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SYNTACTIC DERIVATION OF TAGALOG VERBS

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 DECEMBER 1976

By
Videa P. De Guzman

Dissertation Committee:
Stanley Starosta, Chairman
Howard P. McKaughan
George W. Grace
Byron W. Bender
Ruth Crymes
ABSTRACT

This study investigates the intricacies of Tagalog verb formation. In particular, it attempts to clarify the distinction between verbal inflection versus derivation and to identify their corresponding inflectional and derivational affixes. Relative to these distinctions, it explores the various syntactic relations existing between verb stems and other verb stems or noun and adjective roots, which relations explain systematically the affix layering in derived verb stems.

The analysis is based on the lexicase grammar framework which marks lexical items with various kinds of features. Verbs are marked with a complex of syntactic (case), semantic and morphological features each of which serves to subcategorize the verbs. The contextual or case features of Tagalog verbs expressed in terms of case relations and their corresponding case forms are described in Chapter II. Chapter III presents the subcategorization of verb stems according to these three general sets of features which in turn serve to identify the verb's voice inflectional paradigm and the corresponding voice affixes that mark the verb stem class.

To distinguish inflection from derivation, the approach employed in the classification of verbs deviates from the traditional root classification. Instead, verb stems, which may be a root or an affixed stem, are subcategorized. By this system of classification, the contrast between voice inflectional affixes and derivational affixes is clearly brought out. Inflection is defined as a modification in the phonological representation of a lexical entry which corresponds to the choice of a particular inflectional feature. An inflectional feature which can
be freely varied within a single lexical entry characterizes all members of a given lexical category. As discussed in Chapter III, Tagalog verbs are characterized by voice and aspect inflectional features. On the other hand, derivation is the process of creating a lexical entry in accordance with a systematic analogy with a lexical entry in another syntactic category or subcategory. Whereas an inflectional feature is always present in a given lexical category, a derivational feature is not. Every derived lexical entry is subject to the inflection of its new category.

A crucial factor in determining the verb's inflectional affixes is the inflectional feature voice. This feature indicates which of the verb's cooccurring case relations is realized in the nominative case form, [+NM], or is the grammatical subject of the sentence. The voice inflectional affixes established in this study, in contrast with those in previous works on Tagalog, are few and simple. They are the active affixes um- and m-, the passive affixes -in, -an and i-, and a zero, \( \emptyset \), affix manifested by certain classes of verb stems. All other verbal affixes that remain after stripping off the voice (and aspect) affix such as pag-, pang-, ka-, ma-, maka-, pa-, paki-, etc. are derivational.

The distinction between inflection and derivation becomes more apparent when the relations between verb stems are accounted for. This is shown in Chapter IV. This study is limited to those derived verb stems which are syntactically derived. When a syntactic feature, particularly a case feature, is modified in the process of derivation, then it is called a syntactic derivation. In contrast, if the syntactic features of the related forms are identical and the only difference lies
in the introduction of a new semantic feature in the derived form, then it is a semantic derivation.

Chapter IV gives the different types of syntactic verb derivation rules. Of primary relevance to the questions on inflection and derivation as well as to affix layering are those rules that change verb subcategories. These rules are further classified into DR's that change morphological features and those that change case relation features. The latter type accounts for verbs where 1) a former case relation is deleted, 2) a CR is incorporated, 3) a CR is added without changing CR of source, and 4) a CR is added with a change in CR of source. By means of these DR's, verb stems manifesting a complex of derivational affixes are accounted for by a series of derivation and rederivation which explains systematically the hierarchical layering of derivational affixes. This has been clearly illustrated particularly by the causativization, activization and socialization rules. Without the use of DR's applying to verb stems as formulated here, any account for the occurrence of such complex verb stems can only result in a description of the 'complex' affix forms attached to the root and never in an explanation of the syntactic, semantic and morphological relationships existing between pairs of related lexical entries.
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CHAPTER I
INTRODUCTION

1.1 Aim and Scope

This study investigates the intriguing problem of Tagalog verb formation. Although there have been a significant number of works written on Tagalog verbs and on verbs in other Philippine languages, the relevant questions pertaining to their inflection and derivation are far from settled. There is no consistent agreement as to what the categories of inflection are and how they are distinguished from derivation. Neither is there a clear and concise description of the relations existing between verb stems manifesting identical roots, particularly in regard to their syntactic relations. It is the purpose of this study to distinguish the two morphological processes of inflection and derivation as they operate in Tagalog verb formation. By identifying the inflectional features and the corresponding affixes which a verb stem type takes and showing the various kinds of verb stems which can be created by derivation, we can account systematically for the elaborate affixation of verbs and at the same time identify the lexical relations obtaining between lexical items.

To fulfill this goal, the analysis explores and makes use of the interrelated syntactic, semantic and morphological features of the verb which serve to subcategorize the verbs. Syntactic features refer to the cooccurring nominal expressions which bear specified case relations to the verb and which are manifested in specified case forms. Semantic features are unifying properties of meaning of classes of verbs which have corresponding syntactic and/or morphological consequences. Lastly,
morphological features identified here are abbreviatory features that serve to identify verb stem classes according to their morphological structure which is in turn related to their voice paradigms and the particular voice affixes that mark them.

The verbs analyzed here are morphologically simple verbs, that is, there is only one instance of a root in every form. They may be labelled in general terms as state verbs and non-state verbs. Verbs with compound or phrase bases have been excluded from the analysis.

The study includes the following topics:

(a) Chapter II describes the case relations and case forms in Tagalog. It deals with the case features of nominal expressions which cooccur with verbs. These features are central to the analysis of verbs. They are the identifying contextual features of verbs which serve as one way of subcategorizing verbs. They also play a significant role in stating relations between classes of lexical items expressed in the form of general derivational rules. Chapter II also includes a skeletal framework of the phrase-structure rules for Tagalog.

(b) Chapter III presents the major subcategorization of verb stems according to their syntactic and semantic features cross-classified by the verb stems' morphological-voice features. It is prefaced by a discussion of the distinction between inflection and derivation and an account of Tagalog verbal inflection.

(c) Chapter IV describes the syntactic derivational processes involved in the various stem forms including those subcategorized in the preceding chapter. A syntactic derivation involves a syntactic change either in lexical category feature or in case frame subcategory and/or morphological-voice related features.
1.2 The Lexicase Framework

The theoretical framework adopted in this study is called 'lexicase'. It has been developed by Stanley Starosta and some of his students and colleagues at the University of Hawaii in several articles and dissertations. (See Bibliography.) It was first applied to the analysis of Japanese by Harvey Taylor (1971), and then to Rukai by Paul Li (1973), to Thai by Pranee Kullavanijaya (1974), to Kusaeian by Keedong Lee (1974), to Vietnamese by Marybeth Clark (1975), and to Melayu Betawi by Kay Ikranagara (1975). In all these works, the lexicase model has been shown to be a workable grammatical framework with much promise.

A lexicase grammar is a generative syntactic model which consists of a set of phrase structure rules (PSR), a lexicon and a phonological component. The context-free phrase structure rules generate labelled trees indicating hierarchical and attributional relations between sentence constituents. They refer only to categories that dominate single surface structure constituents whose members are surface words and not morphemes or formatives. Unlike in the Aspects (Chomsky, 1965) model, the category nodes here do not develop into complex symbols. Instead, lexical items from the lexicon are inserted freely under the corresponding category symbols.²

The lexicon consists of three types of lexical rules and a list of lexical entries representing roots and stems. Each entry has a phonological representation and a corresponding matrix of features which are not assignable by subcategorization rules nor predictable by redundancy rules. A lexical entry represents one or more fully
specified lexical items based on the applicable lexical rules. The significant features included in each lexical item are: a) lexical category features such as [+N] for noun, [+V] for verb, [+Adj] for adjective; b) case features of case relations such as [+OBJ] for objective, [+AGT] for agentive, and case forms such as [+NM] for nominative, [+AC] for accusative, [+B] for benefactive; c) contextual or case frame features (particularly for verbs) such as [+OBJ] for cooccurring with an objective case relation, [-[-AC, +INS]] for cooccurring with an instrumental case relation expressed only in the accusative case form; d) semantic features associated with either syntactic or morphological consequences, e.g., [+caus] for causative, [+dir] for direction, [+af] for affected; e) morphological features on verbs associated with constraints on voice inflection such as [+erg] for ergative, [-pot, +act] for non-potential, active; and f) other idiosyncratic features, including a dictionary meaning or definition.

There are three types of lexical rules that apply to each entry where appropriate. They are called subcategorization rules (SR), redundancy rules (RR), and derivation rules (DR). As the name implies, subcategorization rules identify the subcategories of the lexical categories. They are characterized by the symbol '+-' before a specific feature in the output of the rule. The symbol is read 'either plus or minus' which means that one subcategory marked with a '+' indicates having the specified feature and another subcategory marked with a '-' is marked negatively for the feature. For example:

SR:  [+V] → [+pot]
The rule states that the lexical category V, for verbs, is subcategorized into those that are specified as potential, [+pot], and those that are non-potential, [-pot]. Each of these subcategories may still be further subcategorized according to certain other related features. At the same time, V's may also be subcategorized on the basis of a different relevant feature. For example, [+V] → [+ [+AGT]] shows a subcategorization based on a contextual feature. A verb is either positively marked for cooccurring with an agent actant, [+AGT], or negatively marked, [-AGT], to mean the verb does not cooccur with this particular actant.

Redundancy rules, on the other hand, add or predict certain features on the basis of another specified feature. The predictable feature in the output is marked with either a '+' or a '-' symbol before it. For example, a redundancy rule which applies to verbs marked with the feature [+strict] acquires the feature [+LOC] as stated as follows:

RR: [+V [+strict]] → [+LOC]

This means that all verbs marked [+strict] are also marked with the feature which is on the right hand side of the rule. In this case, the added feature means that a [+LOC] actant must overtly cooccur with the verb.

The third set of rules known as derivation rules is of a different kind. They relate lexical items to other lexical items or a lexical class to another lexical class. By means of these rules, new lexical entries are created from already existing ones. The new item is marked with the feature [+Derv] to indicate that it is derived and that a
derivation rule accounts for its general feature specifications which are features carried over from the source item or introduced by the rule. These rules formally and historically relate lexical classes. For example:

\[
\text{DR: } \begin{bmatrix} +V \\ -[+\text{AGT}] \\ -[+\text{DAT}] \\ [+\text{INS}] \end{bmatrix} \rightarrow \begin{bmatrix} +V \\ [+\text{Derv}] \\ [+\text{AGT}] \\ -[+\text{DAT}] \\ [+\text{OBJ}] \end{bmatrix}
\]

The above rule, stated generally, says that a verb with cooccurring agentive and objective actants may be derived from verbs that allow only an objective actant. In common traditional terms, a transitive verb may be derived from an intransitive verb, as may be illustrated by the verb ta?ob 'turn over' and the derived verb ta?ob 'turn something over'. From the rule, it will be observed that the primary change in the matrix of features of the output is the introduction of an agentive actant while the [+OBJ] remains unaltered. This syntactic change has a morphological consequence in terms of the range of the verb's voice paradigm and its corresponding voice affixes. Whereas the intransitive verb is realized with the active voice affix um-, the derived transitive takes the affix i-, giving the forms tuma?ob and ita?ob, respectively, in their objective voice inflected non-finite forms.

All three rules capture linguistically significant generalizations pertaining to lexical categories or subcategories. By employing these rules, all morphological processes, particularly derivation and inflection, are treated in the lexicon. As they apply to each individual lexical entry, the corresponding lexical item or items become fully specified qualifying them ready for lexical insertion at the terminal
nodes of the trees generated by the phrase structure rules. After lexical insertion, the resulting string is a fully specified syntactic representation.

The third component of the grammar, the phonological component, operates on the syntactic representations giving them the necessary full phonological representation. It may be stressed that since the lexical items in the string are each expressed in phonological representations--some phonological changes being handled in the lexicon by morphophonemic rules corresponding to derivation and inflection rules--this component operates only across word boundaries but within the bounds of the sentence. Any syntactic representation then may be considered virtually as a phonological representation. As a general rule, each syntactic representation which has met all the syntactic cooccurrence conditions is a grammatical or well-formed sentence.

The attached diagram, Figure 1 (adapted from Taylor, 1971:10), shows the interrelationships of the components of a lexicase grammar. Note that semantic interpretation lies outside the boundary of the model. It restates or reinterprets all the semantic information provided by the content of lexical items and the relations between them in a given syntactic representation in the light of a particular context of situation (COS). But the context of situation is likewise outside the realm of this grammar. In other words, the 'intrinsic' semantic representations of the string generated by the grammar is what is contained in the syntactic representations. The semantic representations derived by the semantic interpretation component (SIC) in which some extra-linguistic information has interacted with the supposed
rules operating on the input from the grammar are conceivably matters of performance. On the basis of such interaction between these two components, a sentence may be judged acceptable or not. Take as an illustration the following English nursery rhyme:

1. Hey, diddle-diddle,
The cat and the fiddle,
The cow jumped over the moon,
The little dog laughed to see such sport,
And the dish ran away with the spoon.

Leaving out the phonological component, the sentence represents a perfectly grammatical structure which means just what it says. However, this sentence, given its semantic interpretation from the input of the grammar and the COS, can only be acceptable in an imagined world. This situation could not constrain the grammar from generating well-formed sentences such 1. It is not at all unreasonable or inconceivable to think of a competence grammar as generating grammatical sentences regardless of whether they match with a real or an imagined context.
Figure 1. Components of a lexicase model and its relationship to semantic interpretation (Adapted from Taylor, 1971: 10)
1.3 Similarities and Differences Between Lexicase and Some Other Generative Grammars

The lexicase model as a form of generative grammar is more narrowly restricted compared with the enormously powerful transformational types of generative grammars. Bordering between Chomsky's model in *Aspects* 1965 and Fillmore's case grammar of 1968, lexicase is similar to these two grammars in certain characteristic ways but is, at the same time, different in other significant respects.

1.3.1 Chomsky 1965

The two syntactic-related components shared by lexicase with Chomsky 1965 are the Phrase Structure Rules and the Lexicon. Lexicase PSR's, however, are different in that they use only category symbols that dominate individual lexical items or constituent symbols which are also composed of category symbols dominating lexical items, e.g., V, NP, PP, N, Adv, etc. They exclude Chomsky's grammatical categories or items which have only relational or semantic content such as Place, Manner, Direction, Predicate-Nominal, Tense, etc. By using the latter symbols, we go against the essential function of PSR's which is to identify constituency. For instance, the PSR which rewrites:

"(v) Prep-Phrase $\rightarrow$ Direction, Duration, Place, Frequency, etc." (Chomsky, 1965:107) gives no information as to the constituent structure of the symbol identified on the left side of the arrow. Furthermore, it is unclear how the categories listed to the right of the arrow are to be matched by appropriate lexical items. It is rather unlikely that these categories refer to lexical categories if they are manifested by adverbs or nouns occurring as object of the preposition. In a strict sense, then, lexicase PSR's represent a more realistic and consistent way of expressing
constituency.

Lexicase handles Chomsky's categories such as Tense, Aspect, IMP, NEG, or Q as features of lexical categories and as such they are treated in the lexicon before lexical insertion occurs. These features appear as inherent or contextual features which are assigned either by SR's or RR's. In the manner of Chomsky's alternative proposal, lexicase eliminates the subcategorization rules from the component containing the PSR's and assigns them to the lexicon (Chomsky, 1965:120). The grammatical properties expressed as features affect the form of the lexical items and all these corresponding changes in morphological forms take place in the lexicon which stores all existing, and defines possible, lexical items in the language. Thus, the base component or what is referred to here as the set of PSR's is no longer encumbered with grammatical formatives and complex symbols.

Chomsky 1965 has a separate semantic component which determines the semantic interpretation of a sentence. The semantic features introduced in the lexicon are again introduced in the semantic component. Lexicase, which does not have a semantic component as part of the grammar, makes use of semantic features in the lexicon, and other grammatical features specified in the terminal string to give the output sentence its semantic interpretation. In effect, the syntactic representations, or, if we want to go further, the phonological representations are themselves the semantic representations. However, a semantic interpretation component which lies outside the realm of the lexicase model may operate on the phonological representations as input with the context of situation also contributing to the assignment of possible semantic
interpretations.

One other significant difference between lexicase and Chomsky 1965 is the exclusion of transformational rules in the former model. Positing a deep structure level and a surface structure one in Chomsky 1965 necessitates this type of rules to relate them. Lexicase does not recognize the existence of a deep structure which supposedly determines the semantic interpretation of a sentence. It considers just one level of structure. Every sentence is specified with syntactic and semantic features, and if there happen to be two identical strings which by Chomsky's analysis are considered ambiguous, these two are shown to be different sentences as given by their different syntactic representations. For example:

2. ibibili niya ito ng damit
   buy he this dress

```
S
   /\  
  /   \  
V NP   NP
     /\  
    /   \  
   N N Det N
 ibibili niya ito ng damit
buy he this dress
```

The same string can have the following sets of features which differentiate two syntactic representations, hence, two different sentences:

2.a. ibibili niya ito ng damit
   [+V] [+N] [+N] [+Det] [+N]
   [-[-AC, +AGT]] +pro +pro [+AC] [+AC]
   [-[-AC, +OBJ]] +AC +NM [+OBJ] +OBJ
   [-[+NM, -BEN]] +AGT +BEN

'He will buy a dress for this one.'
Similarly, the argument that two sentences may be related only by transformation, e.g., active and passive sentences, in that one is derivable from the other is not thoroughly convincing (Freidin, 1975). Lexicase can capture the relationship between two constructions not necessarily by showing that they have the same deep structure but again by referring to the features of the lexical items, particularly to their case features. For example:

3.a. S
   V
   NP
   Det N
   magluluto? cook
   [+V] [+N]
   [-[AC, +AGT]] [+pro] [+pro] [+Det] [+AC] [+N]
   [-[AC, +OBJ]] [+AC] [+NM] [+AC] [+OBJ]

'The maiden will cook chicken.'

3.b. S
   V
   NP
   Det N
   iluluto? cook
   [+V]
   [-[AC, +AGT]] [+pro]
   [-[AC, +OBJ]] [+AC]
   [-[+NM, -INS]] [+AGT] [+INS]

'The chicken will be cooked by the maiden.'
The two sentences above are related since they are made up of identical trees and partially identical lexical contentives. The first N, *dalaga* 'maiden', is marked in both sentences as having the agentive case relation to the verbs *magluluto?* and *iluluto?*. Similarly, the second N, *manok* 'chicken', has the objective case relation in both sentences. The difference, however, is in the case form in which each of the two N's is manifested in each sentence. In 3.a, the [+AGT] actant is realized in the nominative, [+NM], and the [+OBJ] in the accusative, [+AC], whereas in 3.b, the [+AGT] is in the accusative and the [+OBJ] in the nominative. Corresponding to the selection of which case relation is realized in the nominative or as the grammatical subject of the sentence is the difference in morphological form in terms of stem structure and affix of the cooccurring verbs. These two verb forms are considered separate but related lexical items by virtue of derivation. Both share the same root *luto?* 'cook' and the relation is formally statable in the form of the following derivation rule:

\[
\text{DR:} \quad [- \text{pot}, +\text{act}] \\
\text{MR:} \quad \sqrt{[+\text{AGT}]} \rightarrow \sqrt{[+\text{NM}]}
\]

The derivation rule states that a verb with cooccurring [+AGT] and [+OBJ] marked with the feature [+erg] can create a verb with the same case relations but marked with the features [-pot, +act]. By a redundancy rule, a verb marked [+erg] is restricted from cooccurring with a nominative agentive actant but it allows a nominative objective. On the other
hand, a redundancy rule allows just the opposite cooccurrence restriction when the verb has the features \([-\text{pot}, +\text{act}]\). The derived verb acquires all other features specified as \(\alpha F_i\) from its source. It undergoes a morphophonemic change as stated by the accompanying morphophonemic rule (MR) which prefixes it with \(\text{pag}\). The associated voice affix of the source is \(\text{i-}\) and that of the derived one is \(\text{m-}\). Thus, the verbs of sentences 3.a and 3.b, which may be labelled active and passive, respectively, are related via a verb derivation rule.

Lexicase grammar, then, is able to account for facts about structural and lexical relations at least as adequately as, if not more than, that of a transformational grammar of the Chomsky 1965 version. It can do this task without positing a deep structure level and, hence, using no powerful transformational rules. It eliminates certain redundancies such as requiring complex symbols in the base as well as in the lexicon and semantic features in both the lexicon and the semantic component, by incorporating subcategorization rules in the lexicon and by defining a grammar without a separate semantic component. The PSR component of the lexicase grammar is simplified by relegating morphological processes to the lexicon. And, most importantly, lexicase uses derivation rules, a much more narrowly restricted type of rules than transformational rules, to relate lexical items or classes of lexical items and to show in some cases syntactic relations as well.

These characteristics of the lexicase model are not shared either by Fillmore's case grammar nor by the generative semanticists' grammar. The following comparisons treat the specific points with which lexicase differs from these two other grammars.
1.3.2 Fillmore's Case Grammar (1968; 1971)

The use of case relations in lexicase is attributable to Fillmore's (1968) revival of the notion of case and description of its place in a transformational grammar. It will be recalled that in the grammar he proposes, he incorporates case relations as categories dominating NP's in the base component. By applying transformational rules such as nominative marking, accusative marking and preposition selection, the deep case relations are mapped onto surface structures. Later, Fillmore concedes (1971) that his use of labelled nodes for case dominating NP's or S is problematic. He recognizes that cases are clearly not categories, but, so far, he has not found an acceptable notation which can handle them with fewer complications.

The solution which lexicase adopts for this perplexing problem is to mark case as features on lexical items. As features on lexical items, case includes both case relations and case forms. Both of these features are drawn from a limited set of relations and forms posited for all languages. Case forms other than Fillmore's nominative and accusative have been introduced by lexicase, e.g., [+L] for locative, [+B] for benefactive, [+C] for comitative, etc. (see others in Taylor, 1971; Li, 1973; Kullavanijaya, 1974). It may be pointed out that lexicase considers it important not only to determine the ways in which case relations are realized but also to explain why certain sets of case relations tend to be manifested in one single form. Starosta (1973b) observes that in a variety of languages, certain groups of case relations take identical case forms. This type of information can possibly be useful in explaining historical change, in making typological classification and in postulating some universal characteristics in language. He presents several
justifications for the value of positing not only universal case relations but case forms as well.

1.3.3 Generative Semantics (Lakoff, 1971; McCawley, 1968 and 1972)

Compared with the stream of transformational grammar known as generative semantics, lexicase shares many fewer features than what it does with the two generative grammars discussed above. In its claim that "semantic representations and syntactic phrase-makers are formal objects of the same kind" (Lakoff, 1971:269), generative semantics states semantic representations of sentences and lexical items in terms of atomic predicates. From McCawley's classic example (1968:73; 1972:60) John killed Harry, the semantic representations are as follows:

$$
\begin{array}{c}
\text{(a)} \\
\text{S} \\
\text{V} \quad \text{NP} \quad \text{NP} \\
\text{CAUSE} \quad \text{John} \quad \text{S} \\
\text{V} \quad \text{NP} \\
\text{BECOME} \quad \text{S} \\
\text{V} \quad \text{NP} \\
\text{NOT} \quad \text{S} \\
\text{V} \quad \text{NP} \\
\text{ALIVE} \quad \text{Harry}
\end{array}
$$

By the application of the predicate-raising rule, the predicate from the innermost node combines with that of the next higher node in each cycle until it reaches the topmost predicate giving the output:
With this derived verb construct, the lexical item *kill* can now be inserted.

One basic difference pointed out by Starosta between the two systems is that features in lexicase are unordered bundles, while atomic predicates are arranged hierarchically. This suggests that lexicase makes the claim that "it is impossible for two lexical items to differ solely in the ordering of features or in the iteration of a single feature" (Starosta, forthcoming, p.184), and since any necessary constraints on feature domination are part of the basic definition of features, the simpler feature system is preferable.

Finally, the semantic structure of generative semantics is so abstract there are only two terminal node labels, namely, predicates and indices. The differences among N,V, Adj, P and Conj do not exist; they all correspond to the single semantic category identified as predicate. It seems that what is emphasized by this categorization are only the feature similarities shared by the various lexical categories which features can be expressed in the matrices of lexical items. As a consequence, the transformational rules and derivational constraints that relate the deep semantic structure to surface structure have been
invested with more and more power, until they can do practically anything. This is rather unfortunate because the extremely powerful rules can in principle accommodate any form of deep structure, thus emptying the theory of any claim about the nature of language in general.

In all these contrasts between lexicase and the other generative grammars, the significant points of differences are as follows:

(a) it has a single level of structure that is simultaneously the syntactic and semantic representations;

(b) it makes use of features on lexical items which provide syntactic, semantic and phonological information; and

(c) it uses derivation rules, which rely heavily on features, to state significant generalizations about syntactic and lexical relations.

Under these stringent conditions imposed by lexicase, this study attempts to show lexicase to be a viable and promising framework for the description of another natural language. It is believed that if a less powerful framework can account adequately for a broad range of linguistic facts, it is to be preferred in that it provides a narrower characterization of the nature of language.
Footnotes to Chapter I

1 The term state is equivalent to Lakoff's stative (or non-activity) verbs (1970:121) and not to Chafe's state verbs (1970:98-99), which are identified here as adjectives.

2 The same principle is used by Jackendoff in his model (1972:21-22).

3 The phonological component is beyond the scope of this study, hence, the representations given here are the phonological representations of individual lexical items.

4 To interpret a double negative marking on contextual features, see Chapter II, p. 30.
CHAPTER II

CASE RELATIONS AND CASE FORMS IN TAGALOG

2.1 Case

One of the fundamental notions in a lexicase grammar is case as an inherent feature of lexical items. As Blake points out, case is commonly understood in a limited sense as referring "to form and has to do with meaning only insofar as that is denoted by the form" (1930:34). He clarifies the meaning of the term by distinguishing between case (called case relation, CR, in this study) as the semantic relationship a nominal expression holds with its cooccurring predicate, and case form (CF here) as the realization or manifestation of the case. Depending on the language, various devices are used to express case relations. It may be through affixation or suppletion of nouns or pronouns, use of particles or prepositions/postpositions, constraints on word order, or verbal affixation (Fillmore, 1968:21, 32). Thus, a case relation always has an associated case form marked by the particular mechanism the language adopts. This being the system, it is possible for a CR to be realized in more than one CF, and for a CF to represent a neutralization of more than one CR. For instance, German has various case forms which manifest a noun perceived as having an objective case relation with its cooccurring verb such as shown in the following sentences (Kufner, 1962:43) which have been marked here with case features:

1.a. ich sehe den Mann
'I see the man.'
1.b. ich helfe dem Mann
I help man
[+D(ative)]
[+OBJ]

'I help the man.'

1.c. ich gedenke des Mannes
I remember man
[+G(enitive)]
[+OBJ]

'I remember the man.'

The noun marked with the feature [+OBJ] means that it has an objective case relation with its verb. In 1.a, this noun is realized in the accusative case form [+AC], in 1.b, in the dative case form [+D], and in 1.c, in the genitive case form [+G]. In contrast, to show one CF manifesting different CR's we can cite the following familiar examples in English (Fillmore, 1968:27):

2.a. The door opened.
[+NM (nominative)]
[+OBJ]

2.b. John opened the door.
[+NM
[+AGT (agentive)]

2.c. The wind opened the door.
[+NM
[+INS (instrumental)]

The nominative case form [+NM] in the above sentences realizes an objective [+OBJ], an agentive [+AGT], and an instrumental [+INS] case relation. This form is identified by its occurrence before and agreement with the finite verb. From the two sets of examples above, it will be observed that a case form does not only realize CR's. It also characterizes the grammatical function of a given CR in the
sentence. Thus, for the first set, the designated CF's show different functions of a noun which has an objective case relation to the verb while that of the second set shows that each noun specified with a different case relation is the subject of the sentence, as indicated by \([+\text{NM}].\)

Following Blake's and Fillmore's assumption that case relations are basic to the structure of sentences in any language, this study analyzes the case relations and case forms in Tagalog which cooccur with verbs. In this connection, another assumption held in this study is that the verb has both inherent contextual (case frame) and semantic features. As Chafe asserts, "the nature of the verb determines what the rest of the sentence will be like; in particular...what nouns will be semantically specified" (Chafe, 1970:97). This characteristic of verbs suggests that they can be subcategorized according to these cooccurring case relations and case forms which comprise what is called the verb's case frame. It will be recalled that lexicase, unlike Fillmore's case grammar, does not have a deep structure wherein the case relations are generated. Since there is only a single level of structure in lexicase, both features are marked in that level. They are assigned to lexical items, in general, by redundancy and subcategorization rules. Otherwise, they appear as idiosyncratic features of certain lexical items. The difference in formulation of the case frame features between lexicase and Fillmore's case grammar may be illustrated by the following examples:

3.a. Fillmore

\[
\text{open} \\
[+_[_ 0(I)(A)]]
\]
3.b. Lexicase

\[
\begin{align*}
\text{open}_1 & \quad \text{open}_2 & \quad \text{open}_3 \\
[-[+\text{INS}]] & \quad [+\text{Deriv}] & \quad [+\text{Deriv}] \\
[+[+\text{OBJ}]] & \quad [+\text{AGT}] & \quad [-[+\text{AGT}]] \\
[+\text{OBJ}] & \quad [+\text{INS}] & \quad [+\text{INS}] \\
[+\text{OBJ}] & \quad [-[+\text{NM}, -\text{INS}]] & \quad \\

\end{align*}
\]

The latter formulation has the following advantages:

(a) By registering each contextual feature separately, we can manipulate one independently of the others such that a rule, for instance, may state a generalization that refers only to the case form of the [+INS] when cooccurring with a [+AGT] without referring to other CF's or CR's that cooccur.

(b) Rules predicting the occurrence of one case feature based on the presence of another can be easily formulated, thus, simplifying the specifications in the entry.

(c) By using the notation of the form [+[+OBJ]] to denote either [+[+OBJ]\_\_] or [+\_\_+OBJ]], we can formulate universal rules of case cooccurrences without reference to word order which can be handled by language-specific redundancy rules.

(d) The use of parentheses means only optional overt manifestation, hence, a [+INS] may or may not be present only with open_2 under 3.b. No [+INS] cooccurs with open_1, but it must be the subject in open_3 where there is no cooccurring [+AGT]. By Fillmore's notation, both instrumental and agent actants are shown to be optional.

(e) Finally, especially for stating lexical relations in terms of DR's, this type of configuration shows precisely the features that carry over, those that get altered, and those that are introduced.
2.2 Case in Tagalog

Working on Fillmore's hypothesis that there exists a finite and universal set of case relations and on Starosta's claim to a corresponding universal set of case forms and, consequently, to the necessity of accounting for the system of case expression to achieve explanatory adequacy (Starosta, 1973b), we will identify the case relations which Tagalog distinguishes and, concomitantly, the system it adopts in expressing them. The CR's and CF's identified will be used for marking N's, Det's and P's.

Tagalog, like other Philippine and some other Austronesian languages, has an interesting, although seemingly peculiar, way of expressing case in both verbs and cooccurring nouns. This characteristic is not at all a new observation in Philippine linguistics. As early as 1906, Blake had described this phenomenon in his article 'Expression of Case by the Verb in Tagalog.' His account centers on the case-indicating function of the verbal affixes which he identifies as voice. The active voice, he says, denotes the case of the agent and the passive expresses not only the accusative, but also the dative, instrumental, locative, and ablative, with the noun whose case is to be indicated being made the subject of the passive verb (Blake, 1906:183-4). One important fact he recognizes is that "sometimes two forms are used to express what is ordinarily considered one case, sometimes one form expresses two or more cases" (1906:188). For example:

4.a. lulu'tu?in niya ang manok
cook he chicken
[+AC ] [+NM ]
[+AGT ] [+OBJ ]

'He will cook the chicken.'
4.b. ilulutu? niya ang manok

'He will cook the chicken.'

5.a. bubuksan ng diyanitor ang kandado

'The janitor will open the lock.'

5.b. itata?ob niya ang bangka?

'He will turn over the boat.'

5.c. tatabasin niya ang tela

'She will cut out the cloth.'

In sentences 4.a and 4.b, the verb stem luto? can be marked with either the affix -in or i- indicating the subject [+NM] as having the [+OBJ] case relation. In sentences 5, each verb stem is marked by the only affix it can take to identify its cooccurring subject as having the [+OBJ] case relation. All these show that different affixes may mark one case relation. On the other hand, compare the following:

6.a. ihahatid niya ang bata? sa paaralan

'The child will go to school.'

6.b. ibibili niya ang bata? ng laru?an

'The child will buy a toy.'
6.c. isasalok niya ng tubig ang timba?

He will fetch some water with the pail.

Note that in sentences 6, a single verbal affix is- is able to mark a nominative [+OBJ], a nominative [+BEN], and a nominative [+INS]. Another supporting evidence for the lack of a strict one-to-one correspondence between a verbal affix and a case relation has been given previously (see example 2) and its syntactic representations 2.a and 2.b on pp. 11-12, Chapter I where one verb stem takes the same affix but each time marking a different case relation as its subject.

Further on, Blake states that aside from verbal modification, case relations between nouns and verbs may also be indicated by the case forms of those words which have case inflection such as the various pronouns and pronominal adjectives. The cases of words that are uninflected, such as common nouns and personal names, are indicated by the forms of the articles or determiners (labelled Det) placed before them. However, a similar form of overlap and diffusion observed in verbal affixes also obtains in determiners which mark the case relations which occur in non-nominative forms. For example:

7.a. maghihintay siya ng magpereyodiko sa kanto

He will wait for a newspaperboy at the street corner.

7.b. maghihintay siya sa magpereyodiko sa kanto

He will wait for the newspaperboy at the street corner.
The [+OBJ] actant in 7.a is marked by the accusative determiner ng while the same actant in 7.b is marked by the locative determiner sa. The difference suggested by these case forms does not mean a necessary distinction in the case relation of the noun following them. The difference in semantic content between the two forms of [+OBJ] NP's is one of definiteness, [+AC, +OBJ] means indefinite and [+L, +OBJ], definite.

In the sentences below, the determiner with the accusative case form feature marks either the non-nominative [+OBJ] or [+AGT].

8.a. hiniram ang estudyante ng libro sa guro?
borrow student book teacher

\[
\begin{array}{cccc}
+\text{Det} & +\text{N} & +\text{Det} & +\text{L} \\
+\text{NM} & +\text{NM} & +\text{L} & +\text{LOC} \\
+\text{AGT} & & & \\
\end{array}
\]

'The student borrowed a book from the teacher.'

8.b. hiniram ng estudyante ang libro sa guro?

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

'The book was borrowed by the student from the teacher.'

8.c. hiniraman ng estudyante ng libro ang guro?

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

Lit.: 'The teacher was borrowed-from a book by the student.'

The same determiner can also mark a [+INS] as in:

9. hinawa? ng bata ng kutsilyo ang tinapay slice child knife bread

\[
\begin{array}{cccc}
+\text{Det} & +\text{N} & +\text{Det} & +\text{N} \\
+\text{AC} & +\text{AC} & +\text{AC} & +\text{NM} \\
+\text{NM} & +\text{NM} & +\text{INS} & +\text{OBJ} \\
+\text{AGT} & & & \\
\end{array}
\]

'The bread was sliced by the child with a knife.'
With these seeming discrepancies in the correspondence between case relations and case forms, no description of Tagalog grammar which treats only the cooccurring CR's or only the cooccurring CF's can ever be adequate. We will, therefore, seek to explain the system formally in light of case frame features referring to both CF's and CR's as well as to some other inherent semantic features that subcategorize the verbs.\(^4\) In this connection, the term voice is adopted from Blake to designate the various forms the verb stem takes to identify the case relation of its subject.\(^5\) The terms case relation and case form are used only for identifying nouns, determiners, and prepositions.

2.3 Case Marking in Tagalog

The three kinds of case-related features that are marked on lexical items are case relation, case form, and case frame features. The verb as center or head of the sentence requires its nominal 'subordinates' to play specified roles and this character of the verb is reflected in its case frame feature specification. The nominal expressions governed by the verb may be either a noun phrase, NP, or a prepositional phrase, PP. The construction NP has a noun, N, as its head with sister determiner, Det, while the PP has two heads, the preposition, P, and the N of its sister NP.\(^6\) By convention, each N in these constructions is marked for CR and CF. Det's and P's are marked only for CF, and their obligatory sister category N carries the CR of the entire nominal expression. There are only a few lexical items belonging to the
class of Det's and P's and each one is permanently marked in the lexicon for the CF feature that it manifests.

For example:

10. pumitas pick
      [ +Det ] [ +N ]
    ang bachelor
      [ +NM ] [ +NM ]
    binata?
      [ +Det ] [ +Det ] [ +N ] [ +AC ] [ +AC ] [ +P ]
    ng flower
      [ +AGT ] [ +OBJ ]
    bulaklak
    para for
      [ +B ]
    sa for
      [ +Det ] [ +N ] [ +L ] [ +BEN ]
    dalaga maiden
      [ +L ]

'The bachelor picked a flower for the maiden.'

Interestingly, it will be noted that in Tagalog the object of the preposition is realized in the locative case form [+L] instead of the accusative [+AC] as in most languages that lack case inflectional modification on nouns.

To distinguish a CR feature from a CF feature, we use three capital letters representing the abbreviation of the CR and one or two capital letters representing the CF. Using two letters, instead of adhering to only one, to symbolize CF's avoids confusing the feature with other identical symbols representing a different feature, e.g., if N is used for the nominative CF and at the same time it is used for the category of nouns. These features like all others are enclosed in square brackets.

For marking case frame features on verbs (V), we follow the notation of the form [+__[+X]], [-__[+X]], or [+__([+X])] to indicate contextual features. If [+X], which may be a CR, a CF or both, is the case feature environment of the V, the first case frame states
that a V must occur before this specified case feature; the second
means it cannot occur before that case feature; and the third means
that it may or may not be followed by that case feature. The blank
shows positional order and if the V requires that it occur after the
case feature, then the specification is [+[+X]__]. On the other
hand, if there is no requirement on order, the feature may be stated
simply as [+[X]] which is interpreted as 'must occur either before
or after [+X].' The simpler notation without the blank can still
be used despite cases where a strict order is required if this
requirement is stated in the form of a redundancy rule. For
Tagalog, a RR applying to verbs will state, unless otherwise marked,
that [+[+X]] is always to be interpreted as [+__[+X]]. For N's,
Det's, or P's, the proper positional environment may be similarly
marked.

