2.1 AGENTIVE-LOCATIVE-Goal Verbs

AGENTIVE-LOCATIVE (A-L) Goal verbs have the feature matrix:

+voluntary
+agentive
+locative
+direction
-dative
+goal
+\([+NM,+AGT]\)
+\([+AC,+OBJ]\)
+\([+L, +rel}, +LOC])

The LOCATIVE of A-L-Goal verbs must have either [+L] or a locative relator noun (indicated by the feature [+relation] or [+rel]; see Sec. 3.2.3).

Following are some of the A-L-Goal verbs in Vietnamese.

dể      put, place, leave
đặt      place, put
thọc    thrust, poke
ấn      thrust, press
bổ       cast, put
vứt    throw away, discard
liệng   throw, cast, hurl
gộp        contribute
dồi       transfer, move
dọn    move, arrange
dầu     stop, park (vehicle)
lái    drive (vehicle) (sentence (3.35) above, Sec. 3.2.2.4.2)
chéo    oar, row, paddle
Although the case frame indicates that LOCATIVE is generally optional for A-L verbs, some of these verbs, such as dedic 'put' and  thọc 'thrust', have obligatory LOCATIVE— Kullavanijaya's strict inner locative (1974: 56; and Sec. 3.3.4.1 above).

The verbs áp 'press', treo 'hang', dân 'glue', và 'draw', and viết 'write' can take their LOCATIVES only with the relator noun trên 'the top, the surface' or with the [+L,+gol] marker vào 'onto', as in (3.128) and (3.129).

(3.128) nó viết vài lời trên giấy cho ông Hải
he write some word top paper for Mr.

(3.129) nạng áp mặt vào cửa sổ
she press face onto window

'He wrote some words on paper for Mr. Hai.'

'She pressed her face to the window.'
The [+gol] vào can also mean 'into', but in (3.128) and (3.129) it can mean only 'onto'; that is, because of the semantic properties of the verb áp, vào cừu-sổ in (3.130) cannot mean 'into the window opening' but only 'onto the window glass/frame' (Tôn-nhdr Kŏm-Chŏ, personal communication).

On the other hand, a verb such as thọc 'thrust' usually takes the 'into' meaning of vào, as in (3.130).

(3.130) no’ thọc tay vào. cừu-sổ
he thrust hand into window

\[
\begin{array}{c}
+NM \\
+AGT \\
+OBJ \\
+L \\
\text{[gol]} \\
+LOC \\
\end{array}
\]

'He thrust his hand in through the window.'

Thọc does not occur with the relator noun tren; i.e., (3.131) is ungrammatical.

(3.131) * no’ thọc gậy tren đạt / bùn
he thrust stick top earth mud

\[
\begin{array}{c}
+NM \\
+AGT \\
+OBJ \\
\text{[gol]} \\
+LOC \\
\end{array}
\]

'He thrust a stick on the ground/mud.'

But thọc can occur with other relator nouns, for example, trong 'the inside', as in (3.132).

(3.132) no’ thọc gậy trong bùn
he thrust stick into the mud

\[
\begin{array}{c}
+NM \\
+AGT \\
+OBJ \\
\text{[gol]} \\
+LOC \\
\end{array}
\]

'It appears that the P vào has two distinguishing properties related to the subcategorization of verbs. We might say that vào has the feature [+entering] which, by the rules
1. [+entering]  →  [+surface]

2. [-surface]  →  [+enclosed]

gives vàò the features [+enclosed,+surface]; that трèn has the feature [+surface]; that trong has the features [-surface,+interior]; and that the rules

3. \[\{+V,+P\}^{+enclosed} \rightarrow [+\_+[+interior]] \]

4. \[\{+V,+P\}^{+surface} \rightarrow [+\_+[+surface]] \]

apply to verbs and prepositions. Further, in addition to the feature [+\_([{:~c,+rel},+LOC})], verbs such as áp seem to have a semantic property which modifies that feature as follows: [+\_([{:+L,+AC,+rel}]},+LOC,+surface])]. These features insure that áp-class verbs will not occur with L case markers or locative relator nouns which do not have the feature [+surface], which is consistent with the facts of the language. See Sec. 6.2.2.1.1 for these rules in relation to Thai khâw 'into' and Sec. 6.2.2.1.3 regarding Thai nay 'inside'.

An interesting fact is that the A-L-[+surface] verb viêt 'write' is also an AGENTIVE-DATIVE verb (see the preceding section) and it is one of the A-D verbs which take a directional LOCATIVE, as in (3.133).

(3.133) nó viêt †thσ vào Sàiòn
3p write letter into

\[\text{[+NM] [+AGT] [+AC] [+L] [+AC] [+LOC]} \]

'He wrote a letter to Saigon.'
Thus, to account for the syntactic behavior of việt, we might postulate that việt's feature matrix would include the following features ([+surf] = [+surface]).

\[
\begin{align*}
\dfrac{(+AC)}{\dfrac{\{+D, +L, +gol\}}{+DAT}} \\
\dfrac{(+L)}{\dfrac{\{+AC, +rel\}}{+surf, +LOC}} \\
\dfrac{(+L)}{\dfrac{\{+L, +gol, -surf, +LOC\}}{[-surf] +[surf]}} \\
[-surf] +[surf] \\
[-surf] +[DAT] +[LOC]
\end{align*}
\]

Should both LOCATIVES occur in the same sentence, the [+surf] LOCATIVE occurs before the [-surf] LOCATIVE and either LOCATIVE before DATIVE.

Examples of some of the other A-L verbs in sentence are given here.

(3.134) nằng đế kẹo ở trong hộp
she put candy in inside box

\[
\begin{align*}
\dfrac{+NM}{+AGT} \\
\dfrac{+AC}{+OBJ} \\
\dfrac{+L}{+loc} \\
\dfrac{+AC}{+LOC}
\end{align*}
\]

'She placed the candy in a box.'

(3.135) đế cả dưới gầm phán (Thompson 1965: 201)
put all below space wooden beneath camp bed

\[
\begin{align*}
\dfrac{+AC}{+OBJ} \\
\dfrac{+AC}{+LOC} \\
\dfrac{+AC}{+rel}
\end{align*}
\]

'Put (them) all (in the space) under the camp bed.'

(3.136) Hưng liếng sợi giấy qua sông
throw Cl rope across river

\[
\begin{align*}
\dfrac{+NM}{+AGT} \\
\dfrac{+AC}{+OBJ} \\
\dfrac{+L}{+gol} \\
\dfrac{+AC}{+LOC}
\end{align*}
\]

'Bravery threw the rope across the river.'
(3.137) xin cho chim gop nhac ve tru
please give bird donate music back to sky

[+NM] [+DAT] [+AC] [+L] [+AC] [+GOL] [+LOC]

'Please let the birds bring music back to the sky.'
(from Trinh-Cong-Son "Xin Cho Troi" (song) 1966)

(3.138) ho don nha den khu khac
they move house to area other

[+NM] [+AGT] [+AC] [+OBJ] [+L] [+AC] [+LOC]

'They moved to another area.'

(3.139) no tim. duoc vang va duoi song (Nguyen D-H
3p seek obtain gold in below river

[+NM] [+AGT] [+AC] [+OBJ] [+L] [+AC] [+GOL] [+LOC]

'He found gold in the river.'

3.3.5.2.2 AGENTIVE-LOCATIVE-Source Verbs

Some of the A-L-Source verbs are

b0i remove
tay erase, remove, take out
xoa erase, cross out
nh0 pull up, extract

They have the following case frame ('ext' = 'extent'; see remarks below regarding khoi).
Frequently, the LOCATIVES of A-L-Source verbs are not marked overtly for Source, the only Source marking being on the verb itself, with the LOCATIVE marked only by a locative relator noun, as in (3.140) and (3.141).

(3.140) cò-áy xóa bài trên bảng đen
she erase lesson top blackboard

\[ [+\text{NM},+\text{AGT}] \]
\[ +[+\text{V},+\text{AC},+\text{OBJ},+\text{LOC}] \]

'She erased the lesson from the blackboard.'

(3.141) chí-áy nhở lúa ngoài đồng (Tôn-nũ Kim-Chí)
she pull up rice outside field

\[ [+\text{NM},+\text{AGT}] \]
\[ [+\text{V},+\text{AC},+\text{OBJ},+\text{LOC}] \]

\{ 'She's uprooting the rice from the field.' \} 
\{ 'She's out in the field uprooting rice.' \}

As with A-D-Source verbs, the \[ [+\text{L},+\text{src},+\text{ext}] \] P từ 'from' never occurs with A-L-Source verbs; i.e., (3.142) and (3.143) are ungrammatical.

(3.142) * cò-áy xóa bài từ bảng đen
she erase lesson from blackboard
'She pulled the plant out of the ground.'

However, as shown in the case frame, some A-L-Source verbs can occur with the [-extent] Source L case marker khôl 'out of', as in (3.144).

(3.144) chí-áy nhỏ cây (ra) khôl dáț
she uproot plant out out of earth

'She pulled the plant out of the ground.'

In (3.145), trén is commonly used whereas ra khôl is "snobbish" (Tôn-nũ Kim-Chi).

(3.145) chí-áy tâm rêt nhỏ
top dress
she remove stain

'She removed the stain from her dress.'

3.3.5.2.3 AGENTIVE-LOCATIVE-Location Verbs

A-L-Location verbs include the following:

ăn  eat
nâu  cook, boil
chíen  fry
giọt  wash (clothes)
rửa  wash (object, parts of body)
gội (dầu head) wash (hair)
mây  sew
ủi  iron, press
câu  fish
lấm  do, make
dọc  read
học  study
gữ  keep

Little investigation has been done on this class of verbs other than to identify it as a class on the basis of the verbs' ability to take optional inner locational LOCATIVES. The following case frame is proposed.

\[
\begin{array}{c}
\text{+[voluntary]} \\
\text{+[agentive]} \\
\text{+[locative]} \\
\text{-[direction]} \\
\text{+[NM,+AGT]} \\
\text{+[+[AC,+OBJ]} \\
\text{+[+[AC,+rel],+LOC]} \\
\end{array}
\]

A-L-Location verbs take their LOCATIVES with a [+L,+1cn] P or a locative relator noun ([+rel]; see Sec. 3.2.3).

Many of these verbs, unlike most of the AGENTIVE verbs of direction, have optional OBJECTIVES. They might have the feature [+durative], a term suggested by Susan Fisher (personal communication) for this type of verb with optional OBJECTIVE. Keedong Lee (1974b) discusses a distinction between verbs of "activity" (or atelic verbs--[+durative])
and verbs of "accomplishment" (telic verbs) on the basis of the distinctive use of resultative aspect markers, thus providing another possible basis for class distinction. Nevertheless, it is supposed that most of these verbs require OBJECTIVE when they have inner LOCATIVE, as in (3.146), since the inner LOCATIVE is the location of the OBJECTIVE, not the AGENTIVE.

(3.146) ế́nh 与其他 (óż) trong chén lón
3p eat gruel in inside bowl big

\[
\begin{array}{cccc}
+NM & +AC & +L & +LOC \\
+AGT & & & +rel \\
\end{array}
\]

'He eats his rice gruel in a large bowl.'

(3.147) ế́nh rõi.
3p eat already

\[
\begin{array}{c}
+NM \\
+AGT \\
\end{array}
\]

'He's eaten already.'

Without the OBJECTIVE or a specifically understood OBJECTIVE, the inner LOCATIVE in (3.146) would become an outer LOCATIVE:

(3.148) ế́nh trong chén lón
3p eat inside bowl big

\[
\begin{array}{ccc}
+NM & +AC & +LOC \\
+AGT & & +rel \\
\end{array}
\]

'He's in a big bowl eating.'

The inner LOCATIVE precedes an outer LOCATIVE, as in (3.149).
(3.149) Hái rửa chén trong chậu ngoài hiện
elder two wash bowl inside basin outside veranda
sis
[+NM] [+AGT] [+AC] [+AC] [+AC] [+AC] [+LO] [+LOC] .

'Second Sister is washing dishes in a basin out on the veranda.'

(3.150) Lan ủi quần áo trên tấm van dưới đất ngoài bếp
iron pants top Cl plank below earth outside kitchen
dress
[+NM] [+AGT] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [.]

'Lan irons the clothes on a board on the floor out in the kitchen.'

Besides both inner and outer LOCATIVES, (3.150) has an included LOCATIVE; that is, dưới đất is a LOCATIVE attribute to the noun van, as shown in the following structure.

(3.151)

(3.152) Họ câu cá ngoài biển, trên sông, trong hồ và dưới ao
they fish fish outside sea top river inside lake and below pond
[+NM] [+AGT] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [+AC] [.]

'They fish in the sea, in the river, in the lake, and in the pond.'
bac Hai lam. nha (o) ngoai, dong
uncle make house in outside field

['Old Hai is building a house in the field.]

We know that ngoai, dong in (3.153) is an inner LOCATIVE
because (3.153) can mean either that Old Hai is building
the house himself or is having it built by someone else.

(3.154) Lan g [_wu_ sach hoc (o) trong tu_] keep book study in inside cabinet

['Lan keeps her textbooks in the cabinet.]

3.3.5.3 AGENTIVE Verbs

The [-locative] AGENTIVE verbs have the case frame:

\[
\begin{align*}
+\text{voluntary} \\
+\text{agentive} \\
-\text{locative} \\
\text{[+[NM,+AGT]} \\
\text{[+[AC,+OBJ].}
\end{align*}
\]

They include the following verbs.

- san hunt (predate)
- choi play
- danh hit
- gioi kill
- can bite (of animal)
- xe tear, tear up, rend
- xe split up, cut (up)
- dan knit, weave

Some of the AGENTIVE verbs, such as san 'hunt' and choi
'play', are [+durative] verbs--they do not have obligatory
OBJECTIVES.

Some examples follow.

(3.155) họ chơi bóng-rô tuần rồi
they play basketball week already

\[
\begin{array}{cccc}
+NM & +AGT & +AC & +OBJ & +TIM \\
\end{array}
\]

'They played basketball last week.'

(3.156) họ chơi với ba người phòng học
assembly play with three person make allowance for

\[
\begin{array}{cccc}
+NM & +AGT & [+C] & +AC & +INS \\
\end{array}
\]

'The team was playing three reserves.' (Nguyen V.K. 1964: 1157)

(3.157) họ giết động-bào mình
they kill compatriot self

\[
\begin{array}{cccc}
+NM & +AGT & +AC & +OBJ \\
\end{array}
\]

'They kill their own countrymen.'

(3.158) chó dữ do cắn con tôi!
dog fierce that bite child I

\[
\begin{array}{cccc}
+NM & +AGT & +AC & +OBJ \\
\end{array}
\]

'That fierce dog bit my child!'

3.3.5.4 OBJECTIVE-LOCATIVE-Goal Verbs

The OBJECTIVE-LOCATIVE (O-L) Goal verbs have the case frame:

\[
\begin{array}{c}
+\text{voluntary} \\
-\text{agentive} \\
+\text{locative} \\
+\text{direction} \\
+\text{goal} \\
+[(+NM,+OBJ)] \\
+[]([+go1,+LOC]) \\
\end{array}
\]
They are subdivided into three groups, as follows:

(1) Those verbs which can take their LOCATIVES in either the L or the A. case form: \(+\{(+L,+AC),+LOC\}\).

(2) Those verbs whose LOCATIVES must occur in the AC case form: \(+\{(+AC,+LOC)\}, -\{(+L,+LOC)\}\).

(3) Those verbs whose LOCATIVES must have either \(+L\) or a locative relator noun (see Sec. 3.2.3):
\(+\{(+L,\{+AC,+rel\}),+LOC\}\). Keedong Lee (personal communication) points out that verbs in this group are Manner of Locomotion verbs.

Verbs of group (1) include the following verbs.

- đi: go
- ghé: stop by
- trèo: climb
- ngồi: sit
- nằm: lie

Following are examples of these verbs in sentences.

(3.159) Xuân đi (vào) Sài Gòn to into

\[+\text{NM}\] \[+\text{OBJ}\] \[+\text{L}\] \[+\text{AC}\] \[+\text{LOC}\]

'Xuan went (down from north of Saigon) to Saigon.'

(3.160) cô-ẩy ghé nhà Hương một ngày chơi
she stop by house one day play

\[+\text{NM}\] \[+\text{OBJ}\] \[+\text{AC}\] \[+\text{LOC}\] \[+\text{TIM}\]

'She stopped by Huong's house for a day to visit.'
(3.161) họ ngồi (vào) xe 'They're sitting in the car.'
they sit into vehicle

\[ +\text{NM} \quad +\text{OBJ} \quad +\text{go} \quad +\text{AC} \quad +\text{LOC} \]

Although ngồi 'sit' and nằm 'lie' can take a [+go] preposition, they can also take a [+lcn] preposition, as in (3.162).

(3.162) Lân nằm ở trên giường
lie in top bed

\[ +\text{NM} \quad +\text{OBJ} \quad +\text{L} \quad +\text{lcn} \quad +\text{AC} \quad +\text{LOC} \]

'Lân's lying on the bed.'

(3.163) has both an outer and an inner LOCATIVE.

(3.163) ở Sài Gòn nó thường đi Chợ Lớn
in 3p usual go

\[ +\text{L} \quad +\text{AC} \quad +\text{NM} \quad +\text{OBJ} \quad +\text{AC} \quad +\text{LOC} \]

'In Saigon, he often goes to Cholon.'

Verbs of group (2), whose LOCATIVES must occur in the AC case form, might be called Direction of Locomotion verbs. (They are discussed in detail in Sec. 5.3.2 below.)

They include the following verbs.

qua/sang go across
ra go out
xuống go down
dến/tại arrive at
về return, go back

Examples of these verbs in sentences follow.
(3.164) Lan sang Mỹ học 'Lan went to America to study.'
cross America study

\[
\begin{align*}
&+\text{NM} \quad +\text{AC} \\
&+\text{OBJ} \quad +\text{LOC}
\end{align*}
\]

(3.165) đoàn hướng-dạo xuống tận miền nam
group guide go down extreme region south
point

\[
\begin{align*}
&+\text{NM} \quad +\text{AC} \\
&+\text{OBJ} \quad +\text{LOC}
\end{align*}
\]

'The Boy Scouts went all the way down south.'

(3.166) tôi sẽ đến phi-trường
I Fut arrive airport

\[
\begin{align*}
&+\text{NM} \quad +\text{AC} \\
&+\text{OBJ} \quad +\text{LOC}
\end{align*}
\]

'I'll come to the airport.'

In its lexical entry, đến is [+terminus], which is [+goal] by implication.

Verbs of group (3) include the following verbs.

- bay fly
- nhảy jump, dance
- bước step
- lội swim, wade, wallow
- chạy run
- chạy run, flow
- té fall (person)
- rơi fall (leaves, rain)
- la-cha trickle, drip (tears)
- liengkap hover, soar (bird, plane)
- đầu perch (bird)
- áp approach, be pressed

Some of the O-L-Goal verbs, such as liengkap 'soar',
dấu 'perch', and áp 'approach', have corresponding A-L-Goal
verbs (see Sec. 3.3.5.2.1 above). It is believed that the A-L verbs are derived from the O-L verbs by transitivization derivation (see Kullavanijaya 1974: 166ff).

Following are examples of O-L-Goal group (3) verbs in sentences.

(3.167) con cò bay vao ruong
Cl crane fly into field

\[
\begin{array}{ccc}
  +\text{NM} & +\text{L} & +\text{AC} \\
  +\text{OBJ} & +\text{gol} & +\text{LOC} \\
\end{array}
\]

'The cranes flew into the field.'

(3.168) chim bay tren tri? 'Birds are flying in the sky.'
bird fly top sky

\[
\begin{array}{ccc}
  +\text{NM} & +\text{AC} \\
  +\text{OBJ} & +\text{LOC} \\
  +\text{rel} \\
\end{array}
\]

(3.169) no chim vao cu xam xe dap
3p run into door store bicycle

\[
\begin{array}{ccc}
  +\text{NM} & +\text{L} & +\text{AC} \\
  +\text{OBJ} & +\text{gol} & +\text{LOC} \\
\end{array}
\]

'He ran into the bicycle shop.'

(3.170) song nay chay ra bien
river this flow out sea

\[
\begin{array}{ccc}
  +\text{NM} & +\text{L} & +\text{AC} \\
  +\text{OBJ} & +\text{gol} & +\text{LOC} \\
\end{array}
\]

'This river flows into the sea.'

(3.171) lua dang roi ngoai nga nha
rain Prog fall outside house

\[
\begin{array}{ccc}
  +\text{NM} & +\text{AC} \\
  +\text{OBJ} & +\text{LOC} \\
  +\text{rel} \\
\end{array}
\]

'It's raining outside.'
The tears of the mother trickle on the cold body of her son.' (from Phạm Duy "Giót Mưa Trên Lá" in Mười Bai Tâm Ca (songs), 1965)

Compare (3.173) with (3.129) above, with áp as an A-L-Goal verb.

3.3.5.5 OBJECTIVE-LOCATIVE-Source Verbs

O-L-Source verbs have the case frame:

\[
\begin{array}{c}
+\text{voluntary} \\
-\text{agentive} \\
+\text{locative} \\
+\text{direction} \\
-\text{goal} \\
+[(+\text{NM},+\text{OBJ})] \\
+[\{(+\text{AC},+\text{L},+\text{src},-\text{ext})\},+\text{LOC}] \\
\end{array}
\]

This small set of verbs includes the following.

- rời leave, depart from, be detached from
- đói leave, move (with corresponding A-L-Goal verb)
- tẻ be separated from
- lý-khai dissociate oneself from

Like the A-L-Source verbs discussed in Sec. 3.3.5.2.2, O-L-Source verbs frequently do not mark Source overtly.
They do not occur with the [+L,+src,+ext] P ờ 'from', but can, in some instances, occur with the [+L,+src,-ext] P khỏi 'out of', as in (3.175).

(3.174) tôi sẽ ờ khỏi bệnh viện ngày 26 tháng năm
I Fut leave hospital day month five

\[
\begin{array}{ccc}
+NM & +AC & +AC \\
+OBJ & +LOC & +TIM
\end{array}
\]

'I'll leave the hospital on May 26.'

(3.175) ...ờ khỏi giường (Nguyen V.K. 1964: 896)
leave out of bed

\[
\begin{array}{ccc}
+L & +AC \\
+src & +LOC & -ext
\end{array}
\]

'leave one's bed'

3.3.5.6 OBJECTIVE-LOCATIVE-Location Verbs

There is a small class of [-direction] OBJECTIVE-LOCATIVE verbs whose LOCATIVES occur only in the AC case form. These verbs have the case frame:

\[
\begin{array}{c}
+\text{voluntary} \\
-\text{agentive} \\
+\text{locative} \\
-\text{direction} \\
+\text{[+NM,+OBJ]} \\
+\text{([+AC,+LOC])}
\end{array}
\]

They include the following, with example sentences below.

ơ be in, reside in
ghân be near to
xa be far from
(3.176) chiều sister Lan ở Long-Xuyên be in
[+NM] [+OBJ] [+AC] [+LOC]
'Elder Sister Lan is in Long-Xuyen.'

(3.177) chiều ấy xa nhà nhiều she be far house much from
[+NM] [+OBJ] [+AC] [+LOC]
'She's often far from home.'

(3.178) lòng tôi không lúc nào xa mấy chiều cả innards I not moment which be far P1 elder all from sis
[+NM] [+OBJ] [+AC] [+LOC]
'My heart is never at all far from you girls.'

There are problems concerning gần and xa, and in Sec. 8.5 below they are suggested as a topic for investigation.

3.3.5.7 OBJECTIVE Verbs

The non-Locative OBJECTIVE verbs have the case frame:

```
[+voluntary
 -agentive
 -locative
 [+NM,+OBJ]]
```

The OBJECTIVE class includes such verbs as the following.

cháy burn
chết die
khóc cry
ngủ sleep

Following are some examples.
(3.179) ông-áy chết hôm qua 'He died yesterday.'

- [+NM]
- [+OBJ]
- [+AC]
- [+TIM]

(3.180) nó khóc nhiều, rồi ngủ 'He cried a lot then went to sleep.'

- [+NM]
- [+OBJ]

'He cried a lot then went to sleep.'
CHART III-4 Semantic Tree of Ten [+voluntary] Verb Classes in Vietnamese
4.1 Background and Definition

The term "coverb" was first used by teachers of Chinese language (see, for example, Hockett 1945, *Spoken Chinese*, and DeFrancis 1963, *Beginning Chinese*) to describe a verb which

1) occurs as a secondary verb preceding the main verb in a sentence,
2) is followed by a noun phrase with which it forms a constituent,
3) can be translated as a preposition in English.

DeFrancis (1963: 83) gives this description: "Coverbs are transitive verbs which precede the main verb of the sentence. Some coverbs, such as *zài* '(be) at', are sometimes used as full verb; a few are never anything but coverbs. All can be translated as prepositions in English." (4.1) is an example,

(4.1) ṭā ṭāi Zhōngguo niànn shū (Teng 1972: 72)

'He's studying in China.'

where *zài* is the coverb, *zài Zhōngguo* is the "coverb phrase", and *niànn* is the main verb.

Though the term "coverb" is used to some extent in linguistic studies of Chinese (Y-C Li 1971; Liang 1971; C. Li & Thompson 1973, etc.), the term "preposition" is a more
common one for such secondary verbs (Chao 1968, Chen 1972, A. Hashimoto 1971, Huang 1968, Teng 1972, and C. Li & Thompson 1973, etc.).

There are three coverbs in Mandarin Chinese which are directly relevant to a study of coverbs and the classification of verbs in Vietnamese. They are \textit{zài} 'in, at', \textit{dào} 'to', and \textit{gěi} 'for, to'. It is these three coverbs which can also occur in phrases following the main verb instead of preceding it, in which case they are called "postverbs" by Y-C Li (1971: 6) and "complements" by Chao (1968: 326, 753). Below are examples of \textit{zài}, \textit{dào}, and \textit{gěi} in both positions.

(4.2) \textit{nǐáo \textit{zài} \textit{tiān-shāng \textit{fēi}}} \quad \text{(Liang 1971: 89)}
\begin{footnotesize}
\text{bird be in sky on top fly}
\end{footnotesize}
'Birds fly in the sky.'

(4.3) \textit{tā \textit{zhù \textit{zài} \textit{Táizhōng}}} \quad \text{(Y-C Li 1971: 6)}
\begin{footnotesize}
\text{he live be in Taichung}
\end{footnotesize}
'He lives in Taichung.'

(4.4) \textit{nǐ \textit{dào wǒmen jiā lái hāishr wǒ \textit{dào nǐmen jiā qù}}} \quad \text{(Chao 1968: 756)}
\begin{footnotesize}
\text{you to we house come or I to youPl house go}
\end{footnotesize}
'Will you come to our house or shall I come to yours?'

(4.5) \textit{tā \textit{zǒu \textit{dào jiā lǐ}}} \quad \text{(Chao 1968: 753)}
\begin{footnotesize}
\text{he walk to house inside}
\end{footnotesize}
'He went into the house.'

(4.6) \textit{wǒ \textit{gěi tā sòng xīn}} \quad \text{(Chao 1968: 326)}
\begin{footnotesize}
\text{I to he send letter}
\end{footnotesize}
'I sent a letter for him.'
There is some justification in making a grammatical distinction between the occurrence of these coverbs before the main verb and the occurrence after. As noted above in Sec. 3.3.4.1 in the discussion on LOCATIVE, Teng (1972: 59-61) makes a distinction between inner and outer LOCATIVE, stating that inner LOCATIVE subcategorizes verbs whereas outer LOCATIVE occurs freely with most verbs. In Chinese, the locative preposition or coverb phrase occurring before the verb can be an inner or an outer LOCATIVE, whereas the phrase occurring after the verb is always an inner LOCATIVE (Teng 1972: 17). According to Chao's translations of (4.6) and (4.7) above, 帮 in (4.6), preceding the verb, marks BENEFACTIVE, which can be considered to be parallel to outer LOCATIVE in that it occurs with most verb types. In (4.7), where 帮 follows the verb, it marks DATIVE, which subcategorizes a certain class of AGENTIVE verbs; that is, DATIVE appears in their lexical entries. The coverb 帮 was discussed in Sec. 3.3.4.2, DATIVE and BENEFACTIVE.

Teng (p. 60) gives the following examples of LOCATIVE, in which (4.8) and (4.9) contain outer LOCATIVES, (4.10) is ungrammatical, and (4.11) contains an inner LOCATIVE with the verb 写 'write', which has an optional LOCATIVE in its lexical entry matrix.
(4.8) tā zài pùzǐ lǐ mǎi dòngxi
he loc.v store inside buy thing
'He is buying things in the shop.'

(4.9) tā zài jiàoshì lǐ xiě zì
he write classroom inside write word
'He is writing in the classroom.'

(4.10) *tā bǎ dòngxi mǎi zài. zhuōzǐ – shang
he pre- thing buy loc.v table top trans.
'He bought the thing (and put it) on the table.'

(4.11) tā bǎ zì xiě zài. zhuōzǐ – shang
he pre- word write loc.v table top trans.
'He wrote the word on the table.'

The classification and analysis of these preposition-like verbs is difficult because some of them, including the three given above, can also occur as main verbs (see DeFrancis' description cited above). Examples of zài, dào, and gěi used as main verbs are given here.

(4.12) tā jiā zài nǎr (DeFrancis 1963: 69)
he house be at where
'Where is his house?'

(4.13) tā jiā zài chéng wàitou (DeFrancis 1963: 70)
he house be at city outside
'His house is outside the city.'

(4.14) dào le nà lǐ, xiàng yòu, biān zǒu
arrive Compl there inside toward right side go
'Arriving there, go to the right.' (Hockett 1945: 45)

(4.15) wǒ gěi tā táng (Li & Thompson 1973a: 3)
I give he candy
'I give him candy.'
4.2 The Coverb Problem

As stated in Sec. 1.1, one of the problems with which this study is chiefly concerned is the determination of the syntactic role of coverbs, especially in Vietnamese.

Before one can accurately formulate statements regarding coverbs, it is necessary to determine the categorial nature of coverbs, the ways they function syntactically, the relationship between coverbs and their corresponding verbs, and how they function in the classification of verbs.

Discussions about coverbs have explicitly or implicitly centered around the following question:

Is a sentence containing a coverb
1) a complex sentence with embedding, i.e., a) the coverb being the main, or higher, verb, or b) the coverb being an embedded verb;
2) a single matrix sentence containing a verb phrase series—that is, two verbs in series; or
3) a single-verb sentence containing a prepositional phrase in which the coverb is a preposition, or case marker?

In Chinese linguistics, the term "coverb" has been used to designate all words which occur in a preposition-like use, whether or not there exists for a particular word a use as main verb. In this study, I will restrict my attention to those "coverbs" which have corresponding verbs, and limit the use of the term "coverb" to these in their non-main-verb
function.

Previous solutions for Vietnamese are given and evaluated in terms of these questions in Sec. 5.2 below. However, more work has been done specifically on coverbs in Chinese, so these solutions are discussed in the following section. This will provide a background and a framework within which to evaluate the analyses proposed for coverbs in Vietnamese.

4.3 Analyses of Chinese Coverbs

4.3.1 Y. R. Chao

Chao (1968: 749-751) gives as the most important properties of prepositions: 1) They do not as a rule have aspects; 2) they do not usually function as centers of predicates; and 3) they do not usually omit their objects, "as an ordinary transitive verb normally does when the object is in the near context." Chao considers the coverbs preceding the main verb to be verbs functioning as prepositions, and that the prepositional phrase (the preposition plus its object) modifies the verb. In regard to the coverbs ざし 'at' and  dao 'to', the modification has the meaning 'time when' or 'place where' (pp. 336-338); with せし 'for', the prepositional phrase means 'interest' or 'benefit' (p. 339). Such constructions he calls subordinate constructions, which have their center in the second constituent, with the first verb as modifier, "translatable as a preposition" (p. 326).
When these coverbs occur after the main verb, they are verb-complement constructions (Chao 1968: 326), in which the first verb is the center of the construction and the second verb (also called preposition (p. 754)) and its object form a complement in a verb-verb series. The second verb (or preposition) is "often compounded enclitically" with the preceding verb (pp. 754, 317), as in (4.16), where 꽀 'to' is suffixed to the verb 送 'send'.