One other type of notation used here is called double negative
marking. A verb which is marked [-[+NM, -OBJ]] is interpreted as
having the contextual feature of a nominative but which can only be
realized by an objective case relation. Should the verb cooccur with
a nominative manifesting a case relation other than an objective,
then the sentence becomes ungrammatical. If the verb is marked
[-[-AC, +AGT]], it means that its cooccurring agentive case relation
can be realized only in the accusative case form. This system of
negative marking is economical because it does not only indicate
the required cooccurring feature but also specifies the corresponding
constraint on cooccurrence.

The category V is not the only one that requires case frame
specifications. Prepositions as heads of PP's are marked not only for case form which indicates the case form of the entire phrase, but also for case relations they require of their sister NP's. In the above example, the preposition para 'for' has to include 

\( [+^{+\text{BEN}}] \) in its matrix of features. Since the cooccurring case form of the N following a P is predictable in the locative case form, except when P is in the comitative case from \([+C]\), a redundancy rule such as follows will simplify the case feature specifications of P's in the lexical entry:

\[
\begin{align*}
\text{RR:} & \quad \begin{bmatrix} [+P] \\ [-C] \end{bmatrix} \rightarrow [-[-L]]
\end{align*}
\]

Stated negatively, the rule means that a preposition which is not in the comitative case form cannot occur with a specified case feature other than a locative case form. With this rule, the entry for para only contains \( [+P, +B, +^{+\text{BEN}}] \). An entry with these kinds of features may be further simplified by eliminating the contextual feature if, in the language, it is the case that for all P's marked with a particular case form they cooccur only with a single corresponding case relation. It may be mentioned that a few prepositions permit a sentence S after them instead of a NP. In such a construction, the S is not marked for case since, by definition, only N's carry case relations.

2.4 Case Relations

The CR's set up in this study are only those required by a verbal predicate V. In positing them for Tagalog, two guidelines have been observed: a) each distinctive role occurs only once in


each sentence (Fillmore, 1971:38), and b) two instances of the same case relation can occur in the same simple sentence only if they are coreferential or conjoined (Starosta, 1973b:136). Some of these cases are required obligatorily by the verb, others only optionally. This will become evident in the subcategorization and redundancy rules that assign case frame features.

The CR's set up by Ramos (1974:20, 34) may be compared with those in this study as listed below.

<table>
<thead>
<tr>
<th>CR's in Ramos:</th>
<th>CR's in this study:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Inherent</td>
<td>(b) Non-inherent</td>
</tr>
<tr>
<td>1. agentive (A)</td>
<td>1. instrumental (I)</td>
</tr>
<tr>
<td>2. objective (O)</td>
<td>2. benefactive (B)</td>
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<tr>
<td>3. directional (Dir)</td>
<td>3. affected (Af)</td>
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<tr>
<td>4. locative (L)</td>
<td></td>
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<tr>
<td>5. instrumental (I)</td>
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<tr>
<td></td>
<td>1. Objective (OBJ)</td>
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<td></td>
<td>2. Agentive (AGT)</td>
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<td>3. Dative (DAT)</td>
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<td>4. Locative (LOC)</td>
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<td></td>
<td>5. Instrumental (INS)</td>
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<td></td>
<td>6. Benefactive (BEN)</td>
</tr>
<tr>
<td></td>
<td>7. Reason (RSN)</td>
</tr>
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<td></td>
<td>8. Comitative (COM)</td>
</tr>
</tbody>
</table>
In this analysis, Ramos' directional and locative cases fall together under a single case relation, the locative; her inherent and non-inherent instrumental case can also be mentioned once with certain collocational restrictions stated in the verb; her affected case is identified here as the Dative which is required by other verbs not covered in her study. In addition to these changes and the other cases shared by both studies, two other CR's are introduced, the Reason and the Comitative case relations which will be shown as CR's cooccurring with Tagalog verbs.

2.4.1 Objective Case Relation [+OBJ]

The objective case relation is "the semantically most neutral case, the case of anything representable by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself" (Fillmore, 1968:25). Fillmore further restricts the concept to things which are affected by the action or state identified by the verb. This definition is expanded here to include animate beings, things resulting from the action or state, and even those indirectly involved or remaining unchanged in the course of the action. The objective case relation is basic in that if a verb takes any CR at all, it takes at least a [+OBJ]. If it occurs by itself, it takes the nominative case form; if it cooccurs with a locative, a dative, an agentive or an instrumental, it can be realized in either the nominative or the accusative case form. With an instrumental case relation and without an agentive, however, the [+OBJ] is always manifested in the nominative case form. Certain verbs which cooccur with an objective and an
agentive case relation require a third actant, which is either a locative, a dative or a comitative case relation, the last two being required only by derived verb forms under secondary verb subcategories. The following examples show some of these occurrences:

11. gumalaw ang bata?
movement
[+NM] [+OBJ]
'The child moved.'

12. gumawa? si Angel ng tugtugin
make
[+NM] [+AC] [+OBJ] [+OBJ]
'Angel composed a music piece.'

13. natapon ang sabaw sa sahig
spill
[+NM] [+L] [+LOC]
'The soup got spilled on the floor.'

14. tinupok ng malaking sunog ang sambayanan
burn
[+AC] [+INS] [+NM] [+OBJ]
'The big fire burned down the whole town.'

Fillmore's restriction that only a single case relation can occur in every simple sentence necessitates his positing two distinct cases, namely, Objective and Factitive (1968:25), the latter being absorbed into the Goal case (1971:42). The difference is that the Objective refers to the thing affected whereas the Goal is that which results from the action or state identified by the verb. An object of result or Goal case cooccurs with creative verbs such as gawa? 'make', tahi? 'sew', sulat 'write', tayo? 'build' while an Objective cooccurs
with non-creative verbs. Since the distinction between these two cases can be predicted by the semantic features, say [+create], of the verb, then both can be subsumed under one case relation. A problem arises when a creative verb occurs with apparently two objective cases in the same sentence, one as a result and the other as a source, as in:

15. gumawa? ang nanay ng punda sa tela-nang natira
make mother pillowcase cloth left

'Mother made a pillowcase out of the left-over piece of cloth.'

Starosta (1973a:135-37) proposes to deal with this problem by applying the criterion of coreference. This principle allows both the result and source actants to be marked by the same case relation and occur in the same simple sentence if the referent of one actant is identical to or included in the referent of the other. This suggests that there are verbs that permit the optional cooccurrence of an actant which is coreferential to one that is required by the verbs. The same principle can be shown to account for relations other than source-result. For instance, Fillmore's sentence 'I hit him on the leg' (1970:126) is translated as follows:

16.a. hinampas ko siya sa binti?
hit I he leg

'I hit him on the leg.'

In this sentence, the actant binti? marked by the locative case form indicates the specific location of hitting done on the more general object siya marked by the nominative case form. Semantically, logically and pragmatically one cannot hit binti? without also hitting
siya since the former is contained in or part of the latter. The coreferentiality that can be alluded to here expresses the relation between a possessor and an inalienably possessed actant. To attest to this relation, the same verb in sentence 16.a can cooccur with the [+OBJ] binti? realized in the nominative case form:

16.b. hinampas ko ang binti? niya
hit I leg his

'\(I\) hit his leg.'

In 16.b, the relation possessor-possessed is marked more directly by the use of the possessive pronoun niya, which will be marked with [+DAT] in the accusative case form according to Fillmore's analysis of possessive N's (1968:49-50). It will be noted that this possessive pronoun is an attribute of the [+OBJ] noun and not a sister of the verb, hence, it is not marked here with case features.

Besides the occurrence of a [+OBJ] in the locative case form in instances such as 16.a, there is also a class of verbs which expresses its [+OBJ] as [+L] when the cooccurring [+AGT] is [+NM]. For example (cf. the German sentence 1.b, p. 21, which is the exact analogue of 17):

17. tumulong siya sa mga nasunugan
help he fire-victims

'He helped the fire-victims.'

The other occurrence of a [+L, +OBJ] as exemplified in 7.b (see p. 27) indicates definiteness in contrast to indefiniteness marked by [+AC]. It may be noted that a similar situation obtains in Spanish where a personal or personalized direct object of a verb, except for the verb
tener 'have', is marked by a which can be related to the preposition a 'to'.

In the preceding examples, we have NP's being marked [+OBJ] with either the more common [+AC] or the [+L] case form. However, there are also PP's which contract an objective case relation when cooccurring with what may be identified as verbs of communication. Some of the words which are analyzed as prepositions (Institute of National Language, 1950:416-7) or as introducers (Otanes, 1966:132-3) are tungkol, hinggil 'about', ukol 'with regard to', and laban 'against'. They introduce a following [+OBJ] actant in the [+L] form, and they may be marked accusative [+AC]. Thus, Otanes' sentence (1966:138) may be given the following feature specifications:

18. nag-usap tungkol sa eleksyon ang mga lalaki
   talk about election men
   [+P] [+L] [+NM] [+AGT]

'The men talked about the election.'

Words classified as P such as tungkol in sentence 18 present two problems: (a) The PP above may also occur as a NP in the accusative case form as follows:

18.a. nag-usap ng tungkol sa eleksyon ang mga lalaki
    talk about election men
    [+AC] [+L] [+NM] [+AGT]

in which tungkol is a noun which requires a related NP attribute.

The two phrases may be contrasted more vividly in the following tree diagrams:
The complex NP analysis seems tenable especially when we compare it with similar NP's such as sa pamamagitan ng palakol 'by means of an ax', which, incidentally, is a 'true' NP in that it never occurs without the determiner, and ang asawa ng guro? 'the spouse of the teacher' in which the head N's require a following attributive NP.

(b) Unlike other PP's as in sentence 10 (see p. 30), this type of PP in question may occur in full in the nominative case form:

18.b. pinag-usapan ng mga lalaki ang tungkol sa eleksyon
   'The matter on elections was discussed by the men.' which strongly supports the NP analysis. In contrast, the same verb in sentence 10 never allows the cooccurrence of the P when the [+BEN] is in the nominative case form:
10.a *ipinitas ng binata? ng bulaklak ang para sa dalaga
pick bachelor flower for maiden

In view of the evidence supporting a N analysis instead of a P for the words concerned, the explanation could be that these words are derived P's from original N's and both forms exist under separate categories. This is accomplished through a general process of deriving P's from certain N's which may be called a preposition DR. This particular type of word derivation is well attested to in Indo-European languages.

2.4.2 Agentive Case Relation [+AGT]

By Fillmore's definition, the agentive case relation is "the typically animate perceived instigator of the action identified by the verb" (1968:24). In a lexicase grammar, the presence of an agentive case relation is assumed to require a cooccurring objective case relation. In addition, certain classes of verbs also require the cooccurrence of a locative, a dative, or a comitative case relation. This means, then, that there are at least two case relations cooccurring when a [+AGT] is present. In general, the presence of a [+AGT] also allows the potential occurrence of an instrumental, a benefactive, or a reason case relation. Of these peripheral cases, the instrumental case can serve as a condition for distinguishing the agentive case relation from the objective or dative which do not normally cooccur with an instrumental case relation.

The case forms in which the [+AGT] may be realized are either the accusative [+AC] or the nominative [+NM]. The basis for selecting one form over the other is not determined by a kind of hierarchy based
on cooccurring actants (see Fillmore, 1968:33). The restriction on the selection of subject depends on the classification of the verb. One class may prohibit a particular cooccurring case relation from being realized in the nominative case form whereas another class of an identical case frame may allow the same case relation to be either subject or non-subject. In view of this, the definitions commonly associated with the labels accusative or ergative language do not hold for Tagalog as a whole, but rather for individual verb classes.

The following examples illustrate some occurrences of the agentive case relation:

19. naghanda? si Irma ng isang programa para sa mga bisita niya
   prepare one program for her guests
   [+NM] [+AC] [+B]
   [+AGT] [+OBJ]

'Irma prepared a program for her guests.'

20. gagawaran ng hukom ang bilanggo? ng parusa bukas
   lay on judge prisoner sentence tomorrow
   [+AC] [+NM] [+AC]
   [+AGT] [+LOC] [+OBJ]

'The prisoner will be given a sentence by the judge tomorrow.'

In comparison with the agentive case relation in Ramos (1974:20-23), the present analysis does not see the necessity of subcategorizing this case relation, or any case relation for that matter, into the classes [+undergoer], [-undergoer, +goal], and [-undergoer, -goal] which are designated as subcase features. In her semantic feature analysis of the verbs, the classes of verbs
specified with the features [-ext], [+ext, -cf], and [+ext, +cf] imply the three classes of cooccurring [+AGT], respectively. Since the semantic features on the verb already provide the semantic interpretation of its cooccurring actant or actants, it would be redundant to set up two separate sets of features each implying the other. It suffices to identify only those features that subcategorize the verbs.

2.4.3 Locative Case Relation [+LOC]

As defined by Fillmore (1968:25), the locative case relation identifies the location or spatial orientation of the state or action identified by the verb. He also points out that locational and directional elements do not contrast. In Tagalog, there is evidence that these two elements are complements and their differences can be determined by the character of the associated verb. Hence, we can distinguish locational and directional (source or goal) uses of the locative case depending on verb class and case form. (See also Anderson, 1971:100-18.)

By some semantic features on the verb, we can determine whether the locative case relation required by the verb is a directional or a non-directional which may be simply a locational, and if it is the former, whether it is a destination or a point of origin. This characteristic may be captured by the following subcategorization and redundancy rules:
SR-i: $[+V] \rightarrow [\pm \text{loc}]$

SR-ii: $[+\text{loc}] \rightarrow [\pm \text{strict}]
\quad [\pm \text{dir}]

RR-i: $[+\text{strict}] \rightarrow [+[\text{LOC}]]$

RR-ii: $[-\text{strict}] \rightarrow [+([\text{LOC}])]$

SR-iii: $[+\text{dir}] \rightarrow [+\text{goal}]$

The first rule means that a verb may or may not be a locative verb. By SR-ii, a locative verb may be either strict or non-strict and directional or non-directional. A $[+\text{strict}]$ verb, by RR-i, requires the cooccurrence of a $[+\text{LOC}]$ actant whereas a $[-\text{strict}]$, by RR-ii, permits the cooccurring LOC to be manifested optionally.

SR-iii states that directional verbs are further subclassified into those which designate the cooccurring or the implied $[+\text{LOC}]$ as either a goal or a non-goal, which means source. With these inherent semantic features identifying the meaning of the locative verb and its cooccurring locative actant, Tagalog finds no need for using prepositions, say as in English, to designate in, on, into, onto, to, from, at, etc. It can function adequately using only its single locative determiner sa, since the verb already specifies the information that is otherwise contained in the preposition. Thus, locative verbs in Tagalog can be given a more accurate translation by indicating its associated preposition, e.g., punta 'go-to', alis 'depart-from', tira 'reside-in/at'. Indeed, these features explain the seeming lack of prepositions in the language. However, Tagalog is not completely devoid of prepositions. In fact, there are a few indicating direction which are available if one desires to be
more specific, e.g., mula?, buhat, galing which can be equated with 'from' and patungo or tungo, papunta, hanggang, indicating 'to' broadly. Another device used to specify locations is complex locative noun phrases, e.g., sa ibabaw ng mesa 'on top of the table'.

In terms of distinguishing between what Fillmore (1968:26ff.) calls 'optional' and 'obligatory' locative expressions, it is useful to consider the distinctions made by Platt (1971:30-33) among inner, outer, and far outer locatives. Platt defines "an inner Locative as a Locative which is obligatory (as with put) and/or directional (as in the case of: Tom walked to town): Outer Locatives... as Locatives optionally co-occurring with certain predicate fillers and with the Agentive..." A far outer Locative, on the other hand, is one which may co-occur with any verb and, thus, "plays no part in the selection of verbs". The following examples from Platt identify these three 'degrees of location', respectively:

a. John keeps his car in the garage.
b. John washes his car in the garage.
c. In that town, people know their neighbors.

Another criterion which he identifies as distinguishing the first two types of location has to do with the location of the cooccurring Agent. He states that with an inner locative, the Agent is usually located at the specified location.

In this study, the terms inner and outer locative have been adopted with a modification of certain conditions. An inner locative is one that is required by the verb to indicate the location of the [+OBJ] and not necessarily that of the [+AGT]. It may be obligatorily
or optionally manifested, and even if it is not expressed overtly, it is implied in the lexical content of the verb. Kullavanijaya (1974:56) marks this distinction by the features [+strict], where the inner [+LOC] must be grammatically expressed (see RR-i), and [-strict], where the inner [+LOC] may not be overtly present (see RR-ii). By these definitions, the three subcategories of locative verbs identified above by the features [+goal], [-goal] and [-dir] are all inner locative verbs and are further specified as [+strict] or [-strict]. Some examples which illustrate the various classes of verbs that take inner locatives are as follows:

21. inilagay niya ang mga bulaklak sa mesa
   put she flower table
   [+V]  [+AC]  [+NM]  [+L]  [+strict]

   'She put the flowers on the table.'

22. itatapon niya ang basura (sa hukay)
    throw he garbage pit
    [+V]  [+AC]  [+NM]  [+L]  [-strict]

    'He will throw away the garbage (in the pit).'

23. nanggaling siya sa ibang bansa?
    come from he other country
    [+V]  [+NM]  [+L]  [+strict]

    'He came from a foreign country.'

24. humingi? siya ng payo (sa guro?)
    ask for she advice teacher
    [+V]  [+NM]  [+AC]  [+L]  [-strict]

    'She asked for advice (from the teacher).'
25. tumira sila sa bahay namin
reside they house our

They lived in our house.'

On the other hand, an outer locative expresses the location of the entire action. It is one which can be selected by any verb, either a locative or a non-locative verb. It is always optional.

For example:

26. kuma?in sila ng hapunan (sa bagong restawrang eat they dinner new restaurant

They ate dinner at this new restaurant last night.'

27. sumakay sila sa 'cable car' (sa San Francisco)
ride they

They rode on the cable car in San Francisco.'

28. nagluto? siya ng litson sa kawali? (sa kusina?)
cook he roast frying pan kitchen

He cooked a roast in the frying pan in the kitchen.'

Needless to say, this type of locative is not relevant to the subcategorization of verbs, and, hence, it is not marked as a feature of the verb. The locative feature on the verb, then, refers only to inner locatives. When cooccurring with outer locatives, inner locatives can be distinguished by being closer to the verb in
terms of position. Where only one locative actant is overtly manifested, it is always subject to either inner or outer locative interpretation.

There are some interesting and significant observations which can be made of locative actants in relation to their cooccurring verb forms as well as to other cooccurring actants, namely:

(a) The inner locative actant of strict or non-strict locative verbs can occur in the nominative case form marked on the verb by an affix different from that which requires a [+AGT] or a [+OBJ] subject. Note the difference in verbal affixes in the following sentences which correspond to those in sentences 21 to 25:

21.a. linagyan niya ng mga bulaklak ang mesa
put she flowers table
\[+V\] \[+AC\] \[+AC\] \[+NM\]
\[+goal\] \[+AGT\] \[+OBJ\] \[+LOC\]
\[-strict\]
Lit.: 'The table was laid-on some flowers by her.'

22.a. tatapunan niya ng basura ang hukay
throw she garbage pit
\[+V\] \[+AC\] \[+AC\] \[+NM\]
\[+goal\] \[+AGT\] \[+OBJ\] \[+LOC\]
\[-strict\]
Lit.: 'The pit will be thrown-into some garbage by her.'

23.a. pinaIl...,6a1ingan na niya ang iba't ibang bansa?
come from he other country
\[+V\] \[+AC\] \[+NM\]
\[+goal\] \[+OBJ\] \[+LOC\]
\[-strict\]
Lit.: 'Other countries have been traveled/visited by him.'

24.a. hiningi?an niya ng payo ang guro?
ask for she advice teacher
\[+V\] \[+AC\] \[+AC\] \[+NM\]
\[-goal\] \[+AGT\] \[+OBJ\] \[+LOC\]
\[-strict\]
Lit.: 'The teacher was asked for some advice by her.'
25.a. tinirahan nila ang bahay namin reside they house our
[+V ] [+AC ] [+NM ]
[-dir ] [+OBJ ] [+LOC ]

Lit.: 'Our house was lived in by them.'

The sentences express what action is done on the [+LOC] subject or what event ensues from it. It may be mentioned that if obligatory occurrence of the [+LOC] is made the criterion for identifying a locative case, we cannot account for the many instances of optionally cooccurring inner locatives.

(b) Outer locatives generally occur in the locative case form and usually after the inner locative, if any occurs. However, there are instances where they can appear in the nominative with a particular derived verb form which means approximately 'V-ing place or place for V-ing'. They are usually prefixed with the derivational affix pag-. For example:

26.a. kina?inan nila ng hapunan ang bagong restawrang eat they dinner new restaurant
[+V ] [+AC ] [+AC ] [+NM ]
[+Derv ] [+AGT ] [+OBJ ] [+LOC ]
[-[+NM, -LOC ]]

ito kagabi
this last night

Lit.: 'This new restaurant was eaten dinner at by them last night.'

29. pinagpahingahan niya ang liliim ng punong-kahoy rest he shade tree
[+V ] [+AC ] [+NM ]
[+Derv ] [+AGT ] [+OBJ ] [+LOC ]
[-[+NM, -LOC ]]

'He rested in the shade of the tree.'
Lit.: 'The shade of the tree was where he rested.'
The verbs in the above examples come from non-locative verbs ka'in 'eat', pahinga 'rest' and kumpuni 'repair', respectively. Some locative verbs also manifest similar derived verb forms, but others do not. For example:

31. pinangpintahan niya ng larawan sa 'canvas'
    paint he picture
    [+V] [+AC] [+AC] [+L]
    [+Derv] [+AGT] [+OBJ] [+LOC]
    ang 'den' ng tatay
    [+M] [+LOC]

'He painted the picture on canvas in father's den.'

27.a. *sinakyan nila sa 'cable car' ang San Francisco
      *pinagsakyan

The verb form sinakyan cooccurs only with an inner locative subject and pinagsakyan with an inner locative subject and a [+AGT]. Note that 27.a does not have an inner locative subject or a cooccurring AGT.

(c) Directional verbs marked either [+goal] or [-goal] have the option to cooccur with another inner locative actant which expresses the point of origin of a [+goal] verb or the destination of a [-goal]. The restriction is for this locative actant to be expressed as a prepositional phrase with its preposition specifying a directional feature opposite that of the directional feature of the verb. This may be expressed in the form of the following
negatively stated redundancy rule:

\[
RR: \ [^\text{goal}] \quad \rightarrow \quad \begin{bmatrix}
^+P \\
^+L \\
^\text{goal}
\end{bmatrix} \begin{bmatrix}
^+L \\
^\text{goal}
\end{bmatrix}
\]

For example:

32. pumunta siya sa aklatan mula sa klase
   go-to he library from class
   \begin{bmatrix}
   ^\text{goal} \\
   ^\text{NM} \\
   ^\text{OBJ} \\
   ^\text{LOC}
   \end{bmatrix}
   \begin{bmatrix}
   ^L \\
   ^L \\
   ^+\text{can}
   \end{bmatrix}
   \begin{bmatrix}
   ^+\text{can}
   \end{bmatrix}

'He went to the library from class.'

33. umalis siya (sa bahay) patungo sa tindahan
   leave he house towards store
   \begin{bmatrix}
   ^\text{goal} \\
   ^\text{NM} \\
   ^\text{OBJ} \\
   ^\text{LOC}
   \end{bmatrix}
   \begin{bmatrix}
   ^L \\
   ^L \\
   ^\text{can}
   \end{bmatrix}
   \begin{bmatrix}
   ^+\text{can}
   \end{bmatrix}

'He left (the house) for/towards the store.'

When the directional verb is marked [-strict] and the locative noun phrase is not expressed overtly, the optional locative prepositional phrase may still cooccur with the verb. The preposition in this phrase must obligatorily occur, otherwise, the actant receives the interpretation as provided by the directional feature on the verb. For instance, sentence 33 has a [-strict] feature, and as such the locative phrase sa bahay may be absent.

33.a. umalis siya patungo sa tindahan
   leave he towards store
   \begin{bmatrix}
   ^\text{goal} \\
   ^\text{NM} \\
   ^\text{OBJ} \\
   ^\text{LOC}
   \end{bmatrix}
   \begin{bmatrix}
   ^L \\
   ^L \\
   ^\text{can}
   \end{bmatrix}
   \begin{bmatrix}
   ^-\text{can}
   \end{bmatrix}

'He left for/in the direction of the store.'

If the prepositional phrase is not marked by the preposition patungo 'to, toward', the noun phrase sa tindahan will be interpreted as the place of origin. Hence, observe the following sentence:
33.b. umalis siya sa tindahan

'He left the store.'

Similarly, compare the following pair of sentences with a verb marked [+goal, -strict]:

34.a. dumating siya sa paaralan ng alas siyete
    arrive he school seven o'clock
    [+goal][+NM][+L][+LOC]

'He arrived in school at seven o'clock.'

34.b. dumating siya galing sa paaralan ng alas siyete
    from
    [+goal][+P][+L][+goal]

'He arrived from school at seven o'clock.'

The above cooccurrence restrictions show the relevance of the features [+goal] and [-goal] specified in both verbs and prepositions.

(d) By postulating one locative case relation and some semantic features which give the [+LOC] a proper interpretation, we can capture the relations and generalities expressed by what others have identified separately as directional and locative cases (Ramos, 1974:33).

(e) The close connection between what in other languages would be considered the [+DAT] actant cooccurring with what is commonly called ditransitive verbs and the [+LOC] with what is commonly identified as locative verbs is quite striking in Tagalog. Both actants indicate either the goal or the source of the [+OBJ] referent involved in the ditransitive or locative verb. Consider, for instance, the parallels between ditransitive and locative verbs which can be subclassified into [+goal] and [-goal] such as follows:
Ditransitive verbs:  Locative verbs:

<table>
<thead>
<tr>
<th>[+goal]</th>
<th>[-goal]</th>
<th>[+goal]</th>
<th>[-goal]</th>
</tr>
</thead>
<tbody>
<tr>
<td>bigay</td>
<td>kuha</td>
<td>lagay</td>
<td>pitas</td>
</tr>
<tr>
<td>'give'</td>
<td>'take'</td>
<td>'put'</td>
<td>'pick'</td>
</tr>
<tr>
<td>alay</td>
<td>hiram</td>
<td>tapon</td>
<td>alis</td>
</tr>
<tr>
<td>'offer'</td>
<td>'borrow'</td>
<td>'throw'</td>
<td>'remove'</td>
</tr>
<tr>
<td>abot</td>
<td>bili</td>
<td>sabit</td>
<td>bunot</td>
</tr>
<tr>
<td>'hand over'</td>
<td>'buy'</td>
<td>'hang'</td>
<td>'extract'</td>
</tr>
</tbody>
</table>

It has been found that there are no discernible syntactic or semantic differences between the supposed [+DAT] and the [+LOC] actant cooccurring with the verbs listed above. Hence, the four types of verbs have been classified here into [+goal] and [-goal] verbs with the actant representing the goal or the source of a cooccurring [+OBJ] identified as the [+LOC] actant. Supporting evidences for this analysis are:

(a) the supposed [+DAT] of ditransitive verbs and the [+LOC] of locative verbs, with a cooccurring [+AGT], are realized in the same non-nominative case form, the locative [+L]:

(b) the verbal affix which marks the supposed [+DAT] and the [+LOC] as being realized in the nominative case form is the same affix -an.

With causative verbs, however, a distinct contrast exists between the affix that marks what is identified here as [+DAT] and that which marks the [+LOC] or the supposed [+DAT] of ditransitive verbs as subject. Compare the following examples of non-causative [+goal] ditransitive and locative verbs, which are both marked here as taking a [+LOC], with corresponding causative verbs where the [+DAT] means the actant that is ordered to perform the action indicated by the causative verb:
35. binigyan niya si Rosa ng regalo
give he present
[+V] [+AC] [+NM] [+AC] [+OBJ]

'Rosa was given a present by him.'

36. linagyan niya ang bata? ng laso
put she child ribbon
[+V] [+AC] [+NM] [+AC] [+OBJ]

'She put a ribbon on the child.'

35.a. papagbibigayin niya si Buddy ng regalo kay Rosa
give gift
[+V] [+AC] [+NM] [+AC] [+L] [+LOC]

'Buddy will be asked by him to give a gift to Rosa.'

36.a. papaglalagayin niya si Mel ng laso sa bata?
put ribbon child
[+V] [+AC] [+NM] [+AC] [+L] [+LOC]

'Mel will be asked by her to put a ribbon on the child.'

35.b. pabibigyan niya kay Buddy ng regalo si Rosa
give
[+V] [+AC] [+L] [+NM] [+OBJ] [+LOC]

'Buddy will be asked by him to give a gift to Rosa.'

36.b. palalagayan niya kay Mel ng laso ang bata?
put
[+V] [+AC] [+L] [+NM] [+OBJ] [+LOC]

'Mel will be asked by her to put a ribbon on the child.'

If such fusion of ditransitive and locative verb classes is taken, we arrive at two classes of what may be labelled location verbs, namely, [+goal] and [-goal], with cooccurring [+OBJ], [+AGT] and [+LOC] actants. These classes are comparable with the corresponding
classes of locomotion verbs which are non-agentive. For example, the following verbs express the same [+goal] and [-goal] features:

**Locomotion verbs:**

- [+]goal
  - punta 'go to'
  - pasok 'enter'
  - akyat 'climb to'
- [-goal]
  - alis 'leave from'
  - labas 'get out of'
  - hiwalay 'dissociate one's self from'

Both location and locomotion verbs are locative directional verbs.

2.4.4 Dative Case Relation [+DAT]

The [+DAT] actant in this study is the same as Fillmore's Experiencer case, the animate being affected by a psychological event or mental state expressed by the verb (1971:42). In addition, it is also, in Taylor's terms (1971:44), the case of the normally human entity indirectly involved in the activity described by the verb. It is not, however, to be equated with the dative case form of traditional grammar which marks the goal or destination of the object in such verbs as give, sell or return. Neither is it to be identified with the dative or ablative in some case grammars which is associated with the source of the object of verbs such as buy, borrow or remove. These two instances have been identified in the preceding section as manifesting a locative case.

The distinction between a [+DAT] and a [+OBJ] case seems to be obscured when the two are not cooccurring in the same simple sentence. Thus, some linguists have suggested that they be conflated and considered as [+OBJ]. The subjects in the following sentences, if we
follow the suggestion, are both marked [+OBJ]:

37. nabali? ang lapis
    break pencil
    [+NM] [+OBJ]

'The pencil broke.'

38. nagalit ang dalaga
    was angered maiden
    [+NM] [+OBJ]

'The maiden became angry/was angered.'

It may be countered, however, that although these two verbs may be satisfied with the presence of just a single actant, their syntactic possibilities differ. Sentence 38 with a supposed [+OBJ] feature may allow another actant which means the object of the maiden's anger and which may be properly identified as [+OBJ]. On the contrary, sentence 37 with the neutral [+OBJ] does not allow a similar actant. Thus, the following marking for 38 is considered to be the correct analysis:

38.a. nagalit ang dalaga (sa tsuper)
    maiden driver
    [+NM]    [+L]
    [+DAT]   [+OBJ]

'The maiden became mad (at the driver).'

Moreover, similar psychological experiences expressed by the verb are paralleled by verbs of perception or sensation and of emotional or mental states. These verbs require the cooccurrence of the same actants as those in 38.a where the designated [+OBJ] is unaffected and indifferent to the experiencer marked [+DAT]. For example:
39. nakita namin ang palabas sa plasa
see we show town square
[+AC] [+DAT] [+NM] [+OBJ]

'The show at the town square was seen by us.'

40. nakarinig kami ng kaluskos sa ibaba
hear we scuffing downstairs
[+NM] [+DAT] [+AC] [+OBJ]

'We heard a scuffing downstairs.'

The class of state verbs exemplified in the sentences above shows the necessity of establishing a dative case relation distinct from the objective since 'we' and 'scuffing' are not coreferential.

Another occurrence of the [+DAT] is with state or potential verbs that express leaving an adverse effect on the experiencer, who is somehow intrinsically related to the [+OBJ] whose state has been affected. With these verbs, we find another support to Fillmore's assignment of a [+DAT] to an actant who is the possessor of something. (See pp.36-37.) For example:

41. nawala' ang pera ng bata'
lost money child
[+NM] [+OBJ]

'The child's money got lost.'

41.a. nawalan ng pera ang bata'
[+AC] [+OBJ] [+NM] [+DAT]

'The child lost some money.'

The noun bata' which is the possessor of pera that was lost in 41 becomes prominently the affected actant when the cooccurring verb requires it to be realized in the nominative case form in 41.a. It
suffers from the event or state or process designated by the verb involving an object which it owns or possesses. This particular occurrence of the [+DAT] is referred to in Ramos (1974:40) as the "Affected" case, but we can avoid positing an extra case relation and capture syntactic and semantic generalities by treating this case relation as a [+DAT].

One other relevant environment in which the [+DAT] occurs is with some subclasses of causative verbs. These verbs require at least a cooccurring [+OBJ] and a [+AGT] besides the [+DAT]. With such verbs, the [+DAT] can occur either in the nominative or the locative case form. (For examples, see 35.a, 35.b, 36.a, and 36.b on p. 53.)

The [+DAT] as possessor or owner of an object, alienable or not, poses an interesting puzzle in the analysis of the existential verb may and its derived form mayroon or its corresponding negative wala?. Either form carries the meaning 'have' or 'there exist'. With the first meaning, the verb cooccurs with a [+OBJ] in the accusative case form and a [+DAT] or a coreferential [+OBJ] as subject. The second instance does not require the cooccurrence of a nominative actant with the accusative [+OBJ]. The [+OBJ] may occur by itself, particularly in exclamations, or with a locative, a benefactive or a coreferential objective realized in the form of a prepositional phrase. For example:

42. may sakit si Heneral Castro
have illness

\[-[Def]\]
[+AC]
[+OBJ]

[+NM]

[+DAT]

'General Castro is ill.'
43. may pakpak ang balita? 
   have wings news 
   [-[+Det]]  [+AC]  [+NM]  [+OBJ] 

'News has wings.'

44. may sunog 
    there exists fire 
    [-[+Det]]  [+AC]  [+OBJ] 

'There is fire!'

45. wala? ang nanay dito 
    not exist mother here 
    [+NM]  [+L]  [+LOC] 

'Mother is not here.'

46. walang balita? tungkol kay Pete 
    there is none news about 
    [+AC]  [+OBJ] 

'There is no news about Pete.'

The only justification for positing a [+DAT], as in 42, is that the cooccurring [+OBJ] referent is viewed as an alienable or inalienable possession of the designated [+DAT] referent. Otherwise, both actants may be analyzed as coreferential OBJ's, with the one in the accusative form being a part of or included in the other actant marked subject, as in 43. As for sentence 46, the PP is an attribute of the preceding N. This problem, however, is beyond the scope of this study.

2.4.5 Instrumental Case Relation [+INS]

The instrumental case relation expresses the force or object causally involved in the action or state identified by the verb (Fillmore, 1968:24). It also embraces the concept of means for the
occurrence of what is expressed by the verb. It may occur as a tool implicated by an agent in the performance of an action or as a means that brings about an event. While the potential occurrence of an instrumental case can be predicted by the occurrence of a [+AGT], the presence of a [+INS] is not a sufficient condition for the presence of a [+AGT]. There are verbs that allow the instrumental case to cooccur with an objective case alone and a few, with an objective and a dative case.

The instrumental case relation exhibits a few peculiarities in its various occurrences. First, when it cooccurs with an agentive case, it may be realized either in the nominative or the accusative case form. In the latter form, the [+INS] may be optionally manifested in either a simple NP structure or a complex one depending on the type of verb it cooccurs with and the case relation which occurs as the subject of the sentence. The simple NP structure consists of the determiner marked with the feature [+AC], accusative, and the head noun representing the tool or force involved. In the complex NP structure, the [+INS] actant is an obligatory attribute of the specific head noun *pamamagitan* 'means, way'. The structure is represented in the following tree-branching diagram:
The head noun *pamamagitan* is permanently marked with the identical [+INS] feature but with a different case form [+L]. The obligatory cooccurrence of another [+INS] attribute is also specified. The complex [+INS] actant then is realized in the locative case form following the marking of the case form on the head N and not the marking on its attribute. The gloss for this NP is 'by means of X'.

For example:

47.a. nagputol si Pablo ng damo *(sa pamamagitan)* ng karit

cut grass means sickle

[+NM] [+AC] [+L] [+INS] [+INS]

'Sablo cut grass (by means of) with a sickle.'

47.b. pinutol ni Pablo ang damo *(sa pamamagitan)* ng karit

[+AC] [+NM] [+L] [+INS]

47.c. ipinangputol ni Pablo ng damo ang karit

[+AC] [+AGT] [+OBJ] [+INS] [+INS]

47.d. pinutulan ni Pablo ng sanga ang punong mangga

cut from branch tree mango

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

(sa pamamagitan) ng itak

means bolo

[+L] [+INS] [+AC]

'Sablo cut off some branches from the mango tree with a bolo.'

Second, without a cooccurring [+AGT], the [+INS] may cooccur with a [+OBJ] or, rarely, with a [+OBJ] and a [+DAT]. In these environments, the [+INS] with only a [+OBJ] is always realized in the [+AC] form. However, when the verb is marked potential, to mean either ability or accidental, the [+INS] may be either in the [+AC] or
It plays the role of an involuntary, non-responsible agent that brings about the event. With non-agentive verbs, instrumental tools usually cooccur with [+pot] verb stems and instrumental forces with either [+pot] or [+erg] verbs. They are always in the [+AC] case form. For example:

48.a. giniba? ng bagyo ang bahay
destroy storm house
 [+V] [+AC] [+NM] [+OBJ]
'The house was destroyed by the storm.'

48.b. nagiba? ng bagyo ang bahay
 destroy storm house
 [+V] [+AC] [+NM] [+OBJ]
'The house was destroyed by the storm.'
Lit.: 'The storm was able to destroy the house.'

49. nahiwa? ang bata? ng kutsilyo
  cut child knife
  [+V] [+NM] [+AC] [+INS]
Lit.: 'The child happened to be cut by/with a knife.'

With a cooccurring [+DAT], the [+INS] is realized in either the [+AC] or the [+L] in a complex NP structure.

50. nakita ko ang buong nangyari ng mga mata ko
see I whole event eye my
 [+AC] [+NM] [+AC] [+INS]
'I saw the whole event with my eyes.'

51. nakaramdam siya ng ginhawa sa panamagitan ng hypnotismo
feel he relief means hypnotism
 [+NM] [+AC] [+L] [+INS]
'He felt some relief through hypnotism.'
From the foregoing occurrences, it appears that a pattern of case forms emerges. There seems to be an effort on the part of the language to realize the cooccurring case relations in distinct case forms to the extent necessary to avoid ambiguity. For instance, verbs with a cooccurring [+AGT] distinguish a nominative, an accusative and a locative case form. When a case relation is non-nominative, the [+AGT] and the [+OBJ] are realized in the [+AC] while the [+LOC] and the [+DAT] are manifested in the [+L]. There is no confusion between the two accusative actants when they occur as non-subject because of certain distinctive features such as [+animate] usually associated with [+AGT] and [-animate], with [+OBJ]. Between a [+LOC] and a [+DAT], the latter is easily recognizable not only because it is typically [+animate], but, also, because it is selected by identifiable types of verbs, again, designated by certain semantic features. Thus, a normal construction with an agentive verb may consist of one [+NM], one [+AC] and one [+L]. It can allow an outer [+L, +LOC] which can be distinguished from the inner [+LOC] by the features on the verb as discussed earlier. When all three case forms as pigeon holes are full and an optional instrumental case is taken, it has to occur in a case form that will distinguish it from the case relation that it closely resembles, which is the [+OBJ]. It is not realized, generally, in the [+AC] when the [+OBJ] is also in that form. Hence, we find it taking the [+L] form as manifested by the unique complex noun phrase. However, if the [+OBJ] is in the nominative, the [+INS] can freely assume the accusative case form.
since it can just as well be distinguished from the accusative [+AGT].

Without a cooccurring [+AGT], the non-nominative [+INS] can be manifested in the [+AC] since it does not compete with the cooccurring [+OBJ] which has to be in the [+NM]. When it occurs with verbs of sensation or perception, the [+INS] may be either [+AC] or [+L]. With a cooccurring [+NM, +OBJ], it is [+L]. With a [+DAT] it usually expresses the sense organ used for what is indicated by the potential verb or the means through which the state is achieved.

2.4.6 Benefactive Case Relation [+BEN]

The relation of the animate or inanimate element for whose benefit an action is performed or for the benefit of which a state exists is the benefactive case relation. It can also indicate the entity in whose place an action is performed or the purpose for which an action is undertaken (Starosta, 1973a:139-40). It may be realized in the nominative or the benefactive case form with agentive verbs, and only in the benefactive case form with non-agentive verbs. It does not cooccur with verbs of sensation or perception. For example:

52. bumili ako ng silya para sa nanay
    buy I chair for mother
    [+NM] [+AGT] [+AC] [+P] [+L] [+B] [+BEN]

'I bought a chair for mother.'

53. ipinagluto ko ang nanay
    cook I mother
    [+AC] [+NM] [+B] [+BEN]

'I cooked for mother.'
54. namatay si Rizal para/alang-alang sa kaniyang bayan
die for /for the sake of his country

'\(\text{Rizal died for his country.}\)'

The [+BEN] actant in the benefactive case form as recipient
is usually manifested by a prepositional phrase consisting of a P
and a NP, where NP is generally a [+L] Det and a head noun N. With
the meaning 'purpose', the [+BEN] actant is a prepositional phrase
consisting of a P and either a NP with a nominalized verb as head N
or a sentence S whose head V is always non-finite. The nominalized N,
like any underived N, is marked for both case relation and case form
whereas the S, not being a noun, is marked neither for case relation
nor case form. The only indication that the phrase is a benefactive
actant is the case form marking on the preposition, which at the
same time functions as a complementizer of the embedded S. For
example:

55. nag?ipon siya ng pera para sa pamimili ng aginaldo
save up he money for buying presents

sa Pasko 13
Christmas

'\(\text{He saved up some money for the purchase of some gifts}\)
at Christmas.'

56. kumaka?in ako ng bitamina para lumakas
eat I vitamins for become strong

'I take vitamins to be strong.'
In some analyses (Platt, 1971:48-49; Kullavanijaya, 1974:51), the benefactive case relation has also been associated with the indirect object of verbs such as 'give' obviously because it 'benefits' from the action. As has been mentioned previously, verbs of transportation or location in this study require a [+LOC] as goal. The indirect object cannot be a [+BEN] because it can be shown that an optional [+BEN] can cooccur with it. Compare the following pair of sentences:

57.a. binigyan ko ng pera si Nena para sa simbahan
give I money for church
[+AC] [+AC] [+NM] [+P] [+LOC] [+B] [+BEN]
'I gave Nena some money for the church.'

57.b. ipinagbigay ko ng pera si Nena sa simbahan
give
[+AC] [+AC] [+NM] [+B] [+LOC]
'I gave some money to the church for Nena.'

2.4.7 Reason Case Relation [+RSN]

The nominal which indicates the reason for doing an action or the cause of the occurrence of an event or state expressed by the verb has been labelled reason case relation. It occurs optionally with almost all verbs whose semantic features are compatible with a reason or cause that explains why the agent performs an action, why an object undergoes a process, or why/how a certain state comes about. It is realized either in the nominative or the reason case form. With state or emotion verbs, the [+RSN] may optionally be in the reason case form or the locative. For example:
58.a. nagtrabaho ang dalaga dahil sa pagkamatay ng tatay
work maiden because death father

58.b. ikinapagtrabaho ng dalaga ang pagkamatay ng tatay niya

59.a. natumbaba siya (dahil) sa matinding init
fall/faint she because intense heat

59.b. ikinatumbaba niya ang matinding init

With potential verbs cooccurring with a non-nominative [+RSN],
the preposition that marks the reason case form may be optionally
unexpressed leaving only the [+RSN] actant realized in the [+L]. The
resulting construction as in 59.a becomes superficially identical
with that manifested by a potential verb with a [+OBJ] and a [+DAT]
in its case frame.

60. natakot siya sa kulog
afraid she thunder

By simply looking at the cooccurring case forms, 59.a without dahil
is apparently identical to 60. The two sentences differ, however, in their cooccurring case relations. Where the potential verb in 59.a takes a [+OBJ] subject and a [+RSN], that of 60 takes a [+DAT] subject and a locative [+OBJ]. It may be mentioned that sentence 60 is analyzed differently by Ramos (1974:37). She gives the same sentence as cooccurring with kulog 'thunder' marked either by the accusative determiner ng or by the locative determiner sa. With ng, the sentence is glossed 'She was frightened by the thunder' and with sa, it is 'She was frightened of the thunder' and the subject siya is identified as having the objective case relation and the non-nominative actant kulog, the instrumental. Although she considers the sa in this sentence as possibly a reduced form of dahil sa marking a 'causal case', Ramos was prevented from pursuing this line of analysis due to the limitation of her study. Two questions can be raised about her analysis: (a) Her first sentence possibility -

"natakot siya ng kulog 'She was frightened by the thunder.'"

is rejected on the ground of unnaturalness. The acceptable form is the non-potential form which has no [+NM, +INS] counterpart:

tinakot siya ng kulog

It is claimed here that the potential forms of the class of emotion verbs do not cooccur with an instrumental actant in the accusative case form. (See pp. 60-61 for occurrences of the INS actant.)

(b) Her second sentence possibility -

"natakot siya sa kulog 'She was frightened of the thunder.'"

forces a locative case form realization of the instrumental actant,
which would be restricted to this subclass of verbs, and thus, loses the generalizations made previously about instrumentals (see 2.4.5, pp.58-63). Moreover, the meaning carried by the actant kulog is that to which fear is directed. This meaning can be compared with the following examples used previously:

38. a. nagalit ang dalaga (sa tsuper) (From p.55)
    got angry maiden driver
    [+NM] [+DAT] [+OBJ]

    'The maiden got mad (at the driver).'</n
49. nahiva? ang bata? ng kutsilyo (From p.61)
cut child knife
    [+NM] [+AC] [+INS]

    'The child got cut by/with a knife.'

Apparently, the sentence in question is closer to 38.a than to 49; their verbs belong to the same subclass of emotion verbs and their non-nominative actants kulog and tsuper play the role of the object of fear and anger, respectively, built up in the experiencer actant. Hence, with the meaning given for the sentence in question, the proper analysis should be that it has a cooccurring [+DAT] subject and a locative [+OBJ] instead of a [+OBJ] subject and a locative [+INS].

Having justified the analysis of 60, we can proceed to compare it with 59.a without dahil. One way of showing the difference between the two sentences is by expanding 60 to include a [+RSN], and we may get something like the following:
Another way is by comparing the verb form in 59.b, where the cooccurring [+RSN] is the subject, with the following sentence in which the [+OBJ] in 60 is [+NM]:

60.b. kinatukutan niya ang kulog (dahil sa pagkamatay ng aso niya na tinama'an ng kidlat)

and with the sentence in which the [+RSN] is [+NM]:

60.c. ikinatakot niya sa kulog ang pagkamatay ng aso niya na tinama'an ng kidlat

It will be observed that in 60.a where the locative [+OBJ] is present, the [+RSN] retains its preposition to mark it unambiguously.

Sentences 60.b and 60.c show the difference in corresponding verb forms to show that the cooccurring [+OBJ] in the former and [+RSN] in the latter are in the nominative case form. Note the identical affix i- used in 58.b, 59.b and 60.c to mark [+NM, +RSN].

One other point that may be stressed in connection with 60 is that a class of verbs exemplified by natakot with only a cooccurring [+OBJ] can be derived from the class which requires both [+DAT] and [+OBJ]. (See SVDR-3, p.318, Chapter IV.) This suggests that if no
+[DAT] is present and a [+RSN] cooccurs without its preposition, the construction will be superficially identical to 60, but with a different feature specification:

60.d. natakot siya (dahil) sa kulog

She became afraid because of the thunder.

Whatever semantic commonality there may be between 'be/become afraid of' and 'be/become afraid because of' has not been explored here. A fairly reasonable explanation for the cooccurrence possibility of the [+DAT] with a [+OBJ] and a [+RSN] with this verb, or any other verb in this subclass, is that we can speak of someone's feeling what is expressed by the verb toward some object for a certain reason.

2.4.8 Comitative Case Relation [+COM]

Taylor defines the comitative case relation as "that which is somehow associated in a parallel way with the referent of another actant in the verbal activity or state described" (1971:42). There are three types of verbs in Tagalog which permit the occurrence of a [+COM] actant, namely:

(a) Non-potential verbs whose subclassification is not affected by the presence of a [+COM] which expresses the notion 'in company with' or 'at the same time with' one other actant in the action or process designated by the verb. The [+COM] is realized in the comitative case form [+C] through the preposition kasama or kasabay, whose respective meanings are as indicated above. Both prepositions are presumed to have been derived from nouns of the
same shape meaning 'companion'. The status of the category of the source, however, lies beyond the scope of this study. For example:

61. nag-aral ako ng pagmamaneho kasabay ni Mercy

study I driving same time

[+NM] [+AC] [+P] [+C] [+COM]

'I studied driving at the same time with Mercy.'

62. pumunta ang pamilya ni Titong sa Missouri

go to family

[+NM] [+OBJ]

[kasama] ng pamilya ni Mel

in company with family

[+P] [+AC] [+COM]

'Titong's family went to Missouri along with Mel's family.'

It will be noted that the comitative prepositional phrase is different from the previous type of prepositional phrase discussed in terms of the accusative marking on the head N rather than the locative.

(b) Verbs identified as 'social' require a cooccurring [+COM] expressing the nominal that has been performing or is in the process of undergoing something indicated by the verb before another actant, usually a [+AGT] or a [+OBJ], 'joins in' the same activity or process. In other words, the verb indicates that an actant does or undergoes what the verb states imitating or following the model set by the [+COM] actant. The [+COM] with this class of verbs is usually manifested in the locative case form, but it may also appear in the nominative.

For example:

63. nakipanood siya ng TV sa amin

watch he us

[+V] [+NM] [+AC] [+L] [+COM]

'He joined us in watching TV.'
64. pinakisakyan ni Del ang kaibigan niya sa kotse
   ride friend her car
   [+V] [+AC] [+NM] [+COM] [+L] [+LOC]

'Del joined her friend in riding in the car.'

(c) A small class of verbs which expresses social-reciprocal action requires the cooccurrence of at least a [+AGT] or a [+OBJ] with a [+COM]. The [+COM] is realized in the locative or nominative case form. For example:

65. nakipagkasundo? siya sa kalaban niya
   come to terms he opponent his
   [+V] [+NM] [+L] [+COM]

'He came to terms with his opponent.'

66. pinakipagkita?an niya ang guro tungkol sa
   meet with he teacher about
   [+V] [+AC] [+NM] [+P] [+COM] [+AGT]
   kaniyang marka
   his grade
   [+L] [+OBJ]

'He met with the teacher about his grade.'

2.5 Case Forms

A description of the case system in a language would be incomplete without any reference to the system by which the various case relations are realized and marked. As stated earlier in this chapter, the system of marking case relations in Tagalog involves two devices: a) by case-marking determiners or prepositions occurring before the nominative and non-nominative nouns; pronouns are permanently marked for their individual case forms; and b) by verb
inflection to mark the case relation of the actant realized in the nominative case form which is the grammatical subject of the sentence. (See McLaughan, 1973:208.) The case-relation-marking affixes in the verb are referred to as the verb's voice. It may be emphasized that a single voice inflectional affix does not necessarily mark one and only one case relation subject. Depending on the verb's syntactic (case frame subcategory), semantic and morphological features, a voice marker identifies a corresponding case relation as subject. This means that a particular voice affix with a verb in one subcategory may mark, say a [+OBJ] case, and the same voice affix with a verb from another subcategory may mark another case relation, e.g., [+AGT]. Conversely, a given case relation in the nominative case form may be marked by one or more voice affixes according to the particular class of the verb it cooccurs with.

As stated previously, case forms are treated in lexicase as lexical features on nouns, prepositions, and determiners. Each of these categories is marked for a single case form feature. There are six case forms identified in this study that realize the eight case relations posited. They are the nominative [+NM], accusative [+AC], locative [+L], benefactive [+B], reason [+R], and comitative [+C]. The first three case forms are realized by determiners [+Det] and the remaining three by prepositions [+P]. However, there are also a few prepositions that may realize the [+AC] and [+L] case forms. The presence of a preposition and a determiner both carrying a case form feature in a prepositional phrase does not pose any
conflict in identifying the case form of the entire constituent. The principle of dominance applies to the different categories. In a complex noun phrase, for instance, the case relation of the head noun is the case relation of the whole constituent and the case form of the marker in the highest node governs the marker under it; whereas, the case form of a prepositional phrase is the case form of the preposition (its lexical head) and the case relation is the case relation of the head noun of the noun phrase.

The discussion which follows deals first with the non-nominative case forms and their corresponding case form markers. The nominative case form, which realizes all the case relations marked variously in the verb, will come after.

2.5.1 Accusative Case Form [+AC]

Most accommodating of the non-nominative case forms is the accusative case form. It can realize the [+AGT], [+OBJ], [+DAT], and [+INS] case relations. Excluding phenomenal, existential and impersonal verbs, every verb, in general, cooccurs with at least one case relation which is realized in the nominative case form. This implies that an accusative case form can appear only when the nominative slot has been filled by a case relation, and one other actant in the case frame of the verb is one that is allowed to be realized in the accusative case form.

Unlike the nominative case form, the accusative may occur more than once in a simple sentence. Each of these occurrences manifests a distinct case relation. Verbs normally allow one or two occurrences
of the [+AC], unless a third optional actant may also be realized in the same case form. Sometimes, this third actant is modified in some ways that will distinguish it from the two other accusative case forms. (See discussion on Instrumental Case Relation, 2.4.5, pp. 58ff.)

The accusative case form is marked by the accusative determiner nang (here abbreviated ng to conform to standard orthography) when the actant is a common or abstract noun. If it is a personal name, the personal accusative determiner that marks it is ni with a singular meaning and nina with a plural meaning. In general, the whole actant can also be manifested by members of the accusative class of pronouns, either personal or demonstrative, which bear any of the case relations allowed to be realized in the [+AC].

Some of the case relations that occur in the accusative form have to obey certain restrictions. They are discussed below.

2.5.1.1 Accusative Objective [+AC, +OBJ]

In Tagalog, there are certain constraints on the case form realization of N's that are assigned the objective case relation feature. As a general rule, any case relation can be manifested in either a nominative or a non-nominative case form. When non-nominative, the actant may be realized either in the accusative or the non-accusative case form following the subcategorization below:

SR: [-NM] → [+AC]

If the actant is non-accusative, the following redundancy rule marks it with the locative case form:

RR: [-AC] → [+L]
A [+OBJ] actant, when non-nominative, is realized in either the accusative or the locative case form. Each of these forms corresponds to the semantic feature indefinite and definite, respectively. These semantic features are added by the following redundancy rule:

$$RR: \left[ \begin{array}{c} +AC \\ +OBJ \end{array} \right] \rightarrow [-\text{def}]$$

The usual non-nominative form of a [+OBJ] is the accusative, but where the locative form is permitted, it expresses a definite objective referent. When the [+OBJ] actant is a personal name or a personal pronoun, it can only be realized in the locative case form when non-nominative. Thus, the following redundancy rule applies:

$$RR: \left[ \begin{array}{c} [+\text{pers name}] \\ [+\text{Pro}, +\text{pers}] \\ -\text{NM} \\ +\text{OBJ} \end{array} \right] \rightarrow \left[ \begin{array}{c} +\text{L} \\ +\text{OBJ} \end{array} \right]$$

The above rule accounts for the ungrammaticality of the following sentence:

67. *naghintay ni Maria ang nanay niya
    wait for Mary/her mother
    \left[ +\text{AC} \right] \quad \left[ +\text{NM} \right] \quad \left[ +\text{AGT} \right]

and the grammaticality of the following:

67.a. naghintay kay Maria ang nanay sa kaniya
    'Mother waited for Maria/her.'
    \left[ +\text{L} \right] \quad \left[ +\text{NM} \right] \quad \left[ +\text{AGT} \right]

It is important to note that demonstrative pronouns behave like the common nouns in being realized in either the [+AC] or the [+L] form.
when occurring with the [+OBJ] role. Besides denoting definiteness, since both forms are lexically definite, the demonstrative pronoun marked [+L] is more emphatic than that which is marked [+AC]. For example:

67.b. naghihintay nito ang nanay
wait for this mother

'Mother is waiting for this.'

67.c. naghihintay dito ang nanay
this

'Mother is waiting for this very particular thing.'

Although not expressed formally, a similar observation pertaining to the surface realization of the objective case is made by Ramos (1974:100-1). She indicates that the objective phrase is not marked by ni nor ng pronouns and, instead of ni-marked phrases and ng-pronouns, kay-marked phrases and sa-pronouns are used. It can also be replaced, she adds, by ng-demonstratives. What these statements fail to account for, however, is the possibility of realizing a [+OBJ] case relation expressed by a common noun or a demonstrative in the locative case form (a common noun marked by sa or a sa-demonstrative in Ramos' terms).

This 'irregularity' in the case form realization of the [+OBJ] has not passed unnoticed in some other works on Tagalog. Two authors, in particular, state a similar restriction as follows:

(a) "Also, in a verbal predicate, the nominal in the object complement cannot be a name or a pronoun" (Otanes, 1966:70).

(b) "Pronouns and personal names cannot be objects of agentive
verbs; they are always in a dative relationship to these verbs" (Stevens, 1969:4).

One problem with the preceding statements is the vagueness of the terms 'object complement', 'objects of agentive verbs', and 'dative relationship'. It is not clear whether the authors are referring to case relations or case forms when they use such terms. Perhaps, it would be reasonable to interpret the terms as case relations rather than case forms. Following Otanes' restriction in a, the complement kay Maria/sa kaniya in sentence 67a cannot be an object complement (a [+OBJ] here), and neither can nito nor dito in 67.b and 67.c, respectively. Our prediction is that she must mark these as directional complements (our [+LOC]), even if they differ semantically from her directional complements in general. To Stevens, these complements will be assigned a dative case, except nito. However, if the complement cooccurring with the same verb maghintay 'to wait for' were not a name or a pronoun such as follows:

67.d. naghintay ng bus ang nanay
       wait for bus mother

'Mother waited for a bus.'

then, it would be considered by both Otanes and Stevens as being an object complement or as having an object relationship to the verb. It is rather curious that a verb which presumably determines what case relations must cooccur with it should change one case for another on account of selectional differences between the elements that manifest it, e.g., common versus proper nouns, common nouns versus pronouns, definite versus indefinite. When we compare 67.a - 67.c with 67.d, we note that the [+OBJ] case relation in all four sentences,
regardless of form or inherent features, plays the same role in relation to the verb. To this list may be added a definite [+OBJ] form corresponding to the indefinite [+OBJ] form in 67.d as follows:

67.e. naghintay sa bus ang nanay wait for bus mother

[+L] [+NM]

[+OBJ] [+AGT]

'Mother waited for the bus.'

In all instances, it can be said that the verb takes the same case relation features. What we observe changing are the case forms with a corresponding change of feature referring to either definiteness or emphasis, as the case may be. This change is considered reasonable since actants are to a certain extent free to occur in at least two different case forms. To say that the case relations contracted by a verb change with a change in case forms loses semantic and syntactic generalizations. Until a more arguable position than the one claimed here is presented, we will continue to regard CR's as invariant within the same verb and CF's more flexible. In view of these arguments, we find the importance of making CR and CF distinctions.

There is another marker besides which applies strictly to the objective case relation. These are the expressions tungkol or hinggil 'about', ukol 'with regard to', and laban 'against' which have been classified here as members of a limited set of prepositions. They are marked with the accusative case form feature and with a case frame feature requiring a cooccurring [+OBJ] actant interpreted by the verb as topic of conversation or subject of information in verbs of information. For example:
68. nag-report siya sa amin tungkol sa aksidente

\[ \begin{align*}
\text{He reported to us about the accident.}
\end{align*} \]

2.5.1.2 Accusative Dative [+AC, +DAT]

When the [+DAT] does not cooccur with a [+AGT], it may be realized in the accusative case form. In this case form, it cooccurs with a [+OBJ], [+LOC] or [+RSN] realized in the nominative. For example:

69. nakita ni Jim ang 'air show' (sa bukid)

\[ \begin{align*}
\text{The air show was seen by Jim in the field.}'
\end{align*} \]

70. kinatakutan ng bata? ang malaking aso

\[ \begin{align*}
\text{The child feared the big dog.'}
\end{align*} \]

2.5.1.3 Accusative Instrumental [+AC, +INS]

The [+INS] almost always occurs in the accusative case form.

When it occurs in the case frame [+AGT, +OBJ], its form may be modified into a complex noun phrase in the [+L] case form, to mark it explicitly as having the instrumental case, especially when there are already two or more identical [+AC] forms. Often, an ambiguity occurs when the objective case is unexpressed. For example:

71. nagguhit siya ng lapis

\[ \begin{align*}
\text{He drew a pencil/with a pencil.'}
\end{align*} \]
The same sentence may be realized unambiguously as follows:

71.a. nagguhit siya sa pamamagitan ng lapis

\[
\begin{align*}
\text{means} & \quad \text{pencil} \\
+L & \quad [+AC] \\
+\text{INS} & \quad [+\text{INS}] \\
\end{align*}
\]

'He drew by means of a pencil.'

2.5.2 Locative Case Form [+L]

The locative case form can host a locative, a dative, an objective or a comitative case relation. A simple, underived agentive verb of location can have two instances of the [+L] case form, excluding outer locatives, optional prepositional phrase locatives, and coreferential locatives. These two [+L] constituents must be a [+LOC] and a definite [+OBJ]. However, when the verb is causative, the possibility of realizing a third actant in the [+L] case form can be attributed to the presence of an additional [+DAT] in the verb's case frame. One other verb type which can compound the occurrence of [+L]'s in a sentence is the social verb in which a [+COM] case relation may also be realized in this case form. For example:

72. nakipagpasalin ako (sa Mama) (kay Cricket) sa transfer I mother

\[
\begin{align*}
+\text{soc-caus} & \quad [+\text{NM}] \\
+\text{LOC} & \quad [+\text{COM}] \\
\end{align*}
\]

pabangong ito sa aking 'atomizer'

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

'I joined Mother in having Cricket transfer some of this perfume to my atomizer.'

This sentence can look forbidding especially if we consider the notion of 'free' ordering of constituents in Tagalog. There are bound to be as many readings here as there are permutations of the case
relations than can be realized as [+L] matched with each lexical item. However, these readings can be narrowed down on the basis of some semantic features expressed by the definition of [+OBJ] and [+LOC]. Perhaps, the crucial distinction is between the [+COM] and the [+DAT], since both, like the [+AGT], are typically animate. Failing support from semantic features to make a clear-cut distinction between these two case relations, we can refer to possible 'preferred' ordering conditions on constituents. As many linguists would not contest, the preferred ordering for the case frame requiring [+AGT], [+OBJ] and [+LOC] in Tagalog is as appears in this sequence. With an additional [+DAT] in the preceding case frame, the preferred order is [+AGT], [+DAT], [+OBJ] and [+LOC]. If, in addition to the preceding four actants, a [+COM] is permitted to cooccur, the order is identical to the preceding with the [+COM] appearing between the [+AGT] and the [+DAT], as shown in sentence 72.

The determiner sa marks the locative case form of common nouns. Before personal names, the determiner is kay indicating a singular meaning or kina indicating a plural meaning. The [+L] marked locative set of pronouns can also be assigned any of the case relations enumerated above which may be realized in [+L]. Directional verbs, as has been mentioned, may express their locative case relation through a prepositional phrase. The prepositions galing, mula? and buhat indicate 'from', hence, [-goal] or source and patungo or tungo 'toward' and hanggang 'until; up to' refer to [+goal].
2.5.3 Benefactive Case Form [+B]

There is only one case relation which the benefactive case form realizes and that is the benefactive case. The [+B] case form is identified by the preposition para 'for; for the sake of' and as in most prepositional phrases, it governs the [+L] case form of its cooccurring noun phrase. (See examples 52 and 52, pp. 63-64.)

2.5.4 Reason Case Form [+R]

The reason case form realizes only the reason case relation. It is marked by the preposition dahil 'because of' and is followed by the [+L] marked nouns, including names and pronouns. Certain verbs, particularly potential verbs, allow the preposition to be omitted, creating an opportunity for the remaining [+L] marked phrase to be given a different possible case interpretation. (See examples 58.a, 59.a, 60.a, pp.66, 69-70.)

The behavior of the preposition dahil is identical to that of the preposition tungkol 'about' which occurs before a [+OBJ] noun phrase. (See pp. 38-39.) That is, the prepositional phrase as a whole can be preceded by the accusative case form determiner ng rendering dahil a noun, as in the following:

73. na?inis ang dalaga ng dahil sa kaniya

    annoy   maiden because him
    [+NM]   [+OBJ]    [+N]     [+L]
    [+AC]     +RSN
  [++[RSN]]

'The maiden got peeved because of him.'

Unlike the tungkol phrase, however, the full dahil phrase cannot occur in the nominative case form; only the nominative noun phrase can,
as in:

73.a. ikina'inis siya ng dalaga

\[\text{[+NM]} \quad \text{[+AC]} \quad \text{[+RSN]} \quad \text{[+OBJ]}\]

'He was the reason for the maiden's being annoyed.'

2.5.5 Comitative Case Form [+C]

The comitative case form which is identified by the preposition kasama 'in company with' or kasabay 'along with; at the same time as' realizes only the comitative case relation. Further studies on prepositions may reveal other derived words with the affix ka- as possible markers for the [+C] case form, e.g. kasunod 'after; following', ka'agapay 'shoulder to shoulder with; arm to arm with'. Moreover, such studies may explain why the following NP of this preposition is marked [+AC] instead of the widespread [+L]. One explanation that may be attempted here is that the preposition we have isolated is possibly a noun or an adverb functioning as predicate of a non-verbal sentence. This sentence is embedded in the NP associated with it, thus creating a complex NP. Following this treatment, sentence 61 on p. 71 may have the structure represented schematically as follows:
Two evidences that support this analysis are as follows:

(a) The complementizer na, marked here as a P, which occurs with other types of embedded sentences may also occur before the posited embedded sentence.

(b) Following a, this particular concept of 'togetherness' in the action or event is also expressed by a complex NP structure where the attribute is no longer a sentence but simply a NP, and the head N in order to incorporate the idea of an expressed or unexpressed associate has to be realized in the plural pronoun, thus:

2.5.6 Nominative Case Form [±NM] and Voice Marking on the Verb

It is a characteristic feature of the case system of Tagalog and the other Philippine languages to realize all verbal case relations in
general in the nominative case form which corresponds to the grammatical subject of the sentence. With the exception of the small classes of special verbs which include phenomenal, time, event and existential verbs, one case relation always occurs in the nominative form of every simple verbal sentence. The nominative case form is identified by the determiner *ang*, marked [+NM], when the actant is a common or abstract noun and by *si* when it is a personal name, singular in meaning, and *sina* with the meaning plural. The set of pronouns marked [+NM] realizes any of the case relations compatible with the role identified.

Although the nominative case form neutralizes all case relations it manifests, the identity of the case relation is recoverable through the verb by means of a system of affix marking. Depending on the case relations the verb takes, the verb is marked by a particular affix to indicate which of its cooccurring case relations is realized in the nominative case form. This feature is called *voice*. Thus, a verb marked with an affix that signals a cooccurring [+AGT] as the grammatical subject is said to be in the agentive voice; with one that indicates a [+OBJ] in the nominative, the verb is in the objective voice; with one that indicates a [+LOC] as subject, the verb is in the locative voice, and so forth. The analysis here shows that there are sets of affixes that identify the voice paradigm of verbs. They are manifested by classes of verbs subcategorized according to their case frame, semantic and morphological-voice features. In the following are identified the case marking affix or
affixes with which each case relation realized in the nominative is signified. The six voice marking affixes are $um$-, $m$-, $i$-, $an$ and $\emptyset$.

2.5.6.1 Nominative Agentive [+NM,+AGT]

The agentive case relation manifested in the nominative case form is marked by the active affix $um$- or $m$-. At this point, it must be emphasized that the approach taken in this study considers the classification of verb stems rather than verb roots, the latter being the normal practice in all previous works in Tagalog. (See detailed discussion in Chapter III.) This means that with the roots bigay 'give' and kuha 'take', we can also have stems such as pagbigay, pamigay, pangbigay, kapagbigay, pagpabigay, etc., correspondingly. While $um$- marks the [+AGT] subject for the class of verbs exemplified by the root-stem kuha, identified here as belonging to the non-ergative class, [-erg], $m$- marks the [+AGT] subject of the stem classes exemplified by pagbigay in one subclass and panguha in another subclass, both of which share the morphological-voice features [-pot, +act] read as non-potential active verbs. All verb stems belonging to these two subclasses have initial $p$'s and when they are marked by the voice affix $m$-, the initial $p$ of the verb stem is fully assimilated to the voice marker $m$-.. Thus, $m$-+pagbigay becomes magbigay, and $m$-+panguha becomes manguha.

It will be shown later how this type of classification and marking can express more significant generalizations than a root classification and marking with affixes such as mag-, mang-, and ma-, as in mano?od
'watch' and making 'listen', and why this analysis is preferable or desirable.18

2.5.6.2 Nominative Objective [+NM,+OBJ]

Of all case relations, the object cooccurs with the greatest number of verb subclasses, and it is marked in the verb with a voice affix according to the type of verb it cooccurs with. Being this basic, it is not surprising to find that it can be marked by all types of voice marking affixes available in the language. It can be marked by either of the active affixes um- and m- and by any of the passive affixes -in, i-, or -an or by 0 which means no affix at all. (The specific case frame, semantic and morphological-voice marking of each verb subclass with the corresponding affix will be discussed in detail in the next chapter.)

2.5.6.3 Nominative Dative [+NM,+DAT]

The dative case relation occurs in two major subcategories of verbs, namely, information and psychological verbs and in one type of secondary derived verbs--the causative verbs. Information verbs marked with the affix -an and subclasses of psych verbs marked by 0 and another subclass marked by -an signify that the cooccurring [+DAT] is realized in the nominative case form. With causative verbs with a cooccurring [+DAT] as subject, the voice affix is -in.

2.5.6.4 Nominative Locative [+NM,+LOC]

The inner locative case relation when realized in the nominative case form is always marked in the verb by the affix -an. The problem
of ambiguity with one affix marking two different case relations arises when -an marks a nominative objective case and a nominative locative case in identical verb stem forms. For example:

74.a. papahiran niya ang mesa
mop he table
[+AC] [+NM] [+AGT] [+OBJ]

'He will mop the table.'

74.b. papahiran niya ng barnis ang mesa
apply he varnish table
[+AC] [+AC] [+NM] [+OBJ] [+LOC]

'He will apply varnish on the table.'

With some subclasses of non-strict locative verbs, the root forms of stems, particularly those that are marked by -an to indicate a [+NM,+OBJ], do not manifest a locative case in the nominative at all. Instead, the related stem characterized by either the affix pag- or pang-, signifying an active verb stem, is marked by -an to express a locative voice. For example:

75.a. [linabhan]
[nilabhan] niya ang damit na naputikan sa palanggana
launer she dress soiled basin
[+AC] [+NM] [+L] [+AGT] [+OBJ] [+LOC]

'The soiled dress was washed by her in the basin.'

75.b. pinaglabhan niya ng damit na naputikan ang palanggana

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

'The basin was used by her to launder the soiled dress in.'

As mentioned earlier, there is a class of derived locative verbs which indicates outer locatives as being the cooccurring subject. Being identical in form and marked by the same affix -an as the
location verbs that indicate an inner locative subject, these derived verbs can be easily confused with inherent location verbs in the locative voice. (See pp. 48-49.) For example:

76. paglalaruan nila ng 'pingpong' ang aming 'basement' play in they our
   [ +AC ] [ +AC ] [ +LOC ]

   'Our basement will be used by them to play pingpong in.'

The distinction is more apparent in the case of a derived locative verb which comes from one with a locative voice form. Compare the following:

77.a. pinagbigyan ni Clara ng regalo kay Rosa ang given-to gift
      [ +AC ] [ +AC ] [ +LOC ]

      'The maid was handed a present by Clara for Rosa.'

77.b. binigyan ni Clara ng regalo si Rosa give
      [ +AC ] [ +AC ] [ +NM ]

      'Rosa was given a gift by Clara.'

The meaning of the derived verb in 77.a differs from that of the source verb in 77.b. The former indicates that the locative subject is not the intended goal or terminal of the objective referent. It expresses only 'place of giving'. The latter means that the locative subject is the end goal or recipient of the objective referent.
2.5.6.5 Nominative Instrumental \([+\text{NM},+\text{INS}]\)

The instrumental case relation ordinarily occurs in the nominative case form only when it cooccurs with a \([+\text{AGT}]\). It is identified in the verb with the affix i- and the verb stem is a derived form with the affix pang-. When the verb root-stem does not employ the i- affix to designate a nominative objective, the root-stem with i- may also signify the \([+\text{NM},+\text{INS}]\). For example, either of the following sentences is acceptable:

78.a. ipangbubungkal niya ng hukay ang asarol na ito
dig he pit hoe this
\([+\text{AC}]+\text{AGT}[+\text{OBJ}][+\text{INS}]

'This hoe will be used by him to dig a pit.'

78.b. ibubungkal niya ng hukay ang asarol na ito
\([+\text{AC}]+\text{AGT}[+\text{OBJ}][+\text{INS}]

2.5.6.6 Nominative Benefactive \([+\text{NM},+\text{BEN}]\)

The benefactive case relation in the nominative case form is marked in the verb by the voice affix i-. The verb stems which require the cooccurrence of a \([+\text{NM},+\text{BEN}]\) are the same verb stems that allow a cooccurring \([+\text{NM},+\text{AGT}]\). When the agentive subject is realized by either a root-stem or a derived active stem, a benefactive may also be realized by the same stem. For example:

79. iginawa' ng nanay ng damit ang manika? ni Melissa
make mother dress doll
\([+\text{AC}]+\text{AGT}[+\text{OBJ}][+\text{BEN}]

'Mother made a dress for Melissa's doll.'
80. ipagdilig niya ng halaman ang nanay
water she plants mother
[+AC] [+AC] [+NM]

'She will water the plants for mother.'

The agentive voice forms of 79 and 80 are gunawa? and magdilig whose stems are the root gawa? and the derived stem pagdilig, respectively.

There are instances in which root-stems of non-locative or even non-strict locative verbs are used with the affix -an instead of i- to indicate a benefactive subject. They have become acceptable, although the element of ambiguity in the verb as marking also a [+NM,+LOC] remains. For example:

81. binilhan ng nanay ng damit ang kaibigan niya
buy mother dress friend her
[+AC] [+AC] [+NM] or [+NM]

'Mother bought a dress from/for her friend.'

Because of its limitations, this particular form with the -an marker is considered an 'irregular' benefactive voice form.

2.5.6.7 Nominative Reason [+NM,+RSN]

The case relation here labelled [+RSN], which refers to the cause or reason for the occurrence of an action, event or state, when realized in the nominative case form is marked in the verb by the affix i-, too. The verb stem, however, is a derived form with the prefix ka-. For example:
82. ikinapagluto? kaagad ng nanay ng pagka?in
   cook immediately mother food
   [+AC] [+AC] [+OBJ]
   ang pagdating ng mga bisita
   arrival visitors
   [+NM] [+RSN]

'The visitors' arrival caused mother to cook food immediately.'

83. ikinata"as ng presyon niya ang pagkawala? ng
   rise pressure his loss
   [+AC] [+NM] [+OBJ] [+RSN]
   kaniyang anak
   his child

'The loss of his child caused his blood pressure to rise.'

2.5.6.8 Nominative Comitative [+NM,+COM]

Of the verbs that may allow the occurrence of a [+COM], only
the derived secondary social verbs can allow it to be realized in
the nominative case form. This manifestation is marked by the affix
~an appended to a derived social verb stem identified by the prefix
paki-. For examples, see 64 and 66, p.72.