(4.16) 送-Doctrine to 他 一 人 朋 祖 one to 他 'send-to him a gift'

However, when the second verb is separated from the main verb and the direct object immediately follows the main verb, as in (4.17), he says this is a "different matter"—a case of "two verbs, each with an object to itself" (p. 317).

(4.17) 送 一 朋 给 他 祖 one 祖 他 'send a gift to him'

In either case, whether 꽀 and its object immediately follow the main verb or follow the direct object, they constitute a complement to the main verb. Chao lists those verbs which obligatorily or optionally take 꽀 with their indirect objects if the indirect object immediately follows the main verb, those which do or do not take 꽀 "according to the direction to or from the indirect object" (p. 317), and those which never take
Regarding zài and dào having the meaning of 'time when' or 'place where', he states that when they are the first verb they mean 'at, from, by', and when they are complements they mean '(up) to' (p. 337).

It is not clear from Chao's various discussions whether his analysis of coverbs following the verb would fit most readily into solution (2) (two verbs in series) or solution (3) (a single verb and a prepositional phrase) above. He considers such sentences to contain a verb-verb series, but he also refers to the second verb as a preposition and the second verb plus its object as a prepositional phrase ("K-O phrase", K = P). Although he discusses prepositions as distinct from verbs (see above), he does not make this distinction clear in his analysis of coverbs. Chao makes no observations regarding constituent structure of sentences with coverbs.

4.3.2 A. Hashimoto

Hashimoto (1971: 57-58) also makes the distinction between the occurrence of zài preceding the verb and zài following the verb. Since zài cannot be negated when it follows the verb, she states it is a preposition and that the "whole locative expression" is a prepositional phrase which is derived from the VP constituent--that is, the locative phrase is immediately dominated by VP.

When zài occurs in preverbal position as the sentence
adverbial "Place", Place is a constituent immediately dominated by Sentence. In such a case \( z_\text{ai} \) is derived from an underlying sentence with \( z_\text{ai} \) as the locative verb. She postulates that when \( z_\text{ai} \) is the main verb of a sentence, it is always followed by a locative phrase in which the locative preposition \( z_\text{ai} \), identical in form with the locative verb, occurs in the deep structure and is obligatorily deleted in the surface structure (p. 8). Her postulated deep structure of (4.18) is shown in the tree below.

(4.18) Zhang San \( z_\text{ai} \) xuéxiào-li chī fān. (Hashimoto 1971: 57-58)

'Zhang San eats rice in school.'

Postulating a deep structure preposition which is homophonous with its verb and which never appears on the surface seems unnecessarily abstract, but, although Hashimoto does not refer to case grammar, it is consistent with the Fillmore 1968 model in which every case has an
underlying preposition.

When .zaì  or  dào  in preverbal position mark Time, they are prepositions in a PP which is dominated by Sentence (pp. 93, 145).

In postverbal position, .zaì  is a locative preposition in a locative phrase "derived from" the VP (p. 57), as can be seen in the diagram of (4.18) above. Also shown is the fact that she considers the localizer (relator noun, according to my analysis) to be a unique category 'loc', dominated by the locative phrase but outside the PP.

The verb  dào,  occurring after another verb, can be reduced to the particle de, marking an Extent complement and taking a following Sentence. (4.19) illustrates the structure of Extent.

(4.19)  

(Hashimoto 1971: 43,45)

'drunk Perf
'Zhang San drank liquor so much he got drunk.' Hashimoto does not discuss postverbal  dào  in its full form and followed by an NP instead of an S.

Gei  is a preposition derived from the verb gei 'to give' and marks the indirect object construction, which occurs postverbally and is an optional PP within VP
Hashimoto (1971: 18-20). She posits a PP "governed" by the P ｇēl in the deep structure for all verbs taking the indirect object, and such verbs are marked [+__NP,PP] in the lexicon. Hashimoto (pp. 18-19) disagrees with Chao that ｇēl is suffixed to some verbs, stating, "that ｇēl is a preposition and not part of a compound verb is apparent" from the indirect object construction, in which the direct object precedes the indirect object and in which "the preposition ｇēl is obligatorily before the indirect object."

When ｇēl occurs before the verb, it is the benefactive preposition "with the same phonetic shape but with a different meaning: 'for'" instead of 'to' (p. 19). She does not give the structure for a sentence containing the benefactive preposition.

In summary, when the preverbal coverb ｚａｉ marks location, it is a verb in an embedded sentence directly dominated by the higher sentence (solution 1b). All other occurrences of coverbs are as prepositions (solution 3), but the structure of their sentences differ from each other. When preverbal ｚａｉ and ｄǎo mark TIME, they are P's in a PP dominated by S. The structural attachment of the preverbal P ｇēl is not given. Postverbal locative P ｚａｉ and indirect object P ｇēl are in PP's dominated by the VP. This distinction of VP and S domination is somewhat parallel to Fillmore's suggestion (1968: 26) that "inner" phrases are dominated by the Proposition and "outer" phrases are dominated by Modality.
4.3.3 Y-C Li

Li, in his case grammar of Chinese (1971), defines a coverb as a verbal element which does not function as a main verb but "enters into construction with a noun phrase," which construction he calls a "coverb phrase" and states that it modifies the verb (p. 5). His definition of coverb includes only those coverbs which occur before the verb. Those which occur after the verb (zài 'in', dào 'to', gei 'to') he calls postverbs, but states that the postverb phrase is "similar" to the coverb phrase, and, further, that he considers a phrase with zài or dào, "whether occurring as a coverb phrase or postverb phrase, as the same L phrase in the deep structure" (p. 62).

Li considers coverbs and postverbs to be case markers. He notes that the occurrence of the locative case markers zài and dào and the dative case marker gei as postverbs depend on the kind of main verb. Verbs such as zǒu 'walk', zuò 'sit', tāng 'lie', and fāng 'put' take postverbal locatives. Locative "seems to associate with the motion verbs (intransitive locomotion verb class) in a more definite way than with other kinds of verbs...L co-occurs with them in the deep structure" (p. 187). He states that the postverb gei occurs with "a verb like sòng 'to give', which predicts the occurrence of D in the deep structure" (p. 90).

In accordance with the practice in Fillmore case grammar up until 1968, Li considers every case to have a case marker in the deep structure, which is deletable on the
surface under certain conditions.

Thus, Li's analysis appears to be closest to solution (3) above: A sentence containing a coverb is a single-verb sentence containing a case-related phrase in which the coverb is the case marker.

4.3.4 C. T. C. Tang

Tang, in his "Case grammar in Mandarin Chinese" (1972), like Li, considers what I am calling coverbs to be case markers derivable from Fillmorean case labels which expand as $K + NP$, where $K$ is a case marker. He cites ǒi 'to' as D (Dative) and zài 'at, in, on' as L (Locative). He does not list ǐo.

He specifies (p. 153) certain verbs as having in their case frames Dative: ǐng 'send', or Locative: ǐng 'put', lài 'come', qu 'go'.

Tang observes that, by using this framework, we can have a simpler base by "eliminating such language-specific constituents as prepositions, coverbs, postverbs, localizers from the base rules" (p. 170).

Tang's solution most closely fits with solution (3) above: The coverbs are case markers (my "prepositions") in a single-verb sentence.

4.3.5 S-H Teng

Teng (1972) discusses transitivity relations in Chinese in terms of Chafe (1970), who considers the verb to be central and, by its internal semantic structure, to specify
what semantic roles (i.e., case relations) will occur with it. Verbs are classified as to whether they are "state" ("he is tall"), "action" ("he cried"), "process" ("he died"), or "process action" ("he broke a dish"). Action verbs require accompanying Agents; process and state verbs require accompanying Patients. Verbs are further subcategorized by Experiential, Benefactive, Locative, Goal (my DATIVE), etc.

Teng talks about inner and outer Locative in terms of inner Locative being specified by verb features and thus dividing "all action verbs into Locative and non-Locative" (p. 60). Examples of Locative verbs are xīō 'write', fāng 'put', and quà 'hang'. Outer Locative occurs freely with all verbs. In Chinese, "pre-verbal locatives may be defined as outer Locative and post-verbal locatives as inner Locative...inner Locative may be pre-posed to the pre-verbal position (sic), outer Locative may not be post-posed" (p. 17-18). In other words, when zài and dào phrases occur after the verb they are inner Locative. When gěi occurs after the verb, it is unambiguously Goal, as in (4.20).

(4.20) wǒ xīō - le yī fēng xīn gěi tā (Teng 1972: 305)
   I write Asp one Cl letter give 3p 305

   'I wrote him a letter.'

(Xīō is noted above as being a Locative verb; however, it can also take Goal.) "Goal may occur either pre-verbally or post-verbally, in many cases at least, but Benefactive occurs only pre-verbally" (p. 305). Therefore, (4.21) is ambiguous.
Teng considers outer Locative and Benefactive to be higher verbs, as in solution (1a) above. If ế in (4.21) marks Benefactive, the sentence would have the following structure, in which ế 'give' is a process action verb which takes an embedded sentence under a Patient node (Patient = "that which undergoes change of state", Goal = "a recipient" (p. 264)).

The embedded verb े 'write' is an action range verb (Range = the extent of the verb's scope or reference (p. 184)). Teng does not give an underlying structure for inner Locative or Goal, but he does state, "the relation Goal always introduces the preposition ế, which will always be identical to the 'highest' verb in Benefactive sentences" (p. 78).

The structure of (4.22), which has an outer Locative, is also given.
(4.22)  
\[ \text{tā zài Zhōngguó nián shū} \]  
(He is studying in China.)

It seems, then, for Teng, "outer" relations (some preverbal occurrences of coverbs) are higher verbs (solution (1a) above), and "inner" relations (postverbal occurrences of coverbs) are prepositional phrases, solution (3) above.

4.3.6 J. C-P Liang

Liang's 1971 dissertation treats specifically of coverbs and the questions raised in Sec. 4.2 above. Stating that all the coverbs were assuredly verbs at an earlier stage in the Chinese language (p. 29), he asks if a coverb is actually a verb in the modern language and, if so, whether it is the main verb. If it is not a verb, he asks what its syntactic function is. "In asking this set of questions, we are questioning the validity of postulating a grammatical category of preposition in Chinese" (p. 51). He concludes that none are prepositions, that all of the three Chinese coverbs that we are concerned with are finite verbs except gēi in preverbal position, which is a "passive marker".
Although he states that "we are not concerned with the classification of verbs" (p. 89), he does note cooccurrence restrictions between these coverbs and certain kinds of verbs. In fact, he sets up (pp. 90-95) classes of verbs which can have a zài phrase preceding or following the verb and those which are restricted in respect to coverb position. Verbs which can have zài preceding or following without change of meaning belong to the static intransitive verb class--zuò 'sit', zhàn 'stand', shuì 'sleep', zhù 'live', etc. Zài means "location of the action of the verb" when it precedes the verb and "destination of the action of the verb" when it follows the verb with the motion intransitive verb class--fēi 'fly', zōu 'walk, go', pāo 'run', etc., and the motion transitive verb class--fàng 'put', diū 'throw', bān 'move'. Zài cannot follow verbs of the static transitive verb class--kàn (shū) 'read', chī (fàn) 'eat', etc. (p. 92).

Examples are given here with static intransitive verb zhù, (4.23), and the static transitive verb kàn, (4.24).

(4.23) wǒ zài. Shànghǎi zhù. (Liang 1971: 88)
I be at live
wǒ zhù. zài. Shànghǎi
I live be at
'I live in Shanghai.'

(4.24) wǒ zài. jīā kàn shū (Liang 1971: 35)
I be at home read book
*wǒ kàn shū zài jīā
I read book be at home
*I read at home.'
He gives the following deep structure for "a V-V type of sentence containing a zāi-phrase" (p. 97).

```
NP  VP
  S   S
   NP VP  VP₂ (p. 99)
     V NP
       wǒ zāi jiā kan shū
```

When the identical NP is deleted, zāi jiā becomes a second VP. His "presurface structure" (p. 99) implies a verb-verb series, but he states (p. 102) that the zāi-phrase is always subordinate to the other verb phrase. Zāi in first position indicates location and in second position indicates "destination of the action of the other verb," similar to dào (pp. 84-85).

Dào in first position also indicates location of the action of the second verb. However, in first position dào is the "main" verb instead of an embedded verb like zāi (p. 188), although his structure and translation for (4.25) shows dào to be the first verb in a verb-verb series, that is, the first of two main verbs.

(4.25) tā dào tǔshūguǎn kàn shū  (Liang 1971: 181)
he arrive library read book

'He goes to the library and studies.'
In second position, *dao* indicates destination of the action of the other verb (p. 178). Like Hashimoto, Liang considers *dao* in second position to function as a marker for the "extent complement" of verbs (p. 179), as in (4.26) and (4.27).

(4.26)  
\[ \text{ta dao xuexiao} \]  
he run to school

'He runs to school.'

(4.27)  
\[ \text{ta pao dao ta shangqi bu jiexiaqi} \]  
he run until he upper air not connect lower air

'He runs until he's breathless.'  

The objects of the *dao*-phrase can be a time or place noun or a sentence (p. 183).

In first position, as a passive marker, *gei* occurs in both "the so-called benefit and the harm sentences" (p. 188), in which its meaning 'to give' has been "completely lost"
When in second position, 其 indicates direction of the action of the other verb and "no longer has the lexical meaning of 'to give' but performs the function of marking out the indirect object to which the direction of the action of the verb...is focused" (p. 154). He lists (pp. 154-156) the types of verbs which must or may take 其 as a direction marker. For at least some sentences he states that 其 has "lost all of its verbal characteristics" (p. 157).

In his summary (pp. 188-189), Liang states that all of the coverbs are finite verbs except preverbal 其. However, in his description and analyses, only preverbal 到 is a finite verb. Despite contradictory terminology, statements, and structures, it is possible to discover what his solutions would be: solution (2)--verbs in series, for 到 when it occurs before another verb; and solution (1b)--embedded verb, for 在 before another verb and all three coverbs when they occur after the other verb. The categorial status of preverbal 其 is not stated; its designation as a "passive marker " puts it outside the solutions suggested here.

In discussing the status of preposition in "classificatory grammars", Liang quotes from Lí Jīn-xì, Guó-yǔ wén-fǎ (A Grammar of Chinese), Shanghai, Commercial Press, 1965, p. 197, that a preposition is "a word which we use to introduce a noun or a pronoun to a verb or an
adjective for the purpose of expressing various relations [of the verb or the adjective] such as time, place, means, and cause" (p. 30). This notion coincides closely with the notions of modern case grammar, but Liang says it is "much too broad and general to be an adequate criterion for classification" (p. 32).

4.3.7 C. N. Li and S. A. Thompson

Li and Thompson (1973c: 1) state, "The term 'co-verb' refers to a closed class of morphemes in Mandarin, most of which can be translated into English by means of prepositions...The co-verb typically introduces a noun." Since "many co-verbs are homophonous with verbs" (p. 10), there is "rather wide disagreement about whether [they] should be regarded as verbs or as prepositions" (p. 1), and they state that the use of the term "co-verb" "has enabled many teachers of Mandarin to avoid making a decision about whether to call these words verbs or prepositions in presenting them to students" (p. 2).

Li and Thompson (1973a: 4; 1973b: 15; 1973c: 10-18) claim that coverbs are not verbs but case-marking prepositions which introduce "phrases which could be labeled with such case names as Benefactive, Locative, Instrumental, etc." (1973a: 4). In their 1973c paper, they give several arguments to support their analysis. The first argument compares coverb sentences with serial verb sentences, stating that, if coverbs were verbs, coverb sentences would
express two separate actions, as is the case with serial verb sentences. Coverb sentences "always express one action modified by the co-verb phrase" (p. 14). For example, they state (p. 26, fn 9) that the sentence

(4.28) wǒ gěi nǐ fānyì zhèi. fēng xìn (Li & Thompson 1973c: 26)

'I'll translate this letter for you.'

'cannot reasonably be derived from the two strings

wǒ gěi nǐ zhèi. fēng xìn. 'I give you this letter.'

wǒ fānyì zhèi. fēng xìn 'I translate this letter.'

Further, the object of the first verb in serial verb sentences cannot "become the head noun of a relative clause" (p. 15), but the object of the preposition in the coverb sentence can, as shown in (4.30), where zài is the coverb.

((4.29) and (4.30) are both from Li & Thompson 1973c: 16.)

(4.29) wǒ zài nèi. ge dìfang chī fàn

'I eat at that place.'

(4.30) wǒ zài nèi. ge dìfang... chī fàn de nèi. ge dìfang...

'I eat at that place Poss that C1 place

'That place that I eat at...'

Pointing out that some coverbs do not have homophonous verbs, they state (1973c: 17-18) that there exists in the grammar of Mandarin the independent class "preposition" and that it is not economical to have to refer to a language-particular word class "coverb".

Finally, they state (1973c: 18) that "there are
sentence-final phrases containing what most analysts would call a preposition, which can be viewed as transformed variants of co-verb sentences." They give as example:

(4.31) a) wǒ zhù zài. Shànghǎi (Li & Thompson 1973c: 18)
   I live at

b) wǒ zài. Shànghǎi zhù
   I at live

'I live at Shanghai.'

Since (4.31) a) and b) are paraphrases, it seems reasonable to suppose that zài is a preposition in both sentences.

From the above statement, it appears that Li and Thompson do not recognize a distinction between preverbal and postverbal prepositional phrases. However, in their 1973b paper, they do give an example of a verb which allows the prepositional phrase to occur before it but not after it, as shown in (4.32) and (4.33).

(4.32) Zhāng-sān zài chuàng shāng shūǐjiào
   at bed top sleep-sleep

'Zhang-san sleeps on the bed.' (Li & Thompson 1973b: 3)

(4.33) * Zhāng-sān shūǐjiào zài chuàng shāng

They show that the verb shūi 'sleep' allows the zài prepositional phrase to follow, as in (4.34).

(4.34) Zhāng-sān shūi zài chuàng shāng
   sleep at bed top

'Zhang-san sleeps on the bed.' (Li & Thompson 1973b: 2)

and state that the only reason for the difference between the two verbs "appears to be the polysyllabic nature of the verb shūǐjiào" (p. 3). There is no discussion in any of the Li
and Thompson papers regarding the types of cases that different verbs can take or regarding Inner versus Outer LOCATIVE and DATIVE versus BENEFACTIVE cases. In Sec. 4.1 above, it is stated that 在 and 做 occurring postverbally mark Inner LOCATIVES only and occurring preverbally mark either Inner or Outer LOCATIVES, and that 为 occurring postverbally marks only DATIVE while preverbally it usually marks BENEFATIVE. By this analysis, the verbs 住 'live, reside' and 睡 'sleep' in (4.31) and (4.34) above are OBJECTIVE-LOCATIVE verbs which take inner LOCATIVES which can occur postverbally, while the verb 眠 'sleep-sleep' in (4.32) and (4.33) appears unable to take an Inner LOCATIVE and (4.32) might be translated 'On the bed Zhang-san is sleeping'.

Although Li and Thompson agree with Liang that coverbs are historically derived from verbs and say that some of them are still homophonous with verbs which have similar meanings (1973c: 3; also see discussion in Sec. 7.3.2 below), they definitely support solution (3) for all coverbs: Whether they occur preverbally or postverbally, they are synchronically case-marking prepositions, not verbs.

4.3.8 Summary of Analyses of Chinese Coverbs

In summary, there is general agreement that the postverbal coverbs are more closely related to the verb than the preverbal coverbs are. In the descriptions just considered, this view is stated in terms of
1) constituency: Postverbal coverbs are elements under the VP while preverbal coverbs are elements of an embedded sentence attached to the higher S.

2) verb classes: Postverbal coverbs are restricted to certain verb classes while preverbal coverbs can occur with most verb classes.

Implicit in this view is the concept of inner and outer phrases. Li, Tang, and Teng discuss coverb phrases in terms of case relations, with Teng explicitly stating that inner Locative (postverbal locatives) subcategorizes verbs more strictly than outer Locative (preverbal locatives). Liang makes the distinction between preverbal locatives, which are the location of the action of the verb, and postverbal locatives, which are the direction or destination of the action of the verb. It is generally observed that postverbal ʰêl marks Dative (Indirect Object, Goal) while preverbal ʰêl marks Benefactive (or "harm"--cf. Gradin 1970a regarding Detrimental in Jeh), and that Dative is more restricted in the verbs with which it can occur.

A general summary, in terms of the solutions suggested in Sec. 4.2 above, is illustrated in the following table. Noted for each analysis are the preverbal and postverbal occurrences of coverbs.
## Solutions:

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<td>a) Cvb: Higher V</td>
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<td></td>
<td>Cvb V</td>
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<td>b) Cvb: Embedded V</td>
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<td></td>
<td></td>
<td></td>
<td>V Cvb</td>
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<td></td>
<td></td>
<td>zài V</td>
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<tr>
<td>2) Two V's in series</td>
<td>(?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dao V</td>
<td></td>
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<td>3) Cvb:</td>
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<tr>
<td>P (case marker)</td>
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<td></td>
<td>V</td>
<td>V Cvb?</td>
<td></td>
<td>V Cvb</td>
<td>V</td>
<td>V Cvb</td>
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<tr>
<td></td>
<td>Cvb ?</td>
<td>dao V</td>
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<td>Cvb V</td>
<td>Cvb</td>
<td>Cvb V</td>
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<td></td>
<td></td>
<td>gěi V</td>
<td></td>
<td>Cvb V</td>
<td>Cvb</td>
<td>Cvb V</td>
<td></td>
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<tr>
<td>Other &quot;marker&quot;</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>gěi V</td>
</tr>
</tbody>
</table>

### CHART IV-1 Comparison of Chinese Solutions for Coverbs

All but Tang and Liang recognize P as a base category. Tang considers the base element to be K (case) which is realized on the surface in Chinese by case markers (he never states how his "case marker" differs from a P); he considers prepositions to be a language-specific constituent. Liang suggests that P is not a valid category for Chinese and that coverbs are V in the base and on the surface.
5.0 The Coverb Problem Restated

As stated in Sec. 4.1 above, in Chinese linguistics, the term "coverb" has been used to describe all words which occur in a preposition-like use, whether or not there exists for a particular word a use as main verb. In this study, "coverb" will refer to words which occur in a prepositional function only when they also have a corresponding main-verb function. The term will not refer to the main-verb function.

As stated above in Sec. 4.2, the coverb problem involves a determination of the syntactic role of coverbs--to determine the categorial nature of coverbs, the ways they function syntactically, and the relationship between coverbs and their corresponding verbs.

It was further stated that previous discussions about coverbs have mainly centered around this question:

Is a sentence containing a coverb

1) a complex sentence with embedding, i.e.,
   a) the coverb being the main, or higher, verb, or
   b) the coverb being an embedded verb;
2) a single matrix sentence containing a verb phrase series--that is, two verbs in series; or
3) a single-verb sentence containing a prepositional phrase in which the coverb is the preposition?
Solutions for Chinese were discussed. It was found that there was general but not total agreement that Chinese coverbs are prepositions or at least perform a preposition-like function. All but Liang (1971) and Tang (1972) recognize preposition as a basic category. Most analyses indicate a classification of verbs on the basis of their occurrence with certain coverbs, and most analyses implicitly or explicitly note the distinction between inner and outer LOCATIVE and between DATIVE and BENEFACTIVE on the basis of verb case frames. (See Sec. 3.3.4 for discussion of inner and outer cases.)

This chapter will present the Vietnamese coverbs, giving solutions proposed in previous analyses, and then presenting the analysis proposed in this study and relating it to solutions previously proposed.

5.1 Locative Verbs as Case Markers
5.1.0 Introduction

It turns out that all the coverbs definitely identified for Vietnamese can occur as [+L] case markers except cho 'give to/for', which will be discussed in Sec. 5.4. (See Sec. 3.2.2.4 above for exposition of [+L] case markers.) The following sections will give these locative verbs and show their various uses.

5.1.1 Vietnamese Locative Coverbs

Following is the list of common Vietnamese verbs which can occur as coverbs and which are "locative" in one sense
or another.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ơ</td>
<td>be in/at, reside in</td>
</tr>
<tr>
<td>qua / sang</td>
<td>go across (to), pass over/by</td>
</tr>
<tr>
<td>IãI</td>
<td>come (back)</td>
</tr>
<tr>
<td>vè</td>
<td>return (to)</td>
</tr>
<tr>
<td>ra</td>
<td>go out (to)</td>
</tr>
<tr>
<td>võ / vao</td>
<td>go in/into</td>
</tr>
<tr>
<td>lên</td>
<td>go up (to)</td>
</tr>
<tr>
<td>xuống</td>
<td>go down (to)</td>
</tr>
<tr>
<td>đến / tới</td>
<td>arrive at</td>
</tr>
</tbody>
</table>

In many instances the members of the pairs qua and sang, võ and vao, and đến and tới are completely interchangeable. Situations where there is a preferable or obligatory choice are largely stylistic or dialectal rather than grammatical and will not be considered pertinent factors in the grammatical analysis of coverbs.

The following examples are sentences which show the above verbs either as main verbs (marked beneath as V) or as coverbs (marked as Cvb). All occurrences, whether as verbs or coverbs, are underlined.

(5.1) Tôi sẽ ơ đó đến cuối năm
V Cvb
'I'll be there until the end of the year.'

(5.2) Họ mới đơn nhà, không ơ nhà cũ nữa
V
'They just moved, they're not at the old house any more.'
(5.3) Nếu chị ăn Tết ở Huế thì tôi sẽ ra Huế.
If elder eat festival be in then I Fut go out

'sister Cvb

'If you, sister, celebrate the New Year in Hue, I'll come to Hue.'

(5.4) Đầu tháng 11 cô Mai sẽ dạy ở trường Gia-Long
head month Miss Fut teach be in school

'At the beginning of November Miss Mai is going to teach at Gia-Long School.'

(5.5) Bên Mỹ chắc có nhiều đồ đẹp làm
be in side America sure have many thing pretty very

'Có In America there must be many very pretty things.'

qua

(5.6) Bao giờ cô qua cô Lan chơi?
when Miss cross Miss play

'When are you going over to Miss Lan's to visit?'

(5.7) Chiếc thuyền qua sông rồi
Cl sampan cross river already

'The boat has crossed the river already.'

(5.8) Cô lại đó chèo thuyền qua sông
miss steer ferry oar sampan cross river

'The barge girl is oaring the boat across the river.'

(5.9) Ông Phong gởi dụng cụ qua Lào
Sir send tool cross

'Mr. Phong sent the tools to Laos.'
sang

(5.10) có anh sang cây thì vui lắm
have elder cross here then joyful very
brother V

'If you come here (a great distance), it will be lots of fun.'

(5.11) mùa thu sắp tới anh ấy sang Mỹ học
season fall about arrive he cross America study
to V V

'He's going to America to study this coming fall.'

(5.12) con nhận quà Tết mà gửi sang Mỹ cho con
child receive gift New mother send cross America give child
cross Year Cvb

'I received the New Year's gift you sent to America for me, Mother.'

lai

(5.13) anh lại đây chỗ nhè
elder come here play OK?
brother V

'Come on over here and talk to me, OK?'

lai does not seem to be as common as the other coverbs, either as a verb or as a coverb, although it occurs profusely in immediate association with other verbs to modify them.

(Cf. examples of these verbs as adverbs in Sec. 5.1.3, especially sentence (5.47).)

(5.14) chỉ từ cho người đưa giấy lại nhà tôi
elder con give person take paper come house I
cross tinue Cvb

'Go ahead and give that man the paper to bring to my house.'
Bring the chair here.

I'll return to Saigon to celebrate the New Year about the 30th.

When you return to My-Tho, come over and see me, OK?

I've just returned from visiting the other islands of Hawai'i.

'I'm going to send a souvenir back to Saigon.'

'I sent you a postcard already.'

Miss Kim will go to Hue for three or four days.'
When I went away I carried with me many happy memories.

Mr. Phong sent a letter to Hue already.

I sat in the bus and looked out at the two rows of pine trees along the side of the road.

Lan went into the classroom already.

Elder Sister May went to My-Tho last week.

The clerk stuck his hand into his coat pocket.

'I'll return to Bangkok in the middle of March.'
len

(5.29) Lan lên Đàlạt nghỉ vài ngày
V
go up rest a few day

'Lan went to Dalat to rest for a few days.'

(5.30) ông ấy đem sách lên Sài gòn. (Liem 1973: 11)
he bring book go up

Cvb

'He brought books up to Saigon.'

xuống

(5.31) cho tôi xuống đây nhé
give I go down here OK?
V

'Please let me off (the bus) here.'

(5.32) nhiệt độ thay đổi từ 70° xuống 33°
temperature change from go down
Cvb

'The temperature changed from 70° down to 33°.'

dến

(5.33) Xuân đến nhà bác hai giờ rồi
arrive house uncle two hour already
V

'Xuan arrived at her uncle's house two hours ago.'

(5.34) tôi đi bằng xe buýt ghé St. Louis Chicago rồi đến New York.
I go by bus stop by finish arrive
V

'I went by bus, stopped by St. Louis and Chicago, and finally arrived in New York.'

(5.35) tôi đến thăm thi sĩ Xuân và hai chúng tôi nhắc đến có luôn
arrive visit poet and two PI I recall arrive miss often
Cvb

'I went to see poet Xuan and the two of us spoke of you often.'
They moved to No. 3 Gia-Long Street.

'I worked from 9 o'clock until noon.'

5.1.2 Other Potential Locative Coverbs

The list above is undoubtedly not complete. There are other words which are potential or may be actual coverbs. Two of these are đi 'go' and theo 'follow'.

đi is a regularly occurring OBJECTIVE-LOCATIVE (O-L) verb of direction. It is listed in Sec. 3.3.5.4 above as being a member of the group of O-L-Goal verbs which can take their LOCATIVES in the AC case form, as in (5.38),

(5.38) chí Lan đi Sài Gòn
elder go
gi, sí

'Leading Sister Lan went to Saigon.'

or in the L case form, as in (5.39).

(5.39) chí Lan đi vào Sài Gòn.

go in

elder go in
gi, sí, vào

'Leading Sister Lan went to Saigon (from north of Saigon).'
Di can occur as a coverb—a [+L,+gol] case marker—with certain AGENTIVE-LOCATIVE verbs of direction, as in (5.40).

(5.40) ông Phong ɡɔli. dỳŋ-cu di  læo.  (N. D. Liem)
Sir send tool go

\[
\begin{array}{ccc}
+NM & +AC & +L \\
+AGT & +gol & +LOC \\
\end{array}
\]

'Mr. Phong sent the tools to Laos.'

However, di cannot occur as a coverb with O-L verbs; i.e., (5.41) and (5.42) are ungrammatical.

(5.41) * Lan  chày di vùơn 'Lan ran to the garden.'
run go garden

\[
\begin{array}{ccc}
+NM & +L & +AC \\
+OBJ & +gol & +LOC \\
\end{array}
\]

(Lan chày vào vùơn 'Lan ran into the garden' is grammatical.)

(5.42) * Lan vè di nhà  'Lan returned home.'
return go house

\[
\begin{array}{ccc}
+NM & +L & +AC \\
+OBJ & +gol & +LOC \\
\end{array}
\]

(Lan vè nhà 'Lan returned home', and Lan di vè nhà 'Lan went home', with di as verb with the coverb vè, are both grammatical.)

In Chapter VII below, coverbs are discussed as being part of a historical process involving verbs and prepositions. It is believed that di is involved in this process and is not, at the present stage of the language, a full coverb. For this reason, di is not included in the above list of coverbs.

It is uncertain whether the verb theo 'follow' can be
considered a locative verb. It appears to require an OBJECTIVE that is capable of locomotion, as in (5.43).

(5.43) cô-ăy theo chòng / xe
        she follow husband vehicle

'She followed her husband / the car.'

It can occur with a locative noun such as đường 'road' only in a metaphorical sense; that is, (5.44) is grammatical but (5.45) is not.

(5.44) nó theo đường cộng-sân
        he follow road communism

'He follows the Communist way.'

(5.45) * nó theo đường Lê-Loi

'He followed Le-Loi Street.'

The problems of abstract LOCATIVES are beyond the scope of this study. Theo can occur as a coverb meaning 'following, according to', as in (5.46).

(5.46) tôi lâm theo lời ông nói (Cadière 1958: 132)
        i do follow word Sir speak

'I'll do (it) according to what you say.'

The case relation of lời in (5.46) is open to question; perhaps it is INSTRUMENTAL or MANNER. It is unknown what case form theo marks. (Cf. Khmer taam 'follow' as a [+L] coverb with INSTRUMENTAL.) Much more investigation is needed before the status of theo as coverb can be determined.

5.1.3 Adverbial Uses

All the words of direction in the above list and the direction word đi can also occur following main verbs to
modify the main verbs in a way consistent with the semantic features on the direction word. Following are some examples, with the direction word underlined.

(5.47) **tiếng quá với không gặp lại có trước khi ra đi**
sorry very be- not meet come Miss before time go go
cause back out

'I'm very sorry because I didn't see you again before I went away.'

(5.48) **chúng ta mau lên, kéo bij chết** (Thompson 1pPl Incl be go up lest suffer die 1965: 232)
fast

'We'd better hurry up, or else we'll be dead!'

(5.49) **mãi, anh ghé vào chơi khi đó**
invite elder stop by go in play time that bro.

'At that time please stop in to visit.'

Such words can precede or follow an OBJECTIVE, as in (5.50) and (5.51).

(5.50) **đem rượu ra** (Nguyen D-H 1972b: 406)
carry wine go out

'Bring the wine out!'

(5.51) **đem ra ba chai rượu**
3 bottle

'Bring out three bottles of wine.'

In this function, these words serve only to modify the main verb and can, in most instances, be omitted. They do not form a construction with a following NP. Furthermore, they can occur with a preposition which does occur in construction with a following NP, as in (5.52),
Second Sister is pulling the plants out of the ground.'

in which ra is optional. For these reasons, I do not consider these words in this function to be verbs or coverbs, but adverbs ([+Adv]). One difference between the use as coverb and the use as Adverb can be shown by a simple change of word order. In (5.53), lai 'come', with constituent NP họ, is a coverb. In (5.54), lai is an adverb meaning 'hither'. (Both examples are from Jones and Thong 1960: 160.)

(5.53) chưng nào ông đem lai họ
degree which Sir carry come they

'When are you going to take (it) to them?'

(5.54) chưng nào ông đem họ lai

'When are you going to bring them over here?'

It may turn out that these adverbs play a role in cooccurrence restrictions with certain verbs, particularly AGENTIVE-LOCATIVE verbs. It may be that some A-L verbs of direction require either a directional LOCATIVE or a directional Adverb. Certainly, further investigation should reveal the derivational relationship between these V-P-Adv
functions. However, such investigation will not be undertaken in this study and no further analysis will be made other than to note the presence of these adverbs when they occur in sentences.

5.2 Previous Solutions for Vietnamese

5.2.0 Introduction

Little has been written specifically about coverbs in Vietnamese, but they are dealt with in some grammars and in a number of analyses of related phenomena. In the following sections are given summaries of analyses of Vietnamese coverbs by Laurence C. Thompson, Nguyen Dinh-Hoa, Nguyen-Dang Liem, Donna Ha, and Tran Trong Hai.

5.2.1 Laurence C. Thompson

Thompson, in A Vietnamese Grammar (1965a), calls occurrences of coverbs sequential phrases, about which he says, "...a number of high-frequency verbs appear with rather specialized meanings as second head in sequential phrases" (p. 231). By this, it seems that he considers such second verbs still to be verbs but with slight shifts in meaning from their use as main verbs. Following are some of his examples (from pp. 232-234), with the coverb underlined.

(5.55) việc này thuộc về ông Lâm  
work this concern return Sir  
'This matter concerns Mr. Lam (intimately).'
(5.56) việc này thuộc đến ông Lâm
arrive at
'This matter concerns Mr. Lam (superficially).'

(5.57) anh ấy làm đến hai giờ rưỡi
elder that do arrive at two hour half
bro

'He worked up to two-thirty.'

(5.58) họ về cảnh dao vào tờ giấy bùa
they draw branch peach go in sheet paper temple

'They draw a peach branch on a (paper) amulet.'

It appears that Thompson's solution fits solution 2 above: a coverb is the second verb in a verb series.

5.2.2 Nguyễn Đình-Hòa.

In his paper "Vietnamese categories of result, direction, and orientation" (1972), Nguyen discusses coverbs as being the second verb in a verb series. Categories of direction are "manifested by means of co-verbs appearing after main verbs" (p. 395); there are verb sequences which "contain units which have been translated by such prepositions as to, toward, into" (p. 396). A good many of his examples and much of his discussion concern these "units" as postverbal directionals without following locative phrases, as in (5.59) and (5.60), with the "co-verb" underlined. (These are what I have called, in Sec. 5.1.3 above, direction adverbs, which modify the direction of the main verb.)
(5.59) **kiềng**  **chân**  **lên**  
stand on foot up 

'tiptoe' 

(5.60) **đem**  **ruou**  **ra**  
carry wine out 

'Bring (out) the wine!' 

He lists and describes each of the following "co-verbs of direction", which "all have a movement or a motion as core meaning" (p. 403).

- **đi**: go; away, off, forth 
- **đến/tới**: arrive, reach; toward (with destination) 

He states that **đi** and **đến/tới** express movement of the subject vis-a-vis a given location; the rest of the coverbs express direction of a movement in space (p. 403).

- **ra**: exit; out 
- **vào**: enter; in 
- **lên**: ascent; up 
- **xuống**: descend; down 
- **sang/quà**: go/come over, cross (over to); across 
- **về**: go/come back, return; back to 
- **lá**: come, return; back 
- **đẩy**: rise; up, upward 

Đẩy never takes an object since "its basic meaning is that of an intransitive verb...although the movement is upward there is no change of place" (p. 408). His examples of **đi** show two uses: In (5.61) **đi** is used as what I have called adverb;

(5.61) **vứt**  **đi**  'throw away'  

discard away
in (5.62) ᵇl occurs as a coverb with what I have analyzed as an AGENTIVE-DATIVE/LOCATIVE verb, ᵇl 'send' (see discussion of ᵇl in Sec. 5.1.2 above).

(5.62) . . . ᵇl ᵇl Nha-Trang (Nguyen 1972: 404)
send to
'sent (it) to Nha-Trang'

Nguyen (1972: 404) states that the main verb of a sentence with a coverb is "one of directional action which denotes a motion, gesture, behavioral act or process." He lists a number of verbs according to their possible co-occurrence with specific coverbs, stating that some verbs are restricted with regard to possible direction. A study of his list reveals that those verbs which are so restricted occur only with "co-verbs" functioning as adverbs. Following are those verbs from his list which can generally occur with any of the coverbs.

bò crawl
bay fly
bși swim
chẩy run
mang bring
dem bring
d.lua hand
khInvestigators carry
†ung throw

Tung (an AGENTIVE-LOCATIVE verb, according to my analysis) does not occur with ᵇl 'away' or ᵭl 'back'.

Nguyen discusses cho 'give' as a coverb occurring with the indirect object of a main verb of giving or distributing.
He lists examples of verbs of giving, but his example sentences with *cho* as a coverb are with 'beneficiary' nouns (my BENEFACTIVE, not my DATIVE) with verbs which do not take indirect objects, as in (5.63).

(5.63) Tôi về hai bức tranh *cho* anh
I paint two Cl picture for elder bro.

'I'll do two paintings for you.' (Nguyen 1972: 411)

In his 1973 discussion on the various classes of ditransitive verbs (Nguyen 1973), Nguyen also discusses *cho* with Verbs of Giving. Perhaps the best way to elucidate his analysis of coverbs in this paper would be to give the relevant points from the section on Verbs of Inserting.

He says (1973: 16), "There are several verbs in Vietnamese that accompany two NP's, one of which expresses location in a rather special way." The NP which expresses location in his example is one which is preceded by a verb which "has often been called a coverb of direction in the surface structure." He gives sentence (5.64).

(5.64) ông *thu-ký* thọc tay vào túi áo
grand- sec'y thrust hand enter pocket jacket
father

'The clerk stuck his hand into his coat pocket.'
(Nguyen 1973: 16)

This sentence, in his analysis, is a "telescoped construction" because the noun *tay* 'hand' is both the object of the main verb *thọc* 'thrust' and the subject of the embedded verb *vào* 'enter'.

He gives two alternative deep structures for (5.64),
the first being:

Presumably, a transformation or convention deletes the second tay under identity conditions.

This analysis of (5.64) shows the phrase vào túi áo as syntactically a relative clause, and we might expect a sentence with such a structure to be glossed as 'the clerk thrust the hand which entered his coat pocket'. This fails to show the relationship between the NP túi áo 'coat pocket' and the verb thọc 'thrust'; that is, the verb thọc has a direct object 'the hand which entered the pocket', but no sister constituent expressing the goal of the thrusting. Vào is the main verb of a relative clause, a solution which does not fit any of the solutions suggested in Sec. 5.0.

Nguyen's alternative deep structure for (5.64) is a Fillmorean representation, indicating the case relation of each NP with the main verb of the Proposition by a case node, and representing vào as K--the case marker for an NP of Direction:
Thus, this alternative complies with solution (3): Sentence (5.64) is a single-verb sentence containing a case phrase--or preposition phrase--in which the coverb is a K--or preposition.

This last analysis, more clearly than the first analysis, states the relationship between the verb \( \text{thúc} \) and the NP \( \text{túi áo} \). That is, it states clearly that the act of thrusting is directed toward the pocket, which is not true of the first analysis. Furthermore, it more truly characterizes the ditransitivity of \( \text{thúc} \) and the types of sentences in which \( \text{thúc} \) can occur. Nguyen gives \( \text{thúc} \) as a Verb of Inserting, and, as stated earlier here, says that this class of verbs has a "special location" NP as one of its NP's. In fact, his class of Verbs of Inserting clearly belongs in my class of AGENTIVE-LOCATIVE-Goal verbs (Sec. 3.3.5.2.1 above), which are verbs which, in addition to their OBJECTIVE nouns, have optional or obligatory LOCATIVE nouns in their case frames. \( \text{Thúc} \) is one of the AGENTIVE-LOCATIVE verbs which has an obligatory LOCATIVE.
Although Liem does not give a structural analysis of coverbs as such, we can deduce from his statements which of the three solutions presented above are applicable.

In his *Vietnamese Grammar* (1969: 153-154), coverbs are termed Defective Verbs (i.e., the second—not the main—verb of a sentence). When a locative Defective Verb occurs in an Active Intransitive sentence, it is attached to the Predicate, which includes an Intransitive Verb stem plus the Defective Verb; the Predicate is followed by an L Relator Axis Phrase of Direction. He gives the following examples. I have inserted slash marks to indicate phrase boundaries according to Liem.

(5.65) nó / đi vô / trong nhà (Liem 1969: 154)

He went into the house.'

When a locative Defective Verb occurs with a "Single Transitive" verb, instead of being attached to the Predicate, it is the initial and obligatory element of an L Relator Axis Phrase of Location (pp. 154-155). The only Defective Verb which can occur here is the Defective Verb Ở, as in (5.66).
(5.66) nhân / bán / quần áo / ngoài chợ
    he sell pants dress stay outside market

Sbj SgTrV DirObj DefvV LPrep NHd

'He sells clothes in the market.' (Liem 1969: 155)

A verb such as gởi 'send' is a Double Transitive Verb when the Indirect Object immediately follows it and there is no Defective Verb, as in (5.67).

(5.67) nhân / gởi / tôi / hai bức thư (Liem 1969: 100)
    he send I two letter

Sbj DbTrV IndirObj DirObj

'He sent me two letters.'

(5.67) can be transformed into (5.68), in which the verb gởi becomes a Single Transitive Verb with an Indirect Object Relator Axis Phrase which has the Defective Verb cho.

(5.68) nhân / gởi / hai bức thư / cho tôi
    he send two letter give I

Sbj SgTrV DirObj DefvV NHd

'I sent two letters to me.' (Liem 1969: 101)

(5.68) can in turn be transformed into (5.69), with an L Relator Axis Phrase and the Defective Verb về.

(5.69) nhân / gởi / hai bức thư / về tôi
    he send two letter return I

Sbj SgTrV DirObj DefvV NHd

'I sent two letters to me.' (Liem 1969: 101)

Liem does not say why a Double Transitive verb becomes a Single Transitive Verb when it takes a Defective Verb as Direction or Indirect Object marker, but we can deduce that
it is because he considers the presence of a Defective Verb to signal a verb series; that is, the noun head of a Locative or Indirect Object phrase is the Object of the Defective Verb so that we have $V^\text{NP}\cdot V^\text{NP}$, with the first verb being the main verb of the sentence and the second verb being a secondary verb. This appears to be his analysis of (5.66), (5.68), and (5.69). In (5.65) we have $V^\text{V}\cdot P^\text{NP}$. (For a full discussion of what Liem calls Location Prepositions and what I call relator nouns, see Sec. 3.2.3 above.) It thus appears that Liem's 1969 solution is solution (2): a single matrix sentence containing two verbs in series.

Although in 1969, Liem calls coverbs "Defective Verbs", his analysis states them to be markers of location, direction, or indirect object on following relator axis phrases. This satisfies the definition of $P$ as a case marker on following nouns and paves the way for his 1973 statement that coverbs are $P$'s. In his 1973 description of case in Vietnamese, he does not single out coverbs for discussion but includes them in his list of case-marking prepositions (Liem 1973: 3-4). His examples of locative coverbs in sentences (p. 11) include one with an intransitive verb of direction and a LOCATIVE of direction, (5.70), one with a transitive verb and a LOCATIVE of direction, (5.71), and one with a transitive verb and a LOCATIVE of location, (5.72). The case markings are Liem's, but the terms "LOCATIVE of direction" and "LOCATIVE of location" are mine.
(5.70) ông ay đi lên Sài gòn.

He went up to Saigon.

(5.71) ông ay đem sách lên Sài gòn.

He brought books up to Saigon.

(5.72) ông ay mua sách ở Mỹ.

He bought books in America.

Thus, Liem's 1973 analysis complies with solution (3): coverbs are prepositions.

5.2.4 Donna Ha

Ha's case analysis of Vietnamese (1970: 28) lists eight common direction verbs, including đi 'go' and excluding lại 'come (back)' (which I have included in my list of direction verbs-coverbs). She proposes that when any of these verbs, except đi, occurs following đi, it is a preposition marking the Direction case, and that such verbs are marked in the lexicon with the feature 'co-prep' (p. 30). She sets up a rule that states this fact by operating on that feature to create a homophonous preposition. Her rule is given here, along with her lexical entry for qua and two sample sentences.
Both sentences: 'I am going over to America.'

\[
\text{qua} \quad \begin{array}{c}
\frac{+V}{+V} \\
+\text{co-prep}
\end{array} \rightarrow \begin{array}{c}
\frac{+P}{+\text{Direction}}
\end{array}
\]

She points out the fact that the location verb قوى also occurs as a preposition, though marking the Locative rather than the Direction case. She states that "the verb قوى is the only verb which takes an explicitly obligatory L case when used as a main verb" (p. 34). (Note that her "L", following Fillmore, is a case relation, not a case form.) She does not make clear whether she means by this that قوى is the only verb marking L or that قوى always requires an L case NP following while direction verbs do not have obligatory D case NP's. All her examples of direction verbs and her formulation of a direction verb sentence suggest that direction verbs also have obligatory NP's.

Since her co-prep rule applies only to verbs of direction, she finds it necessary to posit two lexical entries for قوى:
where the verb \( \varphi \) has A for Actor subject, and the preposition \( \psi \) is prevented from cooccurring with a preceding verb of direction and preceding \( \varphi \) verb.

It is seen that Ha's solution for coverbs is solution (3): coverbs are prepositions marking case relations. Certain of them are derived from verbs.

5.2.5 Trần Trọng Hải

Tran's analysis (1972) is solution (3) above; that is, he considers a coverb to be a preposition that serves as a case marker in a prepositional phrase. Tran, like Ha, considers coverbs to be prepositions derived from verbs, but he also includes the location verb \( \varphi \). He, too, posits a rule feature, \([+\text{cvb}]\), for the lexical entries of these verbs, and a coverb derivational rule. The form of the rule is as follows:

\[
\begin{align*}
\text{\( +V \)} & \quad \text{\( +P \)} \\
\text{\( [+V] \)} & \quad \text{\( +P \)} \\
\text{\( +[A\_L] \)} & \quad \text{\( +[\text{location}] \)} \\
\text{\( \)} & \quad \text{\( -[+\text{dir}] \)} \\
\text{\( \)} & \quad \text{\( -[+V] \)} \\
\text{\( \alpha F_i \)} & \quad \text{\( \alpha F_i \)}
\end{align*}
\]

(Tran 1972: 8)
What this rule says is that a [+cvb] verb which has a certain subcase feature can serve as a model for a preposition with the case form corresponding to the subcase, and carry over any other semantic features, $\alpha F_i$. For example, if a verb is marked [+cvb,+dir,$\alpha F_i$], there is a corresponding preposition marked [+DERV,+Di,$\alpha F_i$].

In this paper, Tran also discusses coverbs in Thai, Lao, and Chinese (although he fails to note the distinction in Chinese discussed in Sec. 4.1 above between coverbs that occur before the verb and those that occur after), and the derivational rule above is posited as universal.

Like Ha's rule, this is a rule which operates on an ad hoc rule feature and does not identify any characteristic syntactic or semantic property of these particular verbs that allows them to serve as prepositions. The following section proposes an analysis of coverbs that attempts to overcome this weakness.

5.3 Analysis Proposed in This Study
5.3.0 Introduction

My solution for the coverb problem is solution (3): Coverbs are case-marking prepositions. In the following sections, I will attempt to justify this solution with regard to the locative coverbs listed above in Sec. 5.1.1, giving reasons for their classification as prepositions and demonstrating the relationship between the verbal and prepositional functions of these locative words.
5.3.1 Locative Coverbs as Prepositions

Within the framework of the lexicase model and following Ha and Tran, I will treat coverbs as prepositions derived from verbs. Because, in any given sentence, a word functions as either a V or a P, and because V's and P's are subject to category-particular syntactic rules, I consider the preposition and the verb to be two separate lexical items, related by a derivational rule. That is, the coverb ֶֹ (which should be glossed 'in, at' instead of the verbal gloss 'be in/at' given in Sec. 5.1.1) is a preposition which is lexically separate but derivationally related to the verb ֶֹ 'be in/at'. The distinctions between V's and P's and the derivational relationship between the coverbs and their corresponding verbs is discussed fully in Sec. 5.3.3 below.

There already exists in Vietnamese a category P, a class of prepositions which have no corresponding verb function. Such P's as ֶּ 'in', ֶֶ 'from', and ֶַ 'with' can never occur as the main verb in a sentence. It is not necessary, therefore, to postulate a new category in Vietnamese in order to classify the coverbs as P's; whereas, to posit a distinct category of "Coverb" or "Defective Verb" is not only unnecessary and uneconomical, but it suggests that these words are a class of verbs. It can be shown in several ways that a word performing a "prepositional function" cannot be a verb.

In the first place, verbs in series implies two
actions or states, whether they are simultaneous actions or sequential actions as consecutive action, purpose, or resultative. The sentence, with the word vào,

(5.74) Lan chạy vào vườn
run (go) into garden

'Lan ran into the garden.'

could be considered to have serial verbs and to mean 'Lan ran and entered the garden'. However, (5.74) is not conceptualized by native speakers as having sequential actions. Vào could still be considered to be a verb if (5.74) is interpreted as simultaneous action: 'Lan ran, entering the garden'. However,

(5.75) Lan nhìn vào cửa sổ
look window

'Lan looked into the window.'
cannot be interpreted as 'Lan looked, entering the window'. Vào in (5.75) cannot be a verb. To say that vào in (5.74) is a verb and vào in (5.75) is something other than a verb is to make an inconsistent and ad hoc statement about the grammar of Vietnamese, since the two vào's are grammatically identical. It might be claimed that vào in both (5.74) and (5.75) is a verb functioning as an adverb modifying the direction of chạy and nhìn. However, if this were the case, the presence of vào should be optional, and it is not; Lan chạy vươn and Lan nhìn cửa sổ are ungrammatical.

Again, (5.76) might be considered to have two separate actions;
(5.76)  bac Hai mang do. len Dalat
uncle carry thing (go) up to

'Old Hai took the things up to Dalat.'
'Old Hai carried the things and went up to Dalat.'

but (5.77) does not mean 'Old Hai sent the things and went up to Dalat.'

(5.77)  bac Hai goi do len Dalat
uncle send thing (go) up to

'Old Hai sent the things to Dalat.'

If len in (5.77) is claimed to be a subordinate verb, it could only be in an "Object-controlled" verb complement (see Kullavanijaya 1974 on the structure of verb complements), and the following structure could be posited for (5.77),

(5.78)

\[
\text{\begin{center}
\begin{tikzpicture}
  \node (S) at (0,0) {S};
  \node (NP) at (-2,0) {NP};
  \node (V) at (0,0) {V};
  \node (NP2) at (2,0) {NP};
  \node (S2) at (4,0) {S};
  \node (NP3) at (6,0) {NP};
  \node (N1) at (-2.5,-1) {N};
  \node (NP4) at (5.5,-1) {NP};
  \node (N2) at (-2.5,-2) {N};
  \node (V2) at (2.5,-2) {V};
  \node (N3) at (-2.5,-3) {N};
  \node (NP5) at (5.5,-3) {NP};
  \node (N4) at (-2.5,-4) {N};
  \draw (S) -- (NP);
  \draw (S) -- (V);
  \draw (S) -- (NP2);
  \draw (S) -- (S2);
  \draw (NP) -- (N1);
  \draw (NP) -- (NP4);
  \draw (V) -- (V2);
  \draw (NP2) -- (N2);
  \draw (S2) -- (V);
  \draw (NP5) -- (N3);
  \draw (NP5) -- (NP2);
  \draw (N4) -- (NP5);
  \draw (N4) -- (NP3);
\end{tikzpicture}
\end{center}}
\]

in which the "Missing Complement Subject" (Kullavanijaya 1974: 250-256) of the embedded verb len is coreferential with the object of the higher verb goi. Such a structure is necessary for causative, purposive, or resultative complements (as, e.g., in ma cho chi Hai nau com 'Mother let Second Sister cook the rice').

However, if we use the same structure to explain
(5.79), ́ư 'from' would also have to be shown as an underlying verb although it never occurs as a verb on the surface.

(5.79) bạ c Hải gởi bạ c thọ ́ư Dalat
uncle send letter from

'Old Hai sent a letter from Dalat.'

[Old Hai sent a letter [* a letter went from Dalat]]

Although lên has a corresponding verb function and ́ư does not, lên and ́ư are grammatically identical in (5.77) and (5.79). It would be circular and unnecessarily abstract to say that lên is a verb, not a P, because it has a corresponding verb function, and then have to treat ́ư and other underived P's as verbs because they behave like the coverbs.

Furthermore, positing complex sentences with underlying verbs for coverb sentences is unnecessary because coverb sentences fit into surface structure patterns established independently on the basis of P's which have no corresponding verb function. There exists a framework to explain coverbs and coverb sentences in a way that is consistent with these surface structure patterns and with the requirements of the verbs with which coverbs occur. This framework, which is demonstrated for Vietnamese in Chapter III above, states that a verb has a particular case frame which shows the case relations with which a verb may or must occur and the allowable case forms for these case relations. Prepositions, as defined and discussed in Secs. 3.1 and 3.2.2.0 above,—and the coverbs—are case
markers which mark the case form of the case relation and therefore function in satisfying the requirements of verbs. If coverbs were verbs, there would be no way of economically stating such case frames without marking these verbs with case forms, a change in the theory which is unmotivated on any other grounds and which would make such verbs subject to two different sets of syntactic rules.

To illustrate the function of coverbs in satisfying the requirements of verbs, we can recall the discussion in Sec. 5.2.2 of Nguyen Dinh-Hoa’s analysis of the following sentence.

\[ (5.80) \] ông thụ-kỷ thục tay vào tủ áo
grand- sec’y thrust hand enter pocket jacket
father

'The clerk stuck his hand into his coat pocket.'

(Nguyen D-H 1973: 16)

In the discussion, it was stated that the verb thục has an obligatory LOCATIVE. We can say that thục has the following case frame,

\[
\text{thúc} \quad \text{'thrust'}
\]

\[
[+\text{NM},+\text{AGT}]\]

\[
[+\text{AC},+\text{OBJ}]\]

\[
[+\text{L},\{+\text{AC},+\text{rel}\},+\text{LOC}]\]

stating that it has an obligatory OBJECTIVE and an obligatory LOCATIVE and that the LOCATIVE must occur in the L case form or the AC case form with a locative relator noun. That is, (5.81) is ungrammatical.
(5.81) * ông thư-ky thọc tay túi áo
clerk thrust hand pocket

Thus, the coverb vào plays a vital role in (5.80) in satisfying the requirements of the verb thọc. If vào were a verb in (5.80), there would be no uniform and economical way of stating this role in the case frame of thọc.

As P's, the locative coverbs of course play a role in subcategorization of verbs. For example, OBJECTIVE-LOCATIVE-Goal verbs can be subcategorized according to whether they may not occur with [+L] P's, must occur with [+L] P's or relator nouns, or have free choice.

Finally, some of the locative coverbs can occur with OBJECTIVE and TIME phrases, where it is very difficult to consider them verbs, as, for example, in (5.82) and (5.83).

((5.82) is ungrammatical without the coverb.)

(5.82) tôi nghĩ đến cô-áy nhìều
I think to she much
(reaching)

[+NM] [+DAT] [+AC] [+OBJ]

'I think of her a lot.'

(5.83) Lan đi vào tháng năm
'lon is going in May.'

If vào in (5.83) is a verb, it has no subject unless we wish to say that Lon is going into the fifth month. Likewise, in (5.84), đến ba giờ chiều is a relationship of time with the verb làm 'do'; đến is not a complement verb whose
subject is the noun *việc* 'work' or a secondary verb whose subject is the noun *Xuân*.

(5.84) *Xuân làm việc đến ba giờ chiều*.

'do work to three hour evening

'Xuan worked until three o'clock in the afternoon.'

dến here can only be a [+L] P marking the case form of the TIME case relation. It would not make sense to say that a coverb is a preposition when it occurs with TIME and a verb when it occurs with LOCATIVE.

Thus, the functions of coverbs comply with the definition of "P" and, as P's, are a necessary part of the description and classification of verbs.

5.3.2 Case Frames for Locative Verbs

Once it is shown that the coverbs are prepositions, it becomes necessary to explain the relationship between them and their corresponding verbs. To do this, we will first examine the characteristics of the verbs.

With a few exceptions, the V's in the example sentences of Sec. 5.1.2, Locative Coverbs in Sentences, are followed by nouns that are locative in one sense or another. In most instances the noun itself has the feature [+place] in its lexical entry, as *Hue* (place name), *dây* 'here', and *phòng* 'room' in (5.3), (5.13), and (5.25), respectively.

The relevant parts of these sentences are repeated here:

(5.3) ...Tôi sẽ ra *Hue*  'I'll come to Hue.'
(5.13) anh lại *dây* chờ nó  'Come on over *here*...'

...
(5.25) *Lan vào phòng học*... 'Lan went into the classroom.'

*Cô* 'Miss' in (5.6) is not inherently a [+place] noun.

(5.6) *báo giờ cô qua cô Lan chớ!* 'When are you going over to Miss Lan's to visit?'

In this sentence it is a derived [+place] noun meaning 'Miss Lan's place', a feature which is required by the presence of the locative semantic property of the verb qua. In fact, all the verbs which have corresponding [+L] coverbs have a locative semantic property which causes them to have in their lexical entries the case frame feature [+__[+LOC]], stating that the verb must be followed by a noun which has a LOCATIVE case relation with the verb. All of them belong to the class of OBJECTIVE-LOCATIVE verbs. (See discussion of OBJECTIVE-LOCATIVE verbs in Secs. 3.3.5.4-6.)

We might ask whether or not LOCATIVE is really obligatory for these verbs. In the examples in Sec. 5.1.2, the verbs *về* 'return' and *ra* 'go out' in (5.18) and (5.22), respectively, are not followed by LOCATIVE case nouns. (5.18) *tới vừa đi thăm các đảo Hạng-Uy-Dĩ về*

'I've just visited the islands of Hawaii and returned.' (5.22) *em ra đi,... 'When I went away...'*

The real world destinations of *về* and *ra* are perhaps understood in context of situation but not in grammatical context; that is, [+LOC] in the case frames of these verbs is optional: [+__([+LOC])].

This LOCATIVE is different from the outer
[+__([+LOC,-dir])] assignable to all verbs by a redundancy rule, since all of the [+locative] verbs under discussion except 'be in' have the feature [+direction]. It is more of a problem to distinguish between 's Inner LOCATIVE assigned by its [+locative] semantic feature and the Outer LOCATIVE assignable to all verbs, since both can occur in one sentence, as in (5.85), and both are [-direction]. (See Sec. 3.3.4.1 above for discussion of Inner and Outer LOCATIVE.)

(5.85) \[\text{Saigon} \quad \text{no} \quad \text{Bay-Hien.}\]

\[\begin{array}{cccccc}
\text{+L} & \text{+AC} & \text{+NM} & \text{V} & \text{+AC} \\
\text{+lcn} & \text{+LOC} & \text{+OBJ} & \text{-dir} & \text{+LOC} \\
\end{array}\]

'In Saigon, he stays in Bay-Hien.'

The problem of distinction is resolved by the fact that the Outer LOCATIVE always requires an L case marker or a locative relator noun, whereas the Inner LOCATIVE does not allow an L case marker.

This fact of case form and case relation cooccurrence is directly relevant to the question of what it is that distinguishes verbs which have corresponding coverbs from verbs which do not. Not only ' , but all of the verbs in question have Inner LOCATIVES and must take their Inner LOCATIVES in the AC case form. For example, (5.86) is grammatical and (5.87), with the P vao, is not.
(5.86) nó xướng nhà bếp
he go down kitchen

\[
\begin{array}{c}
\text{[+NM]} \\
\text{[+OBJ]} \\
\text{[+AC]} \\
\text{[+LOC]} \\
\end{array}
\]

'He went down to the kitchen.'

(5.87) * nó xướng vào nhà bếp
into

\[
\begin{array}{c}
\text{[+NM]} \\
\text{[+OBJ]} \\
\text{[+L]} \\
\text{[+GOI]} \\
\text{[+AC]} \\
\text{[+LOC]} \\
\end{array}
\]

'He went down into the kitchen.'

These verbs can be said to have in their case frames the
feature [-_ [+L,+LOC]], or, to positively state the conditions
under which a [+LOC] constituent may occur: [+___([+AC,+LOC])].

In fact, the set of locative verbs which have corresponding
prepositions is composed of the OBJECTIVE-LOCATIVE-Location
verb \* and the subclass of OBJECTIVE-LOCATIVE-Goal verbs
whose LOCATIVES must occur in the AC case form. (See Sec.
3.3.5.6 and Sec. 3.3.5.4, group 2 of O-L-Goal verbs.) These
verbs are characterized by the features

\[
\begin{array}{c}
\text{[+___([+AC,+LOC])]} \\
\text{[-___[+L,+LOC]]} \\
\end{array}
\]

As shown in Sec. 3.3.3, these verbs do not have
AGENTIVE in their case frames although the direction verbs
can take INSTRUMENTAL in the I case form. Their subjects
are in the OBJECTIVE case. They all share the following
case frame features, with the exception that [+location] \* cannot take INSTRUMENTAL.
The location verb *be in/at* has the feature [-dir], which implies [+lcn] (see Sec. 3.3.4.1 for locative subcategorization and redundancy rules). The verb *arrive at* has the feature [+ter], which implies [+gol] and [+dir]. All the other members of this class share the feature [+gol], though each has additional semantic and phonological features distinguishing it from the others. They are *qua/sang 'go across (to)', l Gabri 'come (back to)', vè 'return (to)', ra 'go out (to)', vô/vào 'go in (to)', lên 'go up (to)', and xuống 'go down (to)'*. The glosses '(to)' indicate that the LOCATIVES of [+gol] verbs may be marked either [+ter] or [+path] by subcategorization rules.

The verb *di 'go*', as discussed above in Sec. 5.1.2, is an OBJECTIVE-LOCATIVE-Goal verb and, as a member of that class, shares with this set of OBJECTIVE-LOCATIVE verbs the feature [+((+AC,+LOC))]. However, since *di* freely occurs with [+L] prepositions, it can have [+((+L,+LOC))]. Thus, *di* does not have both of the characteristic case frame features of the verbs under discussion, and never occurs itself as a P with OBJECTIVE verbs. Other verbs of direction which share with *di* the feature [+((+L,+AC)+LOC)], and
do not have corresponding prepositions, include ghế 'stop by', ngồi 'sit', and nằm 'lie'.