2.6 Summary of Case Relation and Case Form Correspondences

The following charts show in summary the correspondences
between case relations and case forms with their case markers, and
those between case relations in the nominative case form and their
voice affix markers in the verb.
<table>
<thead>
<tr>
<th>Case Relation</th>
<th>OBJ: AGT; LOC: DAT; INS: BEN; RSN: COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Form: Case Marker</td>
<td></td>
</tr>
<tr>
<td>+NM</td>
<td>+Det, ang</td>
</tr>
<tr>
<td>+AC</td>
<td>+Det, ng</td>
</tr>
<tr>
<td></td>
<td>+P, tungkol, hinggil</td>
</tr>
<tr>
<td>+L</td>
<td>+Det, sa</td>
</tr>
<tr>
<td></td>
<td>+P, +goal, patungo, hanggang</td>
</tr>
<tr>
<td></td>
<td>+P, -goal, mula?, buhat, galing</td>
</tr>
<tr>
<td>+B</td>
<td>+P, para</td>
</tr>
<tr>
<td>+R</td>
<td>+R, dahil</td>
</tr>
<tr>
<td>+C</td>
<td>+P, kasama, kasabay</td>
</tr>
</tbody>
</table>

Chart 1. Tagalog case relations and case forms with corresponding case markers
### Chart 2. Tagalog case relations in the nominative case form and the corresponding voice affixes that mark them in the verb

The analysis of CR's and CF's in this study inevitably led to the distinction between determiners and prepositions, i.e., Det is a sister category of N whereas P is a sister category of NP; both categories are marked for CF; the CF of the P is the CF of the entire PP. The distinctions arrived at lend clarity to the otherwise confused status of particles, noun markers, prepositions and similar categories that have been used in relation to noun phrase and prepositional phrase constructions. The problem of whether the complement marker consists of "a particle or a particle phrase" (Constantino, 1965:80) has, to my knowledge, not yet been satisfactorily described. This problem is
recognized by Constantino himself (1965: footnote 13, p. 80), but the paper he intends to write (or probably has written) on this particular problem (1965: footnote 14, p. 81) has unfortunately not reached my attention. Even in Otanes (1966:133), the constituent labelled 'Intro(ductor)' which occurs before a NP to make up an adverbial complement is expressed by various syntactic forms such as para sa, dahl sa, sa pamamagitan ng, sa, nang, tungkol sa. A similar description is found in Ramos (1974:99) where the case marking particles may be the simple ones, e.g., ng/ni and sa/kay (ang being identified apart as a subject marker), or "compound forms incorporating them: e.g., para sa/ para kay 'for', dahl sa/dahil kay 'because of', and sa pamamagitan ng 'by means of'."

The present analysis profits quite significantly from the system of sorting out PP's and NP's in their simple and complex forms. By the account that has been explicated here, we are no longer forced to group 'simple and complex' particles under one category label, and neither are we compelled to set up various kinds of nominal phrases beyond NP's and PP's. The distinction made between Det's and P's, based on their syntactic relation with N and NP, respectively, and on the case forms each class may be specified with, gives a clearer picture of case-marking of nominal phrases.

In connection with verbs, it has been noted at various points in this chapter that some of the verb forms identified here as signifying a cooccurring [+NM, +LOC] with pag- and ka- stems, a [+NM, +RSN] or, perhaps, even others such as a [+NM, +BEN] and a [+NM, +INS] with pang-stems have not been thoroughly established as verbs. Capell, along with
Müller and Lopez, treats the passive forms of the verbs as nouns on the basis of the occurrence of the possessive forms (accusative case form) of pronouns which mark the 'actors' (1964:239). This reason is not totally convincing because the possessive forms in Tagalog, as well as in Indonesian and Formosan languages (Starosta, personal communication), have a very broad range of uses which makes the 'evidence' for the claim weak. For purposes of this study, we will leave this question open, and provisionally assume that they are verbs. At some later time, some of these forms may turn out to be nominals, in which case the DR's posited here have to be modified or supplemented accordingly.

2.7 Phrase structure Rules for Tagalog

2.7.1 PS Rules

The Phrase Structure Rules (PSR's) component of the lexicase grammar generates bracketed strings of grammatical categories to which corresponding lexical items from the lexicon are inserted. The rules are context-free and they apply to category symbols. The bracketed strings contain general information of syntactic categories and of ordering and hierarchical relationships of constituents necessary for the insertion of lexical items. A lexical item is allowed to be inserted if the syntactic category feature marked on it is identical to the syntactic category labelling the node under which the lexical item is to be inserted. The contextual features in the lexical entry are stated in terms of sister categories and thus, the hierarchical information the phrase structure rules give is indispensable. These
contextual features must be compatible with the environment given by the string. They must match with the terminal category nodes, and there must be no contextual features violated.

Strings of simple grammatical sentences in Tagalog are formed following the rules stated below:

\[
\text{PSR-1: } S \rightarrow (\text{Modal})(\text{Neg})(\text{Modal}) \left\{ \begin{array}{c} \text{NP} \\ \text{AdjP} \\ \text{PP} \\ V \end{array} \right\}^{n}(\text{PP})^{n}(S) \text{ (Adv)}
\]

\[
\text{PSR-2: } \text{PP} \rightarrow P\left\{ \begin{array}{c} \text{NP} \\ \text{S} \end{array} \right\}
\]

\[
\text{PSR-3: } \text{AdjP} \rightarrow \text{Adj} \left\{ \begin{array}{c} \text{NP} \end{array} \right\}
\]

\[
\text{PSR-4: } \text{NP} \rightarrow (\text{Det}) \text{ N} \left\{ \begin{array}{c} \text{NP} \\ \text{PP} \\ \text{S} \end{array} \right\}
\]

The symbols are to be interpreted as follows:

\( \rightarrow \) : The symbol to the left of the arrow consists of the constituents to the right of it.

\( ( ) \) : Parentheses indicate optionality of occurrence.

\( \{ \} \) : Braces indicate obligatory choice of one of the elements within them.

\( X^n \) : Superscript \( n \) means any number of actants allowed by the cooccurring verb.

\( S \) : Sentence

\( \text{NP} \) : Noun phrase

\( \text{AdjP} \) : Adjective phrase

\( \text{PP} \) : Prepositional phrase

\( \text{Modal} \) : Modal includes optative words such as kahimanawari? nawa? 'would that,' indeterminate particles such as
Neg: Negative words such as hindi? 'not', huwag 'don't'.
V: Verb
Adv: Adverb
P: Preposition
Adj: Adjective
Det: Determiner
N: Noun

2.7.2 Some Basic Sentence Types

PSR-1 generates two major types of basic sentences, namely, non-verbal and verbal sentences. Both types may cooccur with optional constituents such as modal, negative and adverb. Because this study centers on verb forms and the cooccurring actants that subcategorize them, no attempt will be made to explain the conditions on these optional constituents. These constituents are not relevant environments to the modification of verb forms and their corresponding subcategorization. They have been identified in the portion of the rule that generates non-verbal and verbal sentences only to indicate the possible position of their occurrence.

2.7.2.1 Non-verbal Sentences

The non-verbal sentences are identified by their predicate constituent construction (the first constituent) as a) equational,
with a NP, b) descriptive or impersonal, with a AdjP, and c) locational, with a PP. The two NP constituents of an equational sentence have the same referent. For example:

84. guro? ang tatay ko
teacher father my
'My father is a teacher.'

85. laru?an ito
toy this
'This is a toy.'

86. Linggo bukas
Sunday tomorrow
'Tomorrow is Sunday.'

The descriptive or impersonal sentences are classified further into two subtypes according to their adjectival constituents:

a) The special descriptive type consists of either an existential adjective or an impersonal adjective such as may/mayro?on 'have; there is', wala? 'don't have; there is none' and gusto 'like; enjoy; want', ayaw 'don't like; don't enjoy; don't want', respectively. These adjectives are special in that they obligatorily cooccur with a following NP. They may or may not occur with a grammatical subject, that is, a NP marked with a nominative determiner. For example:

87. may lamat ang baso-ng ito
have crack glass this
'This glass has a crack.'

88. may miting sa plasa
have meeting town square
'There is a meeting at the town square.'

89. gusto niya ang bago-ng bahay nila
like he new house their
'He likes their new house.'
90. ayaw ng kapatid ko ng 'abstract painting'
don't sister my
like

'My sister does not like abstract painting.'

b) The simple descriptive type does not require a cooccurring NP complement in the AdjP and it always cooccurs with a grammatical subject. For example:

91. matalino ang anak nina En Jin at Harry
intelligent child

'En Jin and Harry's child is intelligent.'

The third type of non-verbal sentences labelled locational is further distinguished by the kind of PP it manifests into: a) temporal location, marked by the preposition na followed by a locative noun phrase, b) reservational, marked by the benefactive preposition para followed by a locative noun phrase, and c) possessive, unmarked by any preposition and identified by a noun phrase in the locative case form (marked by sa or kay/kina) expressing ownership of the subject referent. When the locative noun phrase is a personal pronoun, the sa-marker may be omitted. Each of these subtypes is exemplified below:

92. na sa sala ang mag?anak
living room family

'The family is in the living room.'

93. para sa kuya ang regalo-ng ito
for eldest present this
brother

'This present is for eldest brother.'

94. (sa) kaniya ang trabaho-ng iyan
his work that

'That work is his.'
2.7.2.2 Verbal Sentences

The second portion of PSR-I which requires the occurrence of at least a V constituent in the string generates the verbal type of sentences. As will be discussed in Chapter III, the primary verb stem subcategories based on their case frame features manifest corresponding subtypes of verbal sentences. Seven major types are established. They are a) information, b) location, c) simple transitive, d) locomotion, e) calamity, f) simple intransitive, and g) psych verbs. Each subclass of verbs reflects its corresponding sentence structure in terms of number and types of NP's and/or PP's the verb allows. The structure of strings with secondary verb stems will be treated in Chapter IV.
FOOTNOTES TO CHAPTER II

1 This view is shared by De Guzman (1968), Constantino (1971), Schachter and Otanes (1972) and Ramos (1974).

2 Lawrence Reid (personal communication) pointed out that his informant claims that the only meaning of this sentence is 'He will cook-well/over-cook the chicken.' This is not necessarily so. It is only another meaning. In fact, the adverb mabuti 'well; thoroughly' usually cooccurs with the verb in this sense.

3 An alternative analysis adopted in this study is that pronouns and pronominal adjectives are not inflected in the usual sense but rather are marked with inherent inflectional case form features. (See Appendix A.)

4 By employing syntactic and semantic features in the analysis of verbs, this study shares some similarities with the work done by Ramos (1974). However, as will be pointed out later, there are substantial differences between these two studies.

5 This term is also used by Bloomfield (1917), Lopez (1937), McKaughan (1958:1962), Wolfenden (1961), Constantino (1965), and Llamzon (1966:1968). Others prefer to call it focus. Among them are the linguists from the Summer Institute of Linguistics, Capell (1964), Otanes (1966) and Schachter and Otanes (1972).

6 These constructions and constituents are taken up under the section on Phrase Structure Rules. For a thorough discussion of grammatical relations between constituents, refer to Starosta (forthcoming).

7 To make the sentence grammatical, only the head noun dalaga must occur after the nominative Det ang.

8 This distinction refers to [+LOC]'s in the non-nominative case form only since if it is in the nominative, it has to occur grammatically. Its absence as [+NM] is considered to be a matter of performance, or a restriction on the verb subclass.

9 This analysis is in agreement with Schachter and Otanes' (1972) and Ramos' (1974) classification of directional verbs.

10 In other languages such as Melayu Betawi, some Formosan languages, Japanese, and Vietnamese, the [+DAT] as the goal or the source in ditransitive verbs is also realized, although only partially in some, in the locative case form. See Ikranagara (1975), Starosta (1974), Taylor (1971), and Clark (1975), respectively. If the two actants are distinguished in case form, it may suggest that a split has occurred.
11 Other linguists have maintained that the [+OBJ] identified here as cooccurring with [+LOC] is a [+AGT]. However, it has been found fruitful in terms of stating generalizations if the lexicase analysis of this actant as [+OBJ] is followed. (See Chapter III on verb subcategorization.)

12 Despite the phonological feature distinctions between an ability and an accidental verb form, which in many cases are no longer kept by native speakers, these two types have been treated here as one designated by the feature potential, [+pot], for the purposes of this study.

13 The marking of the actant sa Pasko 'at Christmas' with [+LOC] should be considered tentative because it could also be marked with a time case relation, if such is posited. In view of the adverbial nature of many time elements and their restricted capacity for occurring only in non-nominative case form, which means that no verb form realizes them as subject, the possibility of their being actants with a Time case relation was not explored in this study. For the same reasons, expressions of Manner are also excluded.

14 The distinction between definite and indefinite goals (OBJ here) is adopted from Constantino (1965:80).

15 The use of the pronoun dito marked [+L, +OBJ] should be distinguished from dito marked [+L, +LOC].

16 The class of prepositions set up here may be divided into inherent or underived prepositions and co-verbs or derived prepositions. This is another interesting unexplored area of study in Tagalog.

17 Note the tentativeness of the analysis of the prepositional phrase PP and the non-verbal embedded sentence marked by the symbol (?). The system of marking the missing complement subject of the embedded sentence pointing to the corresponding complement in the matrix sentence is adopted from Kullavanijaya (1974:254).

18 It may be pointed out that the voice affixes discussed here are those that mark verb roots and verb stems which are syntactically derived. Semantically derived verbs such as abilitatives or accidentals from [-erg], [+erg] and [-pot, +act], e.g. makakuha 'able to get', mabigyan 'able to be given to', are not covered in this study.

19 It may be mentioned that another derived verb of the form pagbigyan has the meaning 'to give in'. 
CHAPTER III
TAGALOG VERB INFLECTION AND PRIMARY VERB STEM SUBCATEGORIZATION

3.1 Inflectional and Derivational Affixes in Verbs in Previous Works on Tagalog

In this study, voice as the case-indicating feature of the verb realized as an affix is described as inflectional. It is inextricably linked with the case frame and semantic features of the verb. On the other hand, affixes that have nothing to do directly with marking the nominative case form of a particular case relation are considered derivational. Before proceeding to a more detailed discussion of the terms inflection and derivation, it will be instructive, at this point, to review briefly how some of the most important works on Tagalog grammar treat verbal affixes. Some of them make explicit distinctions while others merely imply them. On the basis of this presentation, we can determine in what respects the present analysis is similar to previous analyses and, more importantly, in what fundamental respects it differs from them.

Of all Philippine languages, major as well as minor, Tagalog has received the widest attention from Philippine linguists. The study of the verb, in particular, has been so fascinating that even to this date, attempts at refining past descriptions abound. The most widely known scientific grammars are those written by Bloomfield (1917), Blake (1925) and Lopez (1941). According to Constantino (1971:42), Bloomfield's grammar is considered superior to the other
two. He also states that Lopez's grammar shows the influence of Bloomfield's analysis. Despite this recommendation, we will consider both Bloomfield's and Blake's works for comparison because of the valuable insights contained in their treatment of verbal affixes. The other significant studies represent two more recent major approaches: a) a modified structural framework by Wolfenden (1961) and by Llamzon (1968); and b) a generative transformational framework by Otanes (1966) and by Ramos (1974). Each of these works is presented in the sequence it has been cited.

3.1.1 Bloomfield (1917)

Bloomfield's grammatical analysis of Tagalog is considered to be "by far the most well-known and by far the most influential work on any Philippine language" (Constantino, 1971:28). It became the model for many succeeding descriptive studies of various Philippine languages and dialects. His use of new grammatical terms in place of traditional, established ones to stress the difference between Tagalog and primarily any other Indo-European language, however, offers no special advantage to the analysis.

Bloomfield labels verbs transient words and classifies them into four types "according to the four relations which a subject may bear to them when they are used as predicates" (1917:153-4). He designates these classes with the following names: 1) active: the subject is viewed as an actor; 2) direct passive: the subject is viewed as an object fully affected or produced; 3) instrumental passive: the subject is viewed as a means, an instrument, something
given forth or parted from; and 4) local passive: the subject is viewed as an object partly or less fully affected, as a place or sphere (1917:154).

In his discussion of transient formation, he describes each active and passive form as existing in "two modes, actual and contingent, and each of these has two aspects, punctual and durative" (1917:217). This system gives rise to four different forms of each active or passive type each of which corresponds to the following more common terms in Philippine linguistics and in grammar in general indicated in parentheses:

(a) actual-punctual (past or completed), e.g. nag\?aral 'studied';
(b) actual-durative (progressive or continuing; present), e.g., nag\?aaral 'is or was studying; studies';
(c) contingent-punctual (infinitive), e.g., mag\?aral 'study';
(d) contingent-durative (future or not begun or contemplated), e.g., mag\?aaral 'will study'.

He further identifies each active and passive verb according to the affix it takes as follows:

(a) active with -um-, e.g., pumutol 'cut'
(b) active with mag-, e.g., maglako? 'peddle'
(c) active with mang-, e.g. mamili 'shop'
(d) direct passive with -in, e.g., putulin 'cut'
(e) instrumental passive with i-, e.g., iputol, use for cutting'; ipagdiwang 'celebrate'; ipagputol 'cut for'; ipangharang 'use for holding up'
(f) local passive with -an, e.g., putulan 'cut from', bakuran 'fence', bigyan 'give to'.

It will be noted that each type of passive has only one characteristic affix. Each is described as corresponding to forms in the active with either the -um-, mag- or mang- affix. Bloomfield mentions that some passive forms corresponding to actives with mag- are prefixed with pag- and others corresponding to those with mang- are prefixed with pang-.

The above set of verbs belongs to what Bloomfield refers to as primary formations. Verb forms which take affixes different from or in addition to those in the primary formations belong to secondary formations. The affixes of secondary forms which generally combine with those in primary forms are -si-, paki-, ka-, pa- and pati-. Certain secondary forms with ka- are said to have varied meanings. They are identified as involuntary if ka- is without an accent and as accidental if ka- is accented. The active form of these verbs takes the full affix maka- while the direct passive form takes only ma-, e.g., makagawa? 'be able to make', mabasag 'can be broken; to get broken'. It may be noted that the direct passive forms, like the active ones, express various types of subjects. Furthermore, the direct passive forms may or may not correspond to an active form. Thus, we find verbs such as mabali? 'get broken', magambala? 'get disturbed' although expressing "an object which undergoes or has undergone a process due to an inanimate actor or to no actor in particular" (1917:284) and verbs such as maawa? 'pity someone', maginaw 'get or be cold', mahiya? 'feel embarrassed' denoting "the
animate performer of an involuntary act, which, then, is looked upon rather as an undergoing than as a performing" (1917:285) falling under the same class.

According to Bloomfield, the instrumental passive of the above set of verbs seems to occur only with pag- and pang- with the i- affix following the ma- (1917:287). The locative passive has the prefix ma- and the suffix -an or it can occur with the explicative pag- as in mapaglagari?an 'place available for sawing'. The set of forms with ka- expressing accidental actions or events are formed with identical affixes as above, except for the difference in accent.

Bloomfield's exhaustive enumeration of the possible verb forms extends beyond the secondary formations. Under primary formation, he describes other modified forms that have identifiable meanings such as a) mutual or concerted action, b) plentiful or diverse action, and c) repeated action at intervals. In this account of special verb formation, he did not fail to describe the accent shifts necessary in some of these forms. Other verb forms included are those whose roots or stems are derived from other words, particularly nouns and adjectives, phrases or compound words.

Although Bloomfield is non-committal with regard to the identification of inflectional and derivational affixes in verbs, the distinction he makes between active and passive forms is considered significant. To a certain extent, it implies that there is a relation existing between an active form and a passive form that share a common root. Unfortunately, the nature of the relation
is not clearly established. His reference to the passive forms as corresponding to certain active forms may also give the wrong impression that for every active form there is a corresponding predictable passive form in three different types. The correspondence is only true for verbs that allow the cooccurrence of certain case relations which in turn can be permitted to occur in the nominative case form. Furthermore, with verbs that allow only one case relation, the verb form can only be either active or passive and not active and passive. For example, the verb _bumagsak_ 'fall' is in the active form and takes only a cooccurring [+OBJ] case relation. This form can appear in no other underived passive form with only the same case relation. It can occur in the potential form with the derivational affix _ma_- as in _mabagsak_ 'accidentally drop; fall unexpectedly' which is of a different semantic and morphological class from the primary form with _um_-.

Bloomfield isolates _pag_- and _pang_- as important affixes in word formation in general. However, he sets up _mag_- as a different affix from _pag_- and, likewise, _mang_- as different from _pang_- either of which pairs may be affixed to a verb root or a verb stem.

The case relation of the subject identified by each of the four types of verbs postulated by Bloomfield is not clearly defined. For example, his active form with _um_- expresses "the actor in a simple action or process" (1917:226). Thus, transitive verbs such as _umagaw_ 'snatch', _pumutol_ 'cut' which cooccur with an actor (or agent) and an object are classified together with intransitive verbs
such as bumbaba 'go down', bumaluktot 'bend, curl up', uminit 'become hot' which require no actors but simply objects. Concerning the direct passive, there is no problem of one affix marking more than one case relation as subject. The direct passive marked by the affix -in always signifies that the subject is "an object viewed as fully affected, taken in by the actor, or created by a simple action" (1917:243). However, the two other passive types, the instrumental and the local passive, denote case relations other than what the labels indicate. As Bloomfield states, the instrumental passive "denotes, transiently, an object given forth, parted from, or used as instrument or the person for whom in such and such an action or process" (1917:248), and the local passive "denotes the thing affected as place in which or the person to whom" (1917:250). Without these individual definitions, it is easy to associate the instrumental passive or local passive only with the case relations suggested by the labels.\footnote{5}

In connection with the last two types of passive voice forms, two questions may be raised: (a) With the object, benefactive, and instrument relations neutralized by the instrumental passive form of the verb, how can the following pairs of sentences be distinguished without marking the case relation of their subject:

1.a. ipuputol niya ito ng tubo
   cut he this sugar cane
   [+NM ] [+INS]

'He will cut sugar cane with this.'
1.b. ipuputol niya ito ng tubo

'He will cut some sugar cane for this.'

2.a. ipinangbahay niya ang bagong tsinelas
use for house he new slippers

'He used the new slippers for house-wear.'

2.b. ipinanghiwa? niya ng mansanas ang lansita
use for cut he apple jack knife

'He used the jack knife for cutting an apple.'

(b) As shown in a, the classification of verbs exclusively according to the affix i- which marks the general label instrumental passive does not only obscure the differences between two case relations as subjects that can be marked identically in the verb; it also seems to place a minor importance on the syntactic requirements of each type of verb stem that may be marked by the same affix (see examples 2.a and 2.b).

3.1.2 Blake (1925)

Although Blake completed his grammar of Tagalog in 1902 and revised it in 1910, it did not get published until 1925 (Constantino, 1971:24). This means that this grammar actually antedates Bloomfield's. The most important feature of the Tagalog verb as analyzed by Blake is the recognition of the expression of case by the verbs and by the case forms of the articles placed before common nouns or personal names or of the pronouns and pronominal adjectives. As far as voice is concerned, he comes up with practically the same
classes of verbs as Bloomfield. He sets up an active voice form and three passive ones, labelled, in-passive, i-passive, and an-passive. To him, the use of these forms depends on the relative importance of the various elements, the most important or the most emphatic idea being made the subject of the sentence. If this is the agent of the action expressed by the verb, the active voice is used; if it is any other element of the sentence, then one of the three passives is employed (1925:140). Blake's identification of the general uses of the passives slightly differs from Bloomfield's; "the in-passive is used when the object of the action towards the agent (e.g., to take) is made the subject; the i-passive when the subject is the object of an action away from the agent (e.g., to give), or the instrument or cause of the action; the an-passive, when a place or anything regarded as place, stands as subject" (1925:141-2). In connection with the case relation of the noun that is made subject of the verb as indicated by the verbal affixes, the same shortcomings noted above in Bloomfield's analysis may be said of Blake's.

Similar to Bloomfield's mode-aspect categorization, Blake distinguishes four mode and tense forms for every stem as follows (1925:40):

(a) modal (subjunctive, imperative, infinitive)
(b) future
(c) preterite
(d) present

He identifies verbs, then, as being inflected to express voice and tense (1925:13). However, he does not give any definite statements
as to which of the verbal affixes he considers inflectional and which are derivational.

The most valuable insight in Blake's analysis of the verb derives from his classification of verbal affixes, which he calls verbal particles, into principal and subsidiary types. The principal particles are employed to form the ordinary finite verb, the subsidiary ones make certain special verbal forms. It will be instructive to present below the seventeen classes of principal particles Blake sets up according to the active particle so that we can identify the pattern of structure the verb stems manifest.

These classes fall into five groups as follows (1925:38):

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>um</td>
<td>mag</td>
<td>man</td>
<td>ma</td>
</tr>
<tr>
<td>b</td>
<td>magsi</td>
<td>manhi</td>
<td>maka</td>
<td>magpa</td>
</tr>
<tr>
<td>c</td>
<td>maga</td>
<td>magpaka</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>magka</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>maki</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>magin(g)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>magkan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h</td>
<td>magkapa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i</td>
<td>magpati</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Correspondingly, Blake states that all of these classes with the exception of I, have a special passive particle which is used instead of the active particle when the verb is passive. He lists these special passive particles as follows (1925:39):

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>-</td>
<td>pag</td>
<td>pan</td>
<td>ka, ma, maka</td>
</tr>
<tr>
<td>b</td>
<td>pagsi</td>
<td>panhi, hi</td>
<td>ka, ma</td>
<td>pa, pagpa</td>
</tr>
<tr>
<td>c</td>
<td>pagsa, sa</td>
<td>pagpa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>paki</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>pagin(g)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>pagkan</td>
<td></td>
<td></td>
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<tr>
<td>h</td>
<td>pagkapa</td>
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<td>i</td>
<td>pagpati</td>
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Recognizing the exceptions in some of these classes, Blake accounts for the formation of the special passive particles, in general, by changing the initial m of the active to p.

In view of this account, two important observations can be made:

(a) Blake's classification of principal particles (affixes) into active and passive, the former consisting of the affixes in the first list above and the latter requiring the combination of the special passive particles, except IV, and one of the essential passive particles i-, -in or -an with a given root, appears to be rather unbalanced. Firstly, each active particle is complete and ready to be affixed to a root to form an active verb, whereas the special passive particle, in most cases, has to be combined with another so-called essential passive particle in its occurrence with a root to form a passive verb. Secondly, whereas the active roots of class I are marked by um- and those of the other classes by active affixes with initial m-, except V.a, their passive counterparts are all marked by any one of the essential passive particles i-, -in, or -an.

(b) The affixes ma- and maka- behave differently from the affixes with initial m or p. They remain unaltered in either the active or passive set. This strongly suggests a separate class for verbs marked by these affixes which contrasts with all the other groups of stems.

The importance of Blake's grouping of particles is the indication of the verb's capacity to take on various forms in the active or passive voice, marked by a corresponding active or passive affix. Another
significant lead provided by Blake's analysis is his account of secondary and tertiary derivation whereby the principal verbal particles of the various classes are combined in the same verb, the second particle, either active or passive, being regularly prefixed to the 'passive' stem of the primary verb, except in certain cases (1925:50), e.g., maka-pag-laro? 'be able to play', pa-pag-labas 'have taken out', i-ka-pagpati-hulog 'cause to throw oneself downward'. This will be referred to in detail in the next chapter on verb derivation.

3.1.3 Wolfenden (1961)

Wolfenden's grammar presents an analysis of the verb structure which is different in certain respects from the two works discussed in the preceding sections. He identifies quite definitely the various inflectional categories of the verb and their corresponding affix realizations. To him, Tagalog verbs are inflected for four aspects, five modes, and five voice-modes (1961:13-14). His voice-mode category is comparable with the active and passive distinctions made by Bloomfield and Blake. The major difference lies in the identification of the active affixes which mark the subjective (actor or agent) relation. Instead of -um, mag-, mang- as set up by Bloomfield (and partly by Blake), Wolfenden lists them as follows with corresponding modal descriptions:

(a) -um- 'causal'
(b) -ag- 'comprehensive'
(c) -ang- 'iterative or habitual action'
To all purposes, the objective, locative and implicative (instrumental) voice-modes marked by -in, -an, and i-, respectively, are identical to the three passives in Bloomfield's and Blake's works. One voice added to the voice-mode category is called aptative, marked by -a-. It is defined as showing "the topic (subject) to be able to undergo the action named by the verb stem; modally, it shows 'state of being'" (1961:15). This particular voice may be questioned since its cooccurring subject does not manifest a unique relation different from those contracted by the three passive forms.

Wolfenden's description of the aspect category as consisting of two cooccurring subcategories, namely, start of action which indicates either 'begun' or 'not begun' and state of action which is either 'continuing action' or 'punctual action' reminds us of Bloomfield's mode-aspect system. However, Wolfenden assigns the 'begun' aspect to the affix n- and the 'not begun' to m-. This is the only explanation which can be gleaned for positing -ag- and -ang-active affixes and -a- aptative affix. The position that m- is an aspect affix is unconvincing in view of its limited range of applicability: root stems that are marked by -um-, -in, and -an never use m- to mark aspect.

The third category of verbal inflection is labelled mode. It shows "a five-way contrast in manner of performance as indicated by the affixes ka 'inversive, reciprocal', pa 'injunctive', pang 'iterative, habitual', pag 'comprehensive', and # (zero affix) 'indicative', and six kinds of action modification contributed by voice-mode morphemes under certain conditions" (1961:20). One major objection that can be raised here is the presence of the 'comprehensive'
and 'iterative, habitual' modes marked by pag- and pang-, respectively. They are identical in meaning with the active or subjective affixes identified as -ag- and -ang-, and to treat them under separate inflectional categories does not seem to be warranted. Moreover, the possibility of two different modes cooccurring simultaneously in the same verb stem, e.g., ka and pag or pa and pang, poses a serious question on the criteria used for determining categories of inflection, and, consequently, in whatever ways these criteria differ from those used for derivation.

Finally, one other problem with this system of verbal inflection is the implication that any verb stem can be inflected for all the categories set up. There are no restrictions to indicate that that is not so.

3.1.4 Llamzon (1968)

The description given by Llamzon of the 'verba' in Tagalog is more complex than the preceding accounts. He has a network of categories, some of which seem unnecessary, others overlapping. His description follows (1968:124-5):

"The categories of the verba are either: (a) proper states, or (b) modalities. There are five proper states of the verba, namely: (i) the non-finite, (ii) the finite, (iii) the brusque command, which is an interjection; (iv) the gerund, and (v) the absolute... The non-finite proper state is used when the action is viewed as possible, commanded, hypothetical, or dependent on the action of another. It is used for: (a) imperative sentences, e.g., matulog ka! 'go to sleep'; (b) subordinate clauses with certain conjunctions, e.g., pumunta ang tao sa bukid upang hanapin ang kaniya na kalabaw 'the man went to the field to look for his carabao'; (c) with certain adverbs, e.g., sana y umulan! 'I wish it would rain'... The finite proper state requires an indication of the aspect under which the action is viewed... The finite brusque command proper state consists of the bare root of the verb, which is an interjection, e.g., sulon
'forward!' The gerund is a verbal-noun formation... e.g., an pagbibili nan manga 'the selling of mango'. The absolute is a subordinate sentential nexus form, and commutes with the adverbs in the sentential nexus, e.g., pagdatin nan guro y batiin mo 'when the teacher arrives, greet him'.

Analyzing these five proper states, the last two can be dismissed since they are non-verbs. The gerund is a derived noun and the absolute may be categorized as a derived adverb. The three remaining ones may be related to aspect, where non-finite expresses no aspect while finite expresses one of three (or four in Llamzon's analysis) aspectual forms. The brusque command which is another form of expressing an imperative may be accounted for by a rule which states that an imperative may or may not be marked by a voice affix. These features may be incorporated with the other category labelled modalities.

Llamzon's modalities consist of two main groups, the 'actualizing functors and the accidental functors'. The latter is accessory to the combination of the former and the 'argument' (taken to mean the verb root). The four kinds of actualizing functors are (a) voice, (b) tension, (c) emphasis, and (d) aspect. The four voices identified as active, passive, local, and instrumental are identical to the four voices defined in the works cited above. The aspects listed are imperfect, perfect, future, and immediate past. The first three are equivalent to the general terms present, past, and future, respectively. The last one is a form which is also referred to as recent past. Tension is defined as "each set of 1 non-finite, 1 finite (with 3 aspects), 1 immediate past aspect, and 1 absolute mode form" (1968:126). The active voice is described as having two
tensions, the subitive and the executive, whereas each of the three other voices has only one; the subitive uses the affix -um- and the executive uses mag-. The only tension in the passive voice is expressed by the suffix -(1)hin, (1968:155), that in the local voice by -(1)han, (1968:160), and that in the instrumental voice by the prefix i- (1968:169). The actualizing variable functor emphasis has two values, namely, (a) emphatic and (b) non-emphatic. The emphatic is formed by adding the prefix pag- to the non-emphatic forms of the verb (1968:126-7). It may be recalled that in Wolfenden, we find this same pag- introduced by the modal category labelled 'comprehensive' in order to account for non-simple verb forms such as magsipagtago 'to hide, plural subject', magsipagpakabait 'exert effort to behave, plural subject', makipaglaro 'play with', or paglampasuhin 'have s.o. mop/wipe s.t.'. Setting up a category 'comprehensive' or 'emphatic' to account only for the manifestation of pag- in a complex formation would appear insufficient because it excludes similar formations with pang- or pa- as in magsipamili 'shop, plural subject', makipabili 'join in having s.t. bought', or pagpatahi 'make s.o./s.t. be the place for having s.t. sewed'. Bloomfield accounts for this type of formation under his description of secondary affixes which are attached to either roots, pag-stems or pang-stems according to the corresponding forms in the active, i.e., -um-, mag-, mang-, respectively, (Bloomfield, 1917: 262-314). In Blake's description, such forms are described as secondary or tertiary derivations, (Blake, 1925:50-52).
What may be considered significant and attractive in Llamzon's analysis is his recognition of what he labels accidental functors as resulting in the formation of derived stems, with each variable corresponding to a stem-forming affix or 'stem-formant' (Llamzon, 1968:178-86). In his summary of the formation of the realizations of the various accidental functors of the verb, he distinguishes between inflectional affixes and stem-formants. His inflectional affixes include -um, mag-, ma-, ma- -(1)(h)an, and ma- in the active voice; -(1)(h)in, pa- -(1)(h)in, pag- -(1)(h)in, pan- -(1)(h)in, ka1 -(1)(h)in, ma- (potential) and ma- (accidental) in the passive voice; -(1)(h)an, ma- -(1)(h)an, pa- -(1)(h)an, pag- -(1)(h)an, paJ}- -(1)(h)an, ka2 -(1)(h)an (local intensive) and ka2 -(1)(h)an (local intensive-accidental) in the local voice; and i-, i- -(1)(h)an, mai- (potential) and mai- (accidental) in the instrumental voice. All other simple and complex affixes are listed as stem-formants.

In connection with the distinction made between the inflectional and stem-forming affixes the following observation can be noted:

(a) There appears to be no criteria for determining which affixes are inflectional and which ones are derivational. Certain affixes, for instance, pa-, pag-, or paJ} are either stem-formants or parts of complex inflectional affixes, having identical meanings in both functions.

(b) The list of stem-formants or derivational affixes shows some redundancies which can be formalized to express more generalities. For instance, each of the following groups of stem-formants although apparently related are treated individually: 1) -si-, -sipag-,
3.1.5 Otanes (1966)

Using the generative-transformational approach of Chomsky 1965, Otanes (1966) gives a different presentation of the verb structure. A striking deviation from the verb composition in past studies is the isolation of the inflectional category of aspect from the verb marked V which is defined as the basic form of a verb (1966:50). The rule that generates a verbal predicate is stated as follows (1966:50):

\[
B-12. \text{Vbl} \rightarrow \text{Asp} \left\{ \begin{array}{l}
\text{V} \\
\text{Comp} \\
\text{Adjc}
\end{array} \right\} \left(\text{Comp}_\text{Adv}\right) \left\{ \begin{array}{l}
\text{pa-} \\
\text{maki-}
\end{array} \right\} \text{S}
\]

The constituent aspect Asp cooccurs with another constituent which is either a basic verb form V followed by either a complement Comp or an adjunct Adjc, or the indirect-action affix pa- or the social-participation affix maki- and an embedded string S. The verb form that takes a complement may or may not cooccur with an adverbial complement Comp\text{Adv}. The two affixes pa- and maki- followed by an embedded sentence are described as generating an indirect-action verb and its complementation and a social verb and its complementation, respectively. Based on the rule above, there is no way of telling that the Asp constituent is more directly related to the constituent V than it is to the constituent Comp or Adjc, in that it is realized in the lexical category V itself. On the other hand, the constituent Comp is a syntactic component and does not express aspect. Also, the
use of the affix symbols pa- and maki- as a constituent class conceals the fact that the category expressed by them is also a V.

Otanes further describes the basic form of a verb V as consisting of a verbal affix and a base, with the former constituent being made up of other identifiable constituents. She expresses them by the following rules (1966:51, 58):

B-13. V → Af B
B-18. Af → (Mod) Foc
B-19. Foc → (DerF) MajF

From rule B-19, the obligatory focus constituent Foc of the verbal affix Af may be either a major focus affix MajF or a major focus constituent combined with a derived focus constituent DerF. Either of these possible realizations, by rule B-18, may in turn be combined with any of the features listed under the optional modification constituent Mod. These rules, in effect, subcategorize the verbs according to the focus affixes they take into:

(a) major verbs, those that take only the major focus constituent;
(b) derived-focus verbs, those that have derived-focus features in their affixes;
(c) modified verbs, those that manifest a modification constituent in addition to the focus constituent.