It is the presence of \([-([+AC,+LOC])]\) that puts such verbs as đi and the locative verbs which have corresponding P's in a single class of verbs, and the presence of \([+[L,+LOC]]\) in these latter verbs that makes them a special class apart from verbs like đi. Thus, it turns out that a verb's ability to have a corresponding coverb in Vietnamese can be directly correlated with its case frame as a verb, and ultimately with the semantic properties that underlie the case frame.

5.3.3 Coverbs in the Lexicon

It was shown in the preceding section that the locative verbs which have corresponding prepositions constitute a particular class of verbs. It was found that a verb's ability to have a corresponding coverb is directly correlated with its case frame as a verb. The feature matrices of the coverbs look very much like the feature matrices of their corresponding verbs, with differences which are characteristic of the different syntactic functions of P's and V's.

The feature matrices of P's, like those of V's, include a case frame. Unlike V's, which may have from one to several case frame features, P's have only one case frame feature, a feature which states the case relation or relations which may occur with that P. This is, of course, because, in a sentence, a P must have one—and only one—cooccurring case
relation; while a V may have none or many cooccurring case relations. These facts reflect a significant difference between P's and V's: A P forms an exocentric construction with an NP, the P and the NP both being obligatory to the PP construction; a V is the head of an endocentric construction (the sentence) of which it is the only obligatory element. In addition, a P is labelled with the one case form it marks. If \([+ACR]\) and \([+BCR]\) stand for case relations, \([+A]\) is a case form, and \([+S_i]\) and \([+F_j]\) are distinctive semantic and phonological features, respectively, a minimal representation of a P feature matrix in Vietnamese will look like this:

\[
\begin{bmatrix}
+P \\
+A \\
+\_\_\_[\{+ACR,+BCR\}] \\
+S_i \\
+F_j
\end{bmatrix}
\]

Because the coverbs are homophonous and synonymous with their corresponding verbs, in the mind of the speaker they are a special class of P's, derived from verbs. This derivational relationship can be expressed in the form of a derivational rule (DR). As stated in Sec. 2.2.3 above, a DR relates a class of lexical items, identified by certain shared features, with members of another class of lexical items. Frequently, in DR's, only selected semantic features are carried over from one item to the other and the bulk of semantic features in the derived item are unpredictable.
(Very often in historical derivation, semantic shifts are such that the semantic properties of a derived item are completely unpredictable and in the synchronic grammar there may no longer be a derivational rule.) However, the relationship between the coverbs and their corresponding verbs is so close in Vietnamese that not only the entire set of phonological features (a change in stress features would be attributable to phonological rules pertaining to the change in syntactic function, not a feature of the lexical items) but also all the inherent semantic features of the source item are carried over to the derived item.

The DR which relates these coverbs to their corresponding verbs will be called the Coverb Derivational Rule. It is formulated as follows:

\[
\begin{align*}
\text{CDR.} & \quad \begin{array}{c}
+V \\
+\_\_\_[+AC,+LOC] \\
-\_\_\_[+L,+LOC] \\
<+\text{direction}> \\
-\text{source} \\
\alpha S_i \\
\beta F_j
\end{array} \quad \begin{array}{c}
+P \\
+\text{DERV} \\
+L \\
+\_\_\_[+AC,\{+LOC,\langle\text{TIM}\rangle\}] \\
<+\text{direction}> \\
-\text{source} \\
\alpha S_i \\
\beta F_j
\end{array}
\end{align*}
\]

in which \(S_i\) represents distinctive semantic features and \(F_j\) distinctive phonological features. The feature \(+\_\_\_[+AC,\{+LOC,\langle\text{TIM}\rangle\}]\) can actually be omitted from this rule since it can be specified for \([+L]\) P's by the redundancy rule.
which would also apply to underived [+L] P's, making a more
general statement. The feature is stated redundantly in
this study to more clearly show the case frame of the
derived lexical items. In any case, the feature [+AC] is
redundant since [+AC] is specified for the case relations of
all P's (Sec. 3.2.2.0).

The CDR claims that, for every lexical entry which is
marked [+__[+AC,+LOC]], [-__[+L,+LOC]], and [-source],
there is a homophonic and synonymous derived preposition
with the case form L, requiring a following LOCATIVE or
TIME noun, and having the same feature of direction as the
verb lexical entry. The P case frame must show that only a
 [+direction] P can occur with a TIME noun; that is, in
Vietnamese, the [-direction,+location] \( \hat{\sigma} \) does not occur with
TIME.

In other words, that set of OBJECTIVE-LOCATIVE verbs
which cannot be followed by a preposition is the very set
of locative-type verbs which can occur as L prepositions
with another verb. (See Secs. 3.3.5.4, OBJECTIVE-LOCATIVE-
Goal verbs, and 5.3.2, Case Frames for Locative Verbs.) It
is not hard to see why this should be so. Since these
verbs are already semantically locative, their LOCATIVE
adjuncts need no additional overt identification other than
their especially close association with a semantically
locative verb. They are free to occur in the most neutral
non-subject case form, [+AC]. In this sense, then, these
verbs already "mark" the [+LOC] case relation. It is not
surprising that they should eventually also be used to
"mark" [+LOC] constituents in sentences in which they are
not the main verb.

To illustrate the operation of CDR, the derivation
of two coverbs as partially specified lexical items is
given, and some of the example sentences with coverbs,
given above in Sec. 5.1.2, are repeated here with branching
tree structures and case-related feature marking.

\[\begin{array}{l}
\text{'be in/at'} \\
\begin{array}{l}
+V \\
+[+NM,+OBJ] \\
+[+AC,+LOC] \\
-\_[+L,+LOC] \\
-\_[+INS] \\
-direction \\
+S_i \ (other)
\end{array}
\end{array}\]

\[\begin{array}{l}
\text{'in, at'} \\
\begin{array}{l}
+P \\
+DERV \\
+[+AC,+LOC] \\
-\_ \\
+L \\
-direction \\
+S_i \ (other)
\end{array}
\end{array}\]

\[\begin{array}{l}
\text{'go out (to)'} \\
\begin{array}{l}
+V \\
+[+NM,+OBJ] \\
+[+AC,+LOC] \\
-\_[+L,+LOC] \\
+\_[{+I,+C},+INS] \\
+direction \\
-source \\
+S_i \ (other)
\end{array}
\end{array}\]

\[\begin{array}{l}
\text{'out to'} \\
\begin{array}{l}
+P \\
+DERV \\
+[+AC,\{+LOC,+TIM\}] \\
+L \\
-direction \\
-source \\
+S_i \ (other)
\end{array}
\end{array}\]
'At the beginning of November, I'm going to teach at Gia-Long School.'

The verb **day** can, by a general redundancy rule, take a \([-\text{direction}]\) LOCATIVE. (See Sec. 3.3.2 for RR's for verbs.)

"The barge girl oared the boat across the river."
They moved to No. 3 Gia-Long Street.

The temperature changed from 70° down to 33°.
The Coverb Derivation Rule will have to exclude such compound verbs with included direction words as trở-qua from having derived prepositions.
5.4 The Dative Coverb in the Lexicon

In addition to the locative coverbs discussed in the preceding sections, there is one other verb in Vietnamese which has a corresponding coverb. That is the verb cho 'give (to)'. Sentence (5.88) shows cho as a verb.

\[\text{(5.88) ông-áy vừa cho con gái chởc xe Huê-Kỳ}\]
\[\quad \text{he just give daughter Cl vehicle America}\]
\[\begin{array}{ccc}
\text{[+NM]} & \text{[+AC]} & \text{[+OBJ]} \\
\text{[+AGT]} & \text{[+DAT]} & \\
\end{array}\]
\[\quad \text{'He just gave his daughter an American car.'}\]
\[\quad \text{(Nguyen D-H 1966: 68)}\]

Cho is a [+D] coverb which occurs with AGENTIVE-DATIVE-Goal verbs, as shown in (5.89) and (5.90). As discussed in Sec. 3.2.2.3 above, DATIVE can occur either before or after OBJECTIVE. If it occurs before OBJECTIVE, the case marker cho is optional, as in

\[\text{(5.89) anh đưa (cho) ch’elle áy cài dò bro.}\]
\[\begin{array}{ccc}
\text{[+NM]} & \text{[+D, +AC]} & \text{[+D]} \\
\text{[+AGT]} & \text{[+DAT]} & \text{[+OBJ]} \\
\end{array}\]
\[\quad \text{'Give her that thing, brother.'} \quad \text{(Tran 1971: 7)}\]

If DATIVE occurs after OBJECTIVE, cho is obligatory, as in
The verb *cho* is an AGENTIVE-DATIVE-Goal verb (see Sec. 3.3.5.1.1) but differs from other A-D-Goal verbs in Vietnamese in that its DATIVE must always occur immediately following the verb, as in (5.91) and (5.92), except when it is topicalized, as in (5.93), and must always be in the AC case form.

(5.91) họ *cho* ai 仝 lên

they give who money

\[
\begin{array}{c}
\text{[+NM]} \\
\text{[+AGT]} \\
\text{[+D, +AC]} \\
\text{[+AC]} \\
\text{[+D]} \\
\end{array}
\]

(5.92) *cho* tôi một gói thuốc

give I one package tobacco

\[
\begin{array}{c}
\text{[+AC]} \\
\text{[+DAT]} \\
\text{[+OBJ]} \\
\end{array}
\]

(5.93) ông ấy họ đã *cho* một vé

gentleman that they Past give one ticket

\[
\begin{array}{c}
\text{[+AC]} \\
\text{[+DAT]} \\
\text{[+NM]} \\
\text{[+AGT]} \\
\text{[+AC]} \\
\text{[+OBJ]} \\
\end{array}
\]

(5.90) tôi sẽ trả lời cho người đó trước

I Fut pay back word to person that before

\[
\begin{array}{c}
\text{[+NM]} \\
\text{[+AGT]} \\
\text{[+D, +AC]} \\
\text{[+AC]} \\
\text{[+D]} \\
\text{[+AC]} \\
\end{array}
\]

'I'll answer that person first.'
Sentence (5.93) is acceptable only in a context of contrast with a preceding or following sentence, such as \textit{cÓn tół phái mua} (remain, I, must, buy) 'As for me, I had to buy mine.'

The DATIVE is optional, as in (5.94), where the recipient is unspecified.

\begin{quote}
\begin{center}
(5.94) \texttt{cho mót gół thuóc} \\
\texttt{give one package tobacco}
\end{center}
\end{quote}

\begin{center}
\texttt{[\texttt{+AC}]}
\texttt{[\texttt{+OBJ}]}
\end{center}

'Give me a pack of cigarettes.'

BENEFACTIVE can occur either in the B or the D case form. If a \texttt{cho} coverb phrase occurs with the verb \texttt{cho}, it is unambiguously BENEFACTIVE since DATIVE with the verb \texttt{cho} must occur in the AC case form. This is shown in (5.95).

\begin{quote}
\begin{center}
(5.95) \texttt{cho mót gół thuóc} \{ \texttt{giúm} \}
\texttt{for} \{ \texttt{tół} \}
\texttt{I}
\end{center}
\end{quote}

\begin{center}
\texttt{[\texttt{+AC}]}
\texttt{[\texttt{+B}]}
\texttt{[\texttt{+OBJ}]}
\texttt{[\texttt{+AC}]}
\texttt{[\texttt{+BEN}]}
\end{center}

'Give a pack of cigarettes (to somebody else) for me.'

The verb \texttt{cho} has the following lexical entry matrix.
Cho 'give'

\[
\text{cho} \quad 'give'
\]

\[
[+V \\
  [+\text{NM}, +\text{AGT}] \quad \phantom{\text{___}} \quad \phantom{\text{___}} \\
  [+\text{AC}, +\text{OBJ}] \quad \phantom{\text{___}} \\
  [+\text{(\text{AC}, +\text{DAT})}] \quad \phantom{\text{___}} \\
  [-\text{[+D, +\text{DAT}]}} \\
  [-\text{[+\text{OBJ}, +\text{DAT}]}} \\
  [-\text{[+\text{INS}]}} \\
  +\text{direction} \\
  -\text{source}
\]

Cho is the only AGENTIVE-DATIVE verb which has a corresponding preposition. It is also the only A-D-Goal verb which cannot take its DATIVE in the D case form. A derivation rule for P cho can be formulated as follows.

\[
[+V \\
  [+\text{AC}, +\text{DAT}] \quad \phantom{\text{___}} \\
  [-\text{[+D, +\text{DAT}]}} \\
\] \quad \Rightarrow \quad [+P \\
  +\text{DERV} \\
  +\text{D} \\
  [+\text{AC}, [+\text{DAT}, +\text{BEN}]}}
\]

which shows that the P cho can mark BENEFACTIVE as well as DATIVE.

To postulate a derivation rule for a single lexical entry, however, captures no generalizations (see Sec. 2.2.3) and adds to the complexity of the grammar since it would be possible, instead, to consider cho to be two separate lexical entries, a V and a P. Nevertheless, if the derivation rule for cho is compared with the Coverb Derivation Rule for locative coverbs, given in Sec. 5.3.3. and repeated here,
significant parallels can be seen. Cho shares with the locative coverbs the feature [-source] and a feature regarding direction. The necessary condition for both rules is that the verb have an "inner" non-OBJECTIVE case relation and that that case relation occur only in the AC case form and never occur in the case form most closely associated with that case relation. In fact, it is this very condition which appears to be the essential characteristic of coverbs. It is the obligatory AC case form on inner non-OBJECTIVE case relations with certain verbs which sets them apart from other verbs of the same class and paves the way for them to have corresponding prepositions, which, by definition, require that their sister constituents occur in the AC case form.

CDR can be modified as below to incorporate the DATIVE coverb.
CDR. 

\[ +V \]
\[ +[+AC, \{+LOC\} \] 
\[ 1 \{+DAT\} _1 \]
\[ -[+L, +LOC] \] 
\[ 1 \{+D, +DAT\} _1 \]

\[ <+direction> \]
\[ -source \]
\[ \alpha S_i \]
\[ \beta F_j \]

\[ \rightarrow \]

\[ +P \]
\[ +DERV \]
\[ \{+L\} \]
\[ 1 \{+D\} _1 \]
\[ +[+AC, \{+LOC, <+TIM>\} \] 
\[ 1 \{+DAT, +BEN\} _1 \]

\[ <+direction> \]
\[ -source \]
\[ \alpha S_i \]
\[ \beta F_j \]
6.1 The Areal Hypothesis

The existence of coverbs--prepositions which have corresponding homophonous and synonymous verbs--is not unique to the Vietnamese language in Southeast Asia. In fact, many languages of the area, without regard to genetic relationship, share not only the coverb phenomenon but other syntactic characteristics. Franklin Huffman begins his paper "Thai and Cambodian - A Case of Syntactic Borrowing?" (Huffman 1973) by saying, "No one who has a passing familiarity with Thai and Cambodian can fail to be struck by the remarkable similarity of syntactic structure between the two languages" (p. 1).

I believe that these similarities are due in large part to long and extensive language contact. There is evidence of much movement and population resettlement in the whole area. "...centuries of migrations, trade, and political relationships link the peoples of Burma, Thailand, Laos, and Vietnam with the southern provinces of China... This entire region, which might be termed greater mainland Southeast Asia, forms an integrated whole for the purposes of the study of racial and linguistic history, ethnic distribution, and cultural evolution" (Lebar, Hickey, Musgrave 1964: vi; also see LHM 1964: 187, 189; and Cady
1964: 14-20). Haas (1965: viii) states that "long contact among members of the various indigenous linguistic families has given rise to certain broad similarities characteristic of a linguistic area."

Emeneau (1956: 16) defines "linguistic area" as "an area which includes languages belonging to more than one family but showing traits in common which are found not to belong to the other members of (at least) one of the families." Haas (1969: 83) prefers the term "diffusion area" as reflecting cultural as well as linguistic diffusion, and observes, "Even among genetically unrelated languages striking structural resemblances are often found spread over wide geographical areas" (pp. 82-83).

Henderson (1965: 401) states, "In the course of investigations extending over many years into the present phonological and grammatical structure of a variety of languages on the South East Asian mainland, my attention has...inescapably been drawn to a number of features which suggest themselves as characteristic of the area, or of sub-areas within the larger area." Huffman (1973: 490, fn 7), in comparing the order of syntactic elements in Thai and Cambodian, states that "within the context of Southeast Asia as a linguistic area the order of syntactic elements is by no means random, but this fact implies mutual influence in the area and supports the conclusion that the syntactic similarities concerned are not coincidental."

Specific cross-language comparisons in phonological or
grammatical structure have been made not only by Huffman (1973) but also by Cooke (1968), Henderson (1965), Honey and Simmonds (1963), Jones (1970), Lee (1974), Liem (1973b), and Nacaskul (1973). (Also see bibliography in Huffman 1973.)

The coverb phenomenon is one of the areal features of Southeast Asia, one of the features characteristic of the languages of the area, possibly as a result of language contact. This study will not be concerned with the probable direction of influence. For a discussion of direction of borrowing in Thai and Khmer, see Huffman 1973: 28-37.

6.2 The Evidence
6.2.0 Introduction

The claim that coverbs are an areal feature is based on evidence found not only in Vietnamese but in various Tai languages (Thai (Siamese), Lao, Black Tai), in Mon-Khmer languages (principally Khmer, but also some occurrences of coverbs in the Mountain Mon-Khmer languages, Chrau (D. D. Thomas 1971 and personal communication, and D. M. Thomas 1969), Jeh (Gradin 1970a and 1970b), and Sedang (Smith 1969 and personal communication)), and in Chinese (for Mandarin see Chapter IV above, for Taiwanese see Chen 1972). I have not yet made any investigations into Burmese or the Austronesian languages in the area. Much more investigation needs to be done on all the languages,
but even this superficial comparison shows striking similarities, giving support to the hypothesis.

Speaking of Thai and Khmer, Huffman (1973: 1) states that "many semantically equivalent forms, or words, seem to share identical ranges of syntactic occurrence." One of the types of forms he gives as example is what he calls "directional verbs". These are what I have called coverbs in Vietnamese and Chinese, and they function in much the same way in Khmer and Thai as they do in Vietnamese. In the following sections, a rather cursory review of the facts in each language--Khmer and Thai--is given. In Sec. 6.2.3, some comparison of all three languages--Vietnamese, Khmer, and Thai--is made. For explanation of orthography and sources for the languages, see Sections 1.3 and 1.4 above.

6.2.1 Khmer
6.2.1.1 Coverbs, Prepositions, and Relator Nouns
6.2.1.1.1 Khmer Coverbs

In Khmer, the national language of Cambodia, there are a number of words which can be analyzed as coverbs. Huffman (1970: 138-139) gives a list of "directional verbs", which "occur after primary verbs which are non-specific as to direction or goal, and specify the direction or general orientation of action initiated by the verb" (p. 138). (See Sec. 5.1.3 for discussion of Vietnamese coverbs as adverbs.) In 1973, he says, "Most members of the class occur also as
primary verbs...when directional verbs are followed by a substantive object, they have a prepositional function" (1973: 16). Following is his list, including glosses; I have designated what I believe to be the correct case form (CF) features for each coverb and added the meanings these words have when used as main verbs. Since most of the coverbs are marked [+L,+gol], the definition of the Goal sub-CF from Sec. 3.2.2.4.3 is repeated here: "The Goal Sub-CF marks the path or goal toward which the action of the verb is directed; that is, the noun associated with a Goal sub-CF names the path or intended terminal point of the action of the verb, never the point of origin." The feature marking of these [+gol] coverbs in example sentences gives only their lexical marking of Goal ([+gol]) and not the semantic interpretation as Path ([+path]) or Terminus ([+ter]) for particular sentences, as determined by subcategorization rules. (See Sec. 3.3.4.1 for subcategorization and redundancy rules regarding Direction.)
<table>
<thead>
<tr>
<th>Preposition</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>níw</td>
<td>still, remaining [+L, +1cn] be in/at</td>
</tr>
<tr>
<td></td>
<td>at</td>
</tr>
<tr>
<td>tíw</td>
<td>orientation away [+L, +gol] go to</td>
</tr>
<tr>
<td></td>
<td>from speaker in space</td>
</tr>
<tr>
<td>mook</td>
<td>orientation [+L, +gol]</td>
</tr>
<tr>
<td></td>
<td>toward speaker in space</td>
</tr>
<tr>
<td>coul</td>
<td>in, into [+L, +gol]</td>
</tr>
<tr>
<td>cəŋ</td>
<td>out, out of</td>
</tr>
<tr>
<td>laeq</td>
<td>up, upward [+L, +gol]</td>
</tr>
<tr>
<td>coh</td>
<td>down, downward [+L, +gol,-ter] go down</td>
</tr>
<tr>
<td>taam</td>
<td>along, following [+L, +gol,-ter] follow</td>
</tr>
<tr>
<td>qaoy</td>
<td>on behalf of, for (familiar) [+D] give</td>
</tr>
<tr>
<td>cuun</td>
<td>on behalf of, for (formal) [+D] give (honorific)</td>
</tr>
</tbody>
</table>

Elsewhere (p. 408), he also gives as a directional verb

claal across [+L, +gol,-ter] go across

and on p. 409 he gives as both a verb and a preposition

dal to, until, reaching to [+L, +ter] reach, arrive at

In a list of "attributive verbs", Ehrman (1972: 77-78)

includes taam, níw, dal, qaoy ('for, to; give'), cuun ('for, to; give'), and the following (all meanings given are hers):

huoh      more than pass (cf. Vietnamese qua)

cwael    around go around
wuən    around go around, encircle
com      exactly at hit exactly, be on target
tuəl     facing support face to face
Speaking of these verbs and some others not within the scope of this study, she says that English prepositional phrases can be translated into Khmer by "a verb phrase which is attributive to what precedes" (p. 77) and that these words can be verbs in such verb phrases.

Jacob (1968: 137), in a list of "prenominal particles", includes taam 'following, by, along', ជស 'at', and ដល 'until, as far as, towards (of feelings)', and marks them as also occurring as verbs.

The word ការ 'out, go out' is included in Huffman's list of directional verbs since it can occur as a directional adverb, as in (6.1).

(6.1) ការ តើ ដារ ការ ជស ស្តី (S. Pou)
3p head stew =out out to rice

\[ \text{[+NM] } \quad \text{[+AC] } \quad \text{[+Adv]} \quad \text{[+L]} \quad \text{[+AC]} \]

'She carried (on her head) the stew out to the ricefields.'

However, ការ never occurs as a P; that is, ជស in (6.1) cannot be omitted. Thus, ការ is not a coverb. Furthermore, ការ as a verb cannot take its LOCATIVE in the AC case form; i.e., (6.2) is ungrammatical, whether with a Source LOCATIVE or a Goal LOCATIVE. Its LOCATIVE must be marked by a directional preposition, as in (6.3) and (6.4).
(6.2) * qom cae

older sib go out
of parent

pteoh

house

srae

ricefield

'Aunt went out from the house.}'

to the field.

(6.3) qom cœn tiw srae

[+NM] [+L] [+AC] [+LOC]

'Aunt went out to the field.'

(6.4) tooep cœn pii nêkôc̄o peel prîk

army go out from city time morning

[+NM] [+OBJ] [+L] [+AC] [+LOC] [+AC] [+TIM]

'The army left the city in the morning.'

These facts are consistent with the coverb derivation hypothesis that an OBJECTIVE-LOCATIVE verb which can have a corresponding P must take its inner LOCATIVE in the AC case form. For these reasons, Khmer cœn is not included in the cross-language list of coverbs in Sec. 6.2.3.1 below.

The word coh 'down, go down' is limited in its occurrence as a coverb. Both as a V and as a P, it is [-ter]; i.e., it can mean only 'through space' not 'toward/to a point'. Examples of coh as a [-ter] V, (6.5), and as a [-ter] P, (6.6), are given.
(6.5) đömrey coh tuënlee (S. Pou)
elephant go down river

\[+\text{NM}] \quad \underbrace{[+\text{Obj}]}_{\text{ter}} \quad \underbrace{[+\text{AC}]}_{\text{LOC}}

'The elephant went down into the river (through the water).'

(6.6) Mela tuul khoa-qaaw coh tuënlee (S. Pou)
carry head clothes down river

\[+\text{NM}] \quad \underbrace{[+\text{AGT}]}_{\text{Obj}} \quad \underbrace{[+\text{AC}]}_{\text{LOC}}

'Malaa carried the clothes down in the river (through the water).'

When a LOCATIVE goal occurs with the verb coh, it must be marked with a [+gol] P, as in (6.7).

(6.7) Mela coh tīw tuënlee (S. Pou)
go down to river

\[+\text{NM}] \quad \underbrace{[+\text{L}]}_{\text{gol}} \quad \underbrace{[+\text{AC}]}_{\text{LOC}}

'Malaa went down to the river.'

When a LOCATIVE goal occurs with another verb, coh may occur as a directional adverb while the LOCATIVE is marked with a [+gol] P, as in (6.8); coh cannot be the [+gol] P in this case.

(6.8) Mela tuul khoa-qaaw coh tīw moēt tuënlee (S. Pou)
carry head clothes down to edge river

\[+\text{NM}] \quad \underbrace{[+\text{Agv}]}_{\text{Obj}} \quad \underbrace{[+\text{L}]}_{\text{gol}} \quad \underbrace{[+\text{AC}]}_{\text{LOC}}

'Malaa carried the clothes down to the riverbank.'
These facts, too, are consistent with the coverb derivation hypothesis. It remains only to assign features to the lexical entry matrix of V coh to allow it to take a [+AC] LOCATIVE which is semantically [-ter] (thus allowing it to become a [-ter] coverb) and a [+L,+ter] LOCATIVE, thus blocking it from becoming a [+ter] coverb.

The word claaq 'across, go across', like coh, is also a [-ter] V and P, and the same set of facts applies.

The word taam 'following, follow' does not follow the usual pattern of locative verbs and markers. (For discussion of similar problems with Vietnamese theo 'following, follow', see Sec. 5.1.2 above.) As a verb, taam cannot take a LOCATIVE at all, unless a moving object can be considered a LOCATIVE; i.e., (6.9) is ungrammatical, (6.10) is grammatical.

(6.9) * koet taam plaw (tīw Krēch)
3p follow road go to
'She followed the road to Kratie.'

(6.10) koet taam \{Sēri\} (S. Pou)
3p follow \{laan\}
\{auto\}
'She followed \{Sarii.\} the car.'

However, taam appears to occur as a [+L,+lcn] or a [+L,-ter] preposition, as in (6.11) and (6.12), respectively.
They cut the wood in the provinces.'
(Huffman 1970: 366)

'I've come along this road often.'
(Huffman 1970: 217)

It may be that taam in (6.12) is an adverb rather than a P. The problems of taam will not be gone into in this study.

Besides occurring as an AGENTIVE-DATIVE verb 'give', cuun also occurs as an AGENTIVE verb meaning 'accompany, escort' (which perhaps requires an embedded sentence), as in (6.13).

'It is presumed that cuun 'give' and cuun 'accompany' are two separate synchronically underived lexical items since neither can be predicted from the other.

As in Vietnamese, most of these words can occur as
directional adverbs. (See Sec. 5.1.3 above for discussion of adverbial uses of Vietnamese OBJECTIVE-LOCATIVE verbs of direction.) Huffman (1973: 16) states that when directional verbs occur in final position in the phrase, they have an adverbial function. He gives the following example.

(6.14) yōok hęp nih tiw 'Take this box away.'
  take box this go
  [+AC] [+Adv]

Another example is (6.15).

(6.15) tuuk nuh dék tnam mōk pii Kämpueng-Caam
  boat that carry tobacco hither from port
  [+NM] [+AC] [+Adv] [+LOC] [+AC]

'That boat is bringing tobacco from Kampong Cham.'
(Huffman 1970: 183)

Examples of some of these words as V's and as P's in sentences have been given above. Examples of the remainder are given below, with the word in question underlined. Relevant categories and case features are postulated in line with those hypothesized for Vietnamese in Chapters III and V above.

(6.16) salaa nîw qae-naa (Huffman 1970: 13)
  school be in where
  [+NM] [+V] [+1cn] [+AC] [+LOC]

'Where is the school?'
(6.17) look Sok twaa kaa niw kənlaeq nin
Sir do work in place Det

\[\begin{array}{c}
\text{[+NM]} \\
\text{[+AGT]} \\
\text{[+OBJ]} \\
\text{[+P]} \\
\text{[+AC]} \\
\text{[+LOC]} \\
\text{[+1cn]}
\end{array}\]

'Mr. Sok works at that place.' \textit{(Ehrman 1972: 11)}

(6.18) niw psaa nih miən mənuh craən nah
in market this have person much very

\[\begin{array}{c}
\text{[+P]} \\
\text{[+AC]} \\
\text{[+1cn]} \\
\text{[+AC]} \\
\text{[+OBJ]}
\end{array}\]

'There are a lot of people at this market.' \textit{(Huffman 1970: 43)}

Unlike Vietnamese ə, Khmer niw can be used to mark the
TIME case relation, as in (6.19).

(6.19) niw tnay nih kənom tiw Kämpuen-Caam
in day this I go

\[\begin{array}{c}
\text{[+P]} \\
\text{[+AC]} \\
\text{[+TIM]} \\
\text{[+1cn]} \\
\text{[+NM]} \\
\text{[+V]} \\
\text{[+gol]} \\
\text{[+AC]} \\
\text{[+LOC]}
\end{array}\]

'I'm going to Kampong Cham today.' \textit{(Jacob 1968: 68)}

(6.20) yoən tiw srok Kmae khae kraoy
we go country Khmer month behind

\[\begin{array}{c}
\text{[+NM]} \\
\text{[+OBJ]} \\
\text{[+V]} \\
\text{[+AC]} \\
\text{[+1cn]} \\
\text{[+gol]} \\
\text{[+AC]} \\
\text{[+LOC]} \\
\text{[+TIM]}
\end{array}\]

'We're going to Cambodia next month.' \textit{(Ehrman 1972: 107)}

(6.21) yook qeqwan nih tiw bəntup
take thing this to room

\[\begin{array}{c}
\text{[+AC]} \\
\text{[+OBJ]} \\
\text{[+P]} \\
\text{[+AC]} \\
\text{[+1cn]} \\
\text{[+gol]} \\
\text{[+AC]} \\
\text{[+LOC]}
\end{array}\]

'Take these things to the room.' \textit{(Huffman 1970: 138)}
(6.22) kee mook kənlaŋ niə thee qəy
3p come place this do what

\[ [+NM] [+V] [+AC] [+AC] \]

'What have they come for?'

(Huffman 1970: 229)

(6.23) yook qəywan niə mook pteəh
take thing this to house

\[ [+AC] [+OBJ] [+P] [+L] [+AC] [+LOC] \]

'Bring these things to the house.'

(Huffman 1970: 140)

(6.24) kənom nin tiw som cbap-qəqnuŋŋaat coul weŋ
I Fut go ask permit go in palace

\[ [+NM] [+V] [+AC] [+V] [+AC] [+AC] \]

'I'll go ask for a permit to enter the palace.'

(Huffman 1970: 230)

(6.25) kee yook demray tieŋ coul tuənlee
3p take elephant pull into river

\[ [+NM] [+AGT] [+AC] [+P] [+L] [+AC] [+AC] \]

'They use elephants to pull (the wood) into the river.'

(Huffman 1970: 366)

(6.26) kaal-naa ʔam baay ruəc, yəŋ tiw laŋ pnum
when eat rice finish we go go up mountain

\[ [+AC] [+NM] [+V] [+V] [+AC] [+AC] \]

'When we've finished eating, we'll go climb the mountain.'

(Huffman 1970: 204)
(6.27) yook qeywan ṉ u̱ h  laəŋ  leə pteəŋ
    take thing that up to top house

    [+AC]    [+P]    [+AC]
    +OBJ     +L       +LOC

'Take those things up to the house.' (Huffman 1970: 140)

(6.28) bæ look  claŋ  tnal  ṉ ın  kẖ æ̊ eğin  səṉ θ̊ ə ki  muə̊ g̱ tist
    if Sir cross street Put see hotel one further

    [+NM]    [+V]    [+AC]    [+AC]
    +OBJ     +ter     +LOC     +OBJ

'If you cross the street, you'll see another hotel.'
    (Huffman 1970: 132)

(6.29) Səri  bəncuun  tuu k  claŋ  stìŋ (S. Pou)
    send boat across stream

    [+NM]    [+AC]    [+P]    [+AC]
    +AGT     +OBJ     +L       +LOC

'Sarii sent the boat across the stream.'

(6.30) kəpəl  daəl  Kəmpuəŋ Caam  qaatìt  mun (S. Pou)
    ship arrive week before

    [+NM]    [+V]    [+AC]    [+AC]
    +OBJ     +ter     +LOC     +TIM

'The ship arrived at Kampong Cham last week.'

(6.31) Sərun  daə  daəl  pteəŋ  Nael (S. Pou)
    walk reaching house

    [+NM]    [+P]    [+AC]
    +OBJ     +L       +LOC

'Sarun walked to (as far as) Nael's house.'
(6.32) kŋom  qaoy  luy  koət  
I give money 3p

\[+NM \]  \ [+V]  \ [+AC]  \ [+AC]  
\ [+AGT]  \ [+OBJ]  \ [+DAT] 

'I'll give him some money.'

(6.33) hoc sabuu haey-niŋ kënsaeŋ-cuut-klun qaoy kŋom phaq
hand soap and towel to I as well

\ [+AC]  \ [+AC]  \ [+P]  \ [+AC]  
\ [+OBJ]  \ [+OBJ]  \ [+D]  \ [+DAT] 

'Please hand me the soap and a towel.'

(Huffman 1970: 149)

As a [+D] preposition, qaoy can mark BENEFACTIVE as well as DATIVE.

(6.34) qøwpuk  tîn  siøwpìw  qaoy  kŋom
father buy book for I

\ [+NM]  \ [+AC]  \ [+P]  \ [+AC]  
\ [+AGT]  \ [+OBJ]  \ [+D]  \ [+BEN] 

'Father buys books for me.'

(Jacob 1968: 141)

(6.35) kee  cuun  ruŋwoen  Sørun
3p give reward (honorific)

\ [+NM]  \ [+V]  \ [+AC]  \ [+AC]  
\ [+AGT]  \ [+OBJ]  \ [+AC]  

'They gave the reward to Sarun.'

(6.36) kŋom  nîn  luəq  siøwpìw  nîh  cuun  look
I Fut sell book this to Sir

\ [+NM]  \ [+AC]  \ [+P]  \ [+AC]  
\ [+AGT]  \ [+OBJ]  \ [+D]  \ [+DAT] 

'I'll sell this book to you, Sir.'
(6.37) look ṛaok twiə cuun kŋom phaŋ (Thach Sarun)
Sir open door for I as well

[+NM] [+AGT] [+AC] [+P] [+AC] [+OBJ] [+D] [+BEN]

'Open the door for me, please, Sir,'

6.2.1.1.2 Khmer Prepositions

Khmer has some underived prepositions--words which never occur as main verbs. The two which are most relevant to this study are:

qae at, as for, with regard to [+L,+lcn]
pii from, since [+L,+src]

Also there are tan-pii 'from, ever since' (see Huffman 1970: 122-123 for the distinction between pii and tan-pii), ruac-pii 'after', etc. Some sentences with these two prepositions follow. Verbs and coverbs from the above list, as well as the two prepositions, are underlined.

(6.38) qae
khaaŋ nhz neeŋ khœ̃ŋ ptœ̃ŋ thom muœy
niw side that person perceive house big one
at

[+P] [+AC] [+NM] [+AC] [+OBJ]
[+L] [+LOC] [+DAT] [+lcn]

'On that side you see a large house.' (Jacob 1968: 68)

(6.39) qae plœz-rœteh-plœø wïn mœøn...pii Pnum-Pêŋ tîw Kœmpœct
at railroad again have from to

[+P] [+AC] [+AC] [+P] [+AC]
[+L] [+LOC] [+L] [+LOC] [+lcn]
[+src] [+LOC] [+gol]

'As for railroads, there's one from Phnom-Penh to Kampot.'

(Huffman 1970: 354)
(6.40) kee yook røteh-koo dék sraw piī srae mook pteēh
3p take cart-ox carry paddy from rice to house field

\[
\text{[+NM]} \quad \text{[+AC]} \quad \text{[+OBJ]} \quad \text{[+OBJ]} \quad \text{[+P]} \quad \text{[+AC]} \quad \text{[+P]} \quad \text{[+AC]} \\
\text{[+AGT]} \quad \text{[+OBJ]} \quad \text{[+SRC]} \\
\]

'They use ox-carts to haul the paddy from the rice fields to the house.'

(Huffman 1970: 342)

(6.41) yook qeywan nuh cēn piī pteēh
take thing that out from house

\[
\text{[+AC]} \quad \text{[+ADV]} \quad \text{[+P]} \quad \text{[+AC]} \\
\text{[+OBJ]} \quad \text{[+L]} \quad \text{[+LOC]} \\
\text{[+SRC]} \\
\]

'Take those things out of the house.'

(Huffman 1970: 140)

(6.42) prateēh-Kampuccia baan qaekkērioc piī cnam naa
country obtain independence from year which

\[
\text{[+NM]} \quad \text{[+AC]} \quad \text{[+P]} \quad \text{[+AC]} \\
\text{[+AGT]} \quad \text{[+OBJ]} \quad \text{[+L]} \quad \text{[+TIM]} \\
\text{[+SRC]} \\
\]

'When did Cambodia achieve independence?'

(Huffman 1970: 376)

6.2.1.1.3 Khmer Locative Relator Nouns

Ehrman (1972: 78-79) gives the following list of words which she calls "locative nominals" and which can be translated as English prepositions. These locative nominals are what I (following Thompson) have called relator nouns (Nr) (see Sec. 3.2.3 above); they are treated as head nouns in the example sentences which follow. They are marked [+place, +relation] in their lexical entries.
Huffman (1970: 392-393) gives kandaal and the following words as "nouns which are translated as prepositions."

<table>
<thead>
<tr>
<th>Word</th>
<th>Translation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>kandaal</td>
<td>middle</td>
<td>'Take those things up to the house.' (Huffman 1970: 140)</td>
</tr>
<tr>
<td>kbae</td>
<td>area next to</td>
<td></td>
</tr>
<tr>
<td>kraoy</td>
<td>back part</td>
<td></td>
</tr>
<tr>
<td>kraom</td>
<td>bottom</td>
<td></td>
</tr>
<tr>
<td>lae</td>
<td>top</td>
<td></td>
</tr>
<tr>
<td>muk</td>
<td>face, front</td>
<td></td>
</tr>
<tr>
<td>nok</td>
<td>interior</td>
<td></td>
</tr>
<tr>
<td>sdam</td>
<td>the right side</td>
<td></td>
</tr>
<tr>
<td>eweq</td>
<td>the left side</td>
<td></td>
</tr>
<tr>
<td>cweij</td>
<td>on top of, over</td>
<td></td>
</tr>
<tr>
<td>khaa</td>
<td>side, direction</td>
<td></td>
</tr>
<tr>
<td>cenlah</td>
<td>space between</td>
<td></td>
</tr>
<tr>
<td>rewoe</td>
<td>interval</td>
<td></td>
</tr>
<tr>
<td>rebah</td>
<td>thing</td>
<td></td>
</tr>
<tr>
<td>somnaek</td>
<td>part</td>
<td></td>
</tr>
</tbody>
</table>

(6.43) yook qeywan nuh coul nok pteeh

'take thing that into inside house'

(6.44) yook qeywan nuh lae nok pteeh

take thing that up to top house

'Take those things up to the house.' (Huffman 1970: 140)
The Kingdom of Cambodia was under the protectorship of France. (Huffman 1970: 391)

Cambodia is situated between Thailand and Viet-Nam. (Huffman 1970: 389)

6.2.1.2 OBJECTIVE-LOCATIVE Verbs in Khmer

Besides the verbs of direction and location listed above which have corresponding coverbs, Khmer has other OBJECTIVE-LOCATIVE verbs which can or must take inner LOCATIVE phrases. (See Sec. 3.3.4.1 for discussion of LOCATIVE in the classification of verbs.) Some of them are:

cən: go out, leave (See discussion above and sentences (6.3) and (6.4).)
tleəq: fall
trələp: return, turn
daə: walk ((6.31) above)
ruət: run
hael(-tik) swim
hou flow
gəndaet float
crook take shelter
chup stop
choo stand
gəŋkuy sit
kuəŋ sit, stay, reside (of royalty or clergy)
deik lie down, sleep
keəŋ recline, sleep
thəêt be placed, situated ((6.46) above)

In general, the case frames of these verbs include the following features:

\[
[+\text{NM},+\text{OBJ}]_\text{[+AC,+L]+LOC}]
\]

The O-L verbs in Khmer have not been subclassified here with respect to O-L-Goal, O-L-Source, and O-L-Location. Also, the O-L-Goal verbs have not been subclassified, as they have been for Vietnamese, with respect to which verbs have free choice of AC or L case form with their LOCATIVES and which are restricted to AC or to L case form. However, it is presumed that those verbs which have corresponding coverbs constitute the class of O-L verbs whose LOCATIVES must occur in the AC case form.

The data so far investigated show this to be the case.

Following are examples of sentences with some of these verbs with LOCATIVE phrases.
(6.47) look qenkuy lëe kawqëy tìw; kñom qenkuy  
Sir sit top chair Imp I sit  

\[ [+NM]  [+AC]  [+NM]  
[+OBJ]  [+LOC]  [+OBJ]  

niw leë kdaa-nië  
in top low platform  

(Huffman 1970: 275)  

'You have a chair; I'll sit on the platform.'

(6.48) lueq kuæq niw kënlæg nih reï  
king reside in place this or  

\[ [+NM]  [+L]  [+AC]  
[+OBJ]  [+lcn]  [+LOC]  

'Does the king reside here?'  

(Huffman 1970: 230)  

(6.49) mënuh deïk leë krette nih chië qëy  
person lie top bed that be ill what  

\[ [+NM]  [+AC]  
[+DAT]  [+LOC]  [+OBJ]  

'What's wrong with the person on that bed?'  

(Huffman 1970: 293)  

(6.50) kñom daë tìw psaa  
I walk to market  

\[ [+NM]  [+L]  [+AC]  
[+OBJ]  [+gol]  [+LOC]  

'I walk to the market.'

(6.51) caw ruët tìw salaa-riën qaoy rehah  
youth run to school for quick  

\[ [+NM]  [+L]  [+AC]  
[+OBJ]  [+gol]  [+LOC]  

'The little boy ran quickly to school.'  

(Jacob 1968: 141)
(6.52) mook tìw croòk tìw kraom daem-cheè nuh sen
come go take in under tree that FP
shelter (for time being)

[+L] [+AC] [+1cn] [+LOC]

'Let's go take shelter under that tree.'
(Huffman 1970: 115)

(6.53) sëmmat gëndaet kàndaal tuènlee (S. Pou)
flotsam float middle river

[+NM] [+OBJ] [+AC] [+LOC]

'Flotsam is floating in the middle of the river.'

(6.54) tìk pñèèk hou piì pñèèk wiè (S. Pou)
water eye flow from eye 3p(inferior)

[+NM] [+OBJ] [+L] [+src] [+AC] [+LOC]

'Tears flowed from his (the child's) eyes.'

(6.55) tìw tìr këèk hou kat piì khaq-ceèn
river flow cut from side north

[+NM] [+OBJ] [+L] [+src] [+AC] [+LOC]

'tìw tìw tboun
to south

[+L] [+gol] [+AC] [+LOC]

'The Mekong River flows (cutting) from north to south.'

(Huffman 1970: 354)

Note that the LOCATIVES without P's here are all locative relator nouns. This fact is not reflected in the case frame above because of the other set of O-L verbs which require that their LOCATIVES occur in the AC case form but do not require Nr's; this is the same set of O-L verbs
which have corresponding coverbs.

6.2.1.3 AGENTIVE-LOCATIVE Verbs in Khmer

Some of the AGENTIVE-LOCATIVE (A-L) verbs in Khmer are

\[\text{yee}k\quad \text{take, bring (as in numerous sentences above)}\]
\[\text{daek}\quad \text{transport, carry ((6.15) and (6.40) above)}\]
\[\text{tuul}\quad \text{carry on the head ((6.1), (6.6), and (6.8) above)}\]
\[\text{reek}\quad \text{carry on both ends of a shoulder pole}\]
\[\text{tien}\quad \text{pull, drag along ((6.25) above)}\]
\[\text{lak}\quad \text{raise, lift up}\]
\[\text{bandaet}\quad \text{float}\]
\[\text{beqhou}\quad \text{cause to flow, direct the flow of}\]
\[\text{beqcei}\quad \text{expel, send out}\]
\[\text{daq}\quad \text{put, place, deposit}\]
\[\text{caq}\quad \text{insert, inject}\]
\[\text{dam}\quad \text{plant}\]
\[\text{stuuq}\quad \text{plant by pushing into ground, transplant}\]
\[\text{saap}\quad \text{sow, scatter}\]
\[\text{pruah}\quad \text{sow, scatter, broadcast}\]
\[\text{kekaay}\quad \text{dig, scratch about}\]
\[\text{sesei}\quad \text{write}\]

The LOCATIVES of all A-L verbs must occur with either an L case marker or a relator noun. No subclassification has been made on the basis of cooccurrence restrictions. The case frames of these verbs include the following features:

\[
{\langle[+\text{NM},+\text{AGT}]\rangle,\langle+[\text{AC},+\text{OBJ}]\rangle,\langle+[\{+\text{L},+[\text{AC},+\text{rel}]\},+\text{LOC}]\rangle}.
\]
The verb *yook* 'take, bring', as well as many other A-L verbs, seems to require a verb, coverb, or adverb of direction after it, frequently *tiw* 'go away' or *mook* 'come hither', as in some of the example sentences cited above and in (6.56).

\[(6.56) \text{chē nūh kee } yook \ mook \ pii \ naa \]
\text{wood that 3p take hither from where}

\[\text{[+AC] [+AOJ] [+NM] [+Adv] [+L] [+sRC] [+AC] [+LOC]}

'Where do they get the wood you mentioned?'

(Huffman 1970: 366)

In all the sentences found, the only clear example of an A-L verb whose LOCATIVE has neither a P nor an Nr is sentence (6.57), with *daq* 'put' (cf. Thai *sāy* 'put into').

\[(6.57) \text{kat pīkāa klāh yook tiw daq thou}
\text{cut flower some take go put vase}

\[\text{[+AC] [+AOJ] [+AC]}

'Cut some flowers and put them in a vase.'

(Huffman 1970: 259)

Other sentences with *daq* have a P or Nr or both, as in

\[(6.58) \text{daq qēywan nīh nīw knōq bēntup phāq}
\text{put thing this in inside room as well}

\[\text{[+AC] [+AOJ] [+L] [+1cn] [+AC] [+LOC]}

'Put these things in the room, please.'

(Huffman 1970: 158)

The A-L verb *caq* must have *knōq* as its LOCATIVE noun, as in
(6.59) knom caq mcul knoŋ sac (S. Pou)
I insert needle inside flesh

[+NM]  [+AC]  [+AC]
[+AGT]  [+OBJ]  [+LOC]

'I stuck a needle in her skin.'

Caq cannot take an L case form: tiw means 'to' instead of
'into', coul 'into' is too strong here, as to 'bore into'.
When the OBJECTIVE of caq is tnam(-krun) '(fever) medicine',
caq cannot take a LOCATIVE but usually takes a BENEFACITIVE,
as in (6.60).

(6.60) knom niŋ caq tnam-krun cuun look
I Fut inject medicine-fever for Sir

[+NM]  [+AC]  [+D]  [+AC]
[+AGT]  [+OBJ]  [+BEN]

'I'll give you an injection of fever-medicine.'

(Huffman 1970: 291)

More example sentences with A-L verbs follow.

(6.61) tuuk nuh dek tnam mook pii Kœmpœuŋ-Gaam
boat that carry tobacco hither from

[+NM]  [+AC]  [+Adv]  [+L]  [+AC]
[+INS]  [+OBJ]  [+src]  [+LOC]

'That boat is bringing tobacco from Kampong Cham.'

(Huffman 1970: 183)

(6.62) koët reck tik coŋ tiw srae (S. Pou)
3p pole water out to ricefield carry

[+NM]  [+AC]  [+L]  [+AC]
[+AGT]  [+OBJ]  [+gen]  [+LOC]

'She carried the water to the ricefield.'
(6.63) kee yook dəmrəy tiən coul tuənlee
3p take elephant pull into river

\[
\begin{array}{cccc}
+NM & +AC & +L & +AC \\
+AGT & +OBJ & +go1 & +LOC \\
\end{array}
\]

ruəc bəndaet taam tīk tīw rəoq-qaa-chəə
then float along water to saw-mill

\[
\begin{array}{cccc}
+L & +AC & +L & +AC \\
-ter & +LOC & +go1 & +LOC \\
\end{array}
\]

'They use elephants to pull (the wood) into the river, then float it by water to the saw-mills.'
(Huffman 1970: 366)

(6.64) kee trəw bəqhou tīk coul srae
3p must Caus-flow water into ricefield

\[
\begin{array}{cccc}
+NM & +AC & +L & +AC \\
+AGT & +OBJ & +go1 & +LOC \\
\end{array}
\]

'They have to irrigate the ricefield.'
(Huffman 1970: 340)

It is interesting to note, in regard to (6.63) and (6.64), that the OBJECTIVE-LOCATIVE verbs qəndaet 'float', hou 'flow' (see (6.53) and (6.54) above), and ceə 'go out' become AGENTIVE-LOCATIVE verbs when they have the causative prefix, baəN.

(6.65) baəq caəq dam daəm-pkaa-kolaap...nīw knoŋ suən
older want plant rose bush in inside garden sib

\[
\begin{array}{cccc}
+NM & +AC & +L & +AC \\
+OBJ & +OBJ & +1cn & +LOC \\
\end{array}
\]

'I want to plant rose bushes in the garden.'
(Huffman 1970: 258)
(6.66) kee yook srəw-puuc moo k saap knoq tnaal
3p take rice seed hither sow inside seedbed

\[
\begin{align*}
+\text{NM} & \quad +\text{AGT} & \quad +\text{OBJ} & \quad +\text{Adv} & \quad +\text{AC} & \quad +\text{LOC} \\
\end{align*}
\]

'They take seed-rice and sow it in the nursery-plot.'
(Huffman 1970: 341)

(6.67) soum səse'i pιeq nih niw ləe kdaa-khien
please write word this in top blackboard

\[
\begin{align*}
+\text{AC} & \quad +\text{L} & \quad +\text{AC} \\
+\text{OBJ} & \quad +\text{Lcn} & \quad +\text{LOC} \\
\end{align*}
\]

'Please write this word on the blackboard.'

6.2.1.4 AGENTIVE-DATIVE Verbs in Khmer

Some of the AGENTIVE-DATIVE (A-D) verbs in Khmer are

qaoy give (informal)
cuun give (formal) (Sentence (6.35) above)
luaŋ sell (sentence (6.36) above)
hoc hand
pñaŋ send
səse'i write (also an A-L [+surface] verb (see discussion of Vietnamese viet 'write', Sec. 3.3.5.2.1))

bəŋriən teach
prap tell, inform
sua ask

A general case frame for A-D-Goal verbs includes the following features:

\[
\begin{align*}
+ [+\text{NM}, +\text{AGT}] & \quad + [+\text{AC}, +\text{OBJ}] & \quad + [+\text{AC}] & \quad + ([+\text{D}, \{+[+\text{L}, +\text{go1}]\}, +\text{DAT}]) & \quad - [+\text{DAT}][+\text{OBJ}] \\
\end{align*}
\]
In modern spoken Khmer, the Accusative OBJECTIVE must occur immediately following the verb (unless the OBJECTIVE is quite long), and the DATIVE follows the OBJECTIVE (cf. Thai and see also Huffman 1973: 496). Unlike Vietnamese and like Thai, this is true even when the DATIVE is in the AC case form, as it must be with the verb qaoy, as shown in (6.68).

(6.68) knom qaoy luy koet  
I give money 3p  
\[+NM\] \[+AC\] \[+AC\] \[+DAT\] 
'I'll give him some money.'

A-D verbs can be subclassified in terms of their DATIVE and case form cooccurrence restrictions. Only qaoy and cuun (which cannot occur with the D case form) and [+information] verbs such as prap 'inform' and sue 'ask' can occur with the AC case form, as shown in (6.68) and (6.69).

(6.69) kee baan prap yeeq piel prik  
3p Compl. tell we from time morning  
\[+NM\] \[+AC\] \[+L\] \[+AC\] \[+DAT\] \[+src\] \[+TIM\] 
'They told us this morning.'

The [+information] verbs can also occur with [+L, +gol] case markers. (See Kullavanijaya 1974: 218ff for discussion of [+info] verbs in Thai.)
(6.70) kruu koo prap tīw kee thaa...
  teacher then tell to 3p say
  +NM [ +AGT ]  [+L ]  [+AC ]  [+DAT ]

'and the teacher tells him (saying)...'
  (Ehrman 1972: 69)

(6.71) kruu sue sēmne teq laay tīw kounsēh
  teacher ask question Plural to student
  +NM [ +AGT ]  [+AC ]  [+L ]  [+AC ]  [+gol ]  [+DAT ]

'The teacher asked the students the questions.'
  (Ehrman 1972: 69 and S. Pou)

The verb qaoy may occur with the direction adverb mook, as in

(6.72) look-kruu qaoy num nih mook kñom
  teacher give cake this hither I
  +NM [ +AGT ]  [+AC ]  [+Adv ]  [+AC ]  [+DAT ]

'The teacher gave me this cake.'
  (Jacob 1968: 141)

The analysis of mook in (6.72) as an adverb rather than a P is confirmed by S. Pou (personal communication), who states, in addition, that a more natural way to say this sentence is without mook, unless it is an imperative sentence, in which case it must have a directional adverb.

Other A-D verbs (e.g., luag 'sell') can occur only with the D case form (with optional occurrence of a directional adverb).
(6.73) kñom luəq siəphiw (tîw) qaoy Mèla (S. Pou)
I sell book away to

\[+NM\] \[+AC\] \[+Adv\] \[+D\] \[+AC\] \[+DAT\]

'I sold the book to Malaa.'

Others (with seeming spatial direction, such as hoc 'hand' and pñaə 'send') can occur with either [+D] (with optional directional adverb) or [+gol] case markers, as in (6.74), (6.75), and (6.76).

(6.74) hoc sabuu haey-nîq kęnsaəng-cuut-kluən qaoy kñom pñaə
hand soap and towel to I as well

\[+AC\] \[+AC\] \[+D\] \[+AC\] \[+DAT\]

'Please hand me the soap and a towel.'

(Huffman 1970: 149)

(6.75) səmbot nih pñaə tîw puəq-maaq kñom
letter this send to friend I

\[+AC\] \[+OBJ\] \[+L\] \[+gol\] \[+AC\] \[+DAT\]

'This letter's going to my friend.' (Huffman 1970: 309)

(6.76) kñom səsei tîw maq-paa qaoy koət pñaə
I write to ma-pa for 3p send

\[+NM\] \[+L\] \[+gol\] \[+AC\] \[+DAT\] \[+AC\] \[+OBJ\]

praq mooə qaoy kñom
money hither to I

\[+AC\] \[+Adv\] \[+D\] \[+AC\] \[+DAT\]

'I'm writing to my parents to have them send me some money.'

(Huffman 1970: 308)
The verb $pnae$ can take a LOCATIVE in place of its DATIVE.

(6.77) $knom$ caq $pnae$ sambot nih tīw srok-baraq

'I want send letter this to France'

\[
\begin{array}{llll}
\end{array}
\]

If the DATIVE of $pnae$ occurs in the AC or C case form, $pnae$ has a different meaning: 'entrust' instead of 'send', as in (6.78), and is likely a different verb from $pnae$ 'send'. (This can also be true of Vietnamese $gui$ 'send' when its DATIVE is in the AC case form (Nguyen D-H 1973: 15).)

(6.78) Səri $pnae$ praq (nĩq) look-kruu (S. Pou)

entrust money (with) teacher

\[
\begin{array}{llll}
\end{array}
\]

'Sarii entrusted the money to the teacher.'

(This is the only instance I have found so far of Khmer DATIVE occurring in the AC case form, except with $qaoy$ and [+information] verbs.)

The verb $sseo$ 'write' occurs with [+gol] case markers, as in (6.76) above; when it occurs with a [+D] case marker, [+D] marks BENEFACTIVE rather than DATIVE.

(6.79) Mala $sseo$ səmbot qaoy puq-maaq (S. Pou)

write letter for friend

\[
\begin{array}{llll}
\end{array}
\]

'Malaa wrote a letter (to somebody else) for her friend.'
Most A-D-Goal verbs can take their DATIVES with the [+ter] preposition dal 'reaching to', with a meaning of 'reaching clear to the end/top--bypassing channels, achieving success in reaching'. With luaq 'sell', it means 'even (unexpected achievement)', as in

(6.80) Sarun luaq kaŋ dal Mela
sell wheel reaching

\[
\begin{array}{cccc}
\text{[+NM]} & \text{[+AC]} & \text{[+L]} & \text{[+AC]} \\
\text{[+AGT]} & \text{[+OBJ]} & \text{[+ter]} & \text{[+DAT]} \\
\end{array}
\]

'Sarun sold a bicycle even to Malaa.'

Unlike Vietnamese, whose A-D verbs do not occur with the Source L case form, Khmer Source sub-CF occurs with certain A-D verbs. These verbs, as distinguished from the A-D-Goal verbs above, are A-D-Source verbs. Some of them are

- tïn̄ buy
- tœtuœl receive, accept
- kcœy borrow
- tïm-tïœ wrest away, obtain by bargaining

and some uses of

- baan obtain, get

Some example sentences follow.

(6.81) kee trœw tïn̄ krœŋ-laœn pii baœrœteeh
3p must buy auto parts from foreign countries

\[
\begin{array}{cccc}
\text{[+NM]} & \text{[+AC]} & \text{[+L]} & \text{[+AC]} \\
\text{[+OBJ]} & \text{[+OBJ]} & \text{[+src]} & \text{[+DAT]} \\
\end{array}
\]

'They have to import auto parts.'

(Huffman 1970: 372)
(6.82)  
\[
\text{kee træw tætæul kaa-yœl-prœom piï roœt-sœphie}
\]
3p must receive approval from National Assembly

\[
\begin{array}{c}
\text{+NM} \\
\text{+OBJ}
\end{array} \quad \begin{array}{c}
\text{+AC} \\
\text{+OBJ}
\end{array} \quad \begin{array}{c}
\text{+L} \\
\text{+src}
\end{array} \quad \begin{array}{c}
\text{+AC} \\
\text{+DAT}
\end{array}
\]

'They must receive the approval of the National Assembly.' (Huffman 1970: 378)

(6.83)  
\[
\text{kœøt kæøy mækøu piï Særi}
\]
3p borrow one pair from

\[
\begin{array}{c}
\text{+NM} \\
\text{+AGT}
\end{array} \quad \begin{array}{c}
\text{+AC} \\
\text{+OBJ}
\end{array} \quad \begin{array}{c}
\text{+L} \\
\text{+src}
\end{array} \quad \begin{array}{c}
\text{+AC} \\
\text{+DAT}
\end{array}
\]

'She borrowed a pair from Sarii.'

(6.84)  
\[
\text{preœh-baat Nœrootdam Siihanœq...tœm-tie}
\]
king obtain

\[
\begin{array}{c}
\text{+NM} \\
\text{+AGT}
\end{array}
\]

qaekkœriœc cœt piï prœœh-barœq... independence nation from France

\[
\begin{array}{c}
\text{+AC} \\
\text{+OBJ}
\end{array} \quad \begin{array}{c}
\text{+L} \\
\text{+src}
\end{array} \quad \begin{array}{c}
\text{+AC} \\
\text{+DAT}
\end{array}
\]

'King Norodom Sihanouk obtained national independence from France.' (Huffman 1970: 376)

(6.85)  
\[
\text{kœøt baan sætraa piï (ksœe) piï mie (kœøt)}
\]
3p obtain manuscript two string from young 3p sib of parent

\[
\begin{array}{c}
\text{+NM} \\
\text{+AGT}
\end{array} \quad \begin{array}{c}
\text{+AC} \\
\text{+OBJ}
\end{array} \quad \begin{array}{c}
\text{+L} \\
\text{+src}
\end{array} \quad \begin{array}{c}
\text{+AC} \\
\text{+DAT}
\end{array}
\]

'She got two manuscripts from her uncle.' (S. Pou)

The A-D-Source verb tœn 'buy' can occur with the goal D case form when it marks BENEFACTIVE.
(6.86) qawpuk tîn sìawphîw qâoy kñom
father buy book for I

\[
\begin{array}{c}
{[+NM]} \\
{[+AGT]} \\
{[+AC]} \\
{[+OBJ]} \\
{[+D]} \\
{[+AC]} \\
\end{array}
\]

'Father buys books for (on behalf of) me.'

(Jacob 1968: 141)

6.2.2 Thai

6.2.2.1 Coverbs, Prepositions, and Relator Nouns

6.2.2.1.1 Thai Coverbs

"The use of co-verbs or derived prepositions is quite common in Thai" (Kullavanijaya 1974: 83). The following list, drawn from the sources given in Sec. 1.4.3 above and from consultation with Pranee Kullavanijaya, includes those Thai coverbs which happen to roughly correspond in meaning and function to the coverbs found in both Vietnamese and Khmer. I have marked each coverb with case form (CF) features, and given the meaning of the corresponding verb.

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>yûu</td>
<td>in, at</td>
</tr>
<tr>
<td>càak</td>
<td>from</td>
</tr>
<tr>
<td>pày</td>
<td>to (away)</td>
</tr>
<tr>
<td>maa</td>
<td>to (hither)</td>
</tr>
<tr>
<td>klàp</td>
<td>back (to)</td>
</tr>
<tr>
<td>khâam</td>
<td>across</td>
</tr>
<tr>
<td>khâw</td>
<td>into</td>
</tr>
<tr>
<td>khîn</td>
<td>up</td>
</tr>
<tr>
<td>lûn</td>
<td>down</td>
</tr>
</tbody>
</table>
Kullavanijaya (1974: 83) also gives wâa 'saying; say' as a coverb. Wâa as a preposition requires a quotation in the following noun slot. This "derived quote noun" has an OBJECTIVE case relation which occurs only with [+information] verbs. The P wâa marks the R (Range) case form on quote nouns. (See Kullavanijaya 1974: 216, 218.) This special OBJECTIVE case relation and the R case form are outside the range of this study, and wâa will not be included in the discussion of Thai coverbs.

Both Noss (1964: 151) and Haas (1964: 553) give examples of the AGENTIVE-LOCATIVE verb sây 'put in' (listed below in Sec. 6.2.2.3) used as a preposition, as in (6.87) and (6.88), with the meaning 'into, to, at'.

(6.87) ... phûut sây nâa  (Haas 1964: 553)
    speak into face
    'say (it) right to one's face'

(6.88) ... yîn sây tôn m̀aay  (Noss 1964: 151)
    shoot into Cl tree
    'shoot at a tree'

As noted for Khmer, most of the coverbs are [+gol] case markers. However, in Thai, many of the [+gol] coverbs cannot occur marking Terminus and so are marked [-ter] in the lexicon. The Goal sub-CF has been defined in Sec.
3.2.2.4.3 as marking "the path along which or goal toward which the action of the verb is directed; that is, the noun associated with a Goal sub-CF names the path or intended terminal point of the action of the verb, never the point of origin." The [-ter] coverbs are marked [+path] by subcategorization and redundancy rules which give the following locative feature tree (from Sec. 3.3.4.1).

In example sentences, [+gol] coverbs which are semantically interpreted as either Path or Terminus for any given sentence are marked only with their lexical feature [+gol], except in cases of explanation. (Sentences designated by '(PK)' are given by Pranee Kullavaniyaya.)

Like Khmer ស៊ូ 'go out' (Sec. 6.2.1.1.1 above), Thai ហំ 'go out' cannot occur as a preposition and so is not included in the list of coverbs. Sentence (6.89), with ហំ occurring as an adverb with the verb ទំ, which requires a preposition with its Inner LOCATIVE, is grammatical; (6.90) is ungrammatical, since ហំ cannot be P.
(6.89) Pùk hàap náam ?òok pay naa (PK)
    pole water out to field
    carry
    [+Adv] [+P]

'Pook carried the water out to the field.'