Otanes' focus constituent is the analogue of voice in previous analyses. It "determines the semantic component to be made the center of attention and expressed in the topic ("subject" in this study) of the sentence" (1966:59). The difference between focus and voice as used by Bloomfield, Wolfenden and Llamzon is that Otanes
allows focus to cooccur with a derived-focus feature and/or a modification feature which in a way resembles some of Blake's passive voice forms and secondary or tertiary derivations. To determine the interplay between the constituents MajF and Mod, let us consider the other rewrite rules given for the MajF constituent as follows (1966:58):

\[
\begin{align*}
B-20. \text{ MajF } & \rightarrow \begin{cases} [+\text{Actor}] \text{ in env. } \text{Asp}_B \text{ }_t \\ [+\text{Actor}] \text{ in env. } \{ _B \text{ } _1 \\ \text{DerF } \} \end{cases} \\
B-22. [-\text{Actor}] & \rightarrow \begin{cases} [+\text{Object}] \\ [+\text{Direction}] \end{cases}
\end{align*}
\]

By rule B-20, the choice of the major-focus constituent is restricted to [+Actor] in the environment of a derived-focus feature. The DerF constituent may be any of the following features as stated (1966:132):

\[
B-57. \text{ DerF } \rightarrow [+\text{Benefactive}] \\
[+\text{Causative}] \\
[+\text{Instrumental}] \\
[+\text{Locative}] \\
[+\text{Measurement}] \\
[+\text{Referential}] \\
[+\text{Reservation}]
\]

To show how the rules operate, Otanes gives the example *ipagluto* 'cook for', a derived-focus verb analyzed as containing three morphemic constituents: "(1) *i*, the benefactive-focus affix (belonging to the "DerF" constituent); (2) *pag*, the transformed variant of the actor-focus affix *mag* (belonging to the "MajF"...); and (3) the base *luto* 'cook'" (1966:130). Interestingly, Otanes further requires the rules that supply the actual affix morphemes to apply cyclically, "the rule that supplies the "MajF" affix applies,
forming the major-focus verb, and then the rule that supplies the "DerF" affix applies, forming the derived-focus verb. The reason for prescribing such an order of derivation is that the shape of the derived-focus affix is determined by the major-focus affix in certain derived focuses" (1966:131). From her last statement, we can glean that the derived-focus affix changes according to the major-focus (actor-focus) affix taken by the verb base. Thus, she directs the reader to compare the benefactive-focus affix i- in ibili 'buy for' and ipag- in ipagluto 'cook for' whose major focus affixes are -um- as in bumili 'buy' and mag- as in magluto 'cook', respectively. Referring to the analysis of the derived-focus verb ipagluto above, where the benefactive-focus affix identified is i-, it is no longer clear whether ipag- should be identified as the benefactive-focus affix based on the corresponding major-focus affix mag-. While it may be correct to say that the form of a derived-focus verb may depend on the form of the actor-focus verb, it is rather questionable to say that the shape of the derived-focus affix of certain derived focuses is determined by the major-focus affix. It may be argued rather that for the forms ibili and ipagluto, the benefactive-focus affix is invariably i- and the difference between the two forms lies in the distinction between their corresponding stem forms; the active stem in the former is a root, whereas it is a derived pag-stem in the latter. Where the active stem has a derivational affix pang-, as in pamili 'shop', the benefactive-focus verb is ipamili 'shop for'.

With a modification constituent in the verbal affix, based on rule B-18, the verb is a modified verb. Quite significantly, Otanes
describes a modified verb as corresponding to a simple (major) verb with which it is identical in focus and in base classification, and to which it has a morphological relationship (1966:156-7). Further on, she states that a modified verb "may be characterized as a verb whose morphological structure and syntactic behavior can be predicted from the morphological and syntactic behavior of a simple verb" (1966:159). The present analysis agrees fully with Otanes that what she describes as a modified verb is a morphological derivation. However, it does not recognize the modified verb as being generated by base rules if they are derived. Rather, they are created from "simple: verbs by means of semantic derivation rules whose effect on the simple verb is a change in semantic feature and a corresponding morphophonemic change.

Another important aspect in Otanes' description is the classification of the verb bases $B$ into transitive $B_t$ and intransitive $B_i$ verbs based on their cooccurring complements. In addition, she also mentions in a footnote (p. 62) that the bases are further classified into affix classes, based on the actual affix morphemes that they combine with. Each verb is marked by the set of major-focus affixes it takes to focus on a topic which has a particular semantic relationship with the verb, e.g., object, directional goal, or actor. From the examples given, however, we find $\text{mag}$- as one of the actor-focus affixes, and, in this case, the same objection raised in the previous analyses reviewed concerning the identification of the affix $\text{mag}$- or $\text{mang}$- instead of $\text{m}$- also applies to Otanes' description.

Since this study, according to the author, is not concerned with
morphological derivation, she says that the rules involving the various verb derivations are not formulated. This statement seems to be a curious contradiction to what some of the base rules are generating. Indirectly, the modified verbs and the pa- and maki- verbs are described as being derived from simple verbs, and their formation is in fact accounted for by base rules that generate them. Thus, the rules in the base component do not only deal with sentence formation but also with category inflection and derivation. In part, this treatment results in a mixture of syntactic, semantic and lexical category labels. Of course, it is still an interesting theoretical question whether morphology and related semantic categories properly belong to the base component, the semantic component, or the lexicon component, or to any two or all components.

3.1.6 Ramos (1974)

Recognizing the futility of classifying verbs exclusively according to the affixes they take, Ramos (1974) approaches the problem by adopting a case grammar type of the generative transformational framework which focuses on semantic-syntactic features. She formulates a semantic feature system for verbs wherein the semantic features trigger the case frame or case cooccurrence restrictions of the verb (1974:10). The semantic features are assigned by subcategorization rules contained in both the constituent structure subcomponent and the lexicon subcomponent, while the case frame features with corresponding subcase features under each case relation feature are provided by selectional redundancy rules. In her system, she
requires a deep structure level which indicates the case relationships existing between the verb and the rest of the sentence. Using a set of transformational rules, the deep structure manages to manifest itself in the surface structure. To avoid Fillmore's problem of having the case relational terms dominate categorial elements, the author resorts to Starosta's and Taylor's system of marking case on nominal constituents in the lexicon.

In this work, Ramos limits her treatment to basic simple verbs. Those that involve modifications of any kind such as those previously discussed are excluded. Hence, we can only refer to her account of the structure of 'major' verbs. Ramos follows Chomsky's model of having the categorial nodes develop into complex symbols. Her verb V takes two basically distinct features: one marks the verb for aspect and the other marks it for the types of case relationships it can enter into (1974:44). With a few modifications, the aspect features in Otanes' analysis have been adopted by Ramos. With respect to case frame features, Ramos marks only the cooccurring case relations of verbs and, following Fillmore (1968), she treats subjectivization as a surface phenomena described as a late transformation. Depending on which nominal expression is chosen as subject, the verb form acquires an affix that marks the case relation of the subject chosen. This might seem to imply that voice or focus is not an inherent feature of the verb. On the contrary, however, it is acquired through a process called case feature incorporation assigned by a transformation rule (1974:118-9). The rule explains that the case feature of the particle which cooccurs with the actant marked as subject is
transferred to and incorporated in the verb. "The incorporated K case feature comes to the surface in combination with aspect and other features of the verb as a verbal affix" (1974:119). She identifies the affixes um-, mag-, and ma- as marking the agentive subject; i-, -in or -an marks the objective subject if an agentive case cooccurs, otherwise, the affix is um-, mang- or ma-; the directional subject is marked by -an only; the locative by either pag- -an or -an; the instrumental force by um-, but the instrumental with agentive involvement by ipang- or i- and by maka- without agentive involvement; the benefactive subject by i- or ipag-; and the affected by ma- -an. To a large extent, the affixes identified here are similar to those described in other works. As such, the same questions, observations or agreements, as the case may be, which have already been pointed out also apply to Ramos' analysis.

As a whole, the complex of semantic features which develops from the basic case feature of the verb presented by Ramos provides some valuable insights into the character of each verb as it relates to its cooccurring actants. For any further semantic feature analysis of verbs, this study can serve as a springboard. As for the problem of inflection versus derivation, no mention is made of it. It remains a question, then, how this approach treats various types of lexical relations.

3.2 Inflection and Derivation

As can be noted in the preceding section, the previous works on Tagalog, generally, have not made a clear-cut distinction between
inflectional and derivational categories or processes. Although
voice and aspect (or tense) may have been described as inflectional
categories of the verb in some works, together with some other
categories which may also be considered inflectional in some others,
the precise affixes manifesting voice are still problematic. The
identification of the voice inflectional affixes in contrast with the
derivational ones has important consequences on the description of the
morphological structure of the verb stems, especially on the various
affix combinations in many verb forms. The contention in this study
is that if inflection and derivation are properly distinguished, we
can provide a more satisfactory account of the lexical relations
among verb forms and of the ramifications of verbal affixes in a
variety of complex forms.

Classical grammars make a fundamental distinction between
inflection or accidence and derivation or word formation. In
discussing such grammars, Lyons (1971:195) says that inflection is
defined as "a change made in the form of a word to express its
relation to other words in the sentence." Derivation, on the other
hand, covers the process "whereby new words are formed from existing
words or roots". The problem with the first definition is the
vagueness in the meaning of "to express its relation to other words
in the sentence." This condition for the change in form can equally
well apply to derivation. For instance, the undoubtedly derived form
beautiful from the base form beauty expresses an attributive relation
to the noun that follows it in a sentence. Perhaps, the kind of
relation that is intended by Lyons in the above definition needs to
be clarified. In the definition of the second term, the problem is in identifying the criterion for a 'new' word. What makes a 'new' word? Why are inflected forms not considered new words?

The problem of distinction becomes more acute when one realizes that the two processes have a good deal in common. In terms of meaning, both processes modify the semantic content of the base in some way. Based on formation, both can involve a root or stem and normally a corresponding phonological modification. A further problem of analysis arises when a given form may be considered as consisting of either a complex affix plus a root or a simple affix plus an affixed stem. For example, the verb ipagluto? 'cook for someone' has been analyzed variously as: a) a complex affix i- plus pag-, each representing an inflectional or verbal category plus the root luto? (Wolfenden, 1961; Llamzon, 1968); b) the affix i- plus the stem pagluto? consisting of the root luto? and the affix pag- which is considered the alternant form of mag- (Bloomfield, 1917; Otanes, 1966); and c) a single complex affix ipag- plus the root luto? (Institute of National Language, 1950; Schachter and Otanes, 1972).

In these accounts, the affixes i- and pag-, whether taken as individual units or as a composite affix, appear to be considered inflectional. The view held in this study, on the contrary, is that the affix i- is inflectional, marking the benefactive actant as the subject of the sentence, and the affix pag- is derivational, forming the stem pagluto? which is derived from the root luto?.

In the current lexicase framework, the following criteria serve to distinguish inflection and derivation:
(a) "Inflection is a modification in the phonological representation of a lexical entry which corresponds to the choice of a particular inflectional feature. An inflectional feature is a semantic feature which can be freely varied within a single lexical entry" (Starosta, 1974:11). Inflectional features characterize all members of a given lexical category, hence, they need not be specified in each lexical entry. Rather, general rules that apply to the entire category specify these general properties. In this framework, such rules are expressed in the form of subcategorization rules (SR's) and/or some redundancy rules (RR's). With the full specification of inflectional features, every resulting lexical item from a lexical entry becomes unique and is thereby restricted in its syntactic functioning. The few exceptions to the rules which may occur are marked individually for one of the values of the inflectional feature, e.g., English trousers, [+plural], mud [-plural].

Starosta (1974:11) defines derivation as "the creation of a lexical entry in a given syntactic category in accordance with a systematic analogy with a lexical entry in another syntactic category. A syntactic category is a set of lexical entries defined by a unique category feature and/or a set of case frame features." In general, it is true that derivation changes the syntactic category or subcategory of a given lexical entry. However, this cannot be made the sole criterion because there are instances of purely semantic derivations. What a semantic derivation does is simply to introduce a non-variable semantic feature to the lexical entry. Thus, the definition above may be revised to allow for both syntactic and
semantic derivations. Every derived lexical entry from a different lexical category is subject to the inflection rules of its new category.

(b) With inflection, the form, meaning, and other syntactic and semantic properties are generally predictable. With derivation, these properties are often sporadic although there may be certain types of derivation whose semantic properties are quite predictable, e.g., gerundive nominalization in English and abstract noun formation in Tagalog.

(c) Derivation relates two lexical entries, the source and the derived forms, by means of a derivation rule (DR) which, among others, shows the changes in either semantic content or syntactic features, particularly that of the case frame, or both. Either change may entail a corresponding change in morphological structure.

The first distinction is crucial. Whereas an inflectional feature can be freely varied within a lexical entry, a derivational feature cannot be. Akhmanova (1971:108) expresses the same criterion for an inflectional category as being "constituted by the opposition of no less than two mutually incompatible grammatical forms."

Thus, in English, the inflectional categories person, number and tense in verbs take the forms first, second or third person, singular or plural number, and past or non-past tense. The forms, differing in at least one inflectional feature, contrast in a particular syntactic environment. For instance, the two non-past forms of the verb go, namely, goes (third person singular) and go (non-third-person-singular) reflect their grammatical contrast by requiring their
cooccurring subject actant to be one which is specified with the same person and number features indicated in the verb. In contrast, a derivational feature is not made up of an opposition and, consequently, there are no opposing forms that constitute a paradigm to speak of. The derivational feature refers to a single instance of a lexical entry or a class of lexical entries. While inflection is typically 100% productive, derivation is typically not.

Implicit in the first criterion is the obligatory application of inflectional rules to every member, underived or derived, of a lexical category. This requirement is not true of derivation rules. The extent to which a derivation rule applies may be an entire category, a subcategory, a subtype or just a few items or even just one lexical entry. The creation of a new word in accordance with a derivation rule (DR) is a distinct historical event, and at any given point in time, there will generally be in the lexicon a large number of lexical items eligible for derivation for which no derived forms have as yet been formed.

Using the second distinction, the English nominal suffix -$s$ indicating plural number of count nouns such as book, map, bat is an inflectional form which is completely predictable. In Tagalog, verbs derived from nouns can have varying meanings conditioned in varying degrees by the meaning of the nouns, e.g., magsapatos 'wear shoes' from the noun sapatos 'shoes'; magdoktor 'study to become a doctor' from the noun doktor 'physician'; mag?itlog 'eat an egg; sell eggs' from the noun itlog 'egg'. In such cases, predictability, particularly of meaning, is fairly limited.
The last distinction implies that derived lexical items must be listed separately in the lexicon (with the possible exception of those derived through completely productive DR's), and that lexical items abbreviated in a lexical entry are related by inflection while lexical entries themselves are related by derivation.

Following these criteria, we can show the different inflectional affixes in Tagalog and distinguish them from the derivational affixes on the verb stems if there are any.

3.3 Inflectional Features and Inflectional Affixes of Tagalog Verbs

3.3.1 Inflectional Features

A verb in Tagalog marked [+V] is characterized by syntactic, semantic and morphological properties. Its syntactic properties are expressed in terms of case frame features which indicate the permissible actants which may cooccur with the verb. These actants bear certain case relations with the verb and are realized in certain case form. In this connection, the verb has also the property of requiring one of its cooccurring actants to be realized in the nominative case form which is the grammatical subject of the sentence. It signals the case relation of the nominative actant by means of a particular affix. This property is referred to as voice feature and the verbal affix as voice affix. Simply put, voice is a syntactic feature marked on a verb which pertains to the case relation of the verb's subject. Thus, a verb with a feature [-+[NM,-OBJ]] is in the objective voice, one with [-+[NM,-AGT]] is in the agentive voice, another [-+[NM,-DAT]] is in the dative voice, and so forth, according to
which cooccurring actant is permitted by the verb to occur as subject. Since the voice feature corresponds to a specific phonological modification of the verb stem and it can be varied freely within each given verb stem depending on its cooccurring actants, and since a characterization of voice is part of a full description of the properties of every verb in every occurrence, this feature is identified as an inflectional feature. Voice is manifested overtly in the verb by one of the voice affixes um-, m-, -in, -an, i- or Ø.

The other inflectional feature that identifies verbs is aspect. Unlike languages that have tense as a feature of the verb, Tagalog has aspect. Aspect is not a system of time-oriented events. It expresses the contrast between starting or not starting, and, if started, between completing or continuing what is expressed by the verb. The aspect feature is realized in the form of morphophonemic changes operating on the verb stem of a given class. These morphophonemic modifications may be in the form of affixation, reduplication, sound replacement or a combination of these modifications.

The voice and aspect features of inflection modify the single phonological representation of a verb stem. According to each type of inflection, a verb stem manifests a set of forms which in traditional grammar is called its paradigm. Thus, we can speak of a verb stem's voice paradigm and aspectual paradigm. Following are the redundancy and subcategorization rules which assign the voice and aspect features on verb stems.

3.3.1.1 The Voice Feature

As a general rule, every verb [+V] implies the occurrence of
a grammatical subject. This concept is expressed by the following
voice redundancy rule (VRR):

\[ \text{VRR-1: } [+V] \rightarrow [+I+NM]] \]

The rule states that a verb cooccurs with a nominative or subject actant. Certain verbs such as phenomenal, time and event verbs that do not require a cooccurring subject are marked in the lexicon with the feature \([-I+NM]]\) to indicate this prohibition. In some instances where the subject is not overtly expressed with verbs that are not marked for non-occurrence of a subject, the grammatical absence of the subject is considered a matter of performance. In such cases, the unexpressed subject is always recoverable from context. For example:

1.a. bumibili dito ng alahas
    buy here jewelry
    \[ +L \] \[ +AC \]
    \[ +LOC \] \[ +OBJ \]

    'Jewelry is bought here/ (We) buy jewelry here.'

1.b. bumibili kami dito ng alahas
    we here jewelry
    \[ +NM \]
    \[ +AGT \]

    'We, here, buy jewelry/We buy jewelry here.'

Related to the above rule is the restriction that only one nominative case form can occur in a simple sentence. This constraint is stated as follows:

\[ \text{VRR-2: } [+V] \rightarrow [-[+NM][+NM]] \]

The occurrence of an actant as subject in a given case frame can be expressed by the following general voice subcategorization (VSR) and voice redundancy rules (VRR):
It will be noted that the rules are stated negatively. To interpret this kind of rule, let us take VSR-1. This rule subcategorizes verbs into a class marked \([- [+NM, +OBJ]]\) which means that the verb does not cooccur with a [+OBJ] as subject, and a class marked \([- [+NM, -OBJ]]\) which means that the verb does not cooccur with a subject except that this actant be identified as [+OBJ]. Rather than simply say that the verb cooccurs with an OBJ, \([+ [+NM, +OBJ]]\), the feature \([- [+NM, -OBJ]]\) carries more information. Besides indicating what the required case relation of the subject is, this type of marking also prevents the cooccurrence of another subject which has another case relation, say a LOC subject.

Rules VSR-1 through VSR-7 and VRR-3 give eight voice subcategories of verbs, namely, 1) objective, \([- [+NM, -OBJ]]\), 2) dative, \([- [+NM, -DAT]]\), 3) locative, \([- [+NM, -LOC]]\), 4) agentive, \([- [+NM, -AGT]]\),
5) benefactive, [-[+NM,-BEN]], 6) instrumental, [-[+NM,-INS]],
7) reason, [+[NM,-INS]], and 8) comitative, [-[+NM,-COM]]. This
set of rules means that all verb stems, regardless of their derivation­
al or morphological structure, express a particular voice. However,
it does not imply that every verb stem occurs with noun phrases in
eight different case relations or allows each one of its possible
cooccurring actants to be realized as [+NM]. Some verbs permit only
one particular cooccurring case relation to take on the [+NM] case
form, others allow more than one. With certain other verb stems, a
particular cooccurring case relation is prohibited from occurring except
it be realized in its non-nominative case form. This is one major
difference between classifying verb roots in contrast to classifying
verb stems. With a verb root classification, as done in most studies,
the verbs generally take at least four types of voice forms (identified
as the active um-, mag- mang- or actor class, the passive -in or object
class, the passive i-, ipang-, or ipag- or instrumental or benefactive
class, and the passive -an, pag- -an, or pang- -an or the locative
class). The result is a confusion among some of the inflectional and
derivational affixes. For instance, a verb root such as luto? 'cook'
has been described as taking the inflectional affixes mag- in the active
or actor, -in in the direct passive or objective, pag- -an in the
locative, ipang- in the instrumental, and ipag- in the benefactive.
By this approach, the generalization that can be stated about the iden­
tity of the derivational affix pag- present in the affixes mag-,
pag- -an and ipag- were m-, -an, and i- analyzed, respectively, as the
inflectional affixes of the verb stem pagluto?, is unfortunately missed.
Similarly, a verb root classification will always fail to account for
the invariant inflectional affixes for the locative, benefactive and
instrumental voice. (See Section 3.3.2, p. 145 for a more exhaustive
discussion.)

3.3.1.2 The Aspect Feature

Each verb stem with a given voice feature is also specified for
aspect. With some modifications introduced, the following aspect sub­
categorization rules (ASR) have been adopted from Otanes (1966: 54, 1970: 36-37):

\[
\begin{align*}
\text{ASR-1: } & [+V] \rightarrow [+\text{fin}] \\
\text{ASR-2: } & [+\text{fin}] \rightarrow [+\text{beg}] \\
\text{ASR-3: } & [+\text{beg}] \rightarrow [+\text{comp}]
\end{align*}
\]

The first rule states that a verb is either finite [+fin] or
non-finite [-fin]. The feature [-fin] indicates lack of aspect.
Generally, the verb form marked with this feature occurs in imperative
sentences, such that the following subcategorization rule applies:

\[
\text{SR: } [-\text{fin}] \rightarrow [+\text{imp}]
\]

The rule means that a verb marked [-fin] is either an imperative [+imp]
verb or a non-imperative [-imp] one.

Non-finite verbs also occur in embedded sentences as obligatory
verbal or predicate complements. As such, they never precede the
main verb. The subclass of verbs that takes a sentential complement is
therefore marked with the contextual feature [-[+fin]] to indicate that
the verb of the sentential complement cannot cooccur with the verb
specified unless the verb of the embedded sentence is in the non-finite
form.
For example:

2. sinikap niya-ng sumulat ng tula?
   try he write poem
   [+fin] [+AC] [-fin]

   'He tried to write a poem.'

3. natuto si Cricket na tumugtog ng piyano
   learn play piano
   [+fin] [+NM] [-fin]

   'Cricket learned to play the piano.'

Another obligatory occurrence of a [-fin] verb is as a sentential complement to adjectives functioning as predicates. For example:

4. madali-ng lutu'tin ang abodo
   easy cook braised-dish
   [+Adj] [-fin]

   'To cook adobo is easy.'

By ASR-2, a verb marked [+fin] is further specified as either begun [+beg] or not begun [-beg]. If it is marked [+beg], then by ASR-3, the verb is identified as either completed [+comp] or not completed [-comp] in which case it is continuing.

One of the changes introduced in the present rules is the introduction of the subcategorization [+fin]. This distinction is rather important to maintain because it suggests the opposition between two types of sentences governed by each category of verb. Moreover, the verb form occurring as a predicate complement if marked with the feature [-fin] signals its different function in relation to the main verb while it indicates at the same time its predicate function within the embedded sentence. Finally, by considering the [-fin] category as a member of the aspectual paradigm, we can show more efficiently the
morphological relationship existing between this form and the [+comp] form which relationship parallels that of the two other members, the [-beg] form and the [-comp] form. To illustrate these relationships, observe the forms exemplified under the following tree-diagram which shows the development of the aspectual categories:

The [-fin] and the [+comp] forms have identical non-reduplicated stems while both the [-beg] and [-comp] forms take the same partially reduplicated stem.

The other deviation from previous analyses of aspect taken in this study is the elimination of the aspectual subcategory identified as [+recent] which refers to a recently completed action. This deviation is based on the following facts:

(a) The [+recent] form exhibits a syntactic behavior which is
quite unique to itself, that is, totally different and unrelated to the other finite forms of the verb.

(b) Not one of its cooccurring actants is realized in the nominative case form, resulting in a subjectless sentence and, thus, syntactically patterns with impersonal adjectives such as *gusto* 'like; want' and *ayaw* 'don't like; don't want'; the verb form does not take a voice affix and this is a plausible reason for not cooccurring with a subject.

(c) This feature has a more restricted range of application than the other finite features. It does not apply to the various classes of inchoative nor of non-perception verbs. In this connection, it may be mentioned that the restriction which Otanes (1966:60) gives for the recent-perfective aspect as applying to Actor-focus verbs may be questioned on two counts. (1) It is not clear why the actor-focus feature is isolated as the conditioning environment when the [+recent] form does not show any overt manifestation of its being in the actor-focus. In fact, no actor-focus affix appears to identify it as such, e.g., "kabibili 'have/had just bought,'" and neither is there a cooccurring topic (subject) which can be identified as actor, e.g., "kabibili pa lang ng bata ng kendi 'The child has just bought some candy'" (Otanes, 1966:54). What appears to be relevant to the structure of the [+recent] form of verbs which cooccur with an actor or agent actant is the type of verb stem they are, whether it is a root, as in kabibili from the root-stem *bili*, a *pag*-stem as in *kapagpapakulo? 'have just boiled s.t.,' etc. (2) Following her definition of Actor-focus which is extended to include not only the performer of the action, but also "any entity primarily involved in the
action expressed by the verb" (Otanes 1966:93) in the case of intransitive verbs, there are various types of intransitive verbs which cannot form the [+recent] aspect, although by her definition they should all be able to, e.g., nilanggam 'attacked by ants,' gumanda 'get pretty,' bagalan 'make slow,' mahuli 'be late', etc.

(d) Immediately following the [+recent] form, a particle lang or the combination of the particles pa and lang which approximately means 'just' or 'just now' must be introduced; something not true of the other aspectual forms.

(e) Finally, this form has a unique morphophonemic rule of its own, completely unconnected with the other forms. For example:

5. katatapos pa lang ng parada
   finish just parade
   [+AC] [+OBJ]

   'The parade ended just now.'

6. kakikita ko lang sa bago-ng bahay ni Heather
   see I just new house
   [+AC] [+DAT] [+L] [+OBJ]

   'I have just seen Heather's new house.'

The above peculiar syntactic and morphological characteristics strongly indicate that the [+recent] form cannot be justifiably considered a member of the aspect inflection. Any suggestion for its possible inclusion has to be rejected on these grounds. The unavoidable conclusion is to consider the form in question as a set of derived verbs created by a derivation rule and characterized by the semantic feature [+recent] and by all the other properties described above, (b,c,d, and e) including those features carried over from the base.
3.3.2 Inflectional Affixation or Modification

To distinguish the inflectional from the derivational affixes of verbs, it will be necessary to define certain terms such as stem, root and base which are used in the process of verb formation. A stem is that element to which only inflectional affixes are added. It may be in the form of a root or a derived stem. A root is a minimal unanalyzable form. A derived stem is that form which is created from an already existing stem. It is usually identified by the addition of a derivational affix. The source is called the base of the derived stem. Without their inflectional affixes, verb stems may take the form of a root, an affixed stem derived from a root, or an affixed stem derived from another affixed stem. Two or more verb forms share the same stem only if they differ from each other only in inflectional affixation. The set of inflected forms of a given verb stem is its inflectional paradigm. It is, however, possible to have two or more homophonous but different stems. To illustrate some morphological types of verb stems and their corresponding voice inflectional paradigms, we have the following examples:

(a) Root-stem
   [-erg]

1. hiram
   "borrow"

   hiram
   [-[+NM,-AGT]]

   hiramin
   [-[+NM,-OBJ]]

   hiraman
   [-[+NM,-LOC]]

   ihiram
   [-[+NM,-BEN]]

(b) PAG-stem
   [-pot,+act]

2. panghiram

   manghiram
   [-[+NM,-AGT]]

   panghiramin
   [-[+NM,-OBJ]]

   panghiraman
   [-[+NM,-LOC]]

   ipanghiram
   [-[+NM,-BEN]]

(c) PANG-stem
   [-pot,+act,+dist]

3. panghiram

   ipanghiram
   [-[+NM,-INS]]

   panghiramin
   [-[+NM,-INS]]
(e) Root-stem

[+erg]

4. bigay 5. pagbigay 6. pamigay 7. pambigay

\[ \text{give}' \]

ibigay magbigay ipamigay ipambigay

\[ [+\text{dist},+\text{erg}] \]

ibigay magbigay ipamigay ipambigay

\[ [-[\text{+NM},-\text{OBJ}]] \]

bigyan ipagbigayan

\[ [-[\text{+NM},-\text{LOC}]] \]

pagbigyan

\[ [-[\text{+NM},-\text{LOC}]] \]

(f) PA-stem

[+caus]

8. pabigay 9. pagpabigay 10. pampabigay

\[ [+\text{caus,+erg}] \]

ipabigay magpabigay ipampabigay

\[ [-[\text{+NM},-\text{OBJ}]] \]

pabigyan ipagpabigay

\[ [-[\text{+NM},-\text{LOC}]] \]

pagpabigayan

\[ [-[\text{+NM},-\text{LOC}]] \]

(g) PA-stem

[+caus,+dat]

11. papagbigay

papagbigay

\[ [+] \]

\[ [+\text{ins,+caus}] \]

Based on stem forms, there are four classes of verb stems exemplified above, namely, Root-stem, PAG-stem, PANG-stem, and PA-stem. They are further identified by their respective morphological-voice features and certain other semantic features, as the case may be. Depending on the particular type of Root-stem, other affixed stems can be derived. The two derived PANG-stems are distinguished from each other by their morphological-voice features [-pot,+act] versus
[+ins] and the semantic feature [+dist] specified in c. It will be observed that the non-potential active distributive PANG-stem exemplified by items 2 and 6 have a voice paradigm corresponding to the paradigm of their bases, the Root-stems hiram and bigay, whereas the instrumental [+ins] PANG-stem is limited to the instrumental voice only. Given the PANG-stem [-pot,+act,+dist] as base, it is possible to form another PANG-stem [+ins] by prefixing the [+dist] stem, say panghiram with the instrumental derivational affix pang- which is then marked with the instrumental voice affix i-. This gives us the form ipangpanghiram, and ipangpamigay in the case of item 6 as base. Performance skill, however, prohibits the use of items with a sequence of identical derivational affix forms, and thereby modifies the items by dropping one of the affixes or by deleting the final consonant of the first affix. Thus, the first becomes either ipanghiram or ipapanghiram which are homophonous to the simple [+ins] form and the causative instrumental, respectively. The productivity of verb stem derivation can be appreciated by comparing items 2 and 3 with their source which is item 1; items 5, 6, 7 and 8 with their source item 4; items 9 and 10 with item 8; and item 11 with source item 5.

Turning now to the voice paradigm manifested by each morphological class, we find that one class may have different voice paradigms and different classes may exhibit identical ones. For instance, compare Root-stem class a with Root-stem class c distinguished by the features non-ergative [-erg] and ergative [+erg], respectively. The former class is inflected for four voices whereas the latter is inflected for only
Similarly, the PA-stem class $i$ marked with the features causative and ergative [+caus,+erg] differs from the PA-stem class $g$ marked causative and dative [+caus,+dat] in their respective voice paradigms. On the other hand, note that the pairs PA-stem class $f$ and Root-stem class $e$ and the PAG-stem $b.5$ and $b.9$ and the PANG-stem $d.7$ and $d.10$ share the same voice paradigms. This identity in voice paradigms suggests the presence of a common syntactic-semantic feature. These unifying features for the two pairs mentioned are [+erg] which means that the verb disallows its cooccurring [+AGT] to be realized in the nominative case form, and [-pot,+act] to mean that the PAG- and PANG-stems are active and their cooccurring [+AGT] can take the nominative case form. Note also that the [-erg] Root-stem class allows an agentive voice form, and, consequently, it does not have or need a corresponding PAG-stem to accommodate the agentive and benefactive voices.

From the above illustration, we observe that a Root-stem class can be the source of various types of derived stem classes and a derived stem class has the potential of being rederived into another stem class. Thus, it is possible for one derived stem class to have different types of morphological bases as can be seen in the PAG-, PANG- [+ins] and PA-stem classes. This is also true of the other derived stem classes marked by the derivational affixes ma-, maka-, ka-, paki- and the other variants of the PAG- and PANG- active stems. Again, each of these other stem classes has its own semantic feature and corresponding voice paradigm. All the major classes of root and derived stems will emerge as we subcategorize them according to their syntactic
semantic and morphological voice-related features.

3.3.2.1 Voice Inflectional Affixes

Given a verb stem with its matrix of syntactic, semantic and morphological voice-related features, along with its phonological representation, the voice affix which realizes the voice inflectional feature of each member of its paradigm can be predicted. The eight voice features identified as objective, dative, locative, agentive, benefactive, instrumental, reason, and comitative are each realized by one of the six voice affixes um-, m-, -in, -an, and Ø. The first two affixes are referred to as the active affixes because the verbs manifesting either of them more or less choose a subject in accordance with Fillmore’s (1968:33) subject choice hierarchy, i.e., if there is an agent, it becomes the subject; otherwise, the subject is the object. They are in complementary distribution; um- occurring primarily with [-erg] Root-stems and their semantically derived re-duplicated Root-stem counterparts, and m- with [-pot, +act] PAG- and PANG-stems, as well as the PAKI- and the petrified PA-stems. The next three affixes are the non-active or passive affixes. Their verb stems which may be a root or a derived stem indicate that the subject is voluntarily, involuntarily or circumstantially affected. The zero Ø affix posited here means that a significant absence of any of the voice affixes in a particular verb stem can also identify a corresponding voice feature. Among the major verb stem classes, it marks psychological verb stems as well as simple intransitive verbs.

Of the six voice affixes identified here, the active m- and Ø are introduced for the first time. In previous analyses the active
affixes besides um- are generally identified as mag- and mang-
not to mention maki- and ma- as in mano?od 'watch' and makinig
'listen'. These four affixes correspond to pag-, pang-, paki- and
the petrified pang-, respectively, in the passive form. Without the
inflectional affix m-, the verb stems in the active form are exactly
the same as the uninflected verb stems in the passive with the
affixes pag-, pang- or paki-. This indicates that in the same manner
that a Root-stem may be inflected for both active and passive forms,
certain derived stems are also capable of taking both active and
passive inflection with the verb stem remaining constant. Thus,
as shown in items 2. panghiram, 5. pagbigay, 6. pamigay and
9. pagpabigay above, only one type of stem serves both active and
passive inflection in the paradigm. By describing the inflectional
active voice affix as m-, which in the examples above mark the agentive
voice, the generality of its application to the active PAG- and
PANG- stems, and even to PAKI-stems not exemplified above, is captured.
Such an analysis also establishes a phonologically closer relationship
between the two active affixes um- and m-. It may be said that the
relationship of these two affixes can be explained diachronically
with the least difficulty.

The present analysis further indicates that as the verb stems
that admit voice inflection are invariant, so are the general forms
of the inflectional affixes. To show that the voice affixes of root
and derived stems are the same simple affixes, we can consider the
benefactive voice forms ihiram 'borrow for', ipanghiram 'borrow for,
+[dist]', ipagbigay 'give for, [-pot,+act]', ipagpabigay 'ask s.o.
to give s.t. on behalf of s.o. else, [-pot,+act,+caus]'. The benefactive case relation whose occurrence is dependent on the presence of a cooccurring agentive also reflects this dependency on the verb form which requires the benefactive to be the subject. The verb stem inflected for [-+[NM,-BEN]] is always the same stem inflectable for [-+[NM,-AGT]], and the benefactive voice affix is always i-. By identifying verb stems instead of verb roots as the elements that are inflected, the unnecessary, dubious and completely redundant practice of listing mag-, magpa-, mang-, etc. and, correspondingly, ipag-, ipagpa-, pag- an, pagpa- an, pang- an, etc. as other voice inflectional affixes is avoided. In contrast to previous studies, the analysis of verb stems and m- as an active affix in this study makes the grammar capable of stating significant generalizations, thereby, resulting in a more adequate description.

The Ø affix is posited here as a zero or unmarked voice inflection employed by certain classes of verb stems. These classes are identified here as psychological verbs and potential verbs. They are distinguished by their syntactic and semantic features as well as their morphological forms marked by the derivational affixes ma- and maka-. For example, the verb stem makita 'to see' has an unmarked form to indicate the objective voice, and the related form makita an has the affix -an to mark the locative voice. Another stem related to this is the form kakita, also derived from the base root kita 'visible' with the derivational affix ka-. It can be inflected for the locative voice with the affix -an and for the reason voice with the affix i-, thus, we have the inflected forms
kakita?an and ikakita. The other stem related to the preceding verb stems is makakita which indicates the dative voice. It may be analyzed as a derived stem whose base is either the root kita with the derivational affix maka-, or the derived stem kakita with the derivational affix ma-. It seems that there is no significant difference between the two analyses. In terms of meaning, however, the derivational affix maka- appears to be analogous to ma- in referring to potential or accidental events. For this reason and for simplicity and ease of reference, the former analysis with the affix maka- has been adopted in this study. (See Section 3.4.2.3 for a discussion of psychological verbs.) Now, it will be observed that, like the stem makita, makakita does not take any voice affix although it indicates a voice inflection different from the MA-stem. The absence of a voice inflectional affix in both the MA- and MAKa- stems has no syntactic consequences since the unique forms of the derived stems which are related by derivation from the same base, can adequately mark the necessary voice distinctions. Hence, we can refer to similar forms that do not manifest an inflectional affix yet indicate a voice inflection as being marked by Ø.

Compared with the preceding major classes of verbs, semantically derived potential or accidental verb stems from action verb stems are formed with the same affixes ma-, maka- and ka-. For example, we may have the following correspondences of action verbs from the preceding section and of potential verbs:
From the above examples, we note that the MA-stems can occur with the inflectional affixes i- or -an marking an objective, benefactive or locative voice, as the case may be. The affix i- also marks the instrumental voice of the derived potential instrumental verb stem, e.g., maipanggupit 'be able to cut with'. The MA-stems, however, are inhibited from appearing with the objective voice affix -in which marks non-potential forms; similarly, the MAKA-stems do not occur with
either of the active voice affixes "um-" or "m-", which mark agentive
voice or objective voice in intransitive verbs. The only explana-
tion that seems reasonable for the Ø marking of the objective,
dative or agentive voice above is that the new stems with ma-
or maka- are distinct enough and marking them with the voice affix
would have been redundant. Maka- can be considered the active
derivational affix marking the agentive, or without an agentive
it marks the instrumental, or otherwise, the dative; ma- is typically
the passive counterpart marking the objective or with certain smaller
classes of verbs, the dative.

It is admitted that the analysis of the derived stems with ma-
and maka- adopted in this study presents a problem in connection with
the occurrence of the voice affix i- in the inner layer of the stem
where ordinarily inflectional affixes occur in the outer layer.
Some linguists who accept the criterion that anything which carries
over in derivation cannot be inflectional, can argue that i- is
a derivational affix, hence, it is carried over to the derived
potential form. Perhaps, this criterion only applies when there
is a resulting change in part of speech in the process of derivation.
When the derivation is within the same lexical category, which means
that the same inflectional features operate, then naturally the
same inflectional affixes are generally expected to appear.
Furthermore, there is no necessity that inflectional affixes be
restricted only to the outer layers. There are special cases where
the inflectional affix occurs in the inner layer and the derivational
affix on the outer layer as in the German form Kinderchen 'little
children', which derives from Kinder 'children', which shows the plural inflectional affix -er within the word. 17 One explanation that may be attempted to account for the occurrence of the inflectional affix i- following the derivational affix ma- instead of the other way around is to highlight the MA-form of the verb stem to signal potential structure. If i- precedes the derivational affix ma-, the resulting verb form may be confused with the ordinary non-potential forms taking the same inflectional affix i as in imasahe 'to massage with', imaneho 'to steer or drive s.t.', and in rare cases imatyag or imasid 'to look or observe for'. It is of course true that there are very few Root-stems with initial ma-, but compared with those that have other syllable beginnings such as imulat 'to open one's eyes', imungkahi? 'to suggest', imumog 'to gargle with', imudmod 'to distribute; to sow', etc., the potential forms with i- if they were to appear as i- + ma-stem, say *imahiram, would have the effect of the preceding forms and lose their distinctiveness as potential verb stems.

Despite this minor objection, if it can be called one, the present analysis positing a Ø inflectional affix and derived MA- and MAKA-stems is still considered more viable than the previous analyses where the affixes ma-, ma--an, mai-, and ka--an are the inflectional affixes, with a separate -ka- derivational affix or simply another inflectional maka- for the reasons summarized below.

(a) As has been shown in the preceding section, only one simple voice affix occurs in each verb stem to identify the cooccurring subject; thus, the complex voice affixes are unnecessary additions to
the inventory of inflectional affixes.

(b) The occurrence of the voice affixes /-i- and -an/ with MA-stems marking objective, benefactive or locative voice, as they do with non-potential stems, indicates that these MA-stems are passive forms.

(c) Considering both (a) and (b) above, we cannot account for the MA- and MAKA- stems and their inflections more adequately and simply if we do not consider these two affixes derivational and a Ø as one possible inflectional affix that these two types of verb stems take. The reason no inflectional affix is necessary is that each derived form is distinct enough to identify at least one voice inflected form.

By distinguishing inflectional and derivational affixes, we have observed some relevant generalizations pertaining to verbal lexical relations. They are summarized as follows:

(a) It is not just the verb root that is inflected for the different possible voices but, broadly, the verb stem, which may be either a root or a derived stem consisting of a derivational affix and a root or another derived stem.

(b) Each stem class has its corresponding voice inflectional paradigm which never exhausts all possible subject choices.

(c) Some morphological stem classes may be subcategorized according to their respective voice inflectional paradigm, e.g., Root-stems exemplified by hiram 'borrow' versus bigay 'give', whereas other derived stem classes, regardless of the structure of their bases, regularly take the same voice inflectional paradigm, e.g., [+ins] PANG-stem.
(d) A derived stem class may share an identical voice inflectional paradigm with a Root-stem class, e.g., the derived [+caus, +erg] PA-stem exemplified by pabigay 'have s.o. give' and Root-stem exemplified by bigay.

(e) A single root can be the basis of various derived stems, but not all roots automatically create all types of derived stems, e.g., no PAG-stem can be directly derived from the [-erg] Root-stem; the existence or non-existence of a corresponding PAG-stem can be predicted on the basis of the class of the Root-stem;

(f) The order in which the derivational affixes appear provides the key to the direction of derivation and re-derivation of stems as can be shown in some examples below, where a fletched arrow indicates a stem derivation.

1. Root-stem: hiram
   [-erg]  \arrow{PAGhiram [+ins]}
   \arrow{KAhiram [-ins]}

2. Root-stem: bigay
   [+erg] \rightarrow PAGbigay \rightarrow PAGbigay \rightarrow KApagbigay
   \rightarrow PANGbigay [+ins]

3. PA-stem: PAbigay
   [+caus] [+erg] \rightarrow PAGpabigay \rightarrow KAPagpabigay
   \rightarrow PANGpabigay [+ins,+caus]

3.2.2.2 Aspect Inflectional Modification

The realization of the aspect feature is inextricably linked with the voice affix associated with the morphological-voice feature
of a given verb stem. As described in the preceding section, a verb stem class with a specified set of case frame, semantic and morphological features manifests its own voice paradigm marked by corresponding voice affixes. Different classes of verb stems based on these three types of features may share a common voice affix and, for convenience, they may be referred to as a general class under the label of their voice affix since their aspectual modification depends on the voice-marking affix. Thus, we can refer to six general classes of voice-marked stems identified by the voice affixes they take, namely, UM-class, M-class, IN-class, AN-class, I-class, and Ø-class.

The feature specifications of the various classes of verb stems that indicate to which voice paradigm and corresponding voice affix class they belong will be identified in the succeeding section, 3.4 Primary Verb Stem Subcategories. 18

Although a voice affix is identified for each verb stem, the affix may not appear in all its aspectual forms. The overt manifestation of a given aspectual category is determined by the morphophonemic rules that realize each aspect feature, which is in turn conditioned by the voice affix class of the verb stem. This interplay between the voice and aspect realization is accounted for by the following rules referred to as voice-aspect morphophonemic rules (VAMR). The first six rules involve the UM-, IN-, AN-, and I- affix classes and the next three rules pertain to the M- and Ø affix classes.
VAMR-1: \[ V[(C_1)V_1 \rightarrow V[(C_1)V_1 \begin{cases} \{UM-\} \\ \{IN-\} \\ \{AN-\} \\ \{I-\} \\ \{-beg\} \\ \{t\text{-comp}\} \end{cases} \] ]

VAMR-2: \[ V[(C_1) \rightarrow V[(C_1)um / \{UM\text{-class}\} \begin{cases} \{-fin\} \\ \{+beg\} \end{cases} \] ]

VAMR-3: \[ V[(C_1) \rightarrow V[(C_1)in / \{IN-\text{-class}\} \begin{cases} \{AN-\} \\ \{I-\} \\ \{+beg\} \end{cases} \] ]

VAMR-4: \[ \{V \rightarrow in\}V / \{IN\text{-class}\} \begin{cases} \{-fin\} \\ \{-beg\} \end{cases} \] ]

VAMR-5: \[ \{V \rightarrow an\}V / \{AN\text{-class}\} \] ]

VAMR-6: (a) \[ V[iniV_1 \rightarrow V[iniV_1 / \{I\text{-class}\} \begin{cases} \{+beg\} \end{cases} \] ]

(b) \[ \{V \rightarrow V[i \ / \{I\text{-class}\} \] ]

VAMR-1 states that the first consonant, if any, and the first vowel of the verb stem is reduplicated when the stem belonging to either the UM-, IN-, AN- or I- affix class is marked with either [-beg] or [-comp]. By VAMR-2, the UM- affix class of stems specified further with either [-fin] or [+beg], which includes both [+comp] and [-comp], is affixed with um- after the first consonant, if any. VAMR-3 applies to the IN-, AN- or I- class marked with the feature [+beg]. It attaches the affix -in- before the first vowel of the stem. It may be stressed that this rule includes in its input the output of VAMR-1 marked [-comp], except the UM-class stems, since [-comp] is redundantly [+beg]. The fourth rule marks the [-fin] or the [-beg] forms of the IN-class stems with the suffix -in. Implicit in this rule is that the [+beg] forms of the IN-class never show the suffix -in. In contrast, all four
aspectual forms of the AN-class are marked by the suffix -an by VAMR-5. Similarly, all aspectual forms of the I-class are marked by the affix i-. VAMR-6 which a-counts for this affixation consists of two disjunctively ordered subrules. The first subrule, VAMR-6.a, applies to the [+beg] forms, resulting from the application of VAMR-3, with the phonological shape in- prefix before the verb stem with an initial vowel. To this input, VAMR-6.a infixes i- between in- and V₁. All other forms of the I-class which do not meet the conditions specified in the first subrule are subject to the second subrule, VAMR-6.b, which prefixes i- to each form.

VAMR-7: (a) $V[C_1 V \{1\} \{g\} \{C_2\} V_2 \rightarrow V[C_1 V \{1\} \{g\} \{C_2\} V_2 (C_2) V_2 /$

- [M-class]
  - [+beg]
  - [-comp]

(b) $V[C_1 V \{1\} \{C_2\} V_2 \rightarrow V[C_1 V \{1\} \{C_2\} V_2 (C_2) V_2 /

- [Ø-class]
  - [+beg]
  - [-comp]

VAMR-8: (a) $V[ \rightarrow V[m / M-class

(b) $V[mp \rightarrow V[m

VAMR-9: (a) $V[ \rightarrow V[n / [M-]

- [Ø-class]
  - [+beg

(b) $V[mm \rightarrow V[n

The process of partial reduplication of the stem is characteristic of the [-beg] and the [-comp] forms. The M-class and Ø-class stems, however, differ from the preceding affix classes in reduplicating the second consonant, if any, and the second vowel of the verb stem, not
counting the final -g or -ng of the derivational affix of M-class stems, as stated in VAMR-7.a. VAMR-8 has two conjunctively ordered rules. The first marks all forms of the M-class with the prefix m- and the second indicates the full assimilation of the initial p- of the stem to the prefix m-. VAMR-9 also consists of two conjunctively ordered rules which apply to the [+beg] forms of either the M- or Ø class. The first rule prefixes n- to the stem and the second effects full assimilation of the initial m- of the stem to the n- prefix.

The following Charts 3 to 6 show examples of the six voice-affix classes of verb stems in their four aspectual forms. Applying the two sets of VAMR's above, the four charts identify the voice (horizontal entries) and aspect paradigms (vertical entries in the four charts) of each of the verb stem classes exemplified.
<table>
<thead>
<tr>
<th>Voice-affix</th>
<th>Marked Class</th>
<th>UM-class</th>
<th>M-class</th>
<th>IN-class</th>
<th>AN-class</th>
<th>I-class</th>
<th>Ø-class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect feature</td>
<td>hiram</td>
<td>humiram</td>
<td>hiramin</td>
<td>hiraman</td>
<td>ihiram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb stem class</td>
<td>bigay</td>
<td>bigyan</td>
<td>ibigay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. hiram 'borrow' [+erg]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. bigay 'give' [+erg]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. pagbigay 'give' [-pot, +act]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. pangbigay 'give' [+ins]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. kapagbigay 'give' [-ins]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. makakita 'see' [+pot, +act]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. makita 'see' [+pot, -act]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart 3. Examples of voice-affix-marked classes of verb stems marked [-fin]
<table>
<thead>
<tr>
<th>Voice-affix</th>
<th>Marked Class</th>
<th>UM-class</th>
<th>M-class</th>
<th>IN-class</th>
<th>AN-class</th>
<th>I-class</th>
<th>Ø-class</th>
</tr>
</thead>
</table>

**Aspect feature**

**Verb stem class**

| 1. hiram | : | hihiram | : | hihiram | : | ihihiram | :
| 2. bigay | : | : | : | bibigyan | : | ibibigay | :
| 3. pagbigay | : | : | : | pagbibigyan | : | ipagbibigay | :
| 5. kapagbigay | : | : | : | : | : | ikakapagbigay | ikapapagbigay | ikapagbibigay |

**Chart 4. Examples of voice-affix-marked classes of verb stems marked [-beg]**
<table>
<thead>
<tr>
<th>Voice-affix Marked Class</th>
<th>UM-class</th>
<th>M-class</th>
<th>IN-class</th>
<th>AN-class</th>
<th>I-class</th>
<th>Ø-class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect feature</td>
<td>[+comp]</td>
<td>[+comp]</td>
<td>[+comp]</td>
<td>[+comp]</td>
<td>[+comp]</td>
<td>[+comp]</td>
</tr>
<tr>
<td>Verb stem class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. hiram</td>
<td>humiram</td>
<td>:</td>
<td>hiniram</td>
<td>hiniraman</td>
<td>inihiram</td>
<td>:</td>
</tr>
<tr>
<td>2. bigay</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>binigyan</td>
<td>ibinigay</td>
<td>:</td>
</tr>
<tr>
<td>3. pagbigay</td>
<td>:</td>
<td>nagbigay</td>
<td>:</td>
<td>pinagbigyan</td>
<td>ipinagbigay</td>
<td>:</td>
</tr>
<tr>
<td>4. pangbigay</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>ipinangbigay</td>
<td>:</td>
<td></td>
</tr>
<tr>
<td>5. kapagbigay</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>ikinapagbigay</td>
<td>:</td>
</tr>
<tr>
<td>7. makita</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>nakita</td>
</tr>
<tr>
<td>8. kakita</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>kinakita^{an}</td>
<td>ikinakita</td>
<td>:</td>
</tr>
</tbody>
</table>

Chart 5. Examples of voice-affix-marked classes of verb stems marked [+comp].
<table>
<thead>
<tr>
<th>Voice-affix</th>
<th>M-class</th>
<th>M-class</th>
<th>M-class</th>
<th>M-class</th>
<th>M-class</th>
<th>M-class</th>
<th>M-class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marked Class</td>
<td>UM-class</td>
<td>M-class</td>
<td>M-class</td>
<td>M-class</td>
<td>M-class</td>
<td>M-class</td>
<td>M-class</td>
</tr>
<tr>
<td>Verb stem class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. hiram</td>
<td>humihiram</td>
<td>:</td>
<td>hinihiram</td>
<td>hinihiraman</td>
<td>ihinihiram</td>
<td>:</td>
<td>inihiniram</td>
</tr>
<tr>
<td>2. bigay</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>binibigyan</td>
<td>ibinibigay</td>
<td>:</td>
<td></td>
</tr>
<tr>
<td>3. pagbigay</td>
<td>:</td>
<td>nagbibilag</td>
<td>:</td>
<td>pinagbibigyan: ipinagbibigay:</td>
<td>:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. pangbigay</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>ipinapangbigay:</td>
<td>ipinangbibigay:</td>
<td>:</td>
<td></td>
</tr>
<tr>
<td>5. kapagbigay</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>ikinapagbigay:</td>
<td>ikinapapagbigay:</td>
<td>:</td>
<td></td>
</tr>
</tbody>
</table>

Chart 6. Examples of voice-affix-marked classes of verb stems marked [-comp]
3.4 Primary Verb Stem Subcategories

As has been defined earlier, a verb stem is that element to which verb inflection applies, and the inflectional features which characterize the verbal category are voice and aspect. These features trigger the modification of the phonological representation of the lexical entry or lexeme. A verb lexical entry or lexeme abbreviates the inflected forms of a verb stem; it serves as the underlying form of the set of inflected forms. Verb stems appear in different morphological shapes. The structure may be a root, a stem consisting of a root and a derivational affix, or a stem with a derivational affix and another affixed stem as base. Besides its morphological feature, a verb stem is also characterized by a set of case frame features and certain semantic features. Basically, the case frame features specify the restrictions on the cooccurring case relations. However, they may include corresponding case form features to indicate particular constraints on the realization of certain case relations. Based on these three kinds of features, the verb stem's voice paradigm can be defined. A voice form, say, agentive, cannot be realized if the case frame features do not specify a [+AGT]. If it does, there must be no feature in the matrix which prohibits the occurrence of a nominative agent, i.e., [-NM,AGT]. In addition, certain semantic features provide information about the proper interpretation of some cooccurring case relations or of the meaning of the verb itself. Moreover, the verb's morphological features relate to its particular stem form and its range of voice inflection. To account for the various
distinctions made in the verb's voice inflection, verb stems are subcategorized according to three dimensions: a) case frame features, b) semantic features, and c) morphological-voice-related features.

For efficiency of analysis and economy of description, an arbitrary distinction between primary and secondary verb stems has been adopted. The major subcategorization accounts only for what is referred to as primary verb stems. Two criteria which have to do with case frame, semantic and voice features are used to identify primary verb stems. Both conditions stated below must be met.

(a) A verb stem is 'primary' if it belongs to one of the major case frame and semantic subcategories and it manifests a distinctive voice paradigm different from the other morphological classes of the same case frame and semantic subcategory. A primary verb stem may be a root or an affixed stem. It may be an underived verb root or a root derived from a N or a Adj or another lexical category. It may also be a derived affixed stem from a verb root or another affixed verb stem, or from a root or affixed N or Adj. For example, the verbs hiram 'borrow', bigay 'give' and bagsak 'fall' are root-stems each belonging to a different major syntactic-semantic subcategory. Likewise, the root-stems anay as in anayin 'be infested by/with termites' derived from the noun anay 'termite' and payat as in pumayat 'become thin' derived from the adjective payat 'thin' belong to two different semantic classes of a major case frame subcategory, hence, two different subcategories. The stems malanta 'become wilted' from the Adj lanta 'wilted' and
pagdoktor as in magdoktor 'be a doctor' from the N doktor 'doctor' illustrate affixed primary verb stems derived from other lexical categories.

(b) A verb stem which is derived from another verb stem is primary if it manifests an identical case frame-semantic subcategory as its source stem and at the same time exhibits a voice paradigm different from that of its source stem. Thus, pagbigay, derived from the verb root bigay, is a primary verb stem since it belongs to the same case frame-semantic subcategory as bigay, namely, location goal verbs; it has a voice paradigm consisting of the agentive and the predictable benefactive voice which is distinct from the voice paradigm of its source, which consists of the objective and the locative voices. On the other hand, a derived verb stem such as panghiram 'borrow, [+dist]', from the root-stem hiram, which manifests a case frame identical to its source differs from it in terms of semantic features. Whereas the derived stem has the feature [+dist] to mean distributive, the source stem does not. Furthermore, both stems have the same voice paradigms. (See page 145 for comparison.) As a result, this derived panghiram is not a primary verb stem. It will be referred to as a semantically derived secondary verb stem. Another type of derived verb stem from a verb stem source may be illustrated by the causative form pabigay 'have s.t. be given to s.o. else'. This stem is derived from the root bigay 'give', but its case frame features include a cooccurring [+DAT] which is negatively specified on the source stem. Moreover, the derived stem has the semantic feature [+caus] for causative which the source stem does not carry. Lastly, its voice paradigm, consisting of
the objective and locative voice, is identical to that of the source stem. Therefore, this derived verb stem is not a primary verb stem either but a syntactically derived secondary one.

Using these two criteria, primary verbs can be set apart from other derived stems which are labelled secondary verbs. By isolating the primary verb stems and describing their syntactic, semantic and morphological features, we can show how verbal inflection and derivation operate. Moreover, by making such a distinction, we can relate the secondary stems that derive from the primary stems more economically and adequately, as will be shown in the next chapter.

The two conditions above although quite effective in distinguishing a sizeable majority of primary from non-primary verb stems are not always sufficient for distinguishing all verb stems. It is recognized that there are borderline cases which must be identified on the basis of some other essential factors. For instance, the verb stems bili 'buy' and pagbili 'sell' are morphologically, syntactically, and to a certain extent, semantically related. Morphologically, it is plausible to consider bili as the source stem of pagbili, the simpler form of two similar and 'related' items being the more basic in general. Syntactically, both have identical case relation features and voice paradigms, and on these bases, pagbili is rejected as a primary verb stem, similar to the distributive stem panghiram. Probing into the semantic content of the two forms, we know that both involve the meaning 'transaction'. The essential difference, however, is in the direction of the [+OBJ] actant involved in the transaction. Both are verbs of location,
which as a subcategory is further specified as either [+goal] or [-goal]. The stem bili is [-goal] while pagbili is [+goal]. Such a distinction does not obtain in the pair hiram and panghiran [+dist]. Since this semantic feature distinction is relevant to the entire verbal subcategorization, differentiating classes such as kuha 'take' and lagay 'put', punta 'go to', and alis 'depart from', it may also be used as another basis for defining a primary verb stem. Hence, on this ground, pagbili, although presumed to be historically related to bili, is also considered a primary verb stem different from bili.

3.4.1 Subcategorization of Primary Verb Stems in Terms of Major Case Frame Features

The first set of features that subcategorize primary verb stems refers to the case relations that cooccur with the verbs. These features are expressed as contextual (case frame) features. Certain verbs with inherent semantic features which restrict the grammatical presence or absence of particular case relations are also subcategorized according to these case-related features.

The eight case relations which may cooccur with a primary verb stem marking the verb's case frame features are the [+OBJ], [+AGT], [+DAT], [+LOC], [+INS], [+BEN], [+RSN] and [+COM]. Based on these case frame features, the primary verb stems can be broadly subcategorized according to the following case frame redundancy (CFRR) and case frame subcategorization rules (CFSR):

\[
\text{CFRR-1: } [+V] \rightarrow [+[OBJ]]
\]
Every verb stem has a cooccurring [+OBJ] actant. Exceptions to this rule are marked in the lexical items. With this environment, a verb stem may be further specified as cooccurring with other actants or not.

\[ \text{CFSR-1: } [+\text{OBJ}] \rightarrow [\pm [+\text{AGT}]] \]
\[ \quad [\pm [+\text{DAT}]] \]

A verb which requires a cooccurring [+OBJ] may or may not cooccur with a [+AGT] and a [+DAT]. If it is negatively marked for [+DAT], then by the following CFSR-2, the verb may or may not be a verb of location marked by the feature [+loc].

\[ \text{CFSR-2: } [- [+\text{DAT}]] \rightarrow [+\text{loc}] \]

\[ \text{CFSR-3: } [+\text{loc}] \rightarrow [+\text{strict}] \]

\[ \text{CFRR-2: } [+\text{strict}] \rightarrow [+\text{LOC}] \]

\[ \text{CFRR-3: } [-\text{strict}] \rightarrow [+(\text{LOC})] \]

By CFSR-3, a verb that is marked with [+loc] is either marked [+strict] or non-strict [-strict].\(^{22}\) According to CFRR-2, a strict location verb has to cooccur with a [+LOC]; a non-strict one, by CFRR-3, may have an optionally cooccurring [+LOC], that is, its [+LOC] actant may or may not be overtly expressed.

Verbs specified as not cooccurring with a [+AGT] and marked [-loc] may or may not cooccur with an instrumental actant by CFSR-4:

\[ \text{CFSR-4: } [- [+\text{AGT}]] \rightarrow [\pm [+\text{INS}]] \]

The above rules render seven major case frame subcategories of primary verbs, which can be illustrated in the following tree diagram:
Figure 2. Major case frame subcategorization of Tagalog primary verb stems
For ease of reference, a descriptive label has been used to identify each of the seven case frame subcategories, namely:\(^{23}\)

(a) information verbs, \([+\text{AGT}], [+\text{DAT}], [+\text{OBJ}]\)

(b) location verbs, \([+\text{AGT}], +\text{loc}, [+\text{OBJ}]\)

(c) simple transitive verbs, \([+\text{AGT}], -\text{loc}, [+\text{OBJ}]\)

(d) psych verbs, \([-\text{AGT}], [+\text{DAT}], [+\text{OBJ}]\)

(e) locomotion verbs, \([-\text{AGT}], -[\text{DAT}], +\text{loc}, [+\text{OBJ}]\)

(f) calamity verbs, \([-\text{AGT}], -[\text{DAT}], [+\text{INS}], [+\text{OBJ}]\)

(g) simple intransitive verbs, \([-\text{INS}], [+\text{OBJ}]\)

Furthermore, some subcategories sharing at least one identical case relation may express other common features, hence, it is convenient to refer to these classes by the name of their common case relation. Those that allow a \([+\text{AGT}]\), for instance, are agentive verbs, and correspondingly, those without a \([+\text{AGT}]\) are non-agentive; those that are identified as \([+\text{loc}]\) are locative verbs and those that are \([-\text{loc}]\) are non-locatives.

There are other case relations whose occurrence does not generally serve to subcategorize the verbs but which have the potential of cooccurring with the other basic case relations. Such case relations may be realized in the nominative case form. It is in this form that their cooccurring verb stem exhibits a distinct morphological structure and corresponding voice paradigm. Thus, these case relations become relevant to verb subcategorization when they occur in the nominative case form. These case relations are introduced by some redundancy rules.

Unless otherwise marked, every verb stem may allow an optionally
cooccurring [+RSN] and [+COM]. The verbs marked for not taking either one of these actants are identified by the following rule:

\[
\text{CFRR-4: } \quad \left[ -[+\text{AGT}] \right] +[+\text{INS}] \rightarrow \left[ -[+\text{RSN}] \right] -[+\text{COM}]
\]

The rule states that a calamity verb does not cooccur with a [+RSN] nor a [+COM].

Two other case relations are predictable from the presence of another case relation by the following rules:

\[
\text{CFRR-5: } \quad +[+\text{AGT}] \rightarrow [+[INS)]
\]

\[
\text{CFRR-6: } \quad +[+\text{AGT}] \rightarrow [+[BEN)]
\]

The first rule says that an agentive, non-dative verb allows the potential cooccurrence of an instrumental actant. The second rule marks an agentive verb with a potentially cooccurring benefactive actant. The [+INS] indicates a tool or device employed by the agent on the [+OBJ] in performing the action and the [+BEN] indicates for whom the action is done.

CFRR-5 and CFRR-6 imply that verbs are generally non-instrumental, and non-agentive verbs are predictably non-benefactives. These generalizations can be expressed as follows:

\[
\text{CFRR-7: } \quad [+V] \rightarrow [+[INS]]
\]

\[
\text{CFRR-8: } \quad [-[+\text{AGT}]] \rightarrow [-[+\text{BEN}]]
\]

Compared with two previous works on Tagalog where verbs are also classified according to their cooccurring complements or case relations, two subcategories delineated here are analyzed differently by Schachter and Otanes (1972) and by Ramos (1974). First of these is the subcategory of information verbs. In Schachter and Otanes, this
class of verbs is a subclass of double object verbs whose other members are identical to the class identified here as location verbs. This means that what is recognized here as [+DAT] is identified by Schachter and Otanes as a directional complement (what we mark here as [+LOC]). In Ramos, information verbs such as utos 'order', bilin 'order; requisition', sabi 'say; tell', balita? 'inform', ulat 'report', etc. are not accounted for in the analysis. They do not belong to any of the fifteen major classes she sets up. Based on the occurrence of three actants, they can be put together only with the subcategory of location verbs (her Class 4, 1974:84), even if the information verbs do not convey a [+OBJ] to a directional goal in the same sense that one class of location verbs does.

Primarily, the difference in analyses lies in the distinction made between a [+DAT] and a [+LOC] (directional actant in the two works cited). In terms of meaning, the [+DAT] is usually the animate actant indirectly affected by what the verb designates; the [+LOC] is the place where the [+OBJ] actant is situated or transported. In terms of lexical derivational possibilities, there is a difference between the class of information verbs and that of location verbs. Under the discussion on causative derivation (see Chapter IV), the causative form of a verb of location which cooccurs with a [+DAT], has a meaning similar to a verb of information. In both instances, the [+DAT] actant performs the same role. Moreover, the causative form of a non-location or simple transitive verb has an identical case frame feature as the verb of information. For example:
7. nag?utos ako ng merienda sa katulong
ask/for/ I snack maid
order [+NM] [+AC] [+L]
(info) [+AGT] [+OBJ] [+DAT]

'I ordered the maid to prepare some snacks.'
Lit.: 'I ordered the maid for some sancks.'

8. nagdulot ang katulong ng merienda sa mga bisita
serve maid snack guests
(location) [+NM] [+AC] [+L]
[+AGT] [+OBJ] [+LOC]

'The maid served some sancks to the guests.'

9. nagpadulot ako sa katulong ng merienda sa mga bisita
serve [+NM] [+L] [+AC] [+L]
(location) [+AGT] [+DAT] [+OBJ] [+LOC]
[+caus]

'I ordered the maid to serve some sancks to the guests.'

10. nagpahanda? ako ng merienda sa katulong
prepare [+NM] [+AC] [+L]
[+caus] [+AGT] [+OBJ] [+DAT]
(simple trans)

'I ordered the maid to prepare some sancks.'

If the [+DAT] and [+LOC] are not distinguished there will be a problem of description in accounting for these two case relations cooccurring with causative agentive verbs. Furthermore, the generalization expressed by the [+DAT] actant of information verbs and the [+DAT] of causative non-information agentive verbs will be unfortunately missed.

The second subcategory analyzed differently here is what has been labelled calamity verbs with the case frame [-[+AGT]], [+INS], [+OBJ]]. This frame is also recognized in Ramos (1974:35f) under the discussion of instrumental force. However, the same frame illustrated therein has not been included in her list of major sub-categories. The only case frame specified with a cooccurring
instrumental actant is labelled Class 13 (1974:93-94) which is also marked with the feature [+meteorological], e.g. umulan 'it rained', lumindol 'it quaked', etc. But the instrumental actant in this frame is described as never occurring on the surface structure.

In Schachter and Otanes, the case frame manifested by calamity verbs falls under one set of a subclass of what is identified as 'adjunctive' verbs which allow a cooccurring "adjunct that is not an actor adjunct" (1972:384,387). In the present analysis, the [+INS] is distinguished from an actor or agent actant since the former cannot have the potential of cooccurring with another instrumental case relation. Furthermore, unlike the [+AGT] in the other subcategories, the [+INS] in this particular case frame is restricted in its case form realization to the non-nominative. Thus, the voice paradigm of this class excludes an instrumental voice. For example:

11. giniba ng bagyo ang maraming bahay
destroy storm many houses
[+AC] [+INS] [+NM] [+OBJ]

'Many houses were destroyed by the storm.'

This peculiar syntactic behavior of calamity verbs is expressed by the following redundancy rule:

\[
\text{CFRR-9: } \begin{bmatrix} -[+AGT] \\ [+INS] \\ [+OBJ] \end{bmatrix} \rightarrow \begin{bmatrix} -[AC] \end{bmatrix}
\]

The rule states that a calamity verb does not permit its cooccurring [+INS] to be realized in any other case form but the accusative.

As for the class of meteorological verbs set up by Ramos, that subcategory is analyzed here as a special class of verbs marked
phenomenal [+phen] because they are derived from nouns which express some natural phenomena. The [+phen] verbs are a special class because of their unique feature [-[+NM]], which means that they do not cooccur with a subject actant although they are marked by an active voice affix. It is relevant to point out that from the [+phen] class of verbs, two types of verbs can be derived, one type belongs to the simple intransitive class and the other, to the calamity class.

For example:

12. uulanin ang parada
    rained on parade
    [+NM ] [+OBJ]

'The parade will be overtaken by the rain.'
Lit.: 'The parade will be rained on.'

13. inulan ng punlo' ang kuta ng mga tulisan
    attack bullets lair bandits
    [+AC ] [+NM ] [+INS] [+OBJ]

'The lair of the bandits was the target of bullets.'

A third distinctive case frame subcategory established in this study involves psych verb stems which are beyond the scope of Ramos' study, although they may be related in part to the subclass she describes as experiential, having only a cooccurring objective case in its case frame (Class 10, 1974:91). In Schachter and Otanes, psych verbs are classified under the object subtype of transitive verbs (1972:293-98). The reasons behind distinguishing this subcategory from that of simple transitive verbs are as follows:

(a) There is a general difference in meaning indicated by the psych verb stem class and the simple transitive verb class. This
difference is reflected in the role played by a [+DAT] actant with a psych verb and a [+AGT] with a simple transitive verb in relation to a cooccurring [+OBJ] actant. The [+DAT] does not affect the [+OBJ], but the [+AGT] usually does:

(b) The derivational potential of each verb stem class in both causative and social forms is more revealing of significant generalizations if the two subcategories are distinguished. (See the sections on derived causative and social verbs in Chapter IV) For example:

14. narinig nila ang tugtugin ni Angel
hear they composition
[+AC] [+NM] [+OBJ]

'Angel's composition was heard by them.'

14.a. ipinarinig ni Jo sa kanila ang tugtugin ni Angel
hear [+AC] [+L] [+AGT] [+DAT] [+NM] [+OBJ]

'Jo made/let them hear Angel's composition.'

15. binali? ni Jose ang tubo
break sugarcane
[+AC] [+NM] [+AGT] [+OBJ]

'The sugarcane was broken by Jose.'

15.a. ipinabali? niya kay Jose ang tubo
break he [+caus] [he]
[+AC] [+L] [+AGT] [+DAT] [+NM] [+OBJ]

'He asked Jose to break the sugarcane.'

In 14.a, the [+DAT] actant of the derived causative verb corresponds to the [+DAT] of the source psych verb. In 15.a, the [+DAT] of the causative verb corresponds to that of the [+AGT] of the source simple transitive verb. In both cases, the causative verbs created from either
a psych or a simple transitive verb have a new [+AGT] actant introduced into its case frame.

There are two other subcategories here which need to be compared with similar subcategories identified in the two works mentioned above. These are the case frame subcategory of locomotion verbs, [-[+AGT], +loc, +[+OBJ]], and that of simple intransitive verbs, [-[+INS], +[+OBJ]]. The former class includes both subcategories identified in Ramos (1974:158-59) as having the case frame marked with agent and directional, (Class 7 and Class 8), and with object and directional cases (Class 15); the latter, both her subcategories identified by the occurrence of only an agent (Class 9) and of only an object (Class 14). To a certain extent, the two present subcategories are similar to those in Schachter and Otanes (1972:301-303) belonging to the general class of directional verbs, having an actor and a directional complement, and the subclass of simple intransitive verbs, respectively. The essential difference is that the two subcategories in this study are both non-agentive. The verbs of locomotion indicate that the [+OBJ] actant, without the mediation of an agent, goes to, comes from or stays in a given location [+LOC]. The verb class permits either animate or inanimate [+OBJ] referents. For example:

16. pumasok ang {bata?} sa silid
   enter {tubig} room
   child/water
   [+NM] [+L]
   [+OBJ] [+LOC]

'The child/water entered the room.'
Irrespective of the feature [+anim] or [-anim], the [+OBJ] referent of locomotion verbs undergoes movement on its own in relation to a given location. Likewise, the subclass of simple intransitive verbs that expresses physical or bodily movement may have either type of [+OBJ] referent. Such a description implies that 'animateness of the subject is not syntactically relevant' (Starosta, 1971a:445). This may be contrasted to the situation with agentive verbs where the introduction of inanimate agents results in situationally anomalous sentences.

3.4.2 Subcategorization of Primary Verb Stems in Terms of Semantic Features

Most of the major case frame subcategories described in the preceding section are further subcategorized in terms of semantic features which indicate different meanings. A semantic feature may provide a proper interpretation to a particular cooccurring case relation or restrict the case form realization of certain case relations. It may also denote the nature of the action, process or state suggested by the verb stem. The rules that account for these features are referred to as semantic feature subcategorization rules (SFSR).

3.4.2.1 Semantic Features of Locative Verbs, [+loc]

The first set of rules below applies to locative verbs marked by the feature [+loc]:

17. gumalaw  move
    ang {bataq}
    {basa}
    child/
    glass
    [+NM]
    [+OBJ]

'The child/glass moved.'
The first rule states that locative verbs identified by the feature [+loc], which include location and locomotion verbs, may be either directional [+dir] or non-directional [-dir]. The former class means transportation or movement of the cooccurring [+OBJ] referent to or from a place designated by the cooccurring or unexpressed [+LOC]. Non-directional [-dir] verbs refer to those that do not express this type of movement. Rather, they presuppose a particular location of the [+OBJ] involved. For instance, the verb sulat 'to write down' presupposes the particular location of what is to be written down, hence, it is a [-dir] locative verb. On the other hand, a verb such as basag 'to break' does not presuppose a location for the [+OBJ], thus, it does not require a [+LOC] and is, therefore, a non-locative verb.

By SFSR-2, a directional verb is further specified as either a goal [+goal] verb or a non-goal [-goal] or source verb. The feature [+goal] means the movement of the cooccurring [+OBJ] referent to a place of destination which may be identified by a cooccurring or unexpressed [+LOC]. This [+LOC] is interpreted as the goal. In contrast, the opposite feature [-goal] indicates movement from a place designated by the [+LOC] which means the source or place of origin of the [+OBJ].

3.4.2.2 Semantic Features of Agentive Verbs, [+AGT]

The class of [-dir] verbs that cooccurs with a [+AGT] is further
subcategorized according to the following rules assigning semantic features that refer to the effect of the action on the [+OBJ] involved:

SFSR-3: 
\[
\begin{align*}
&\begin{cases}
  [+AGT] \\
  [-DAT] \\
  +loc \\
  -dir
\end{cases} \\
\rightarrow [+af]
\end{align*}
\]

SFSR-4: 
\[
[+af] \rightarrow [+cs]
\]

SFSR-3 states that [-dir] location verbs may be either affected [+af] or non-affected [-af]. The class [+af] means that the physical state of the cooccurring [+OBJ] is affected whereas the class [-af] means that the [+OBJ] is not affected in the same manner. The effect of a [-af] verb can be a change in the [+OBJ] referent's position in a particular location. A verb which affects the physical or substantial state of the [+OBJ] is further specified by SFSR-4 as to whether the effect is a change-of-state [+cs] or a non-physical, superficial change which effect is identified as a non-change-of-state [-cs].

The case frame subcategory labelled simple transitive verbs is agentive but non-locative. It is further subcategorized following the rules below:

SFSR-5: 
\[
\begin{align*}
&\begin{cases}
  [+AGT] \\
  [-DAT] \\
  -loc
\end{cases} \\
\rightarrow [+extn]
\end{align*}
\]

CFRR-10: 
\[
\begin{align*}
&\begin{cases}
  [+extn] \\
  [+NM] \\
  [+OBJ]
\end{cases} \\
\rightarrow [-L [-OBJ]]
\end{align*}
\]

SFSR-5 marks two types of simple transitive verbs, namely, extension [+extn] and non-extension [-extn] verbs. Extension verbs denote some kind of abstract effect on the [+OBJ] referent. They are exemplified by verb stems such as tulong 'help', saklolo 'succor',
damay 'aid; express sympathy', or dalo 'help; attend to'. Schachter and Otanes (1972) and Ramos (1974) classify these verbs as directional verbs cooccurring with an agentive and a directional (locative here) actant. In both works, these verb stems are not distinguished in terms of case frame or complements from other members of the same category such as punta 'go', pasok 'enter', etc. By and large, these two groups of verbs differ in the roles played by their cooccurring actants. Considering the first group (our [+extn] verbs), the cooccurring [+AGT] may be said to be doing something on or for another actant (the posited [+OBJ]). In contrast to the second group which indicates that an actant transports itself to a place designated by a [+LOC], the [+AGT] of the verbs of 'helping' may not necessarily be in the place where the [+OBJ] is located. For example:

18.a. tinutulungan ng mga Amerikano ang mahihirap sa ibang bansa?