(6.90) * Pùk hàap náam ?òok naa

'Pook carried the water out to the field.'

The prepositions marked [-ter] in the list above cannot mark a LOCATIVE noun which is interpreted as a terminal goal, but must indicate movement through space toward a goal. This fact is shown in (6.91) and (6.92), using khâam 'across' as an example; appropriate features are marked.

(6.91) Pùk hàap náam khâam saphaan lëaw (PK)
    carry water across bridge already
    [+NM] [+AC] [+P] [+AC] [+L] [+path] [+LOC]

'Pook carried the water across the bridge.'

(6.92) * Pùk hàap náam khâam faq nóon
    carry water across bank over there

'Pook carried the water across to the other bank.'

These [-ter] words can occur as directional adverbs in sentences whose terminal goals are marked with prepositions, as in (6.93) and other sentences below.
(6.93) Pùk hàap náam khâam pay faq nóon (PK)
carry water across to bank over there

\[+\text{NM}] \quad [+\text{AC}] \quad [+\text{Adv}] \quad [+\text{P}] \quad [+\text{AC}] \quad \quad [+\text{LOC}]

'Pook carried the water across to the other bank.'

The problems of \textit{taam} 'following, follow' are much the same as those of Khmer \textit{taam} (see discussion in Sec. 6.2.1.1.1 and discussion of Vietnamese \textit{theo} in Sec. 5.1.2). \textit{Taam} can occur as a [+L,-ter] case marker if it occurs with a directional adverb, (6.94), or as a [+lcn] case marker, (6.95).

(6.94) ...wíŋ pay taam thanõn (Noss 1964: 150)
run away along street

\[+\text{Adv}] \quad [+\text{P}] \quad [+\text{AC}] \quad [+\text{LOC}]

\[+\text{path}\]

'run along the street'

(6.95) ...wíŋ taam thanõn (PK)

\[+\text{L}] \quad [+\text{AC}] \quad [+\text{LOC}]

'run in the area of the street'

However, as a verb it can take a mobile OBJECTIVE, (6.96), but no inner LOCATIVE unless the LOCATIVE is followed by a Goal verb, as in (6.97).

(6.96) Arunee taam \{rót nán\} (PK)
follow \{car that\}

\[+\text{V}] \quad [+\text{AC}] \quad [+\text{OBJ}]

'Arunee followed {that car / Pook}.'
(6.97) Arunee  **taam** mæmnam pay con phôp thalee  (PK)  
follow river go until meet sea  

\[
\begin{align*}
[+V] & \quad [+AC] \quad [+V] \quad [+V] \\
& \quad [+LOC]
\end{align*}
\]

'Arunee followed the river until she came to the sea.'

These problems will not be investigated in this study.

Kullavanijaya (1974: 51, 66, 85ff) analyzes  hay as a [+B] preposition rather than as a [+D] preposition. She does this on the bases of the inherent semantic benefactive marking on the word hay and her analysis of the case relations occurring with the verb hay. That is, she considers hay to be an AGENTIVE-DATIVE (A-D) verb (1974: 128; also see Sec. 6.2.2.4 below) which must take its DATIVE in the C case form, as in

(6.98)  chan hay qeen sip baat kap Pūk mæwannii  
I give money ten baht with yesterday  

\[
\begin{align*}
[+NM] & \quad [+AC] \quad [+C] \quad [+AC] \quad [+AC] \\
[+AGT] & \quad [+OBJ] \quad [+DAT] \quad [+TIM]
\end{align*}
\]

'I gave ten baht to Pook yesterday.'  
(Kullavanijaya 1974: 91)

When the recipient of the verb hay occurs in the AC case form, she considers that noun to have the BENEFACTIVE case relation, as shown in (6.99).

(6.99) phaño hay qeen Pūk  (Kullavanijaya 1974: 51)  
father give money  

\[
\begin{align*}
[+NM] & \quad [+AC] \quad [+AC] \\
[+AGT] & \quad [+OBJ] \quad [+BEN]
\end{align*}
\]

'Father gave Pook (some) money.'
Hay in (6.100) can be considered to be a [+B] preposition with the meaning given.

(6.100) khàw só q khòq Hay Pùk (PK)
3p send thing for

\[\begin{array}{c}
\text{[+NM]} & \text{[+AC]} & \text{[+P]} & \text{[+AC]} \\
\text{[+AGT]} & \text{[+OBJ]} & \text{[+B]} & \text{[+BEN]}
\end{array}\]

'She sent the things for (in place of) Pook.'

If Pùk is the recipient, as in (6.101), Hay may be an embedded verb.

(6.101) khàw só q khòq Hay Pùk (PK)
3p send thing give

\[\begin{array}{c}
\text{[+NM]} & \text{[+AC]} & \text{[+V]} & \text{[+AC]} \\
\text{[+AGT]} & \text{[+OBJ]} & \text{[+BEN]}
\end{array}\]

'She passed the things and gave them to Pook.'

DATIVE for A-D verbs can be marked with kap, as in (6.102), not with Hay.

(6.102) khàw só q khòq kap Pùk (PK)
3p send thing with

\[\begin{array}{c}
\text{[+NM]} & \text{[+AC]} & \text{[+P]} & \text{[+AC]} \\
\text{[+AGT]} & \text{[+OBJ]} & \text{[+C]} & \text{[+DAT]}
\end{array}\]

'She sent the things to Pook.'

In other words, according to Kullavanijaya, A-D verbs may take their DATIVES in the C case form (1974: 49). A few of them can occur with the embedded or coordinate verb Hay instead of having a DATIVE. Thus, in her analysis, Hay is not a [+D] preposition. She does state that the occurrence of Hay with sóon 'teach' is a problem because sóon is an A-D verb, and in sentences like (6.103) she feels that Hay is not an embedded verb meaning 'give'.
In this study, hây will be considered to be a [+D] preposition, partly to parallel the analysis in Vietnamese and Khmer, but also because of the definition in this study of DATIVE case relation as the recipient or goal of the action of the verb and the analysis in this study of hây being one of the A-D verbs which can take its DATIVE in the AC case form (see Sec. 6.2.2.4 below). That is, Pûk in (6.99) and in (6.101) when hây is a sequential verb are considered to be marked [+AC,+DAT]. Pranee Kullavanijaya (personal communication) feels that recipient nouns of hây have particular benefactive marking rather than the neutral marking of the recipient nouns of other A-D verbs. To account for this benefactive marking, hây has an inherent semantic feature [+beneficial] which marks its [+AC,+DAT] nouns [+beneficiary] as well as [+goal]. Hây in (6.101) is not considered to be a verb in sequence; it and hây in (6.103) are analyzed as [+D] prepositions which can mark the DATIVE ('to') case relation with a few A-D verbs, such as sòq and sôon, and mark the BENEFACTIVE ('for') case relation with most verbs.

Following are example sentences with the locative words from the list above. Relevant categories and case features are postulated, and occurrences of the above words are underlined.
phöm vùu thîi thanön Sukhumwít
I be in place at road

[+NM] [+V] [+AC] [+LOC]

'I live on Sukhumvit Road.'  
(Brown 1967: 127)

welaa nán khâw yaq vùu nay Kruêtheep
time that 3p still be in inside Bangkok

[+AC] [+NM] [+V] [+AC] [+LOC]

'At that time, he was still in Bangkok.' (Noss 1964: 97)

khâw tham глаan vùu thîi Kruêtheep (PK)
3p do work in place at Bangkok

[+NM] [+AGT] [+AC] [+P] [+AC] [+LOC]

'He works in Bangkok.'

Thai is the only one of the three languages whose
Source case marker has a corresponding main verb. Following
are examples with càak 'from' as a verb, (6.107), and as
a coverb, (6.108).

Dêeŋ càak bân maa làay pii làmêw
leave home hither to several year already

[+NM] [+V] [+AC] [+P] [+L] [+AC] [+TIM]

'She left home several years ago.'

(Kullavanijaya 1974: 62)
khāw thōn klāa câak naa

3p uproot seedling from field

[+NM] [+AGT] [+AC] [+P] [+L] [+AC] [+LOC]

'She's uprooting the seedlings from the field.'

As in Vietnamese (Sec. 5.1.3) and Khmer (Sec. 6.2.1.1.1), the Goal words in the list above, except for klāp 'back to, go back', can occur as postverbal adverbs to designate direction of the action of the verb. Examples of this usage are included in the example sentences with these words.

Dāmŋ sāŋ nōŋ pay tā?lāat

order brother go market

[+NM] [+AGT] [+AC] [+V] [+AC] [+LOC]

'Dang told his brother to go to the market.'

khāw sōŋ lūuk pay Ameerikaa

3p send child to

[+NM] [+AGT] [+AC] [+P] [+L] [+AC] [+LOC]

[+go]l

'He sent his son to America.' (Brown 1967: 185)

khāw dōn pay bān thūk wan

3p walk to house every day

[+NM] [+OBJ] [+P] [+L] [+AC] [+AC] [+LOC] [+TIM]

'She walks to the house every day.'
(6.112) khāw ?aw nāgsāū pay (Brown 1967: 185)
3p take book away

\[+\text{NM}\]  \[+\text{AC}\] [+Adv]

'He took a book with him.'

(6.113) ... maa thaaŋ māxnāam (Noss 1964: 150)
come way river

\[+\text{V}\]  \[+\text{AC}\]
\[+\text{LOC}\]

'came by way of the river'

(6.114) ?aw khōŋ maa thīi bāan (PK)
take thing to place house (hither) at

\[+\text{AC}\]
\[+\text{P}\]
\[+\text{L}\]
\[+\text{AC}\]
\[+\text{LOC}\]

'Bring the things home.'

(6.115) chān ?aw būrīi maa (Brown 1967: 185)
I take cigarette hither

\[+\text{NM}\]  \[+\text{AC}\] [+Adv]

'I brought cigarettes with me.' (Cf. (6.112).)

(6.116) phōm yàak klàp mīŋ Thāy lāmōw
I want return country already

\[+\text{NM}\]
\[+\text{V}\]
\[+\text{AC}\]
\[+\text{LOC}\]

'I'd like to go back to Thailand.' (Panupong 1970: 30)

(6.117) khāw sōŋ khōŋ klàp Kruŋthēep (PK)
3p send thing back to Bangkok

\[+\text{NM}\]  \[+\text{AC}\] \[+\text{P}\] \[+\text{AC}\]
\[+\text{LOC}\]

'They sent their things back to Bangkok.'
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(6.118) **khâw deən klâp bân thûk wan** (PK)
3p walk back to house every day


\[
\begin{array}{cccc}
+NM & +P & +AC & +AC \\
+OBJ & +L & +LOC & +TIM \\
\end{array}
\]

'She walks home every day.' (Cf. (6.111).)

(6.119) **khâw khâm thanôn pây bân Pûk** (PK)
3p cross street to house

\[
\begin{array}{cccc}
+NM & [+V] & +AC & +AC \\
+OBJ & +LOC & +P & +AC \\
& +L & +LOC & +gol \\
\end{array}
\]

'She crossed the street to Pook's house.'

(6.120) **Wanthanaa wâay-nâam khâm khîooq** (PK)
swim across canal

\[
\begin{array}{cc}
+NM & +AC \\
+OBJ & +LOC \\
\end{array}
\]

'Wanthanaa swam across the canal.'

For an example of **khâm** as an adverb, see sentence (6.93) above.

(6.121) **khwan kamlâq khâw bân** (Panupong 1970: 121)
smoke Prog. enter house

\[
\begin{array}{cc}
+NM & [+V] \\
+OBJ & +AC \\
\end{array}
\]

'The smoke's getting into the house.'

Unlike the situation in Vietnamese, the Thai P 'into' (**khâw**) cannot be glossed 'onto'. That is, Vietnamese **vào** 'into, onto' has the feature [+entering] and thus, through subcategorization and redundancy rules, can mark either [+surface] or [+enclosed] on the case form of LOCATIVE nouns (see Sec. 3.3.5.2.1 above). On the other hand, Thai
khâw has the features [+entering,-surface]; that is, it can be only [+enclosed] and so imposes the interpretation of [+interior] on its LOCATIVE noun. Compare (6.122), which is grammatical, with (6.123), which is not, unless it should mean 'pour water into (hollow) plants'.

(6.122) Arunee thee nåam khâw cአankan (PK)
pour water into vase

['Arunee poured the water into the vase.]

(6.123) Arunee thee nåam khâw tôn máay (PK)
Cl plant

* [+surface]

['Arunee poured water on the plants.]

(6.124) dəən khâw maa klây-klây nòy ná?
walk entering hither close a little OK?

[+Adv] [+Adv]

'Walk right up close, will you?' (Noss 1964: 184; and PK)

(6.125) khâw khên hōokhoo y Choir lâw (PK)
go up tower this already

['He's already gone up this tower.]

(6.126) khâw ?aw khâaw khên rooqsii (PK)
take rice up mill

['They're taking the rice up (the stairs of) the mill.']
(6.127) khāw yīp nāps<s>ī</s> khān maa (Noss 1964: 184)
3p pick up book upward hither

[+]NM [+]AGT [+]AC [+]Obj [+]Adv [+]Adv

'He lifted up the books.'

(6.128) khāw loŋ khāw
3p go down mountain

[+]NM [+]V [+]AC [+]Obj [+]Loc

'She went down the mountain.'

(6.129) khāw hɔɔp phaː phaː loŋ khāw (PK)
3p carry clothes down hill

[+]NM [+]AGT [+]AC [+]Obj [+]P [+]L [+]AC [+]Loc [+]Gol

'She carried the clothes down the hill.'

As discussed above, loŋ is one of the [-ter] preposition which can mark the Path of a Goal but not the Terminus of a Goal. In (6.130), loŋ is a directional 'path' adverb and pay is the P marking the Terminus of the verb hɔɔp.

(6.130) khāw hɔɔp phaː phaː loŋ pay (thĩi) mɑən’ɑam
3p carry clothes down to place at river

[+]NM [+]AGT [+]AC [+]Obj [+]Adv [+]P [+]L [+]AC [+]Loc [+]Gol

'She carried the clothes down to the river.' (PK)
(6.131) Pùk cà? many thểng ?Ameerikaa con thểng wansùk
Fut not arrive until reaching Friday

\[
\begin{array}{cccc}
\text{[+NM]} & \text{[+V]} & \text{[+AC]} & \text{[+P]} \\
\text{[+OBJ]} & \text{[+LOC]} & \text{[+L]} & \text{[+AC]} \\
\text{[+ter]} & \text{[+TIM]} & & \\
\end{array}
\]

'Pook won't arrive in America until Friday.' (PK)

(6.132) ...?òok pay thểng klaa? mâmënaam
go out away reaching middle river

\[
\begin{array}{ccc}
\text{[+Adv]} & \text{[+P]} & \text{[+AC]} \\
\text{[+L]} & \text{[+loc]} & \text{[+ter]} \\
\end{array}
\]

'went out into the middle of the river' (Noss 1964: 149)

As a [+L,+ter] preposition, thểng can mark not only LOCATIVE and TIME case relations but also DATIVE, as in (6.133), and what, for the time being, is analyzed as OBJECTIVE, as in (6.134) (cf. Vietnamese, Sec. 3.2.2.4.4).

(6.133) chăn cà? khian còtmâay thểng thæ (PK)
I Fut write letter reaching you

\[
\begin{array}{cccc}
\text{[+NM]} & \text{[+AC]} & \text{[+P]} & \text{[+AC]} \\
\text{[+AGT]} & \text{[+OBJ]} & \text{[+L]} & \text{[+DAT]} \\
\text{[+ter]} & & & \\
\end{array}
\]

'I'll write a letter to you.'

(6.134) Arunee phüt thểng Pùk kàp chăn (PK)
speak reaching with I

\[
\begin{array}{cccc}
\text{[+NM]} & \text{[+P]} & \text{[+AC]} & \text{[+AC]} \\
\text{[+AGT]} & \text{[+L]} & \text{[+OBJ]} & \text{[+C]} \\
\text{[+ter]} & & & \text{[+DAT]} \\
\end{array}
\]

'Arunee spoke about Pook to me.'

(See the following section regarding the preposition kàp.)
6.2.2.1.2 Thai Prepositions

The underived prepositions in common use in Thai which are of interest in this study are the following:

- t`eæ from, since [+L,+src]
- k`ææ to, toward [+D]
- k`ap (k`a?) with, in relation to [+C,+_ [+COM,+DAT,+LOC]]

As shown, k`ap can occur with COMITATIVE, DATIVE, and sometimes a LOCATIVE (see (6.141) below); this LOCATIVE usage of k`ap has not been explored in this study, and Kullavanijaya 1974 does not refer to it.

Examples of these prepositions in sentences follow, with the underived prepositions underlined as well as the verbs and coverbs from the list in the preceding section.

(6.135) da`g kh`en t`ææ la`g pratuu (Noss 1964: 149)
become rising from back door


'There was a noise from behind the door.'

(6.136) ...?ook deen-thaaq t`ææ cha`aw meït
go out travel from morning dark

\[ [ +P ] \[ [ +AC ] \[ +TIM ] \] [+L] [+src] \]

'started travelling in the early morning'

(Noss 1964: 149)
(6.137) ชูเอย คําผักสุขคิบะต กํ่ะกํ่ะผักน้ํายน้ํา?
help distribute program to guest little OK?

\[
\begin{array}{cccc}
\[+AC\] & \[+P\] & \[+AC\] \\
\[+OBJ\] & \[+D\] & \[+DAT\]
\end{array}
\]

'Will you please help distribute the programs to our guests?'
(Panupong 1970: 25; and PK)

(6.138) ดําเนง บอก กหวามล้ําป แค่ ผุก
tell secret with

\[
\begin{array}{cccc}
\[+NM\] & \[+AC\] & \[+P\] & \[+AC\] \\
\[+AGT\] & \[+OBJ\] & \[+C\] & \[+DAT\]
\end{array}
\]

'Dang told his secret to Pook.' (Kullavanijaya 1974: 39)

แค่ can, depending on the verb, mark either a Goal DATIVE, as in (6.138), or a Source DATIVE, as in (6.139), which is ambiguous since สิ้น 'buy' allows ผุก to also be COMITATIVE.

(6.139) ดําเนง สิ้น ซื้อ ตัวนี้ แค่ ผุก
buy shirt Cl this with

\[
\begin{array}{cccc}
\[+NM\] & \[+AC\] & \[+P\] & \[+AC\] \\
\[+AGT\] & \[+OBJ\] & \[+C\] & \[+COM\] & \[+DAT\]
\end{array}
\]

'Dang bought this shirt {from, with} Pook.'
(Kullavanijaya 1974: 77)

(6.140) แกว แค่ กพ ผัง ดิ ผัก ผักแกว
go with I good more

\[
\begin{array}{cccc}
\[+V\] & \[+P\] & \[+AC\] \\
\[+C\] & \[+COM\]
\end{array}
\]

'To go with me is better.'
(6.141) ข้อ น้ำ ต้อง วาง ข้าม ดิน (Haas 1964: 26)
thing that must put with earth

\[ [+AC] [+OBJ] \quad [+P] \quad [+LOC] \]

'Those things have to be set on the ground.'

6.2.2.1.3 Thai Locative Relator Nouns

A list of locative relator nouns (Nr), which Noss (1964: 147) calls nay-class prepositions, follows. (See Sec. 3.2.3 above for discussion of Nr.)

- nay inside
- นอก outside
- บน top, surface, upper part
- ล่าง bottom, underneath, lower part
- บน above
- ด้าน below
- หน้า front, face
- กลาง back
- ข้าง side
- กลาง middle

I add to Noss's list the following nouns, which frequently occur as relator nouns and the first four of which Noss considers to be คaan-class prepositions (pp. 148-151).

- ที่ place at
- ทาง direction, way
- ที่อยู่ vicinity
- ขนาด extent, point
- ข้าง side, part
- ชาย scope
- ตอน part

Panupong (1970: 162-163) also lists some of these words as prepositions. Kullavanijaya (1974: 88ff) refers to
this type of noun as a "noun auxiliary" and says that such a noun is followed by another noun and is used to mark case—to "satisfy the selectional requirements of a verb for the locative case relation."

Nr's have the features [+place,+relation].

Some of the Nr's have cooccurrence restrictions with respect to coverbs. For example, nay has the feature [+interior]. This feature allows nay to occur as the LOCATIVE noun of an NP with a V or a P which requires or allows the feature [+interior] on its LOCATIVE noun. There are only two such [+L] P's in Thai; they are yùn 'in' and khâw 'into'. For this reason, it is hypothesized here that when khâw occurs with nay it is a P, as in (6.142), although khâw could be interpreted as an adverb (cf. (6.143)).

(6.142) khâw kep khɔŋ khâw nay lînchák (PK)
    3p    keep    thing    into    inside    drawer

\[
\begin{array}{c}
\begin{array}{c}
\text{[+NM]} \\
\text{[+AGT]} \\
\end{array} \\
\begin{array}{c}
\text{[+AC]} \\
\text{[+OBJ]} \\
\end{array} \\
\begin{array}{c}
\text{[+P]} \\
\text{[+L]} \\
\end{array} \\
\begin{array}{c}
\text{[+Nr]} \\
\text{[+AC]} \\
\end{array} \\
\begin{array}{c}
\text{[+gol]} \\
\text{[+LOC]} \\
\end{array} \\
\text{[+interior]}
\end{array}
\]

'He put his things in the drawer.'

If khâw is omitted in (6.142), the sentence means 'he keeps his things in the drawer.'

It is further hypothesized that P's that do not have the feature [+____[+interior]] cannot occur with nay. The following rules can account for these cooccurrences. (See discussions of khâw in Sec. 6.2.2.1.1 and of
Vietnamese vào 'into, onto' in Sec. 3.3.5.2.1 regarding
the feature [+entering].

1. [+entering] → [+surface]
2. [-surface] → [+enclosed]
3. [+enclosed] → [+interior]
4. [+goal] → [+terminus] (See Sec. 3.3.4.1 for rules regarding [+goal].)
5. [+terminus] → [+interior] [+locus]

The P khâw is a [+goal] P, but it has in its lexical entry
the feature [+entering,-surface], which implies rule 3
and therefore blocks the application of part of rule 5 to
khâw. The [+goal] P pay 'to', on the other hand, does not
have the features [+entering] or [+enclosed] and rule 5
applies, so that the P pay cannot occur with the Nr nay.
However, pay can occur as an adverb with nay, as in
(6.143) khâw kêp khoظg khâw pay nay lînchák (PK)
3p keep thing into away inside drawer
[+Adv] [+Adv]

'He put his things away in the drawer.'

where khâw modifies the action of 'putting' and pay
modifies the action of 'putting things into' and is not a
P (PK, personal communication).

Thîi, on the other hand, has the feature [+locus]
and no feature [+interior]. Pay occurs as a P with thîi,
as in (6.144), where pay occurs obligatorily. (Also see
(6.114) above, with maa as a P.)

(6.144) khāw khwâaŋ lûuk boon pay thîi Arunee (PK)
3p throw Cl ball to place at

\[ [+NM] [+AGT] [+AC] [+OBJ] [+P] [+Loc] [+nr] [+AC] [+Loc] +locus \]

'She threw the ball to Arunee.'

Thus, thîi can be the Goal of a directional verb; nay in general cannot (see remarks regarding the verb sâ in Sec. 6.2.2.3 below). Thîi nāa in (6.145) is an inner LOCATIVE of the verb wàa (see Sec. 3.3.4.1), nay nāa in (6.146) is an outer LOCATIVE.

(6.145) khāw wàa khâaw thîi nāa (PK)
3p sow rice place at field

\[ [+NM] [+AGT] [+AC] [+OBJ] [+AC] [+Loc] \]

'She's sowing rice in the field (planting the field).'</n

(6.146) khāw wàa khâaw nay nāa (PK)
inside

'She's in the field sowing rice.'

The case form requirements for the LOCATIVES of AGENTIVE-LOCATIVE-Goal verbs in Thai will have to be refined:

\[ [+---([\{+[L, +rel, -interior\}, +Loc]})] \]

However, Vietnamese trong 'inside', which has the feature [+interior], can be the LOCATIVE noun of some directional verbs (e.g., sentence (3.132) in Sec. 3.3.5.2.1), so that the rule will have to be different for the different
languages or have to be further refined to account for the facts in each language and still make a general statement regarding inner LOCATIVES. The selectional restrictions for such occurrences are very complex and will not be further investigated in this study.

There are Nr's in many of the example sentences above: (6.104), (6.105), (6.106), (6.113), (6.114), (6.130), (6.132), (6.135).

6.2.2.2 OBJECTIVE-LOCATIVE Verbs in Thai

Besides ยุัน 'be in' and the verbs of direction listed above which have corresponding coverbs, and besides ขอก 'go out' (discussion above and (6.132)), other OBJECTIVE-LOCATIVE (O-L) verbs in Thai include:

- นั่ง sit
- ยืน stand
- อยู่ stay
- ยุต stop
- จอด be parked (also A-L verb)
- ตาน turn
- เดิน walk ((6.111), (6.118), (6.124) above)
- วิ่ง run ((6.94) and (6.95) above)
- 挛 go, run (for vehicles)
- ว่าย-น้ำ swim ((6.120) above)
- บิน fly
- หัคลม fall (down) (of persons)
- ตอก fall (through space)
- ล่าย flow
- ลื้ก come loose
- ล้อ go down from something (also A-L verb)

These verbs have the case frame
\[
\begin{align*}
\text{ Example sentences follow.} \\
(6.147) \text{ นอก...} & \text{ นั่น อยู่ที่นั่น มาจาก} \\
\text{ child which sit at place that come from} \\
\{[+\text{NM},+\text{OBJ}],\} & \{[+\text{AC},+\text{L}],+\text{LOC}\}.
\end{align*}
\]

Kruąthēep
Bangkok
(Henderson 1970)

'The boy...who is sitting over there is from Bangkok.'

(6.148) \text{ ด่าน อยู่ที่บ้านลด้วยที่สาม} \\
\text{ probably stay house Cl Ord three} \\
\{[+\text{NM}],+\text{OBJ}\} & \{[+\text{AC}],+\text{LOC}\}

'Danai's probably staying at the third house.'

(Panupong 1970: 145)

(6.149) \text{ รถ คืบยาว} \text{ ข้างถนน} \\
\text{ car parked much side street} \\
\{[+\text{NM}],+\text{OBJ}\} & \{[+\text{AC}],+\text{LOC}\}

'A lot of cars are parked by the roadside.'

(Panupong 1970: 37)

(6.150) \text{ ด็ก วิ่ง} \text{ ข้ามถนน} \\
\text{ child act as run across street away} \\
\{[+\text{NM}],+\text{OBJ}\} & \{[+\text{L}],+[\text{adj}][+\text{AC}],+\text{LOC}\}

'The children all ran off across the street.'

(Noss 1964: 135)
(6.151) ría kamlan lâm tãay saphaen
boat Prog. run below bridge

\[
\begin{array}{cccc}
+NM & +OBJ & +AC & +LOC \\
\end{array}
\]

'The boat's passing under the bridge.'

(Panupong 1970: 163)

(6.152) Wanthanaa wáay-náam nay khlooŋ (PK)
swim inside canal

\[
\begin{array}{cccc}
+NM & +OBJ & +AC & +LOC \\
\end{array}
\]

'Wanthanaa's swimming in the canal.' Cf. (6.120).

(6.153), from Kullavanijaya (1974: 29, and personal communication), has both an inner LOCATIVE, bon kraday, which immediately follows the verb, and an outer LOCATIVE, which follows the inner LOCATIVE.

(6.153) waaníi nóoŋ hoklöm bon kraday thiā ta'īlät
yester- sister fall top stairs place market at

\[
\begin{array}{cccc}
+AC & +NM & +AC & +AC \\
+TIM & +OBJ & +LOC & \\
\end{array}
\]

'Yesterday, at the market, sister fell down on the steps.'

(6.154) pääk-kaa tök lōŋ pay thiā phźin lāay hōn
pen fall down to place floor many instance at

\[
\begin{array}{cccc}
+NM & [+Adv] & +L & +AC \\
+OBJ & +gol & +LOC & \\
\end{array}
\]

'The pen has fallen on the floor many times.' (PK)
(6.155) ม่าน้ำมันนี้ ล่าย โล่ ทaley (PK)
river this flow down sea

\[ [+NM] \quad [+L] \quad [+AC] \]

'This river flows down to the sea.'

The 0-L verb ล่น takes a Source LOCATIVE, as in (6.156).

(6.156) ดินสอง ล่น พาย แควะ มือ
pencil come away from hand

\[ [+NM] \quad [+Adv] \quad [+L] \quad [+AC] \]

'The pencil slipped out of his hand.' (Noss 1964: 149)

6.2.2.3 AGENTIVE-LOCATIVE Verbs in Thai

Some of the AGENTIVE-LOCATIVE (A-L) verbs in Thai are

— รอน take, bring ((6.112), (6.114), (6.115), (6.126) above)
— เก็บ keep, put away ((6.142), (6.143) above)
— ว่าย keep
— ใส่ put into
— ผสม add, put in
— วาง place, put ((6.141) above)
— เล่น let down (also O-L verb)
— ขนก hang
— วาง sow ((6.145) and (6.146) above)
— ทีป pour ((6.122) above)
— ราด pour over
— จ่อ park (also O-L verb)
— ซ่อม find
— หาป carry on both ends of a pole ((6.89-93) above)
— ห่อป carry in the arms ((6.129) and (6.130) above)
— ขนแกะ throw ((6.144) above)
— ย่าน write, draw
— ฉ่อม take note
— ติด glue
and the A-L-Source verbs

thɔŋ  uproot ((6.108) above)
ploŋg  release
y ꞏ p  pick up ((6.127) above)

In general, A-L verbs have included in their case frames the following features:

\[
\begin{align*}
&[+\text{NM, +AGT}] \\
&\quad +[+\text{AC, +OBJ}] \\
&\quad +[\{+\text{L, +rel}\}, +\text{LOC}] 
\end{align*}
\]

which states that the LOCATIVE noun must occur with a [+L] preposition or a locative relator noun (Nr). There are some exceptions, however. The verb waŋ 'put' in sentence (6.141) above, repeated here, takes the preposition kɔp with its LOCATIVE.

(6.141) khɔŋ nān tɔŋ waŋ kɔp din (Haas 1964: 26)
thing that must put with earth

\[
\begin{align*}
&[+\text{AC}] \\
&\quad [+\text{C}] \\
&\quad [+\text{AC}] \\
&\quad [+\text{LOC}] 
\end{align*}
\]

'Those things have to be set on the ground.'

Two of these verbs, sɔy 'put into' and tɔm 'put in' have "strict" (i.e., obligatory) inner LOCATIVES (Kullavanijaya 1974: 128) and can take a LOCATIVE constituent without either a preposition or an Nr; e.g.,

(6.157) khon tɔm nām-man rɔt (Panupong 1970: 12)
person put in petrol car

\[
\begin{align*}
&[+\text{NM}] \\
&\quad [+\text{AGT}] \\
&\quad [+\text{AC}] \\
&\quad [+\text{AC}] \\
&\quad [+\text{AC}] \\
&\quad [+\text{OBJ}] \\
&\quad [+\text{LOC}] 
\end{align*}
\]

'A man's filling the car with petrol.'
Further, ว่าย and สะมี have the feature [+__[+interior]].
and, unlike most other A-L verbs, can have the Nr น้ํา
as their LOCATIVE noun, as in (6.158). (See discussion
regarding restrictions on Nr's in Sec. 6.2.2.1.3 above.)

(6.158) ว่านั้น น้ํา น้ํา ขวด น้ำ
I put water inside bottle that

\[
\begin{array}{c}
+\text{NM} \\
+\text{AGT} \\
+\text{OBJ} \\
+\text{LOC} \\
+\text{rel}
\end{array}
\]

'I put water in that bottle.'

Two Nr's can occur together, and, in (6.159), ที่ is
essential to mark the goal of the A-L verb ค้า. Without
ที่, the [+LOC] phrase is an outer LOCATIVE.

(6.159) ที่น้ํา รถ-มี ขอน ค้า สถาปน สอน บํย
place inside bus person find money often

\[
\begin{array}{c}
+\text{AGT} \\
+\text{OBJ} \\
+\text{LOC} \\
+\text{rel}
\end{array}
\]

'People often find some money on the bus.'