'The poor in other countries are helped by the Americans.'

18.b. tumutulong ang mga Amerikano sa mahihirap sa ibang bansa?

'The Americans help the poor in other countries.'

If the classification of the verbs in question is based on the fact that the actant marked by sa in its non-nominative case form qualifies it to be identified as a directional or locative actant since if it is made the subject, the voice affix on the verb is -an, which is
is a regular affix for a locative subject, it may be argued that such
ground is not compelling. From the preceding chapter, it has already
been shown that the case marker sa may mark the locative case form
not only of a [+LOC] case relation but a [+DAT], a [+COM], or a [+OBJ]
as well. Furthermore, the voice affix -an in the verb does not only
mark a cooccurring [+LOC] as subject. Depending on the verb subclass,
-an can also mark a [+OBJ] or a [+DAT] subject, not to mention a [+COM].

Within the present system of verb subcategorization, the verbs of
the type tulong 'help' in contrast to those of the class punta 'go to'
Admit in their case frame a potentially cooccurring [+BEN] and [+INS].27
This indicates that the former class is an agentive verb and not a non-
agentive like the latter class. For example:

19. tululong si Mang Pedro ng bigas sa mga nasunugan
help rice fire victims
[+NM] [+AC] [+L] [+OBJ]
[+AGT] [+INS] [+BEN]
para sa kanilang samahan
for their association
[+B] [+L] [+BEN]

'Mang Pedro helped the fire victims with rice on behalf of
their association.'

By CFRR-10, a [+extn] verb which is not inflected for the objective
voice realizes its cooccurring [+OBJ] only in the locative case form.
In comparison, the non-nominative form of the [+OBJ] of a [-extn] verb
may be realized in the accusative or the non-accusative case form. If
it is in the accusative, the [+OBJ] is indefinite; if it is in the
non-accusative case form, then it is definite. The non-accusative
case form is also the locative case form. All these are expressed
by the following rules:

CFSR-5: \[\begin{array}{c}
-\text{extn} \\
\text{+NM} \\
-\text{+OBJ}
\end{array}\] \[\rightarrow\] \[\begin{array}{c}
\text{+AC} \\
\text{+OBJ}
\end{array}\]

CFRR-11: \[\begin{array}{c}
-\text{extn} \\
\text{+AC} \\
\text{+OBJ}
\end{array}\] \[\rightarrow\] \[\begin{array}{c}
\text{+OBJ} \\
\text{-def}
\end{array}\]

CFRR-12: \[\begin{array}{c}
-\text{extn} \\
-\text{AC} \\
\text{+OBJ}
\end{array}\] \[\rightarrow\] \[\begin{array}{c}
\text{-L} \\
\text{+OBJ}
\end{array}\]

The other subclass of simple transitive verbs marked [-extn] has a wider membership than the [+extn] class. It expresses an effect on the cooccurring [+OBJ] actant which is more direct and visible in character. There is a three-way distinction with regard to the manner in which the [+OBJ] referent is affected. These distinctions are identical to those expressed by the [-dir] agentive verbs, and reflect the same corresponding syntactic and morphological consequences.\(^{28}\)

Thus, SFSR-3 involving only [-dir] agentive verbs as input is revised as follows:

SFSR-3': \[\begin{array}{c}
\text{+AGT} \\
\text{-dir} \\
\text{-extn}
\end{array}\] \[\rightarrow\] \[\text{+af}\]

By SFSR-3' and SFSR-4, [-extn] verbs are further subclassified into three semantic feature subcategories, namely, [+cs], [-cs] and [-af] simple transitive verbs.

The semantic feature subcategorization of the agentive case frame subcategories may be shown in the following tree diagram.\(^{29}\)
Figure 3. Case frame and semantic feature subcategorization of agentive verbs.
3.4.2.3 Semantic Features of Calamity Verbs, [-[+AGT], [+INS], [+OBJ]]

The class of calamity verbs has a cooccurring [+INS] instead of a [+AGT] as the direct causer of an event designated by the verb. The [+INS] may be a natural force or phenomenon or a substance that affects the cooccurring [+OBJ] referent. The kind of effect the [+INS] actant leaves on the [+OBJ] referent is characterized by the same semantic features which subcategorize agentive [-dir] and [-extn] verbs. Thus, SFSR-3' (the revised form of SFSR-3) is again revised below to include calamity verbs:

\[
\text{SFSR-3'}: \begin{cases} 
[-[+AGT]] \\
[-[+AGT] \\
[+INS]] 
\end{cases} \rightarrow [+af]
\]

By this rule and SFSR-4, calamity verbs are also subcategorized into the subclasses [+cs], [-cs] and [-af].

3.4.2.4. Semantic Features of Simple Intransitive Verbs, [-[+INS], [+OBJ]]

The verb stems in this subcategory are varied. They are identified by semantic features which further subcategorize them as follows:

\[
\text{SFSR-6: } \begin{cases} 
[-[+INS]] \\
[+OBJ] 
\end{cases} \rightarrow [+inch]
\]

\[
\text{SFSR-7: } [+inch] \rightarrow [+term]
\]

\[
\text{SFSR-8: } [-inch] \rightarrow [+affl]
\]

\[
\text{SFSR-9: } [+affl] \rightarrow [+cs]
\]

The rules above subcategorize simple intransitive verbs into five subclasses, namely: (a) inchoative, terminal [+inch, +term], (b) inchoative, non-terminal [+inch, -term], (c) non-inchoative,
afflicted, with change-of-state [+inch, +aff1, +cs], (d) non-inchoative, afflicted, without change-of-state [+inch, +aff1, -cs], and (e) non-inchoative, non-afflicted [-inch, -aff1].

Inchoative [+inch] verbs express a process of 'becoming' whereas those marked non-inchoative [-inch] express an action, an activity or an event. The feature [+term] refers to a terminal or permanent change or transformation; the opposite feature [-term] means non-terminal or transient state. The feature [+aff1] denotes that something external to the [+OBJ] referent afflicts it resulting in some form of change-of-state specified with the feature [+cs] or of a superficial change-of-state identified by the feature [-cs]. These features are similar to those marking the agentive verbs of [+af]. To capture this similarity, SFSR-4 which applies only to agentive and calamity verbs may be revised as follows to incorporate and, hence, eliminate, SFSR-9:

[SFSR-4*]

\[
\begin{align*}
&{\text{[+af]}} \\
&{\text{ [+aff1]}} \\
\rightarrow &{\text{ [+cs]}}
\end{align*}
\]

The verbs of affliction are similar to calamity verbs in that being derived from phenomenal nouns pertaining to diseases, illnesses or discomforts or nouns that have destructive effects, they express the external factor affecting the [+OBJ] referent. Other verbs of this class derive from adjectives and they express certain dispositions towards some activity. For example:

20. inulan ang parade kahapon
rain parade yesterday

'Verner was overtaken by the rain yesterday.'
Lit.: 'The parade was rained on yesterday.'
Verbs that are marked [-affl] express activities or events without any external factor affecting the [+OBJ] referent, e.g., pumutok 'explode', mahulog 'fall, drop'.

In sum, the subcategories of non-agentive non-dative verbs consisting of locomotion, calamity, and simple intransitive types are represented with their semantic feature subcategorization in the following tree diagram:
Figure 4. Case frame and semantic feature subcategorization of non-agentive non-dative verbs
3.4.2.5 Semantic Features of Psych Verbs, [-[+AGT], [+DAT], [+OBJ]]

The last case frame subcategory identified by the presence of a cooccurring [+DAT] and [+OBJ] and the absence of a [+AGT] is generally associated with verbs referring to a psychological state or condition. Its [+DAT] actant is the experiencer or perceiver of the [+OBJ] referent. Psych verbs are classified according to the following semantic features:

- **SFSR-9:** 
  \[ [-[+AGT]] \\
  [+[DAT]] \\
  [+[OBJ]] \rightarrow [+per] \]

- **SFSR-10:** 
  \[ [+per] \rightarrow [+cog] \]

- **SFSR-11:** 
  \[ [-per] \rightarrow [+emo] \]

- **SFSR-12:** 
  \[ [-emo] \rightarrow [+assm] \]

- **SFSR-13:** 
  \[ [-assm] \rightarrow [+attd] \]

Rule SFSR-9 divides psych verbs into perception [+per] and non-perception [-per] verbs. If it is marked [+per], then by SFSR-10, it is further marked either as cognition [+cog] or non-cognition [-cog]. On the other hand, if it is marked [-per], then it is either an emotion [+emo] or a non-emotion [-emo] verb by rule SFSR-11. Non-emotion verbs are further subdivided by SFSR-12 into verbs of assessment [+assm] or non-assessment [-assm]. And finally, SFSR-13 marks [-assm] verbs as either an attitude [+attd] or a non-attitude [-attd] verb.

The class of verbs marked [+cog] may be referred to as verbs of cognition. They include such verbs as *ma'alam* 'know', *malimot* 'to forget', *matuto* 'learn', etc. The class of [+per, -cog] verbs may simply be referred to as perception verbs. Like cognition verbs, they do not express duration. They are exemplified by verbs such as *makita*
In general, psych verbs, unlike agentive verbs, do not cooccur with an instrumental case relation. However, a few verbs of perception such as 'seeing' and 'hearing' allow their cooccurring [+OBJ] referent to be perceived through an instrument. The instrumental actant may be one that is inalienably possessed by the [+DAT] perceiver, e.g., his eyes or his ears, or it may be some tool or device for visual or auditory perception, e.g., binoculars, magnifying glass, stethoscope, etc. For example:

22. nakita ko ng mga mata ko lang ang kometa 'The comet was seen by me with my bare eyes.'

23. marinig ng bata? ng 'stethoscope' ang tibok ng puso niya 'His heartbeat was heard by the child with/through a stethoscope.'

To account for this fact, the particular verbs are individually marked for a potential cooccurrence of an [+INS] actant. Since this feature is not a regular part of the case frame features of psych verbs, there is no specific verb stem which manifests an instrumental voice.

Another characteristic of [+per, -cog] verbs, which is more general in nature, is that they permit the cooccurrence of a non-strict inner locative actant. Since the verb denotes an event experienced by the
[+DAT] referent, the [+LOC] can only be viewed as the location of the [+OBJ] perceived. Thus, the redundancy rule:

CFRR-13: \([-cog] \rightarrow [-\text{strict}]

The rule states that a perception verb marked [-cog] is redundantly marked with the features [-strict] and [-dir]. By CFRR-3, the feature \([+([+LOC)])\) is added to the verb's case frame features. For example:

24. nakita ng doktor sa pasyente ang isang malaking tumor
see doctor in patient one big tumor
\([-cog] \quad [+AC] \quad [+L] \quad [+NM] \quad [+OBJ]

'A big tumor was seen by the doctor in the patient.'

This generality is matched by the existence of a locative voice form in which the corresponding voice inflection is marked with the regular locative affix -an as in:

24.a. nakita?an ng doktor ang pasyente ng isang malaking tumor

\([+AC] \quad [+NM] \quad [+DAT] \quad [+LOC]

'the patient was seen by the doctor as having a big tumor.'

The classes of non-perception verbs differ from perception verbs in realizing their cooccurring [+OBJ] in the locative case form instead of the accusative when it is not the subject of the sentence. Thus, the following redundancy rule applies:

CFRR-14: \([-\text{per} \left[+NM\right] \rightarrow \left[[-L] \left[-+OBJ\right]\right]]

Verbs of emotion marked [+emo] are essentially directed to
objects. It is not possible to be ashamed without being ashamed of something in particular, neither is it possible to be delighted without knowing what is delighting one. There may be no reason for being afraid, but one is afraid of something (Kenny, 1969:60-62). For this reason, verbs of emotion are considered as having the basic case frame features [+DAT], [+OBJ]). Very often, this class of verbs is described as objectless, hence, the only cooccurring case frame feature ascribed to it is the experiencer. (Cf. Ramos, 1974:91.) For example, compare the following pair of sentences:

25.a. natakot ang bata? sa aso
fear child dog  
[+emo] [+NM] [+L]  
'The child was afraid of the dog.'

25.b. natakot ang bata?  
[+NM]  
'The child became fearful/afraid.'

The present analysis differentiates the case frame features of the two homophonous forms of the verb matakot. In 25.a, it is a verb of emotion which requires a cooccurring [+DAT] and [+OBJ] whereas in 25.b, it is a derived non-afflicted verb which requires only a cooccurring [+OBJ]. The two verbs are lexically related by means of a derivation rule which creates the form in 25.b from that of 25.a. (See SVDR-3, Chapter IV.) Each of these two forms has a different morphological stem membership with correspondingly different voice paradigms.

The class of non-emotion verbs is subdivided into verbs of assessment [+assm] and non-assessment [-assm]. The former denotes the experiencer's
assessment or judgment of the quality of the [+OBJ] referent involved. Unlike the three preceding classes of psych verbs, verbs of assessment manifest only one morphological stem form which in turn inflects only for the dative voice. Thus, the redundancy rule below marks all [+assm] verbs as taking only a [+DAT] subject.

CFRR-15:  

For example:

26. naḍaliʔan siya sa eksamen  
   consider easy he examination  
   [+assm] [+NM] [+L] [+DAT] [+OBJ]  

'He considered the examination easy.'

Non-assessment verbs are further specified either as verbs of attitude [+attd] or non-attitude [-attd]. As the name implies, the former expresses the attitude of the cooccurring experiencer towards an object referent. The latter denotes the intentional exhibition of the trait or behavior indicated by the adjective base of the verb, hence, it may be referred to as verbs of enactment. Both classes of [-assm] verbs are derived from Adj's, but they are of different morphological structures and they display different voice paradigms and corresponding voice affixes.

The semantic feature subcategorization of the non-agentive dative case frame subcategory may be represented in the following tree diagram:
3.4.3 Subcategorization of Primary Verb Stems in Terms of Morphological and Voice-Related Features

The verb stems manifesting the seven major case frame subcategories and the twenty-six semantic classes therein appear in different morphological structures. Each morphological form is associated with the set of cooccurring case relations that can be realized in the nominative case form, thus indicating the stem form's voice inflectional paradigm. On one extreme, one type of morphological form allows a maximum of four voice inflected forms and, on the other, certain types exhibit one and only one voice form. Still other morphological types restrict their range of voice inflection to two or three forms. This new added dimension to the subcategorization of verb stems is necessary in order to explain the operation of voice inflection marked by a simple set of inflectional affixes. Past studies, which have always
ignored this particular aspect of subcategorization and which have emphasized the classification of roots instead of stems, unfortunately end up with a complex and redundant system of voice affixation. At the same time, they fail to relate systematically classes of derived verb stems with their sources as well as with other derived and obviously related stems.

The rules that account for the subcategorization of the verb stems according to their morphological-voice-related features given below are labelled MVRSR's.

**MVRSR-1:** \(+V\) \rightarrow [±root]

A verb stem is either a root [+root] or a non-root [-root] by MVRSR-1. As described earlier (see section 3.3.2), a root is a minimal unanalyzable form. In contrast, a non-root is a derived stem analyzable into a derivational affix and a base, which may be a root or another derived stem. All primary verb stems are either roots or derived stems.

**MVRRR-1:** [+root] \rightarrow \(\[, [-[AC] +INS] \),

\(-[R] +RSN\)

\(-[C] +COM\)\)

MVRRR-1 states that a [+root] verb stem does not allow a cooccurring [+INS], [+RSN] or [+COM] to be realized in any other form except in their respective non-nominative case form. This implies that not one of these three case relations is included in the voice paradigm of a [+root] stem.
When the verb is marked [+root], it may be either ergative [+erg] or non-ergative [-erg]. The term ergative verb has been defined as one which may have a [+AGT] or a [+INS] in its case frame for some types, but whose unmarked subject choice is [+OBJ]. It contrasts with an accusative or a non-ergative verb whose unmarked subject choice is determined according to the Fillmorean hierarchy of AGT-DAT-INS-OBJ, i.e., the unmarked subject choice is [+AGT] if there is a cooccurring [+AGT] in its case frame; [+DAT] if there is no [+AGT], etc. (Starosta, 1974:10-11). For our purposes, these two terms are adopted here with a slight modification in meaning. Since every subject choice is marked, [+erg] is marked for not allowing a cooccurring [+AGT] or [+INS] to be realized in the nominative case form. Thus,

\[ \text{MVRSSR-2:} \quad [+\text{erg}] \rightarrow \begin{cases} [+\text{NM}] \\ [-+\text{AGT}] \\ [+\text{NM}] \\ [-+\text{INS}] \end{cases} \]

The above redundancy rule implies that a [+erg] verb paradigm consists of at most the dative or locative and objective voices. In addition, if an agentive verb does not permit a nominative agentive, then by the following redundancy rule, it does not permit a nominative benefactive either:

\[ \text{MVRRR-3:} \quad [+ [+\text{AGT}]] \\ [+ [+\text{NM}]] \rightarrow \begin{cases} [+\text{NM}] \\ [+\text{AGT}] \end{cases} \rightarrow \begin{cases} [+\text{NM}] \\ [+\text{BEN}] \end{cases} \]

A [-erg] verb, on the other hand, is not marked for similar voice restrictions. This means then that its voice paradigm consists of the maximum of four, namely, agentive, dative or locative, objective and benefactive, where the case frame specifications include all these
case relations.

\text{MVRSR-3: } [-\text{root}] \rightarrow [+\text{pot}] [+\text{act}]

By MVRSR-3, a non-root verb is further specified as either potential [+pot] or non-potential [-pot] and active [+act] or non-active [-act]. Verbs that are marked [-pot, -act] are further specified as either instrumental [+ins] or non-instrumental [-ins] by the following rule:

\text{MVRSR-4: } [-\text{pot}] [-\text{act}] \rightarrow [+\text{ins}]

MVRSR-3 and MVRSR-4 describe five subclasses of derived verb stems which are identified by the derivational affixes \underline{maka-} for the [+pot, +act], \underline{ma-} for the [+pot, -act], \underline{pag-} for the [-pot, +act], \underline{pang-} for the [-pot, -act, +ins] and \underline{ka-} for the [-pot, -act, -ins]. These subclasses have the following restrictions on their voice paradigm:

\text{MVRRR-4: } \begin{align*}
\{ [+\text{pot}] \} & \rightarrow [ +\text{NM }] \\
\{ [-\text{pot}] [-\text{act}] \} & \rightarrow [ +\text{INS} ] \\
\end{align*}

\text{MVRRR-5: } [+\text{pot}] [+\text{act}] \rightarrow [ +\text{NM } +\text{OBJ} ]

\text{MVRRR-6: } [+\text{ins}] \rightarrow [ +\text{NM } -\text{INS} ]

\text{MVRRR-7: } [+[+\text{AGT}]] [-\text{ins}] \rightarrow [ +\text{NM } -\text{RSN} ]

\text{MVRRR-8: } [-[+\text{AGT}]] [-\text{ins}] \rightarrow [ +\text{NM } +\text{DAT} ]

MVRRR-4 states that potential and non-potential active stems do not allow either an instrumental or a reason voice in their voice
paradigm. By MVRRR-5, potential active verbs are marked for not inflecting in the objective voice. MVRRR-6 specifies only an instrumental voice for the [+ins] stem. On the other hand, the [-ins] stem of agentive verbs realizes only the reason voice by MVRRR-7, but there are syntactic and semantic classes which permit an objective or a locative, besides the reason voice. Thus, MVRRR-8 provides that a non-agentive [-ins] stem excludes the dative voice in its paradigm.

Each of these morphological verb stem classes is associated with voice marking affixes it takes in its paradigm, which paradigm is in turn linked to its case frame and semantic features. A [+erg] stem takes only the passive voice affixes -in, -an or i- to mark the objective and the locative or dative voice. A [-erg], which follows the accusative verb subject choice hierarchy, signals its 'preferred' subject with the active voice affix um- and the other 'less preferred' case relations, if any, with the passive voice affixes.

The two subclasses of derived stems marked [+pot] take distinct derivational affixes maka- and ma-. The active or maka-class manifests only one voice form and it is always marked by a zero or Ø affix; the non-active or ma-class may take a Ø, -an or i- for its voice paradigm. The [-pot] class subdivided into the [+act] and [-act] subclasses are also restricted in the voice affixes that they take. The [-pot, +act] which is usually marked by the derivational affix pag- marks its preferred subject with the active affix m- and the non-preferred ones with the passive affixes -an or i-. Both the [+ins] and [-ins] stems, having the derivational affixes pang- and ka-, respectively, take the
voice affix ı-, and, with certain non-agentive semantic classes, the [-ins] stem can also take -an to mark either a locative or an objective voice in its paradigm.

The seven morphological-voice-related subcategories of verb stems cross-classify the major case frame and semantic feature subcategories described in the preceding sections. These cross-classifications can be shown in tree-intersecting diagrams.

3.4.3.1 Cross-classification of Agentive Verb Stems

The tree-intersecting diagram which follows (see Figure 6, p.203) shows the cross-classification of information, location and simple transitive verbs.

Some generalizations that can be stated concerning the cross-classification of the [-root] subcategory are as follows:

(a) Information verbs lack the [+ins] stem class.

(b) Of the [+root] stems, [+goal] location verbs are manifested only by the [+erg] class; conversely, [-goal] verbs are manifested only by the [-erg] class.

(c) The absence of [-erg] stems manifesting the [-cs] and [-af] subcategories of [-dir] location verbs is matched in the same semantic subcategories of the [-extn] simple transitive verbs.

(d) The [-root] stem classes derive from the [+root] and other [-root] classes. The [-pot, +act] class derives from the [+erg] and never from the [-erg] class (which is why there are no [+act, -goal] stems) and, unless otherwise marked, it has the derivational affix pag-. The [+ins] class derives from both [+erg] and [-erg] classes
Figure 6. Case frame and semantic feature subcategorization of agentive verbs cross-classified by the morphological-voice-related feature subcategorization
and is always prefixed by the derivational affix pang-. The [-ins] class which may be redundantly referred to as the reason stem derives from the [-erg] and the [-pot, +act] classes, and is prefixed by the derivational affix ka-.

Depending on its case frame and semantic subcategory, a [+erg] stem has basically two voice forms in its paradigm, an objective and a dative or a locative; a [-erg] consists of an agentive, an objective, a dative or a locative, and a benefactive, where the [+BEN] is allowed to cooccur; a [-pot, +act] normally consists of an agentive and a benefactive, but when it is marked [+af, -cs], it can also include a locative voice in its paradigm. The agentive [+ins] and [-ins] classes are marked for manifesting only one voice form each, the instrumental and the reason voice, respectively. There are, however, non-agentive verb classes in which the [-ins] form can include other voice forms.

In terms of listing the agentive verbal lexemes in the lexicon, the predictable regularity of the derived or [-root] primary verb stem classes indicates that the relevant entries are those marked [+erg] and [-erg]. The derived verb stems can be accounted for by the derivation rules included in the lexicon.

Each of the [+erg] and [-erg] stem subcategories under the major agentive case frame and semantic subcategories is exemplified below. For the derived or [-root] stem classes, only a sentence is used to illustrate each of them.
3.4.3.1.1 Information Verbs, [+[AGT], +[DAT], +OBJ]]

Since information verbs generally express oral communication, the medium is understood to be the mouth. Hence, these verbs do not usually have a potentially cooccurring [INS], unlike other types of agentive verbs. If the agent requires an intermediary, it uses the complex form of the instrumental actant which never gets realized in the nominative case form. One other way of expressing this idea of an intermediary is through the employment of a causative verb. Consequently, there is no morphological class of instrumental verbs among the information verbs. One other characteristic of these verbs is the limited membership in the [-erg] class.

(a) [+[AGT], +[DAT], +OBJ], +[erg]

sabi 'say' ?utos 'order' turo? 'teach'
banggit 'mention' bilin 'requisition' balita? 'inform'
tanong 'ask' ?ulat 'report' kuwento 'narrate'

27. ibinalita? niya sa nanay ang buong nangyari
relate he mother whole happening

[brown][+AC][+L][+NM][+AGT][+DAT][+OBJ]

'The entire happening was related by him to mother.'

(b) [+[AGT], +[DAT], +[OBJ], -erg]

sulat 'inform by writing'
daining 'express supplication; complain'

ungot 'express some whim'

28. duma?ing siya sa nanay ng sakit ng u10
complain she mother ache head

[brown][+NM][+L][+AC][+AGT][+DAT][+OBJ]

'She complained to mother of a headache.'
Besides a concrete noun, a [+OBJ] case relation cooccurring with any of the subclasses of information verbs may also be an abstract noun, a prepositional phrase, or a nominalization. For example:

31a. binanggit ng guro sa prinsipal ang panganga'ilangan niya ng libro
mention teacher principal need
[+AC ] [+L ] [+NM ] [+DAT ] [+OBJ ]

niya ng libro
her book

'Her need for books was mentioned by the teacher to the principal.'

31b. babanggitin ng guro sa prinsipal na kailangan niya ng libro
mention teacher principal need
[+AC ] [+L ] [+DAT ] S

niya ng libro
her book

'The teacher will mention to the principal that she needs books.'
3.4.3.1.2 Location Verbs, [+AGT], +loc, [+OBJ]

The five semantic subclasses of locative verbs cross-classified by morphological classes are illustrated as follows:

(1.a) [+AGT], +loc, [+OBJ], +goal, +erg

tapon 'throw'  bigay 'give'  dala 'take to'
lagay 'put'  alay 'offer'  sauli 'return to'
sabit 'hang'  kabit 'attach'  suksok 'thrust into'

32. ibibigay niya sa mga estudyante ang marka bukas
give he student grade tomorrow

'+AGT' [+L] [+OBJ]

'The grades will be given by him to the students tomorrow.'

(1.b) [+AGT], +loc, [+OBJ], +goal, -pot, +act

33. magsasabit siya ng kurtina sa bintana?
hang she curtain window

'+NM' [+AC] [+OBJ] [+L]

'She will hang curtains at the windows.'

(1.c) [+AGT], +loc, [+OBJ], +goal, +ins

34. ipinangdikit niya ng larawan sa album ang
paste with she picture photo album

'+AC' [+AC] [+L]

'Scotch tape'

'+NM' [+INS]

'The Scotch tape was used by her for pasting the pictures in the album.'
(1.d) [+[AGT], +loc, [+OBJ], +goal, -ins]

35. ipinagbigay niya ng balato sa mga kapatid
give he 'windfall' sister/brother
[+AC ] [ +AC ] [ +L ] [+AGT] [+OBJ] [+LOC]

niya ang pananalo niya sa 'sweepstakes'
his [+NM] [+RSN]

'His winning in the sweepstakes was the reason for his giving away a gift to his sisters.'

(2.a) [+[AGT], +loc, [+OBJ], -goal, -erg]

bili 'buy' kuha 'take from; get' hiram 'borrow'
pitas 'pick from' abot 'reach for' hingi? 'ask for'
tanggap 'receive' pulot 'pick' salok 'fetch from'

This class also includes verbs of pulling such as hugot 'pull out; draw', bunot 'pluck', hila 'drag', which are [-strict] verbs.

36. bumili sila ng bahay sa 'Nu-West Realtors'
buy they house
[+NM] [+AC ] [ +L ] [+AGT] [+OBJ] [+LOC]

'They bought a house from Nu-West Realtors.'

(2.b) [+[AGT], +loc, [+OBJ], -goal, +ins]

37. ipinangpitas ni Jun ng niyog sa punog ang kawayan
pick coconut tree bamboo pole
[+AC ] [ +AC ] [ +L ] [+AGT] [+OBJ] [+LOC] [+NM] [+INS]

'The bamboo pole was used by Jun to pick coconuts from the tree.'

(2.c) [+[AGT], +loc, [+OBJ], -goal, -ins]
38. ikinakuha niya ng pera sa bangko ang pagbili ng bahay
   take from he money bank purchase house
   [+AC]  [+AC]  [+L]  [+NM]

   'Their purchase of a house caused him to withdraw money
   from the bank.'

(3.a) [+[AGT], +loc, +[OBJ], +cs, +erg]
   luto? 'cook' tunaw 'dissolve' bayo 'pound'
   ihaw 'broil' biling 'grind' tadtad 'chop'
   laga? 'boil' prito 'fry' halo? 'mix in'

39. iihawin niya ang karne (sa pugon)
   broil he meat oven
   [+AC]  [+NM]  [+L]  [+LOC]

   'He will broil the meat (in the oven).'

   It will be observed that most of the verbs in this class pertain
   to cooking or the preparation of food.

(3.b) [+[AGT], +loc, +[OBJ], +cs, -erg]
   sulat 'write down'  lilok 'sculpture'
   ukit 'carve'

40. lumilok siya ng mukha ni Hesu Kristo (sa marbol)
   sculpture he face Jesus Christ marble
   [+NM]  [+AC]  [+L]  [+AC]  [+LOC]

   'He sculptured the face of Jesus Christ (in marble).'

(3.c) [+[AGT], +loc, +[OBJ], +cs, -pot, +act]

41. magiihaw siya ng karne (sa pugon)
   broil he meat oven
   [+NM]  [+AC]  [+L]  [+LOC]

   'He will broil meat (in the oven).'

(3.d) [+[AGT], +loc, +[OBJ], +cs, +ins]
42. ipinangtunaw niya ng harina (sa mangkok) ang tubig
dissolve the flour in the bowl water

'The water was used by him to dissolve the flour (in the bowl).'

(3.e) [+[AGT], +loc, [+OBJ], +cs, -ins]

43. ikinalilok niya ng mukha ni Hesu Kristo (sa marbol)
sculpture the face of Jesus Christ in marble
ang inspirasyon na nakuha niya sa kaniyang paniniwala?
inspiration derive his faith

sa Diyos
in God

'The inspiration he derived from his faith in God caused him
to sculpture the face of Jesus Christ (in marble).'

(4.a) [+[AGT], +loc, [+OBJ], -cs, +erg]

laba 'launder' banlaw 'rinse' banli? 'scald'
hugas 'wash' paligo? 'bathe' almirol 'starch'

44. hinugasan niya ang mga baso (sa palanggana)
wash the glasses in the basin

'The glasses were washed by her (in the basin).'

(4.b) [+[AGT], +loc, [+OBJ], -cs, -pot, +act]

45. naghugas siya ng mga baso (sa palanggana)
wash the glasses in the basin

'She washed the glasses (in the basin).'

(4.c) [+[AGT], +loc, [+OBJ], -cs, +ins]
46. ipinanglaba niya ng mga puti?an ang mainit na tubig

washed the white clothes with hot water

'The hot water was used by her in laundering white garments.'

(4.d) [+[AGT], +loc, +[OBJ], -cs, -ins]

47. ikinapaglaba ni Rosa ng damit ang pag?alis ng katulong nila

launched the clothes departure maid their

'The departure of their maid is the reason for Rosa's washing the clothes.'

(5.a) [+[AGT], +loc, +[OBJ], -af, +erg]

latag 'spread out' sandal 'lean against'
upo? 'sit s.t.' tihaya? 'lay s.t. face up'
higa? 'lay down' salansan 'file one on top of another'
tali? 'tie to' ta?ob 'turn upside down'
pasok 'take in'

48. inilatag niya ang banig (sa araw)

spread out he mat sun

'The mat was spread out by him (in the sun.)'

As in the preceding class of [-dir, -cs] verb stems, we find no morphological class of [-erg] manifesting the [-dir, -af] subcategory.

(5.b) [+[AGT], +loc, +[OBJ], -af, -pot, +act]
49. naglatag siya ng banig (sa araw)

spread out he mat sun

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

'He spread out the mat (in the sun).'

(5.c) [+AGT], +loc, [+OBJ], -af, +ins

50. ipinangtali? niya ng suhay (sa bahay) ang

he support house

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

alembrang makapal

wire thick

\[+\text{NM}] \ [+\text{INS}] \]

'The thick wire was used by him to tie the support to the house.'

(5.d) [+AGT], +loc, [+OBJ], -af, -ins

51. ikinapagsalansan niya ng mga darnit

file one on top of another she clothes

\[+\text{AC}] \ [+\text{AGT}] \ [+\text{AC}] \ [+\text{OBJ}] \]

(sa aparador) ang pagkahulog ng mga ito

closet falling off this

\[+\text{L}] \ [+\text{LOC}] \ [+\text{NM}] \ [+\text{RSN}] \]

'The clothes fell off so she had to arrange them back (in the closet).'

3.4.3.1.3 Simple Transitive Verbs, [+AGT], -loc, [+OBJ]]

Like the other agentive verbs, the four semantic subclasses of simple transitive verbs are also manifested by five morphological subclasses, namely, the two types of [+root] and the three [-pot] classes of [-root]. It will be noted that only the [+extn] and [+cs] subclasses have both [+erg] and [-erg] verb stems as submembers.
(l.a) \([+AGT], -loc, [+OBJ], +extn, +erg\)
alaga? 'take care of'  abang 'watch for'
matyag 'follow up'  parangal 'honor; fete'
masid 'watch'  bantay 'guard'
anyaya 'invite'

52. inalaga?an ng misyonaryo ang sundalong nasugatan
take care of missionary soldier wounded
\([+AC] \)+AGT
\(+NM \) +OBJ

'The wounded soldier was taken care of by the missionary.'

(l.b) \([+AGT], -loc, [+OBJ], +extn, -erg\)
tulong 'help'  ambag 'share with'  tutol 'oppose'
damay 'aid'  abuloy 'contribute'  halik 'kiss'
saklolo 'succor'  ayuda 'support'  susog 'amend'

53. tumutol ang mga guro? sa plano ng konseho
oppose/reject teachers plan council
\([+NM] \)+AGT
\(+L \) +OBJ

'The teachers rejected the council's plan.'

(l.c) \([+AGT], -loc, [+OBJ], +extn, -pot, +act\)

54. nagparangal ang buong bayan kay Kapitan Pepe
honor whole town
\([+NM] \)+AGT
\(+L \) +OBJ

'The whole town honored Capt. Pepe.'

(l.d) \([+AGT], -loc, [+OBJ], +extn, +ins\)

55. ipinangsaklolo niya sa batang nalulunod ang salbabida
succor he child drowning life-saver
\([+AC] \)+AGT
\(+L \) +OBJ
\(+NM \) +INS

'The life-saver was used by him for saving the drowning child.'
(1.4) [+[AGT], -loc, +[OBJ], +extn, -ins]

56. ikinapag?abuloy niya sa paaralan ang pangangailangan nito
contribute he school needs this

'+AC [+L] [+OBJ] [+NM]

'It its needs made him contribute to the school.'

It may be stressed that the feature [+extn] is too limited to
be able to unify the more specific semantic features expressed by the
various members of the entire subclass. It should be interpreted as
some action which leaves a non-physical effect on the [+OBJ] referent.

(2.a) [+[AGT], -loc, +[OBJ], -extn, +cs, +erg]

pisa? 'squeeze' hiwa? 'cut; slice' basag 'break'
pitpit 'crush' lukot 'crumple' sira? 'tear'
sibak 'split; chop' hampas 'strike' tiba? 'cut down'

57. sinira? niya ang larawan
tear he picture

'+AC [+NM]

'The picture was torn by him.'

(2.b) [+[AGT], -loc, +[OBJ], -extn, +cs, -erg]

ka?in 'eat' inom 'drink' gawa? 'make'
lulon 'swallow' tungga? 'gulp down' patay 'kill'
higop 'sip' sipsip 'suck' tahi? 'sew'

58. tinungga? ng lasenggo ang isa pang boteng serbesa
gulp down drunkard one more bottle beer

'+AC [+NM]

'One more bottle of beer was emptied/gulped down by
the drunkard.'

Similar to the [-goal] type of location verbs, most members of the
class of [-erg] change-of-state transitive verbs denote actions toward the agent. They express termination, consumption, use or creation of the [+OBJ] referent.

(2.c) [+AGT], -loc, [+OBJ], -extn, +cs, -pot, +act]

59. nagbikak si Sepa ng kahoy
    chop wood
    [+NM] [+AC] [+AGT] [+OBJ]

'Sepa chopped some firewood.'

(2.d) [+AGT], -loc, [+OBJ], -extn, +cs, +ins]

60. ipinanggulpi ng tulisan sa bihag ang latigo
    beat bandit captive whiplash
    [+AC] [+L] [+AGT] [+OBJ] [+NM] [+INS]

'The whiplash was used by the bandit to beat up the captive.'

(2.e) [+AGT], -loc, -extn, +cs, -ins]

61. ikinapaghiwag? ng nanay ng isa pang papaya ang
    slice mother one more
    [+AC] [+AC] [+AGT] [+OBJ]

madaling pagka?ubos nito
immediate consumption this
    [+NM] [+RSN]

'Its immediate consumption caused mother to slice another papaya.'

(3.a) [+AGT], -loc, [+OBJ], -extn, -cs, +erg]

talop 'peel' bukas 'open' pintas 'find fault'
punas 'mop; wipe off' balat 'remove skin'
burda 'embroider' kaliskis 'scale, sugat 'wound' as of fish'
62. kinapakapan ng pulis ang mga binata?
frisk policeman young men
[+AC ] [+NM ] [+OBJ ]

'The young men were frisked by the policeman.'

(3.b) [+[AGT], -loc, [+OBJ], -extn, -cs, -pot, +act]

63. ipinagtalop niya ng dalandan ang maysakit
peel she orange patient
[+AC ] [+AC ] [+NM ] [+OBJ ] [+BEN ]

'She peeled an orange for the patient.'

(3.c) [+[AGT], -loc, [+OBJ], -extn, -cs, +ins]

64. ipinangbukas ng mga magnanakaw ng 'kaha de yero'
open burglar safe
[+AC ] [+AC ] [+OBJ ]

ang ilang paputok
some explosive
[+NM ] [+INS]

'Some explosives were used by the burglars to open the safe.'

(3.d) [+[AGT], -loc, [+OBJ], -extn, -cs, -ins]

65. ikinapagbukas ng tatay ng lahat ng bintana?
open father all window
[+AC ] [+AC ] [+OBJ ]

matinding init kagabi
extreme heat last night
[+NM ] [+RSN]

'The extreme heat last night caused father to open all the windows.'
(4.a) [+[AGT], -loc, [+OBJ], -extn, -af, +erg]
ladlad 'unfurl' labas 'put out' kaway 'wave at'
ayos 'fix; arrange' bukas 'open' baba 'lower; put down'
pikit 'close one's eyes' sara 'close'

66. ipinikit ng bata? ang isang mata niya
child one eye his
[+AC] [+NM] [+AGT] [+OBJ]

'One of his eyes was shut by the child.'