(Panupong 1970: 105)

As discussed above in Sec. 6.2.2.1.1, Thai ข้าว
'into' cannot have the meaning 'onto' (cf. Vietnamese
vào 'into, onto'). To express this meaning for A-L verbs
which have the feature [+__[+surface]], the Nr บน 'top,
surface' is used, as in (6.160) and (6.161).

(6.160) ข้าว ค้าง ข้าว ตํา? สอง บาง ทํา? สอง ตัว น้ำ นํา?
who don't put thing top table two Cl that OK?

\[
\begin{array}{c}
+\text{NM} \\
+\text{AGT} \\
+\text{OBJ} \\
+\text{LOC} \\
+\text{rel}
\end{array}
\]

'Don't anybody put anything on those two tables, please.'
(6.161) ¥à maa khîan bon kradaan-dam (Noss 1964: 135)
  don't come write top blackboard

int Fv [+AC] [+LOC] [+rel]

'Don't write on this (our) blackboard.'

A-L-Source verbs require a [+src] P.

(6.162) ¥à plûooy nuu tua nân câak mî: (PK)
  don't release mouse C1 that from hand

int Fv [+AC] [+OBJ] [+L] [+src] [+AC] [+LOC]

'Don't let that mouse go from your hand.'

6.2.2.4 AGENTIVE-DATIVE Verbs in Thai

Some of the AGENTIVE-DATIVE (A-D) verbs in Thai are:

hûy give ((6.98) and (6.99) above)
càmûk distribute ((6.137) above)
khêay sell
khîn return
sûlq send, hand ((6.100-102) above)
yên hand
sûon teach ((6.103) above)
khîan write ((6.133) above)
  (also an AGENTIVE-LOCATIVE [+surface] verb
  (see (6.161) above and discussion of
  Vietnamese viêt 'write', Sec. 3.3.5.2.1))
phûut speak, say
bûok tell, command
lûw tell, inform, narrate
thêam ask
sûk question
bon complain
?ûat show
and the A-D-Source verbs

-  siː  buy ((6.139) above)
-  yiːm  borrow
-  yiːp  pick up

Thai can mark non-subject Goal DATIVE with one of two D case forms, one a coverb (see discussion above regarding háy as D or B case form), and one an underived preposition, kàm. In addition, unlike either Khmer or Vietnamese, Thai frequently marks DATIVE with the C case form kàp, usually reduced in colloquial speech to kà? (Kullavanijaya 1974:73). In general, the case frames for Thai A-D verbs include the following features.

\[
\begin{align*}
&\begin{array}{c}
+ [+NM,+AGT] \\
+ [+AC,+OBJ] \\
+ ( [ [+AC,+D,+C], +DAT ] )
\end{array}
\]

Some of the verbs, such as yəin 'hand', have obligatory DATIVES. The A-D verbs can be subclassified according to their DATIVE and case form cooccurrence restrictions. For example, the [+information] verbs, such as bôok 'tell' and thàam 'ask', can take their DATIVES only in the AC case form or with the [+C] case marker, kàp. (See Sec. 6.2.1.4 above for restrictions with Khmer [+info] verbs.) The two [+D] case markers appear to be in complimentary distribution, although further investigation may prove this to be untrue. Most of the verbs in the list above can occur with kàm 'to' but not with háy 'to'; conversely, yəin 'hand' and sôn 'send' can occur with háy but not with kàm. An exception is sôn 'teach', which can occur with
either \( h\ddot{a}y \) or Fallback (see discussion above, Sec. 6.2.2.1.1, regarding \( h\ddot{a}y \) with \( s\ddot{o}n \)).

Unlike Khmer but like Vietnamese, most of the Thai A-D-Goal verbs can take their DATIVEs in the AC case form. The DATIVE of the verb \( h\ddot{a}y \) 'give' can occur not only in the AC case form but also in the D or C case forms. This is contrary to the coverb derivation hypothesis which would predict that \( h\ddot{a}y \), which can occur as a [+D] preposition, cannot take its DATIVE in the [+D] case form. For discussion of \( h\ddot{a}y \) in this dilemma, see the discussion of Thai coverbs, Sec. 6.2.2.1.1 above, and the discussion of counterexamples to the hypothesis, Sec. 6.2.3.4 below.

In Thai, as in Khmer, the OBJECTIVE immediately follows the verb and the DATIVE follows the OBJECTIVE (Huffman 1973: 496).

Examples of some of the A-D verbs with DATIVEs follow.

\[(6.163) \text{Nit} \quad \khaay \quad \text{w}\ddot{a}\ddot{a}n \quad (k\ddot{a}p) \quad \text{p}\ddot{a} \\
\quad \text{sell} \quad \text{ring} \quad \text{with} \quad \text{aunt} \]

\[
\begin{array}{c}
\text{[\text{+NM}]} \\
\text{[\text{+AGT}]} \\
\text{[\text{+AC}]} \\
\text{[\text{+OBJ}]} \\
\text{[\text{+C}]} \\
\text{[\text{+AC}]} \\
\text{[\text{+DAT}]} \\
\end{array}
\]

'Nit sold a ring to Auntie.' (Panupong 1970: 12; and PK)

\[(6.164) \text{P}\ddot{u}k \quad \text{kh\ddot{\imath}in} \quad \text{na}\ddot{g}\ddot{s}\ddot{\imath}\ddot{\imath} \quad \text{l}\ddot{a}m \quad \text{n}\ddot{a}n \quad (k\ddot{a}p) \quad \text{khr\ddot{u}u} \quad \text{l}\ddot{a}\ddot{a}w \\
\quad \text{return} \quad \text{book} \quad \text{Cl} \quad \text{that} \quad \text{with} \quad \text{teacher already} \]

\[
\begin{array}{c}
\text{[\text{+NM}]} \\
\text{[\text{+AGT}]} \\
\text{[\text{+AC}]} \\
\text{[\text{+OBJ}]} \\
\text{[\text{+C}]} \\
\text{[\text{+AC}]} \\
\text{[\text{+DAT}]} \\
\end{array}
\]

'Pook returned that book to the teacher already.' (Kullavanijaya 1974: 49,50)
(6.165) *khàw sòŋ dìnsò̂o hây lâuk* (Brown 1967: 185)
3p hand pencil to offspring

\[ [+NM] [+AC] [+D] [+AC] \]

'He passed his child a pencil.'

The verb sòŋ can take the [+L,+ter] case marker thăng with its DATIVE (as can khâñ 'write', (6.133) above), as in (6.166).

(6.166) Arunee că’ sòŋ khôŋ thăng thee (PK)
Fut send thing reaching 2p

\[ [+NM] [+AGT] [+AC] [+L] [+ter] [+DAT] \]

'Arunee will send the things to you.'

Of the above list of A-D-Goal verbs, only sòŋ can have a LOCATIVE in place of its DATIVE, as shown in (6.110) and (6.117) above and (6.167). (Cf. Vietnamese, most of whose A-D-Goal verbs can have a Goal LOCATIVE (Sec. 3.3.5.1.1).)

The preposition thăng cannot occur with the LOCATIVE of sòŋ.

(6.167) Arunee că’ sòŋ khôŋ klâp Krữñṭhèep (PK)
Fut send thing back to Bangkok

\[ [+NM] [+AGT] [+AC] [+L] [+gol] [+LOC] \]

'Arunee will send the things back to Bangkok.'

(6.168) yâžin hây phanâk-ŋaan (Noss 1964: 159)
hand to clerk

\[ [+D] [+AC] [+DAT] \]

'Hand it to the clerk.'
(6.169) kamlan càʔ sŏn naŋsêʔ (kàʔ) dèk
Prog Fut teach book to child

\[
\begin{array}{c}
\ [+AC] \\
\ [+OBJ] \\
\ [+D] \\
\ [+AC] \\
\ [+DAT]
\end{array}
\]

'I was going to give the boy a lesson.'

(Panupong 1970: 25; and PK)

(6.170) kàp khruu Dàmèŋ klâa lâw
with teacher dare tell

\[
\begin{array}{c}
\ [+C] \\
\ [+AC] \\
\ [+DAT] \\
\ [+NM] \\
\ [+OBJ]
\end{array}
\]

'Only to the teacher will Dang dare to tell (the story).'

(Kullavanijaya 1974: 30)

(6.171) panhāa phūak nîi nákriən chōp thāam chânn
problem group this student like ask I

\[
\begin{array}{c}
\ [+AC] \\
\ [+OBJ] \\
\ [+NM] \\
\ [+DAT] \\
\ [+AC] \\
\ [+DAT]
\end{array}
\]

'Pupils tend to ask me about these problems.'

(Panupong 1970: 17)

(6.172) sák ?aray náa ?ìik lâʔ
question what aunt again FP

\[
\begin{array}{c}
\ [+AC] \\
\ [+OBJ] \\
\ [+AC] \\
\ [+DAT]
\end{array}
\]

'What are you questioning Auntie about this time?'

(Panupong 1970: 25)

Like Khmer but unlike Vietnamese, Thai A-D-Source verbs occur with the [+L,+src] case marker. As shown in (6.139) above with sêk 'buy', and (6.173) here, they can also occur with the preposition kàp.
(6.173) 典范 你拿 书 书从 Pùk (PK)
I want borrow book with
càak
from

'want to borrow a book from Pook.'

(6.174) 你 吗 吗拾 书 this from I away

'Take this box from me.'

The A-D-Source verb 你 can take a LOCATIVE in place of its
DATIVE:

(6.175) Wantanaa 你 吗 吗拾 书 书 from
table

'Wantanaa picked the knife up from the table.'

6.2.3 Comparison of Three Languages
6.2.3.1 Cross-Language List of Coverbs

The preceding sections on Khmer and Thai give an
overview of coverbs in those two languages. In comparing
coverbs in Khmer, Thai, and Vietnamese, one can hardly
fail to notice the parallel behavior in grammatical
function and semantic import. Following is a chart
showing the approximately parallel coverbs in the three
languages. The glosses given are, of course, very general
and do not specify particular emphases in the individual languages. Meanings of the corresponding verbs are also given. The sub-CF is given for each [+L] case marker. (Underived P's are not included.)

<table>
<thead>
<tr>
<th>Vietnamese</th>
<th>Khmer</th>
<th>Thai</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+L]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+lcn]</td>
<td>ḍ</td>
<td>nìw</td>
<td>yùu</td>
</tr>
<tr>
<td>[+src]</td>
<td>càak</td>
<td></td>
<td>from</td>
</tr>
<tr>
<td>[+gol]</td>
<td>(di)</td>
<td>tiw</td>
<td>pay</td>
</tr>
<tr>
<td></td>
<td>mook</td>
<td>maa</td>
<td></td>
</tr>
<tr>
<td>[+gol]</td>
<td>ləl</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>vê</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+gol]</td>
<td>qua</td>
<td>cłaaŋ</td>
<td>khâam</td>
</tr>
<tr>
<td>[+gol]</td>
<td>vô/vəo</td>
<td>coul</td>
<td>khâw</td>
</tr>
<tr>
<td>[+gol]</td>
<td>ra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+gol]</td>
<td>len</td>
<td>laəŋ</td>
<td>khên</td>
</tr>
<tr>
<td>[+gol]</td>
<td>xuong</td>
<td>coh</td>
<td>log</td>
</tr>
<tr>
<td>[+gol,-ter]</td>
<td>(théo)</td>
<td>taam</td>
<td></td>
</tr>
<tr>
<td>[+ter]</td>
<td>dën/tôî</td>
<td>dâl</td>
<td>thêŋ</td>
</tr>
<tr>
<td>[+D]</td>
<td>cho</td>
<td>qaøy/cuun</td>
<td>hây</td>
</tr>
</tbody>
</table>

CHART VI-1 Cross-Language List of Coverbs

Càak (cf. Thai above) as both verb and preposition occurs in literary Khmer (and Old Mon) (S. Pou, personal communication). It is interesting that klàp 'go back' occurs in Khmer, but only as a verb, not a P. Khmer cên 'go out' and Thai ̀dûk 'go out' occur as verbs and adverbs but never as prepositions, as discussed above in Secs. 6.2.1.1.1 and 6.2.2.1.1, respectively.
Vietnamese \textit{d}l is not included in the list of Vietnamese locative coverbs in Sec. 5.1.1 and is included here parenthetically because it occurs as a coverb only in very restricted circumstances, although it occurs regularly as an OBJECTIVE-LOCATIVE verb and freely as an adverb. Both Khmer \textit{tiw} and Thai \textit{pay} occur freely as coverbs. For instance, both sentences in (6.176) are grammatical.

(6.176) Khmer: \ldots{}kñom tralap \textit{tiw} pteoh (Huffman 1973: 502)

Thai: \ldots{}phñm klñp \textit{pay} bñan

\begin{itemize}
  \item I return to house
  \begin{itemize}
    \item [+NM] [+V] [+P] [+AC] [+LOC]
  \end{itemize}
\end{itemize}

'I'm going back home.'

The analogous sentence in Vietnamese, (6.177), is not grammatical.

(6.177) * \textit{d}l \{\textit{trò-la}i\} \textit{d}l nhà

\begin{itemize}
  \item I return to house
  \begin{itemize}
    \item [+NM] [+V] [+P] [+AC] [+LOC]
  \end{itemize}
\end{itemize}

'I'm going back home.'

The behavior of \textit{d}l is discussed in detail in Sec. 5.1.2.

Another Vietnamese coverb listed here but not included in the list in Sec. 5.1.1 is \textit{theo} 'following, according to; follow'. The problematic status of \textit{theo} is discussed in Sec. 5.1.2. It is not certain what case form P \textit{theo}
marks, and it is not certain whether P *theo* is synonymous with V *theo*.

Other than *đi* and *theo*, all the words listed here for the three languages can be clearly identified as coverbs; that is, each word in the list occurs as a P and has a corresponding homophonous and synonymous V.

6.2.3.2 CR and L Sub-CF Cooccurrences

All but one of the coverbs in each language are [+L] case markers. It seems worthwhile to make a cross-language comparison of L sub-CF and case relation cooccurrences. In Sec. 3.2.4, Chart III-2 for Vietnamese case relation (CR) and case form (CF) cooccurrences shows the CR cooccurrences for the L sub-CF's. This part of the chart is repeated here, including the cooccurrences for Khmer and Thai, based on the evidence presented in Secs. 6.2.1 and 6.2.2.

V = Vietnamese, K = Khmer, T = Thai

<table>
<thead>
<tr>
<th>Sub-CF</th>
<th>CR:</th>
<th>LOC</th>
<th>TIM</th>
<th>DAT</th>
<th>OBJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+lcn]</td>
<td></td>
<td>V K T</td>
<td>K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+src]</td>
<td></td>
<td>V K T</td>
<td>V K T</td>
<td>K T</td>
<td></td>
</tr>
<tr>
<td>[+gol]</td>
<td></td>
<td>V K T</td>
<td>V K T</td>
<td>V K</td>
<td>V</td>
</tr>
<tr>
<td>[+ter]</td>
<td></td>
<td>V K T</td>
<td>V K T</td>
<td>V T</td>
<td>V T</td>
</tr>
</tbody>
</table>

CHART VI-2 Comparison of CR and L Sub-CF Cooccurrences in Vietnamese, Khmer, and Thai
It is interesting that the [-ter] property of most of the [+gol] case markers in Thai seems to prohibit them from marking TIME, DATIVE, or OBJECTIVE, and only those [+gol] case markers which can have a [+ter] interpretation and the case marker which is lexically marked [+ter] can mark TIME. (See sentence (6.107) above, where maa 'to (hither)' occurs with a [+TIM] noun.) A rule such as [-ter] + [-_][+TIM]] will protect the [+gol,-ter] P's from misoccurrences.

6.2.3.3 Comparison of Verb Classes and Case Frames

The verb classes of Khmer and Thai have been analyzed in this study in such a way as to parallel the verb classes of Vietnamese, although only the AGENTIVE-DATIVE (A-D), the AGENTIVE-LOCATIVE (A-L), and the OBJECTIVE-LOCATIVE (O-L) classes have been considered in Khmer and Thai since these are the classes relevant to a discussion of coverbs. Furthermore, the O-L verbs in these two languages have not been broken down as carefully into O-L-Goal, O-L-Source, and O-L-Location classes, as has been done in Secs. 3.3.5.4, 3.3.5.5, and 3.3.5.6 for Vietnamese.

Sec. 3.3.6 above gives a semantic tree of ten verb classes in Vietnamese. CHART VI-3 below gives the part of the tree with the pertinent classes of verbs, A-D, A-L, and O-L. For each class, the case frame that is generally applicable for each language is given. (Vtn = Vietnamese, Khm = Khmer, Th = Thai.) In the A-D class, the first frame given for each language is for A-D-Goal verbs, the
second is for A-D-Source verbs. Meanings of verbs are given as examples for each class.
<table>
<thead>
<tr>
<th>Language</th>
<th>Case Frame Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vtn</td>
<td>[+NM, +AGT]</td>
</tr>
<tr>
<td></td>
<td>[+AC, +OBJ]</td>
</tr>
<tr>
<td>Khm</td>
<td>[+AC, +D, +L+gol, +DAT]</td>
</tr>
<tr>
<td></td>
<td>[+AC, +OBJ, +poss]</td>
</tr>
<tr>
<td>Th</td>
<td>[+AC, +D, +C, +DAT]</td>
</tr>
<tr>
<td></td>
<td>[+L, +src, +DAT]</td>
</tr>
</tbody>
</table>

Eg: give, sell, send; buy, receive  put, throw, plant, hang; uproot  go, come, walk, swim, sit

CHART VI-3  Comparison of Verb Class Case Frames
It will be noticed that the general case form (CF) and case relation (CR) cooccurrences are the same for all three languages in the A-L and O-L classes. This summary chart does not show the subclassification of verbs according to CF occurrence; i.e., it does not show which A-L and O-L verbs have free choice between the AC and L CF's and which are restricted to one or the other. For example, the O-L verbs which have corresponding prepositions take their LOCATIVES only in the AC case form, but this fact is not shown in this chart. For discussions of such subclassification, see the sections on verb classes in the individual languages.

The greatest variance between the languages is in the A-D verbs. In Vietnamese, many A-D-Goal verbs can have LOCATIVES in place of their DATIVES. In the list of A-D-Goal verbs in Thai, only ҫ̀q 'send' can have a LOCATIVE in place of its DATIVE; the same is true of ပါ 'send' in Khmer. Vietnamese and Khmer can mark Goal DATIVE with L case markers; Thai cannot use the L CF with Goal DATIVES, and is the only one of the three languages to mark DATIVE with the C CF. Thai and Khmer mark Source DATIVES with the L Source case marker; Vietnamese has a special possessive noun which occurs with Source DATIVES (see Sec. 3.3.5.1.2 above).

The A-D verbs for 'give' in Vietnamese and Khmer, cho and qaoy, respectively, take their DATIVES in the AC case form only (although this subclassification is not shown
on Chart VI-3). This behavior is consistent with the coverb derivation hypothesis for verbs which can have corresponding coverbs. Thai háy is not so nicely behaved in terms of the hypothesis; for discussion of this problem, see Sec. 6.2.2.4 above and Sec. 6.2.3.4 following.

6.2.3.4 Apparent Counterexamples to the Coverb Derivation Hypothesis

In the analysis proposed for coverbs in Vietnamese, the claim is made (in Sec. 5.3.2) that, in order for a verb to have a corresponding derived preposition marking the case form of a certain case relation, it must as a verb take that case relation only in the AC case form. "A verb's ability to occur as a coverb can be directly correlated with its case frame as a verb." It has been found in Vietnamese and further substantiated in Khmer and Thai that this restriction has to be modified to state that a coverb-potentia1 verb cannot take a noun in the case form marked with the verb's own value. That is, a [+gol] verb, for example, can take its LOCATIVE with a [+ter] or [+src] P, as in (6.178) and (6.179),

(6.178) kaal naa baan yeeq tiw dal Kraceh
Khmer time which able we go reaching

\[
\begin{align*}
+AC \\
+TIM \\
+NM \\
+V \\
+gol \\
+P \\
+L \\
+ter \\
+AC \\
+LOC
\end{align*}
\]

'When will we get to Kratie?' (Huffman 1970: 184)
'Dang went (somewhere) by train from Bangkok.'
(Kullavanijaya 1974: 47)

but it cannot take its LOCATIVE with a [+gol] P, as in

(6.180) * Kim lēn vao phông
Viet. go up into room

'Kim went up into the room.'
(To be grammatical, (6.180) should be Kim lēn di ('go') vao phông ('Kim went up and went to the room.') or Kim lēn và ('and') vao (V) phông, the first being preferred.)

Also, see remarks in Sec. 6.2.1.1.1 regarding [-ter] coverbs.

In (6.181), pay, which is [+gol], occurs with khâw, which is also [+gol], but pay here is a directional adverb modifying the action of khâw, since it is presumed that the relator noun nay cannot take [+gol] pay as a P (see discussion in Sec. 6.2.2.1.3 above).

(6.181) khun khōey khâw pay nay thâm mày
Thai Title ever enter away inside cave Neg

'Have you ever been in the cave?' (Panupong 1970: 139)
However, there are some contradictions to this thesis in Thai. As may have been noticed in (6.176) in Sec. 6.2.3.1, the [+gol] verb klâp, which has a corresponding [+gol] P ((6.117) in Sec. 6.2.2.1.1) does occur with a [+gol] P. (6.176) is repeated here.

(6.176) ...phôm klâp pay bâan (Huffman 1973: 502)
Thai  I return to house

\[\begin{array}{cccc}
+NM & +V & +P & +AC \\
+OBJ & +gol & +L & +gol & +LOC
\end{array}\]

'I'm going back home.'

This is not seen, however, as refuting the entire coverb derivation hypothesis, but rather as a peculiarity of the verb klâp. It is quite possible that pay in (6.176) is an adverb, but it is also possible to consider that klâp is a verb which is in the process of allowing a coverb occurrence and there is variation in usage. (See Sec. 7.1 below for further discussion of such a process.)

This latter view could be held regarding the problem of Thai háy 'give', which is analyzed in this study (Sec. 6.2.2.1.1 above) as occurring also as a [+D] P. As a verb, háy customarily takes its DATIVE in the AC or C case form. However, it can also take DATIVE in the D case form if the D case form is marked by the underived P kæm 'to', as in (6.182).
This is clearly a counterexample to the coverb derivation hypothesis and accounts for one of the reasons Kullavanijaya (1974: 85ff; see Sec. 6.2.2.1.1 above) analyzes ʰᵃʸ as a [+B] P instead of a [+D] P. It is possible to hypothesize that this irregularity is the result of variation during historical change,--that ʰᵃʸ is in the process of allowing P occurrence and, in some dialects or styles of speech, ʰᵃʸ may occur as a [+D] P, and as a verb may not occur with ʰᵃᵉ. Some speakers even now do not accept ʰᵃᵉ with ʰᵃʸ. For further discussion of historical change and a hypothesis regarding verbs and coverbs, see Sec. 7.1 below.

However, there could be other factors involved. As mentioned above, a coverb-potential verb cannot occur with a P marked with the verb's own value. Given as example was the distinction between [+gold] and [+ter] features on V's and [+L] P's. A parallel distinction may exist for ʰᵃʸ and ʰᵃᵉ. ʰᵃʸ has a particular [+beneficial] semantic property, whereas ʰᵃᵉ does not (PK, personal communication). If we hypothesize the following feature matrices for ʰᵃᵉ and P ʰᵃʸ,

(6.182) khāw ʰᵃʸ naŋšīŋ sōŋ lēm kʰàe phōm
Thai 3p give book two Cl to I

\[
\begin{array}{c}
\text{[+NM]} & \text{[+V]} & \text{[+AC]} & \text{[+P]} & \text{[+AC]} \\
\text{[+AGT]} & \text{[+DAT]} & \text{[+OBJ]} & \text{[+D]} & \text{[+DAT]} \\
\end{array}
\]

'He gave me two books.' (Huffman 1973: 15)
then $V$ ʰây could have the matrix:

$\begin{array}{l}
\text{ʰây 'give'} \\
\begin{cases}
+V \\
+dative \\
+beneficial \\
+[{+NM,+AGT}] \\
+[{+AC,+OBJ}] \\
+([{+AC,+C,+D},+DAT]) \\
-[{+D,+ben,+DAT}] \\
\end{cases} \\
\end{array}$

Such an explanation would fit the facts as well as showing ʰây's behavior to be consistent with the coverb derivation hypothesis.

In general, the evidence from Khmer and Thai, even at this superficial level of investigation, strongly supports the coverb hypothesis as made for Vietnamese.
CHAPTER VII

THE HISTORICAL HYPOTHESIS

7.0 Introduction

The widespread occurrence of the coverb phenomenon raises the question not only of its areal historical role but of its grammatical historical role and its role in the relationship between verbs and prepositions. The belief here that prepositions share significant grammatical features with verbs is reflected in the inclusion of case frames in their lexical feature matrices (Secs. 3.1 and 3.2.2.3-7) and is discussed in detail in Sec. 5.3.3. The question is whether these shared features are a universal characteristic, or whether they are coincidental, caused by category overlap or squish, or are the result of historical development.

Ross, in his paper "The Category Squish: Endstation Hauptwort" (1972), proposes that the distinction between the categories Verb, Adjective, and Noun is not discrete but "squishy", that there is a quasi-continuum which contains, besides V, A, N, and other categories, the category Preposition. I think this hypothesis is questionable. There could well be a hierarchical relationship between the categories, a relationship that could be shown by lexical features and lexical derivation rules. Also, it is certainly true that individual lexical items can appear to be squishy in terms of their inclusion
in several categories. However, since in any given sentence, a word falls in one category or another—i.e., it is subject to given category-particular syntactic rules, a functional description of syntactic categories would have to say that each comprises a fixed discrete inventory. Thus, we must say that there is no such thing as "category overlap."

The claim here is that the sharing of features is a universal property of V's and P's (prepositions/postpositions), and the hypothesis is that V's and P's share features not coincidentally but as the result of historical derivational relationships. Further, it is claimed that the occurrence of coverbs—prepositions which have corresponding homophonous and synonymous verbs—represents in a language a stage in the process of a word changing over a period of time from V to P.

The similarities and distinctions between V's and P's are discussed in Sec. 5.3.3 above. The claim regarding the nature of coverbs is discussed at length below.

7.1 Coverbs as a Stage in the Derivation of P from V

To describe what is meant by saying that coverbs represent a stage in the process of a word changing over a period of time from a V to a P, three broad stages can be postulated for the history of a single lexical item:
In stage I, the word occurs only as a verb. In stage II, the word occurs both as a V and as a P which may or may not retain the same semantic features as the verb. (For discussion of semantic shift in P's with homophonous verbs, see Li & Thompson 1973c: 7, and Lord 1975: 280-286.)

It goes without saying that within this stage, there is a long range of varying usage such that at the beginning of the stage the word may perhaps be used as a P only rarely and under given conditions, and at the end of the stage usage as a verb occurs rarely or vestigially. In stage III, the word is no longer used as a verb and is used only as a P.

A coverb is a P at stage II, a P that coexists with an etymologically related verb. In this study, a coverb is defined as a P which retains the semantic features derived from the verb and thus shares semantic features with the coexistent verb. It is this homophonous and synonymous state between the P and the V that keeps the relationship alive in the mind of the speaker such that there exists a synchronic derivation rule relating the P and the V. (See Sec. 5.3.3 above for the Coverb Derivation Rule.)

Evidence supporting the hypothesis that coverbs are
P's derived from V's is set forth in Sec. 7.3.3 below. First, we will take a look at modern Vietnamese prepositions to see if they can provide support for the hypothesis with regard to Vietnamese coverbs.

7.2 Modern Vietnamese Prepositions

There is little evidence in modern Vietnamese that prepositions which do not now have corresponding verbs were verbs at an earlier stage of the language, other than the feeling among native speakers that they are verbs. What evidence I have found is presented here.

The following prepositions, discussed individually in Secs. 3.2.2.4-7, are considered to be synchronically underived prepositions.

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Meaning</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>tài</td>
<td>in</td>
<td>[+L,+lcn]</td>
</tr>
<tr>
<td>từ</td>
<td>from</td>
<td>[+L,+src,+ext]</td>
</tr>
<tr>
<td>khỏi</td>
<td>out of</td>
<td>[+L,+src,-ext]</td>
</tr>
<tr>
<td>bằng</td>
<td>by</td>
<td>[+I]</td>
</tr>
<tr>
<td>với</td>
<td>with</td>
<td>[+C]</td>
</tr>
<tr>
<td>ghiếmg/ho</td>
<td>for</td>
<td>[+B]</td>
</tr>
</tbody>
</table>

The Location preposition tài 'at, in' is considered to be a loan from the Chinese coverb 坐 in. (See Dao D-A 1957: 224, Ly-V-H 1962: 452, and Sec. 4.1 above.)

The Source preposition từ 'from' may very likely be related to the restricted verb từ 'leave, abandon'. The verb từ is restricted in that it occurs only in Sino-Vietnamese compounds, as in (7.1). (Cf. Thai Source coverb ค้าก 'leave; from'.)
I take leave of Hue in 1965.

The Source preposition khol 'out of' appears to have a corresponding verb khol 'avoid, escape; recover', whose general usage, however, seems to be restricted to occurrence with other verbs, as in (7.2) and (7.3), both from Nguyen D-H 1966: 223, and (7.4) from Le & Le 1962: 195.

(7.2) Tôi không khol nhớ tôi anh ấy
'I can't help remembering him.'

(7.3) anh khol phải đi 'You don't have to go.'
elder avoid must go bro.

(7.4) bà - ỡy khol bệnh chưa 'Has she recovered from her illness?'

Tôn-nữ Kim-Chi suggests that khol is used only as a preposition in the South but is used as both a preposition and a verb in the North, and bệnh in (7.4) can be interpreted as a noun 'illness', making khol the only verb in sentence (7.4). Further, Nguyễn Đình-Hòa, a Northerner, gives (7.5) (1966: 223).

(7.5) anh khol hàn chưa
elder recover thoroughly yet bro.

'Have you completely recovered?'

It may be that khol as the only verb in a sentence occurs only in this special use, meaning 'recover from illness'.
Khoi cannot occur as the only verb in a locative sentence; i.e., (7.6) is ungrammatical.

(7.6) * Son khoi vuon

'Son avoided the garden.'

'It seems fair to hypothesize that V khoi was at one time a freely occurring verb and that V khoi and P khoi were more closely related semantically than they are now, and to suggest that at one time sentence (7.6) would have been a grammatically acceptable sentence.

One sentence, (7.7), with the [+C] preposition vo 'with', creates a problem in that vo does not mark a case relation with the verb in the usual sense since it does not mean 'return with us to Viet-Nam':

(7.7) chi sam tru lai Viet-Nam vo chung em

elder early return with Pl young sis

'Return to Viet-Nam soon to be with us.'

It may possibly be considered to be a conjoined verb or the main verb of a purposive complement: 'return and be with us', although it could also express a comitative relationship between two NP's and mean 'return to Viet-Nam and us'.

The [+B] case markers gi`um and hop 'for, help', are felt by many speakers to be verbs (e.g., these words are glossed as verbs in Nguyen D-H (1966)). (7.8) is an acceptable expression in which gi`um appears to be a verb.

(7.8) gi`um toi di 'Please help me/(Do it) for me.' help I go (Imper)
The expression might equally well be considered a prepositional phrase, except the imperative otherwise occurs only with verbs, presumably [+active] verbs. Also, giùm in (7.9) is considered by N-D Liem to be a verb, but such use occurs only in money-lending situations and is used typically by moneylenders for particular BENEFACTIVE emphasis (Liem, personal communication).

(7.9) tôi giùm ông hai trăm
I help Sir two hundred

'For you, I'll loan 200.' (Probably at 100% interest!)

The most substantial evidence for giùm having been a full-fledged verb is the fact that, according to Tôn-nũ Kim-Chí, in some rural areas of Central Viet-Nam giùm is often used for làm 'do' or giúp 'help'. Typical is the expression in (7.10), where giùm is a verb meaning 'do'. (Việc 'work' is a noun, not a verb.)

(7.10) có việc giùm không
have work do not

'Do you have work for me to do?'

For these speakers, (7.11) would be acceptable, although for most speakers in other dialects, it would not, or at least would be considered unsophisticated.

(7.11) ông ấy giùm tôi nhiều 'He helped me a lot.'
he help I much

The preposition hô is a Northern word and is used as a verb in the North much more than giùm is used as a verb in the South. Thus, in the North, (7.12) with hô is acceptable.
(7.12) ông-áy hố tôi nhiều 'He helped me a lot.'
he help I much

It seems likely that hố and glùm show different stages of change and that these stages coincide—very roughly—with geographical areas: In the North, these words can be used as both V and P; in some dialects of Central Viet-Nam, they are both V and P, and in other dialects V is not so acceptable; in the South, usage as V is unacceptable at least in polite use, while usage as P is common.

Like the coverbs, glùm can occur as an adverb, as in (7.13), where glùm modifies the verb glùp-dơ.

(7.13) mong có glùp-dơ glùm cho em
hope miss help for to young sib
'I hope you'll help me.' (polite urging)

There seems to be no evidence that the P vôí 'with' is derived from a verb. However, it, too, can occur as an adverb, as in (7.14), where vôí modifies the verb thám.

(7.14) chí nhỏ viết thám em vôí nhỏ
elder remember write letter visit young with OK?
sis sib
'Remember to write a letter to greet me, OK?'
Not 'greet me with a letter' or 'visit with me', i.e., * thám vôí em. The adverb vôí here emphasizes polite but intimate urging (Tôn-nụ Klm-Chi, personal communication).

(See Lord 1973: 279-280 for the Comitative preposition in some Kwa languages of West Africa, which derives from a Comitative verb and which can occur as an adverb.)

Thus, the evidence at this point of the investigation
is only suggestive of modern synchronically underived prepositions in Vietnamese having been verbs at an earlier stage of the language.

7.3 Evidence in Support of the Hypothesis of P's Deriving from V's

7.3.0 Introduction

The derivational relationship between V's and P's hypothesized above seems to be particularly true of directional words--directional prepositions derived from directional verbs or adverbs and directional adverbs derived from directional verbs (see Sec. 5.1.3 above for discussion of directional "coverbs" as adverbs in Vietnamese). Although in Indo-European languages, there are few examples of P's which historically derive from verbs, Charles Li (1974) suggests that directional prepositions may have derived from directional verbs while locational prepositions were probably derived from nouns. (Also, see Emeneau 1956: 9 and Maher 1973: 49.)

Roderick Jacobs (personal communication) has found in Uto-Aztecan languages evidence for a derivational relationship between directional adverbs and directional verbs; for a full discussion of this derivation, showing a stage in which the words functioned variably as verbs and adverbs, see Crapo 1970.

Although the evidence for historical derivation involving directional words seems to be more common, there
is also evidence in some languages for non-directional prepositions having derived from verbs. For a claim that the Japanese (locative) postposition ni is "a relic of an extinct verb," see Samson 1960: 208, 243. Claims are made by Givón (1974), Lord (1973) and Westermann (1930) that, in some West African languages, certain types of P's--some directional and some not--can be shown to be historically derived from V's and that some of these P's can be called coverbs. For fuller discussion of these claims regarding coverbs in West Africa, see Sec. 7.3.3 below.

In the following sections, some instances of change involving verbs, adverbs, and prepositions in Pacific languages, Chinese, and some West African languages are cited as evidence supporting the claim that there is a historical derivational relationship between P's and V's and that coverbs represent a stage in the derivation of P's from V's.

7.3.1 Verbs, Adverbs, and Prepositions in Pacific Languages

In a discussion of Proto-Oceanic grammar, Pawley (1974: 32-36) makes a distinction between "true prepositions" and "prepositional verbs" ("certain disyllabic forms which connect a verb with its grammatical object" and which have verbal suffixes (p. 32)). He reconstructs a number of prepositional verbs of which the following are of particular interest here:
*pani reconstructible as an independent verb 'give'

"In languages which reflect this form as a prepositional verb, its function is most often as a dative, indicating motion to an animate being, sometimes also to an object."

*tani 'motion away from'

*su(ldR)i "...indicates motion to or after a person, or connection of the sort translatable as 'according to, concerning, on behalf of'. As an independent verb it means 'to follow'."

(Cf. Vietnamese theo 'follow; according to'.)

Dempwolff (1938) associates Proto-Austronesian (PAN) *(t')akaj 'climb, mount' with corresponding modern words in Fijian and Sa'a meaning 'upward' (p. 147); and PAN *mayi 'hitherward' with modern Indonesian, Malay, etc., mari 'come', which seems to be the reverse of V > P. Andrew Pawley (personal communication) states that some words which are purely adverbs in most Polynesian languages were verbs in Proto-Oceanic. He cites as examples the following Maori direction markers, and gives corresponding Proto-Oceanic words with their likely meanings (personal communication).

<table>
<thead>
<tr>
<th>Polynesian</th>
<th>Oceanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>mai</td>
<td>*mai</td>
</tr>
<tr>
<td>iho</td>
<td>*nsipo</td>
</tr>
<tr>
<td>ake</td>
<td>*nsake</td>
</tr>
</tbody>
</table>

This sort of development of directional words is also cited in a discussion of directional suffixes in Kusaiean, a Micronesian language, by K. Lee (1974a: 41-42). He proposes that directional suffixes in Micronesian and Polynesian languages might have been verbs historically.
He gives the following forms for Oceanic (from Grace 1969) and likely meanings.

*mai *lako *nsake *nsipo
come go, walk upwards; climb, lift, rise, jut out downwards

and suggests that at an earlier stage they might have been used as verbs only but later began to be used as directional suffixes. "When we observe some Micronesian and Polynesian languages with such an assumption, we can notice at least three different stages of development" (p. 41), as follows.

Tongan--used as both directional suffixes and as verbs
maio atu
maio to, towards speaker; give (to speaker)
ato to, towards listener; give (to listener)
hake up, upwards; ascent, go up
hifo down, downwards; descend, go down

Samoan--some used as both, some only as directional suffixes
mai atu a'e ifo
maio towards speaker away from speaker and towards listener up; go up, climb
down; give in, surrender, bow, control, restrain

Kusaiean--Directional suffixes are never used as independent verbs.
ma oht tah acng ack yah
ma to the speaker to the listener away to (a certain point) up down
The parallel between the occurrence in Oceanic languages of locative and dative directional words and the kind of locative and dative coverbs that occur in mainland Southeast Asian languages is obvious. It suggests that there might also be a parallel in historical development.

7.3.2 Verbs and Prepositions in Mandarin Chinese

Discussions concerning historical development of prepositions in Mandarin Chinese have dealt little if any with directional adverbs. However, a number of statements have been advanced regarding prepositions.

Suggestions have been made that all the prepositions of Chinese were verbs in an earlier stage of the language (e.g., see Liang 1971: 51; Li and Thompson 1973c: 3; and C. Li 1974). Chao (1968: 749) refers to the "transitional nature of Chinese prepositions, both in the classificatory and in the historical sense." He cites the example of two contemporary prepositions, 至 yú < 爲 and 函 yú < 九, which were used as main verbs in classical times (p. 336). The direct object marker 帶, which is "untranslatable as a preposition" but which is considered by some to be a preposition, is never a full verb in modern Chinese (Liang 1971: 37). T'sou (1972: 12) states that, in most dialects of Chinese, 帶 is "no longer a fully functional verb," but he gives examples from Ancient Chinese of its use as a verb meaning 'hold, grasp'. Li and Thompson
(1973b: 3) state that prior to the Tang dynasty (9th century A.D.) bǎ was a verb meaning 'to take hold of'. Examples of modern prepositions used as verbs in Archaic Chinese are given in Li and Thompson 1973c. An illustration is the Modern Chinese P công 'from' (as in (7.15)) used as a verb in the Fifth Century B.C., (7.16).

(7.15) nǐ děi công gē fāngmiàn kàn
   you must from every angle look
   'You must look at it from every angle.'
   (Li & Thompson 1973c: 7)

(7.16) bī cáo ěr zhàng yī công zhī
   must use your stick to follow (it)
   'You must wield your stick to follow it.'
   (Li & Thompson 1973c: 4, from Li Jī)

Công does not occur as a verb in Modern Chinese; (7.17) is ungrammatical.

(7.17) *nǐ děi công zhèr
   you must from there
   (Li & Thompson 1973c: 8)

C. Li (1974) and Li & Thompson (1973b and 1973c) make the claim that Chinese coverbs are prepositions derived from verbs which occurred regularly in serial verb constructions. They claim further that the category change involves a word-order change from Subject-Verb-Object (SVO) to SOV. That is, the first verb in a construction SVOV(O) "can develop into a case marker thus collapsing SVO complex sentences into simple SOV sentences" (Li & Thompson 1973b: 15). They suggest (1973c: 5, 20) that Mandarin prepositions are still in the process of changing from earlier
verbs, and (p. 5) that this explains the non-homogeneity in the class of prepositions. For example, some prepositions can still occur optionally with the verbal suffix -zhe. Further, they list (p. 7) three types of prepositions representing three stages of change: 1. those matching verbs in sound and meaning, 2. those matching verbs in sound but not in meaning, 3. those with no matching verb. "The differences among these three types of [prepositions] with regard to how closely they match verbs is to be expected, given our hypothesis that some [prepositions] have become less like verbs than others" (p. 8). For an example of a preposition of type 3, see (7.15) above with cón. (7.18) and (7.19), from Li & Thompson (1973c: 7), illustrate type 2.

(7.18) wōmen ən ʂade ɣisi ɓan ba!

'Let's do it according to his idea do Final Particle

(7.19) yóu-rén ən mén-ɪŋ

'someone press doorbell'

'Someone is ringing the doorbell.'

Examples of type 1--true coverbs (as defined in this study) may be found in the section on Chinese coverbs above, Sec. 4.1.

7.3.3 Verbs and Prepositions in West African Languages

Some of the Kwa languages of West Africa have coverbs, notably the words for 'be in/at; in, at' and 'give; to, for'
(Ansre 1966 and Lord 1973). When used as prepositions these words are not conjugated, as Kwa verbs otherwise are. Lord (1973: 271) notes that "Locative prepositions in Kwa are often homophonous with locative verbs, verbs of possession, and incomp1etive aspect markers. Evidence suggests that this homophony is not accidental, and that locative prepositions have developed historically from verbs in serial constructions." She shows differences in the prepositions which are similar to the differences in Chinese prepositions given by Li and Thompson (1973c) and noted above, and gives evidence from different languages showing the various stages of change. She attributes these differences to like cause: Prepositions have derived from verbs at differing rates of speed--differing rates between lexical items in the same language and differing rates between languages. She states (p. 274) that the extent to which prepositions have lost their verbal characteristics "reflects the extent to which they have drifted from the serial pattern of other verbs." For example, she notes that the Ga verb yè 'be at' does not take the usual range of tense-aspect and negation markers. "It may be that yè was formerly fully verbal and is now going through a transition stage to a solely prepositional identity" (p. 275).

Ansre (1966: 30) quotes Westermann (1930: 126f) as giving a list of words which Westermann claims are in the process of historical change from verbs into prepositions,
adverbs, and conjunctions.

7.3.4 Conclusion

It is apparent from the observations made by many different analysts regarding far-flung and unrelated languages which show similar types of lexical items and processes involved in the coverb phenomenon that such a phenomenon is not uncommon. Further, it is reasonable to hypothesize that Southeast Asian coverbs, like the coverbs of West Africa and China, represent a stage in the historical derivation of prepositions from verbs.

7.4 Conditions for the Derivation of P from V

Given the hypothesis that coverbs are a universal and orderly process in the derivation of preposition from verb, we might hope to be able to predict what kind of verb may be subject to this process. Li and Thompson (1973c: 9) state only that the "fluctuation between the verb and preposition forms is controlled by grammatical considerations...It is not quite so easy to determine which verbs at a given stage are eligible for the shift to V + P." They cite Talmy Givón (1974) as "offering significant discussions of semantic types of verbs which are most likely to undergo this process."

Lord (1973: 293) asks, "Why do certain verbs, like Locatives, undergo this change of grammatical category?" She suggests that a verb becomes a preposition when it
loses semantic dominance, which it does when it expresses such aspectual case relationships with another verb as location, means, manner, recipience, and benefit: "Because location is generally considered to be less significant than other aspects of events, in the serial construction the Locative verb phrase is not as important as the other verb phrase semantically (the meaning of the sentence is clear and the location phrase doesn't need to be fully verbal). Accordingly, it loses status syntactically; i.e., it loses its verb properties, remaining as a mere function word."

Even if one were to accept the undefined notion of "semantic dominance", that function words are "mere", and that perception of semantic significance is the cause rather than the result of syntactic difference, such an analysis ignores the semantic properties of the main verb. For example, the put in

(7.20) She put the book on the table.

has an inherent locative semantic property which requires it to have a LOCATIVE phrase in its case frame. That is, contrary to Lord's claim that the meaning of the sentence is clear without the location phrase, the sentence without the location phrase is, in the case of put, ungrammatical:

(7.21) * She put the book.

It seems necessary to go further than vague and subjective semantic criteria alone and determine what are the semantic-syntactic characteristics of verbs which
undergo the $V > P$ change.

First, it is true that every event has a presupposed location, and in this sense location is peripheral to the main event of a sentence and, theoretically, every verb can have a location phrase. This is what is called outer LOCATIVE (Fillmore 1968: 26 fn 34; Platt 1971: 30-33; Teng 1972: 60; also see Sec. 3.3.4.1 above for discussion of the distinction between inner and outer LOCATIVE).

However, locative verbs (verbs with an inherent semantic locative property) have inner LOCATIVE phrases and are here divided into AGENTIVE-LOCATIVE and OBJECTIVE-LOCATIVE verbs. Sec. 3.3.4.2 above discusses a similar distinction between DATIVE (inner) and BENEFACTIVE (outer). Verbs with an inherent semantic dative property are termed AGENTIVE-DATIVE verbs here. These verb classes are established on the bases of case frames for verbs and case relation and case form cooccurrences. (See Secs. 3.3.5.1, 3.3.5.2, and 3.3.5.4-6 for examples of these verbs in Vietnamese).

The claim is made here that only Locative verbs can become [+L] prepositions and that only Dative verbs can become [+D] prepositions.

Further, it is found in Vietnamese, Khmer, and Thai that verbs which have corresponding prepositions are only those Locative and Dative verbs whose LOCATIVE and DATIVE phrases, respectively, must occur in the AC case form, that is, without intervening P's. It will be recalled from Sec. 5.3.2, Case Frames for Locative Verbs, that those
OBJECTIVE-LOCATIVE verbs which have corresponding prepositions have in their case frames the features \([+_\text{AC}]+[+\text{LOC}])\) and \([-+_\text{L}]+[+\text{LOC}])\), stating that they cannot take a \([+_\text{L}]) case marker with their LOCATIVE nouns. For example, the verb \(\text{xu}òng\) in (7.22) cannot take a \(P\) in its LOCATIVE phrase; (7.23) is ungrammatical.

(7.22) \(\text{cô-} ã\text{y xu}òng \text{ nhà } \text{ bếp}\)  
\(\text{she go down house kitchen}\)  
\([+_\text{NM}] [+\text{V}] [+\text{AC}] [+\text{LOC}]\)  
'She went down to the kitchen.'

(7.23) \(\text{cô-} ã\text{y xu}òng \text{ v}ào \text{ nhà-}\text{bếp}\)  
\(\text{she go down into kitchen}\)  
\([+_\text{NM}] [+\text{V}] [+\text{L}] [+\text{AC}] [+\text{LOC}]\)  
'She went down into the kitchen.'

\(\text{xu}òng\) can itself occur as a \(P\), as in (7.24).

(7.24) \(\text{cô-} ã\text{y g}ồi \text{ đĩa xu}òng \text{ nhà-}\text{bếp}\)  
\(\text{she send plate down to kitchen}\)  
\([+_\text{NM}] [+\text{AGT}] [+\text{AC}] [+\text{P}] [+\text{L}] [+\text{AC}] [+\text{LOC}]\)  
'She sent a plate down to the kitchen.'

There are the same characteristics for the A-D verb \(\text{cho}\) 'give', which has a corresponding \(P\) \(\text{cho}\) 'to, for'. As a verb, \(\text{cho}\) must take its DATIVE phrase in the AC case form: (7.25) is grammatical, (7.26) is not.
(7.25) cô-áy  cho  nó  mét  câi
    she  give  3p  one  thing

\[
\begin{array}{cccc}
+NM & +V & +AC & +AC \\
+AGT & +dat & +OBJ & \\
\end{array}
\]

'She gave him one.'

(7.26) * cô-áy  cho  mét  câi  cho  nó
    she  give  one  thing  to  3p

\[
\begin{array}{cccc}
+NM & [+V] & +AC & +AC \\
+AGT & +OBJ & +P & +DAT \\
\end{array}
\]

'She gave one to him.'

Some speakers accept (7.26) if nó is [+BEN]; that is, 'She gave one (to somebody else) for him.' (7.27) shows cho as a P, with the DATIVE occurring either before or after the OBJECTIVE.

(7.27) a. cô-áy  gòi  cho  nó  mét  câi
    she  send  to  3p  one  thing

\[
\begin{array}{cccc}
+NM & +V & +P & +AC \\
+AGT & +dat & +OBJ & +DAT \\
\end{array}
\]

b. cô-áy  gòi  mét  câi  cho  nó
    'She sent him one.'

Thus, it appears that a verb which has an especially close semantic relation to a particular case can occur "directly"--i.e., without a P--with that particular case relation, and can have a corresponding P marking that particular case relation with another verb. This phenomenon is what is called here the Coverb Derivation Hypothesis and has been discussed at length in Sec. 5.3.
CHAPTER VIII
SUMMARY AND CONCLUSIONS

8.0 Objectives of Work

It was stated in the beginning section (Sec. 1.1) that the principal purposes of this study were to 1) describe and illustrate the behavior of coverbs in Vietnamese, 2) determine the syntactic function of coverbs and their role in the classification of verbs in Vietnamese, 3) determine how this function can be characterized in the grammar in a way that is both explicit and intuitively satisfying, 4) make introductory investigation into coverb phenomena in other Southeast Asian languages to find evidence to support the hypothesis that coverbs are a Southeast Asian areal phenomenon, and 5) give evidence to support the hypothesis that coverbs represent a stage in a verb-to-preposition historical change.

In the following sections, the major findings of the study are summarized.

8.1 Description of Vietnamese Coverbs

The description of coverbs shows in a general way how coverbs behave in simple sentences, that is, sentences with one verb.

With the exception of the [+D] coverb, all the Vietnamese coverbs discussed here function as [+L] case markers; of these, one marks Location and the others are
Goal directional markers, one of these being [+terminus]. The [+D] coverb marks DATIVE and BENEFAC TIVE case relations. All the [+L] coverbs mark LOCATIVE and the directional [+L] coverbs can also mark DATIVE and TIME. With certain verbs, some of the directional [+L] coverbs mark a case relation which, pending further investigation, is called OBJECTIVE.

It is also shown that the coverbs of direction can function as postverbal adverbs.

8.2 The Coverb as Preposition
8.2.1 In the Lexicon

It is claimed in this study that a coverb is a preposition--defined as the word that occurs in exocentric construction with a noun phrase, forming a prepositional phrase, and that marks the case form of the PP construction. Each P has features in its lexical entry which show the case form it marks and the case relation that occurs with it.

Coverbs constitute a special class of prepositions in that each has a corresponding homophonous and synonymous verb. It is claimed that this kind of preposition is related to its corresponding verb by a synchronic derivation rule which operates on certain features in the lexical entry of the verb. (These certain features are discussed further in Sec. 8.3 below.) Thus, each coverb has the additional feature [+DERV].
The solution proposed here works for the facts of the language and is consistent with the notions of case relation and case form, which are assumed to belong to a universal grammar. The fact that there is already in the language a class of synchronically underived prepositions whose case marking functions in the same way as the coverbs makes it natural for the coverbs to be members of the class of prepositions. The [+DERV] marking on each coverb states that the coverb is homophonous and synonymous with its corresponding verb and satisfies native intuition that the coverbs are closely related to the verbs.

8.2.2 In the Classification of Verbs

Verbs are classified according to their potential occurrence with various case relations. They are further subclassified by the case forms in which they take their respective case relations. As case markers, whose function is the realization of case relations, prepositions play a large role in the classification of verbs. The occurrence of the [+D] coverb and the [+L] coverb in the case frames of verbs makes it possible to distinguish three ditransitive classes, AGENTIVE-DATIVE (A-D) Goal, AGENTIVE-LOCATIVE (A-L) Goal, and A-L-Location, and one intransitive class, OBJECTIVE-LOCATIVE (O-L) Goal. The [+D] preposition (a coverb) and the Goal [+L] prepositions (also coverbs) can occur with A-D-Goal verbs; only [+L] P's can occur with A-L verbs. The Direction [+L] P's occur with O-L-Goal
verbs, although there is one subclass of 0-L-Goal verbs which may not occur with [+L] P's (see discussion below in Sec. 8.3).

Verbs are broadly classified by their ability to take BENEFACTIVE, which may be marked by the [+D] P. All verbs may occur with TIME, which may be marked by the Direction [+L] P's, and an outer Location LOCATIVE, which may be marked by the [+L,+lcn] P (a coverb).

The cooccurrences of coverbs and verb classes is shown in Chart VIII-1 below. Not included in the chart is the small class of verbs which can mark with Direction [+L] coverbs what is provisionally analyzed as OBJECTIVE case relation. (See examples in Secs. 3.2.2.4.3 and 3.2.2.4.4, and Chart VI-2 in Sec. 6.2.3.2.)

The verb classes are represented in a semantic feature tree (cf. Chart III-4 in Sec. 3.3.6) in full capital letters; semantic features are signified by lower case letters. Those case frames which are directly relevant to the coverbs discussed in this study are shown for the various verb classes. The case form features of the individual coverbs are given below the classes of the verbs with which the coverbs can occur and connected to the verb classes with dotted lines. Those coverbs which occur with the "outer" case relations---BENEFACTIVE, TIME, and outer LOCATIVE---are set at a lower level. No underived P's or their case forms are shown. One underived [+L] P---the [+L,+src,+extent] P---occurs with Goal verbs; it also
CHART VIII-1 Cooccurrences of Coverbs and Verb Classes
occurs marking TIME. The [+L,+src,-ext] P occurs with Locative Source verbs. There is one underived [+L,+lcn] P, and a [+B] P which marks BENEFACTIVE.

8.3 Lexicase and Coverbs

The lexicase grammar has been found to be a satisfactory framework within which to describe and explain coverbs in Vietnamese. The verbs and sentences fall naturally into classes which can be described by environments which are specified in terms of case relations and case forms. Lexical features make statements about lexical items, defining their class membership, and lexical rules make generalizations about classes of lexical items, providing explanatory adequacy in a straightforward way.

One of the principal strengths of the lexicase model is that it assumes a less abstract underlying structure. It brings the base structure as close as possible to the surface while still capturing crucial generalities of the syntactic structure. This provides not only a more straightforward and simpler grammar but a less powerful grammar than one which postulates underlying elements which necessitate different levels and transformational rules to bring the levels together. Being less powerful, it can make a stronger claim.

Another strength is the rigorous constraint that a rule not be allowed unless it operates on features that define a natural class. This is particularly relevant
to the problem of coverb derivation.

Given the analysis of coverbs as prepositions, the problem is how to relate them to their corresponding verbs. Ha (1970) considers the Direction coverbs (my [+L,+gol] coverbs) to be prepositions derived from verbs. Tran (1972) considers all the coverbs to be derived prepositions. Both Ha and Tran posit derivation rules which operate on ad hoc features of the verbs to derive the corresponding prepositions. Ha's feature to allow a verb to undergo the rule is [+co-prep]; Tran's is [+cvb]. Until recently, I took a similar approach but have now abandoned it because rules like Ha's and Tran's operate on features which are merely a notational equivalent for having a separate lexical entry. Such a rule gives only the appearance of capturing a generality if no independently motivated property of these verbs can be found to condition it.

If, however, these verbs share some intrinsic property which makes them a natural class, then it is valid to have a rule which operates on that intrinsic property. It has been found that there is such a property. Mentioned above in Sec. 8.2.2 is a subclass of O-L verbs which cannot take their LOCATIVES in the L case form. It happens that this very class corresponds to the class of [+L] coverbs, and the A-D verb which cannot take its DATIVE in the D case form corresponds to the [+D] coverb. Thus, a common feature defines these words as a natural
class and allows a derivation rule which relates them.

One significant way in which the grammar in this study differs from many other generative grammars (cf. especially Fillmore 1968 and 1971b) is that it posits P as a basic category. This eliminates the necessity of transformational rules to introduce P's into surface sentences. Perhaps more significant is the ability of the grammar to demonstrate the synchronic and historical relationships between V's and P's. A grammar which does not have P as a basic category cannot account for the facts of coverbs--their close relationship to their corresponding verbs and their probable historical derivation from verbs.

8.4 Coverbs in Southeast Asia

A limited investigation of Khmer and Thai has shown that these languages also have coverbs and that there are many similarities in the nature and behavior of coverbs in the three languages. A comparison shows that most of the verbs and prepositions share similar meanings, that, to some extent, the prepositions mark the same case relations, and that all but the Location coverb are directional in nature. It is interesting to note that only in Thai does the Source preposition still have a corresponding verb (although the verb occurs only rarely), so must be considered a coverb. There are some differences between the languages in restrictions of occurrences and
some apparent counterexamples in Khmer and Thai to the coverb derivation hypothesis in my solution for Vietnamese. Most of these counterexamples have been found to be consistent with the hypothesis, due to distinguishing sub-CF features in the coverbs concerned. A much more comprehensive investigation is needed to clarify remaining problems and bring out more facts.

Further investigation into historical data and language typology is needed before the hypotheses concerning areal spread and historical development can be fully substantiated. Already, however, evidence from other languages gives support to the hypothesis that coverbs are prepositions at a stage in the historical derivation of prepositions from verbs.

8.5 Problems for Further Investigation

There are some problems directly involving coverbs which have been only touched upon in this study and need much more investigation before a satisfactory analysis can be given. They include the following topics.

1. The derivational relationship between the verbs and prepositions and the use of these same words as adverbs modifying direction. (See Sec. 5.1.3 above.)

2. The nature and relationship of V and coverb cho when allowing following embedded verbs. The following sentences represent only two of several different structures.
chị-áy  cho  tôi  đi  chơi
she  give  I go  play
'She let me go play.'

họ  với  cho  nó  về (Liem 1969: 67)
they  wish  for  3p  happy
'They wish that he were cheerful.'

3. The case frame features of the P's which allow following embedded verbs (P^S in the PS rules), as in
tôi  nghĩ  đến  anh  trong  làm  việc  này
I  think  to  elder  Prog.  do  work  this
(reaching)  bro.
'I think about you doing this work.'  
(Thompson 1965a: 232)

4. The case relation of the nouns which occur with a
certain  set  of  verbs  which  require  Goal  [+L] case markers,  
as in the following sentences.  (Also see Secs. 3.2.2.4.3 
and 3.2.2.4.4 above.)
tôi  nhớ  đến  cô-áy  nhiều
I  remember  to  she  much
                              +NM       +L      +AC
[+DAT]  [+ter]  {?}       'I think about her a lot.'

Lan  bảo  tôi  về  việc  đó  rồi
tell  I  to?  matter  that  already
                              +NM       +AC       +L       +AC
[+AGT]  [+DAT]  [goi]  {?}       'Lan told me about that matter already.'

It  has  been  suggested  here  that  this  is  some  kind  of
OBJECTIVE.
5. The nature of \( \text{vè} \) in sentences such as the one above. Are \( \text{vè} \) 'back to' and \( \text{vè} \) 'concerning' two synchronically separate lexical entries, related by a historical derivation rule?

6. The nature of the V and P \( \text{theo} \) 'follow, following'. Is P \( \text{theo} \) a true coverb? What case form does it mark and what is the case relation of its cooccurring noun?

7. The relationship between the Source P \( \text{khoi} \) and the verb \( \text{khoi} \) 'avoid', which usually occurs with another verb, as in

\[
\text{anh khoi phai di} \quad \text{(Nguyen D-H 1966: 223)}
\]

elder avoid must go bro.

'You don't have to go.'

8. The classification of the words \( \text{xa} \) 'far' and \( \text{gan} \) 'near', whether they are stative verbs, locative nouns, prepositions, a combination. Could they be \([+1cn]\) coverbs? They have been tentatively analyzed in this study as OBJECTIVE-LOCATIVE-Location verbs (Sec. 3.3.5.6), which appear to be stative.

9. The status of LOCATIVE phrases in existential sentences; for example,

\[
\text{\"Saigon co nhieu xe-ho\"}
\]

in \quad have \quad much \quad automobile

'In Saigon there are lots of cars.'

There are, indeed, many questions involving LOCATIVE and the L case forms. What is the status and scope of abstract LOCATIVE? How general is \([+L]\)--i.e., how many
case forms should be subsumed under L as sub-CF's? If [+D] (in this study) is actually a Goal [+L] sub-CF, is it possible to say that all coverbs, wherever they are found in the world, are [+L] case markers?
APPENDIX

ABBREVIATIONS

<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
<th>Relevant Section</th>
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<tbody>
<tr>
<td>AC</td>
<td>Accusative</td>
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<tr>
<td>A-D</td>
<td>AGENITIVE-DATIVE</td>
<td>3.3.5.1</td>
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<tr>
<td>A-L</td>
<td>AGENITIVE-LOCATIVE</td>
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</tr>
<tr>
<td>Adv</td>
<td>Adverb</td>
<td>3.1, 5.1.3</td>
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<tr>
<td>AGT</td>
<td>AGENITIVE</td>
<td>3.2.1.1</td>
</tr>
<tr>
<td>B</td>
<td>The case form associated with BENEFACTIVE</td>
<td>3.2.2.7</td>
</tr>
<tr>
<td>BEN</td>
<td>BENEFACTIVE</td>
<td>3.2.1.7</td>
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<tr>
<td>C</td>
<td>The case form associated with COMITATIVE</td>
<td>3.2.2.6</td>
</tr>
<tr>
<td>CF</td>
<td>Case Form</td>
<td>2.1, 3.2.2</td>
</tr>
<tr>
<td>CR</td>
<td>Case Relation</td>
<td>2.1, 3.2.1</td>
</tr>
<tr>
<td>Cl</td>
<td>Classifier</td>
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<tr>
<td>COM</td>
<td>COMITATIVE</td>
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<td>Cvb</td>
<td>Coverb</td>
<td>4.1, 4.2, 5.1.1, 5.3, 5.4, 6.2.3.1, 7.1</td>
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<tr>
<td>D</td>
<td>The case form associated with DATIVE</td>
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<tr>
<td>DR</td>
<td>(Lexical) Derivation Rule</td>
<td>2.2.2, 2.2.3</td>
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<tr>
<td>CDR: Coverb Derivation Rule</td>
<td>5.3.3</td>
<td></td>
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<td>DAT</td>
<td>DATIVE</td>
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<td>Det</td>
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<td>dir</td>
<td>Direction</td>
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<td>ext</td>
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<td>FP</td>
<td>Final Particle</td>
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<tr>
<td>gol</td>
<td>Goal</td>
<td>3.2.2.4.3, 3.3.3, 3.3.4.1</td>
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</table>
I The case form associated with INSTRUMENTAL 3.2.2.5
INS INSTRUMENTAL 3.2.1.5
L The case form associated with LOCATIVE 3.2.2.4
lcn Location 3.2.2.4.1, 3.3.4.1
LOC LOCATIVE 3.2.1.4, 3.3.4.1
loc Locative 3.2.1.0, 3.3.3, 3.3.4.1
N Noun 3.1
NM Nominative 3.2.2.1
NP Noun Phrase 3.1
Nr (Locative) Relator Noun 3.2.3
Nu Numeral 3.1
OBJ OBJECTIVE 3.2.1.2
P Preposition/Postposition 3.1, 3.2.2.0, 5.3.1, 5.3.3, 7.1
In the languages discussed in this study, Vietnamese, Khmer, Thai, and Chinese, all P's are prepositions.
PP Prepositional/Postpositional Phrase 3.1
PS Phrase Structure 3.1
Pl Plural 3.1
poss Possessive 3.3.5.1.2
Qu Quantifier 3.1
RR (Lexical) Redundancy Rule 2.2.2; e.g.: 3.3.2, 3.3.4.1
Rel Relative Pronoun 3.1
+rel +relation 3.2.3
S Sentence 3.1
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<td>(Lexical) Subcategorization Rule</td>
<td>2.2.2; e.g.: 3.3.4.1</td>
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<td>src</td>
<td>Source</td>
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<td>sub-CF</td>
<td>Sub-Case Form</td>
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<td>V</td>
<td>Verb</td>
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