(4.b) [+[AGT], -loc, [+OBJ] -extn, -af, -pot, +act]

67. nagta?as ang mga kompaniya ng kotse ng halaga
raise company car price
[+NM] [+AC] [+AGT] [+OBJ]

'The car companies raised their prices.'

(4.c) [+[AGT], -loc, [+OBJ], -extn, -af, +ins]

68. ipinangta?as niya ng kotse ang "jack"
raise he car
[+AC] [+AC] [+NM] [+AGT] [+OBJ] [+INS]

'The jack was used by him in raising the car.'

Some of the [+erg] stems do not have corresponding [+ins] forms because they are not, under normal conditions, performed with the use of an outside instrument or tool, e.g. pikit 'close one's eyes.'

(4.d) [+[AGT], -loc, [+OBJ], -extn, -af, -ins]

69. ikinapag?ayos niya kaagad ng bahay ang pagdating
arrange she at once house arrival
[+AC] [+AC] [+NM] [+RSN] [+AGT] [+OBJ]

ng panauhin
guest

'The arrival of a guest made her put the house in order at once.'
3.4.3.2 Cross-classification of Non-agentive, Non-dative Verb Stems

The three case frame subcategories under the non-agentive, non-dative group of verbs are the locomotion, calamity and simple intransitive verb stems. Their morphological cross-classification is represented in the following tree-intersecting diagram:
Figure 7. Case frame and semantic feature subcategorization of non-agentive, non-dative verbs cross-classified by the morphological-voice-related feature subcategorization.
The observable generalizations pertaining to the cross-classification of non-agentive, non-dative verb stems may be summarized as follows:

(a) Only the subcategory of calamity and simple intransitive verbs of affliction manifest the morphological class of [+erg] stems, which suggests their relation or similarity to agentive verbs in implying an external initiator.

(b) Of the non-agentive, non-dative verbs, only the [inch, +term] manifests both the [-erg] and [+pot, -act] forms. On the other hand, only the [-aff] class manifests both the [-erg] and the [-pot, +act] form, the latter being likewise manifested by the [+inch, -term] class.

(c) Similar to agentive verbs, the [-ins] stem, whatever classes it manifests in the non-agentive non-dative subcategory, derives from the [-erg] and [-pot, +act] classes. It can also be derived from the noun or adjective source of the [+pot, -act] derived class, still identified by the same derivational affix ka-.

Based on their cooccurring case frame features, the three subclasses of non-agentive non-dative verbs imply corresponding voice paradigms as follows:

(a) The voice paradigm of the class of calamity verbs, which are all marked [+erg], consists only of the objective voice. By CFRR-7, the cooccurring [+INS] can only be realized in the non-nominative case form, hence, no stem form manifests the instrumental voice.

(b) Verbs of locomotion marked [-erg] have both the objective
and locative voices.

(c) Simple intransitive verbs, whether [+erg], [-erg], [+pot, -act] or [-pot, +act] can only manifest the objective voice.

Each of the major case frame and semantic subcategories cross-classified by the morphological-voice-related feature subcategories is exemplified below.

3.4.3.2.1 Locomotion Verbs, [-[+AGT], -[+DAT], +loc, [+OBJ]]

The three semantic subclasses of locomotion verbs, namely, [+goal], [-goal] and [-dir] are exemplified according to their morphological class manifestations as follows:

(1.a) [-[+AGT], -[+DAT], +loc, [+OBJ], +goal, -erg]

This class indicates motion of a [+OBJ] referent toward a goal denoted by the cooccurring or unexpressed [+LOC].

punta 'go to' lapit 'go near to'
pasok 'enter' tungo 'go to'
bagsak 'fall on' akyat 'climb'
kabit 'attach to' balik 'return to'

70. pumasok ang tubig sa loob ng bahay namin enter water inside house our

[+NM] [+L] [+LOC]

'The water went inside our house.'

(1.b) [-[+AGT], -[+DAT], +loc, [+OBJ], +goal, -ins]
71. ikinakapasok ng tubig sa loob ng bahay namin ang enter water inside house our
   [+AC] [+L] [+OBJ] [+LOC]
malakas na ulan
strong rain
[+NM] [+RSN]

'The strong rain causes water to enter our house.'

(2.a) [-[+AGT], -[+DAT], +loc, [+OBJ], -goal, -erg]
This class expresses motion of the [+OBJ] from a source location.
alis 'depart from' hiwalay 'separate from; stay away from'
takas 'escape from' labas 'get out of'
layo? 'go away from' kalag 'break away from'
tiwalag 'resign from' baba? 'go down from'

72. hiniwalayan niya ang asawa niya
separate he spouse his
   [+AC] [+NM] [+OBJ] [+LOC]

'He divorced his spouse.'
Lit.: 'He separated from his spouse.'

(2.b) [-[+AGT], -[+DAT], +loc, [+OBJ], -goal, -ins]

73. ikinahiwalay ni Jose sa kaibigan ang pagsisinu-
separate friend lying
   [+AC] [+L] [+OBJ] [+LOC] [+NM] [+RSN]
ngaling nito
this

'His friend's lying made Jose stay away from him.'
The verbs in this class denote motion designated by the verb in a given place.

higa? 'lie down' langoy 'swim in' tira 'reside in'
dapa? 'lie face down' takbo 'run in a place' tigil 'stop at'
dagan 'lie on' upo? 'sit on' hinto? 'stop by'
sakay 'ride on' sandal 'lean against' silong 'take shelter in'

They took shelter at the store while it was raining.'

As far as the morphological structure and voice marking of the verbs of locomotion are concerned, three semantic subclasses are identical. The semantic features [+goal] and [-goal] become relevant in connection with the optional cooccurrence of another related [+LOC] which must be introduced by a preposition. As described in the preceding chapter (see Chapter II, p.49), directional locomotion verbs are permitted to have a cooccurring [+LOC] which expresses the point of origin of a [+goal] verb or the destination of a [-goal] verb. This property is expressed by the following redundancy rule:
CFRR-14: \([\text{agoal}] \rightarrow \left[\begin{array}{c}
+P \\
-\text{agoal} \\
+[\text{+LOC}]
\end{array}\right]\)

The rule states that a directional verb stem may allow a potentially cooccurring locative actant marked by a preposition which indicates the opposite direction indicated by the verb.

3.4.3.2.2 Calamity Verbs, \([-[+\text{AGT}], -[+\text{DAT}], -\text{loc}, +[\text{INS}], +[\text{OBJ}]]\)

The three subclasses of calamity verbs can only express the objective voice and they are manifested by the same morphological type, the \([+\text{erg}]\). However, each semantic subclass is marked by a different objective voice affix.

(1) \([-[+\text{AGT}], -[+\text{DAT}], -\text{loc}, +[\text{INS}], +[\text{OBJ}], +\text{cs}, +\text{erg}]
sunog 'burn'  
tupok 'char; burn'  
wasak 'destroy'
sira? 'tear'  
giba? 'ruin; demolish'  
bali? 'break'
tuklap 'blow off'  
tangay 'carry away'  
lipad 'blow away'

76. tinangay ng agos ang tisinelas ni Rizal
carry water slipper
away current

\(\left[\begin{array}{c}
+\text{AC} \\
+[\text{INS}] \\
+\text{OBJ}
\end{array}\right]\)

'Rizal's slipper was carried away by the current.'

(2) \([-[+\text{AGT}], -[+\text{DAT}], -\text{loc}, +[\text{INS}], +[\text{OBJ}], -\text{cs}, +\text{erg}]
abot 'overtake'  
dapo? 'alight'  
dampi? 'touch lightly'
hiihip 'blow'  
baling 'turn'  
buhos 'drench' to'

kapit 'afflict; sakit 'shine on'
hold on'
77. inabutan sila ng malakas na ulan
    overtake they heavy rain
    [+NM] [+AC] [+INS]

    'They were overtaken by a heavy rain.'

(3) [-[+AGT], -[+DAT], -loc, [+INS], [+OBJ], -af, +erg]
    ta?ob 'turn over' sadsad 'cause to lubog 'sink'
        be grounded'
    buwal 'blow down' tumba 'upset' hapay 'tilt; cause
        to lean'

78. ibinuwal ng bagyo ang punong mangga namin
    blow down storm tree mango our
    [+AC] [+NM] [+INS] [+OBJ]

    'Our mango tree was blown down by the storm.'

Each of the above verb stems is closely associated with the
natural force or phenomenon marked [+INS] which usually can carry out
what is designated by the verb. The same verb stems which can be
physically possible for an agent to perform also appear as agentive
verbs, which verbs may be said to have been derived from calamity verbs.
In such cases, the agentive verbs may cooccur with a potential [+INS].

3.4.3.2.3 Simple Intransitive Verbs, [-[+AGT], -[+DAT], -loc,
    -[+INS], [+OBJ]]

The five subclasses of simple intransitive verbs based on their
semantic and morphological cross-classification are exemplified below.
The subclass labelled [+inch] may be marked [+term], which expresses
a permanent or terminal change of state, or [-term], which means a
temporary or transient change of state. The [+term] class is realized
by the [-erg] and [+pot, -act] forms, not to mention the [-ins]. The
[-erg] and [+pot, -act] classes are generally derived from
the category of adjective and noun roots. Manifesting a morphological structure distinct from each other, each subclass requires a different voice marker.

(1.a) \([- [+INS], [+OBJ], +\text{inch}, +\text{term}, -\text{erg}]\)

laki 'become big; increase in size'
bigat 'become heavy'
tamis 'become sweet'
ba?it 'become good'

payat 'become thin'
sariwa? 'become fresh'
tahimik 'become quiet'
laganap 'become widespread'

[+[NM]
[+OBJ]

halaga nito
price this

'The sale of sugar slowed down when its price rose.'
Lit.: 'The sale of sugar became weak when its price went up.'

The terminal inchoative verbs of this class have two derivational sources. The examples in the first column derive from the class of noun roots which also serve as the base for derived adjectives prefixed by the derivational affix ma-. For example:

laki\textsubscript{N} 'bigness; size; \rightarrow \text{malaki}\textsubscript{Adj} 'big'

\rightarrow laki\textsubscript{V} 'become big; increase in size' (lumaki is the inflected form)

It is universally accepted that inchoative verbs derive from adjectives. However, a specific type of derivation such as evidenced by the morphological structure of the first type of inchoative verbs illustrated in the first column shows that they can also be derived
from noun roots. It is easy to relate this subclass of inchoative verbs with the corresponding 'ma'-adjectives because they have a common source. With this relation, it is tempting to posit a general inchoative verb derivation from adjectives alone, but such an account would present difficulties in explaining the deletion of the derivational prefix ma-. For instance, if the verb lumaki derives from the adjective malaki, then the affix ma- in the source has to be deleted. By introducing a 'subtraction' rule in this particular process of derivation, we will be losing the important generalization that derivational affixes always carry over in derivation and, at the same time, we will be adding an unnecessary power to the theory. On the other hand, deriving verbs from noun roots is quite a general process, too. The irregularity and unpredictability of derivation is observable in the range of classes into which the verbs derived from them can be classified. Largely, the classification rests on the semantic content of the source noun and the meaning introduced in the verb in the process of derivation. (See Chapter IV for a more thorough discussion of derivation from noun roots, adjective roots and verb roots.)

The inchoative verbs in the second column derive from adjective roots. Appearing in identical morphological forms, both derivations are marked by the active voice affix, um-

(1.b) [-[INS], [+OBJ], +inch, +term, +pot, -act]
mabulag 'become blind'  mabaliw 'become insane'
mahilo 'become dizzy'  matuyo? 'become dry'
matunaw 'become melted'  mahanog 'become ripe'
mabasa? 'become wet'
malanta 'become withered'
mamatay 'become dead'

80. nabulok  ang  saging
become rotten  banana

'The banana became rotten.'

The source adjectives of this class of inchoative verbs are simple, root forms usually accented on the final syllable, e.g., bulok 'rotten', patay 'dead', balíw 'crazy', etc., indicating natural states. This [+pot, -act] terminal inchoative class denotes the natural process undergone by the [+OBJ] resulting in the state denoted by the source adjective. The derived verb stems are marked by the derivational affix ma-. In some cases, the final syllable accent in the source stem retracts to the penultimate syllable, as in the verbs in the first column, but, generally, the accent remains on the final syllable, as in the second column.

(1.c) [-[INS], [+OBJ], +inch, +term, -ins]

81. ikinahina? ng benta ng asukal ang pagta?as ng become weak sale sugar rise
halaga nito price this

'The rise in the price of sugar caused its sale to drop.'
82. ikinabulok ng mga saging ang pagkabasa nito rot banana getting wet this [+AC] [+NM] [+RSN]

'Their getting wet caused the bananas to become rotten.'

It will be observed that the terminal inchoative [-ins] class derives from the [-erg] class. However, the [+pot, -act] counterpart derives directly from the source form of the [+pot, -act] which is the simple adjective form. As will be seen later, this direction of derivation is true for all other [-ins] forms with a [+pot] counterpart.

The class of inchoative verbs marked [-term] can be realized only in the [-pot, +act], identified by the derivational prefix pang-, and the [-ins] forms.

(2.a) [-+[INS], [+OBJ], +inch, -term, -pot, +act]

panlaki 'turn big; swell' panariwa 'turn fresh'
pamigat 'turn heavy' panahimik 'quiet down'
panghina? 'turn weak' pamayat 'become thin'
pangitim 'turn blackish' pangalog 'turn shaky'

83. nangalog ang tuhod ng matanda dahil sa pagod niya turn shaky knee old man because fatigue his [+NM] [+R] [+L] [+RSN]

'The old man's knees became shaky because of fatigue.'

(2.b) [-+[INS], [+OBJ], +inch, -term, -ins]

84. ikinapangalog ng tuhod ng matanda ang pagod niya turn shaky knee old man fatigue his [+AC] [+OBJ] [+NM] [+RSN]

'His fatigue caused the old man's knees to shake.'

The next two subclasses of simple intransitive verbs are marked [-inch] and further specified as either afflicted [+affl] or
non-afflicted [-affl]. The [+affl] verbs are either [+cs] or [-cs] to refer to the type of affliction on the [+OBJ] referent. Each subclass is exemplified below.

(3.a) [-[+INS], [+OBJ], -inch, +cs, +erg]

ulan 'be overtaken by' umaga 'be overtaken by morning' rain'
sipon 'be afflicted with hika? 'be seized by asthma' cold'
amag 'have mildew' langgam 'be infested by ants'
tamad 'feel lazy' malas 'experience bad luck'

85. lalagnatin ang mga bata? dahil sa laganap na 'flu' have fever children because of widespread

\[
\text{+[NM]} \quad \text{+[R]} \quad \text{+[L]} \quad \text{+[RSN]}
\]

'The children will be afflicted with fever because of the flu epidemic.'

86. kakalawangin ang kutsara kung ibabad sa suka? have rust spoon if soaked vinegar

\[
\text{+[NM]} \quad \text{+[OBJ]}
\]

'The spoon will turn rusty if it is soaked in vinegar.'

(3.b) [-[+INS], [+OBJ], -inch, +cs, -ins]

87. ikinakalawang ng kutsara ang pagkababad nito sa suka? turn rusty spoon being soaked this in vinegar

\[
\text{+[AC]} \quad \text{+[NM]} \quad \text{+[OBJ]} \quad \text{+[RSN]}
\]

'It's being soaked in vinegar made the spoon rusty.'

(4.a) [-[+INS], [+OBJ], -inch, -cs, +erg]

This class has a limited membership. It denotes the appearance on the [+OBJ] referent of what is referred to by the noun from which the verb derives.
pawis 'perspire'  kilabot 'have goose pimples'
kati 'have itch; feel itchy'  alibadbad 'get nauseated'

88. pinapawisan tayo kung tag?init
perspire we when summer

"We perspire in summer."

(4.b) [-+[INS], [+OBJ], -inch, -cs, -ins]

89. ikinaalibadbad ko ang amoy ng gasolina
get nauseated I smell gasoline

"The smell of gasoline caused me to get nauseated."

The last subclass of simple intransitive verbs marked [-aff1] is realized in three different morphological types. Each is exemplified as follows:

(5.a) [-+[INS], [+OBJ], -inch -aff1, -erg]

This class has a wide membership. It refers to bodily actions or movements or to active processes.

tawa 'laugh' takbo 'run'  kulo? 'boil'
iyak 'cry' ikot 'rotate'  putok 'explode'
dilat 'open one's eyes'  tungo 'bow; stoop'
idlap 'doze'  tikwas 'tilt'  litaw 'appear; surface'

90. pumutok ang bulkang Mauna Loa
erupt volcano

"Mauna Loa volcano erupted."

(5.b) [-+[INS], [+OBJ], -aff1, -pot, +act]

This class of [-pot, +act] verbs is like that of agentive verbs
in taking the derived forms preceded by the derivational affix pag-.

However, it differs from the latter in that it does not derive from another verbal subclass of a simpler morphological form. Rather, the broad class of [\[-aff, \-pot, +act\]] verb stems consists of various semantic subtypes which derive generally from nouns and they are identified by their respective derivational affixes. All these affixes such as pag-, pagsa-, pagpaka-, pagpati- and pagka- in verb stems take identical voice marking. Hence, they are treated here just as one class.

Examples of stems in this subclass are as follows:

- pagdoktor 'be a doctor'
- pagbunga 'bear fruit'
- pagpayong 'use an umbrella'
- pag?asin 'develop salt crystals'
- pagsapusa 'act like a cat'
- pagpakaba?it 'try to be good'
- pagsakastila 'behave like a Spaniard'
- pagpakata?o 'try to be civil; act like a human being'
- pagkatihulog 'let one's self fall'
- pagkabahay 'acquire a house'
- pagkasU\Verte 'commit suicide'
- pagpatnvakal 'commit suicide'
- pagpakaba?it 'try to be good'
- pagpakata?o 'try to be civil; act like a human being'
- pagkabahay 'acquire a house'
- pagkasU\Verte 'commit suicide'

91. nagsapulubi ang binatang mayaman
be like a beggar bachelor rich
[+NM] [+OBJ]

'The rich bachelor put on a beggar's appearance.'

(5.c) [\-+[INS], +[OBJ, -aff1, -ins] This class derives from both the [-erg] and the [-pot, +act] classes.
92. ikinaiyak ng bata? ang pag`alis ng kaniyang nanay
cry child departure his mother
[+AC] [+NM] [+OBJ]

'His mother's departure caused the child to cry.'

93. ikinapagpatiwakal ng dalaga ang kaniyang pagkasawi?
commit suicide maiden her misfortune
[+AC] [+NM] [+OBJ] [+RSN]

'Her misfortune made the maiden commit suicide.'

3.4.3.3 Cross-classification of Non-agentive, Dative Verb Stems

The only case frame subcategory which is non-agentive dative is marked [-[+AGT], [+DAT], [+OBJ]]. It has been labelled here as psych verbs, and it is further subcategorized into six semantic classes, namely, [+cog], [-cog], [+emo], [+assm], [+attd] and [-attd]. The morphological cross-classification of these six classes is represented in the following diagram (see Figure 8, p.234).

The subclass of non-agentive dative or psych verbs reveals the following generalizations:

(a) Both types of perception verbs manifest three morphological subclasses, the [+pot, +act], [+pot, -act] and [-ins]. Verbs of emotion and of assessment do not have a [+pot, +act] that corresponds to their [+pot, -act] forms.

(b) The [+pot] and [-ins] forms of psych verbs generally derive directly from their non-verbal source stems; the [-ins] class of [-attd] verbs, however, derives from the [-pot, +act] class and not from the source stems of the latter class.

(c) The subclasses marked [+assm] and [+attd] are unique in
Figure 8. Case frame and semantic feature subcategorization of psych verbs cross-classified by the morphological-voice-related feature subcategorization.
being manifested only by one stem class, the [+pot, -act] and the [+erg], respectively.

(d) The verbs of [+attId] and [-attId] stand isolated in the entire set of psych verbs in that they do not manifest a [+pot] form. Instead, their forms can be closely associated with agentive stems. In terms of meaning, these two classes differ from the other psych verbs and resemble the agentive and simple intransitive classes in expressing intention.

In terms of the corresponding voice paradigm of each morphological class of a given set of case frame and semantic features, the following may be stated:

(a) In general, the [+pot, -act] class of [+per] verbs inflects only for the objective voice; that of [-per] verbs, only for the dative voice. However, when the [+pot, -act] is also marked [-cog], it can also include a locative voice.

(b) The class of [+pot, +act] stems consists only of the dative voice.

(c) The [+erg] class includes only an objective voice while the [-pot, +act] includes both dative and objective voice.

(d) The [-ins] class always expresses a reason voice. In addition, if the stem is marked [-cog], it also inflects for the locative voice, and if it is marked [+emo] it also inflects for the objective voice.

Each of the subclasses of psych verbs may be exemplified as follows:
(1.a) [-[+AGT], [+DAT], +cog, +pot, -act]
ma'intindi 'understand' ma'alam 'know'
ma'unawa? 'comprehend' maramdam 'sense; feel'
matanda? 'remember' malimot 'forget'

94. nalaman ng maraming tao ang iskandalo tungkol
know many people scandal about
[+AC ] [+NM ] [+OBJ]

sa 'Watergate'
'The scandal about Watergate came to be known to many people.'

(1.b) [-[+AGT], [+DAT], +cog, +pot, +act]
ma'intindi 'understand' ma'alam 'know'
ma'unawa? 'comprehend' maramdam 'sense; feel'
matanda? 'remember' malimot 'forget'

95. sa wakas, naka'intindi rin ang mga bata? ng
end understand also child
[+NM ] [+DAT]
paliwanag niya
explanation his
[+AC ] [+OBJ]

'Finally, the children understood his explanation.'
(1.c) [-[+AGT], [+DAT], [+OBJ], +cog, -ins]

96. ikina Alam ng maraming tao ang iskandalo tungkol sa "Watergate" ang masugid na pagbabalita na mga mamamahayag ng mga newspapermen

'The close news-reporting by newspapermen made many people know of the scandal about "Watergate".'

As stated in other subcategories manifesting a [+pot] class, a corresponding [-ins] class also derives from the same stem source as the [+pot]. It is characteristic of the subcategories illustrated above for all the three stem classes [+pot, +act], [+pot, -act] and [-ins] to derive from one stem source, which usually belongs to another lexical category. Each of these three morphological stem classes is marked by specific derivational affixes maka-, ma- and ka-, respectively, to identify their morphological structure each of which is in turn associated with its corresponding voice inflectional paradigm. It appears that the [+pot, -act] class, which manifests four of the six subcategories of psych verbs, is the most widely used form. Thus, it is mentioned first in the examples. Derivation being selective and non-automatic, we find a few members of a subcategory having a [+pot, -act] form but not a corresponding [+pot, +act] form. For example, matuto 'learn' marked [+cog, +pot, -act] does not have a corresponding [+cog, +pot, +act] form *makututo, which class normally inflects for the dative voice. Instead the [+pot, -act]
form which generally inflects only for the objective voice, manifests both dative and objective voices in the forms matuto and matutuhan, respectively. Compare the following sentences:

97.a. natuto si Irma ng Pranses
learn French

'irma learned French.'

97.b. matutuhan ni Irma ang Pranses

Lit.: 'French was learned by Irma.'

Such verbs are individually marked as exceptions.

(2.a) [-[+AGT], +[+DAT], [+OBJ], -cog, +pot, -act]

makita 'see' ma'amoy 'smell' mabatid 'be aware of'
marinig 'hear' ma'aninaw 'see' mahalata? 'perceive' vaguely'
matanaw 'see' mabana?ag 'catch mapuna 'notice'
from a distance'

98. nakita ng mga bata? ang salamangkero
see child magician

'The magician was seen by the children.'

(2.b) [-[+AGT], +[+DAT], [+OBJ], -cog, +pot, +act]

makakita 'see' maka'amoy 'smell' makabatid 'be aware of'
makarinig 'hear' maka'aninaw 'see' mahalata?

'perceive'
99. nakakita ang mga bata' ng salamangkero

\[ [+NM] [+DAT] [+OBJ] \]

'The children saw a magician.'

(2.c) \([-[+AGT], [+DAT], [+OBJ], -cog, -ins] \]

100. ikinabatid niya ng nangyaring sakuna?

be aware of he happen accident

\[ [+AC] [+AC] [+DAT] [+OBJ] \]

ang pagbabalita' ni Pedro reporting

\[ [+NM] [+RSN] \]

'Pedro's reporting made him aware of the accident that occurred.'

As had been mentioned before, [-cog] verbs allow the optional cooccurrence of a [+LOC], and that actant can occur in the nominative case form. When it does, it can be expressed either by the [+pot, -act] form or the [-ins]. Compare sentence 24.a (p.194) repeated below with 24.b.

24.a. nakita' an ng doktor ang pasyente ng isang

see doctor patient one

\[ [+AC] [+DAT] [+NM] [+LOC] \]

malaking tumor

big tumor

\[ [+AC] [+OBJ] \]

'The patient was seen by the doctor as having a big tumor.'
24.b. kinakita'yan ng doktor ang pasyente ng isang
malaking tumor

'The patient was seen as having a big tumor by the doctor.'

There appears to be no discernible difference semantically nor
syntactically between the two locative voice forms in the [+pot, -act]
and [-ins] stems.

(3.a) [-[+AGT], [+DAT, [+OBJ], +emo, +pot, -act]

matakot 'afraid of' mayamot 'feel annoyed'
matuwa? 'be delighted ma?inis 'feel irritated'
with'
mahina' 'feel embarrassed'

magalit 'be angry with/ masuklam 'be loathful of'
at'

101. natakot ang mga mamamayan sa mga tulisan
afraid townfolk bandit

kawalangawa? ng mga ito
ruthlessness this

'The townspeople were afraid of the bandits.'

(3.b) [-[+AGT], [+DAT, [+OBJ], +emo, -ins]

102. ikinatakot ng mga mamamayan sa mga tulisan ang
afraid of townfolk bandit

kawalangawa? ng mga ito
ruthlessness this

'The bandits' ruthlessness made the townpeople fear them.'
103. kinatakutan ng mga mamamayan ang mga tulisan

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

'The bandits were feared by the town people.'

The [-ins] form of [-cog] verbs under 2.c and [+emo] verbs under 3.b may be compared in terms of the case relation it marks as subject with the affix -an. With the former semantic class, it marks a [+LOC] and with the latter, it marks a [+OBJ]. This shows that the [-ins] class is not limited to the reason voice alone; it can include two other voices in its paradigm.

(4) [-[+AGT], [+DAT], [+OBJ], +assm, +pot, -act]

malaki 'consider big'       mamura 'consider cheap'
maganda 'consider pretty'   mamalahal 'consider expensive'
ma?alat 'consider salty'    mabigat 'consider heavy'
madali? 'consider easy'     mahirap 'consider difficult'

104. nagandahan siya sa palabas sa TV kagabi

\[ \text{[+NM]} \quad \text{[+L]} \]

\[ \text{[+NM]} \quad \text{[+OBJ]} \]

'She considered the show on TV last night good.'

(5) [-[+AGT], [+DAT], [+OBJ], +attd, +erg]

masama? 'take as bad'       dakila? 'honor; exalt'
mali?it 'take as trivial'    mahal 'value; love'
malaki 'take as enormous'    gusto 'like; desire'

105. minasama? niya ang tulong ng politiko

\[ \text{[+AC]} \quad \text{[+NM]} \]

\[ \text{[+AC]} \quad \text{[+OBJ]} \]

'He took the politician's help in a bad light.'
(6.a) [-[+AGT], [+DAT], [+OBJ]; -attd, -pot, +act]

  pagmaginoo 'be a gentleman pagmabuti 'act kindly to'
          to s.o.'

  pagmarahas 'be aggressive pagmasungit 'be ill-tempered
          to s.o.'

  pagmata'as 'be snobbish' pagmaramot 'be stingy/selfish
          toward s.o.'

106.a. nagmasungit ang bata? sa mga kalaro niya
  be ill-tempered child playmates her
          [+NM]    [+L]    [+OBJ]

  'The child was ill-tempered towards her playmates.'

106.b. pinagmasungitan ng bata ang mga kalaro niya
          [+AC]    [+NM]
          [+DAT]    [+OBJ]

(6.b) [-[+AGT], [+DAT], [+OBJ], -attd, -ins]

107. ikapagmasungit ng bata sa mga kalaro niya ang
  be ill-tempered child playmates
          [+AC]    [+L]
          [+DAT]    [+OBJ]

  kakulangan nito sa tulog
          lack this sleep
          [+NM]    [+RSN]

  'The child's lack of sleep will cause him to be ill-tempered
  toward his playmates.'

3.4.4 Voice-marking Affixes of Primary Verb Stem Classes

  Given the case frame, semantic and morphological-voice-related
  features of primary verb stem classes, each class manifests a
  corresponding voice inflectional paradigm marked by corresponding
  voice affixes. The following chart presents each verb stem class with
  its respective voice paradigm identified by the case relation or
case relations entered horizontally and matched vertically by the corresponding affix marking the verbal voice inflection.

<table>
<thead>
<tr>
<th>Verb Stem Classes</th>
<th>Voice Inflectional Paradigm and Corresponding Affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Information Verbs, ([+]+AGT, +[+DAT]) (+[OBJ])</td>
<td>: UM- : M- : -IN : I- : -AN : (\emptyset)</td>
</tr>
<tr>
<td>(a) [+erg]</td>
<td>: : : : OBJ : DAT :</td>
</tr>
<tr>
<td>(b) [-erg]</td>
<td>: AGT : : OBJ/: DAT :</td>
</tr>
<tr>
<td>(c) [-pot, +act]</td>
<td>: : AGT : : BEN : DAT :</td>
</tr>
<tr>
<td>(d) [-ins]</td>
<td>: : : : RSN : :</td>
</tr>
<tr>
<td>2. Location Verbs ([+]+AGT, +loc, +[OBJ])</td>
<td></td>
</tr>
<tr>
<td>(a)[+goal, +erg]</td>
<td>: : : : OBJ : LOC :</td>
</tr>
<tr>
<td>(b) [+goal, -pot, +act]</td>
<td>: AGT : : BEN : LOC :</td>
</tr>
<tr>
<td>(c) [-goal, -erg]</td>
<td>: AGT : : OBJ : BEN : LOC :</td>
</tr>
<tr>
<td>(d) [+cs, +erg]</td>
<td>: : : OBJ : :</td>
</tr>
<tr>
<td>(e)[+cs, -erg]</td>
<td>: AGT : : OBJ : BEN : LOC :</td>
</tr>
<tr>
<td>(f) [-cs, +erg]</td>
<td>: : : : OBJ :</td>
</tr>
<tr>
<td>(g) [-af, +erg]</td>
<td>: : : OBJ : :</td>
</tr>
<tr>
<td>(h) [-dir, -pot, +act]</td>
<td>: AGT : : BEN : LOC :</td>
</tr>
<tr>
<td>(i) [+ins]</td>
<td>: : : INS : :</td>
</tr>
<tr>
<td>(j) [-ins]</td>
<td>: : : RSN : :</td>
</tr>
<tr>
<td>3. Simple Transitive Verbs, ([+]+AGT, -loc, +[OBJ])]</td>
<td></td>
</tr>
<tr>
<td>(a) [+extn, +erg]</td>
<td>: : : : OBJ :</td>
</tr>
<tr>
<td>CF-SF-MVF Verb Stem Classes</td>
<td>Voice Inflectional Paradigm and Corresponding Affixes</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>(b) [+extn, -erg]</td>
<td>AGT : BEN : OBJ :</td>
</tr>
<tr>
<td>(c) [+extn, -pot, +act]</td>
<td>AGT : BEN :</td>
</tr>
<tr>
<td>(d) [+cs, +erg]</td>
<td>OBJ :</td>
</tr>
<tr>
<td>(e) [+cs, -erg]</td>
<td>AGT : OBJ : BEN :</td>
</tr>
<tr>
<td>(f) [-cs, +erg]</td>
<td>OBJ :</td>
</tr>
<tr>
<td>(g) [-af, +erg]</td>
<td>OBJ :</td>
</tr>
<tr>
<td>(h) [-extn, -pot, +act]</td>
<td>AGT : BEN :</td>
</tr>
<tr>
<td>(i) [+ins]</td>
<td>INS :</td>
</tr>
<tr>
<td>(j) [-ins]</td>
<td>RSN :</td>
</tr>
</tbody>
</table>

4. Locomotion Verbs, [-[+AGT], -[+DAT], +loc, [+OBJ]]
(a) [-erg] OBJ : LOC :
(b) [-ins] RSN :

5. Calamity Verbs, [+[+AGT], -[+DAT], [+INS], [+OBJ]]
(a) [+cs, +erg] OBJ :
(b) [-cs, +erg] OBJ :
(c) [-af, +erg] OBJ :

6. Simple Intransitive Verbs, [+[+AGT], +[+DAT], +[+INS], +[+OBJ]]
(a) [+term, -erg] OBJ :
(b) [+term, +pot, -act] OBJ :
(c) [-term, -pot, +act] OBJ :
### Chart 7. Voice inflectional paradigm and corresponding affixes of primary verb stem classes

The same correspondences between the voice paradigm and the voice marking affixes of each verb stem class shown in Chart 7 can be presented in a similar chart below in which the morphological instead of the case frame features serve as the primary basis for subcategorization.

<table>
<thead>
<tr>
<th>CF-SF-MYF Verb Stem Classes</th>
<th>Voice Inflectional Paradigm and Corresponding Affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(d) [+cs, +erg]</td>
<td>:          :      : OBJ      :      :</td>
</tr>
<tr>
<td>(e) [-cs, +erg]</td>
<td>:          :      : OBJ      :      :</td>
</tr>
<tr>
<td>(f) [-affi, -erg]</td>
<td>OBJ :      :      :          :      :</td>
</tr>
<tr>
<td>(g) [-affi, -pot, +act]</td>
<td>:          : OBJ      :      :          :</td>
</tr>
<tr>
<td>(h) [-ins]</td>
<td>:          :      : RSN      :      :</td>
</tr>
<tr>
<td>(a) [+per, +pot, +act]</td>
<td>:          :      : OBJ      :      : DAT</td>
</tr>
<tr>
<td>(b) [+cog, +pot, -act]</td>
<td>:          :      : OBJ      :      :</td>
</tr>
<tr>
<td>(c) [-cog, +pot, -act]</td>
<td>:          :      : OBJ      :      : LOC</td>
</tr>
<tr>
<td>(d) [-cog, -ins]</td>
<td>:          :      : RSN      : LOC     :</td>
</tr>
<tr>
<td>(e) [+emo, +pot, -act]</td>
<td>:          :      : OBJ      :      : DAT</td>
</tr>
<tr>
<td>(f) [+assm, +pot, -act]</td>
<td>:          :      : OBJ      :      : DAT</td>
</tr>
<tr>
<td>(g) [+atttd, +erg]</td>
<td>:          : OBJ      :      :          :</td>
</tr>
<tr>
<td>(h) [-atttd, -pot, +act]</td>
<td>: DAT      : OBJ      :      :          :</td>
</tr>
<tr>
<td>(i) [-ins]</td>
<td>:          :      : RSN      :      :</td>
</tr>
<tr>
<td>(j) [+per, +erg, +ntn]</td>
<td>:          : OBJ      :      :          :</td>
</tr>
</tbody>
</table>

7. Psych Verbs, 
[-[+AGT], [+DAT], +[+OBJ]]

The same correspondences between the voice paradigm and the voice marking affixes of each verb stem class shown in Chart 7 can be presented in a similar chart below in which the morphological instead of the case frame features serve as the primary basis for subcategorization.
<table>
<thead>
<tr>
<th>Verb Stem Classes</th>
<th>UM⁻</th>
<th>M⁻</th>
<th>-IN</th>
<th>I⁻</th>
<th>-AN</th>
<th>Ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, [+erg]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) [+[+AGT], [+DAT], +[+OBJ]]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) [+[+AGT], +loc, +[+OBJ]]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) [+goal]</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(2) [+cs]</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>(3) [-cs]</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) [-af]</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(c) [+[+AGT], -loc, +[+OBJ]]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) [+extn]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) [+cs]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) [-cs]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) [-af]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) [-[+AGT], -[+DAT], [+INS], +[+OBJ]]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) [+cs]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) [-cs]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) [-af]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) [-[+AGT], -[+DAT], -[+INS], +[+OBJ]]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) [+cs]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) [-cs]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) [-[+AGT], +[+DAT], +[+OBJ]]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Voice Inflectional Paradigm and Corresponding Affixes

<table>
<thead>
<tr>
<th>Verb Stem Classes</th>
<th>MVF:CF:SF</th>
<th>Voice Inflectional Paradigm</th>
<th>and Corresponding Affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) [+AGT], [+DAT], [+OBJ]</td>
<td>M^<del>:M^</del>:N^<del>:I^</del>:I^~:AN:Ø</td>
<td>AGT:OBJ:BEN:LOC:</td>
<td></td>
</tr>
<tr>
<td>(b) [+AGT], [+loc, +OBJ]</td>
<td>M^<del>:M^</del>:N^<del>:I^</del>:I^~:AN:Ø</td>
<td>AGT:OBJ:BEN:LOC:</td>
<td></td>
</tr>
<tr>
<td>(a) [+AGT], [+DAT], [+OBJ]</td>
<td>M^<del>:M^</del>:N^<del>:I^</del>:I^~:AN:Ø</td>
<td>AGT:BEN:DAT:</td>
<td></td>
</tr>
<tr>
<td>(b) [+AGT], [+loc, +OBJ]</td>
<td>M^<del>:M^</del>:N^<del>:I^</del>:I^~:AN:Ø</td>
<td>AGT:BEN:LOC:</td>
<td></td>
</tr>
<tr>
<td>MVF-CF-SF Verb Stem Classes</td>
<td>Voice Inflectional Paradigm and Corresponding Affixes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) [+ [AGT], -loc, [+OBJ]]</td>
<td>: UM : M : -IN : I : -AN : Ø</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. [+extn] : AGT : BEN : Ø

2. [-extn] : AGT : BEN : Ø

(d) [-[AGT], -[DAT], -[INS], [+OBJ]] : : : : Ø


2. [-aff1] : OBJ : : : Ø

(e) [-[AGT], +[DAT], [+OBJ], -atttd] : DAT : : : OBJ : Ø


(a) [+[AGT], +loc, [+OBJ]] : : : INS : Ø

(b) [+[AGT], -loc, [+OBJ]] : : : INS : Ø


(a) [+[AGT], [+DAT], [+OBJ]] : : : RSN : Ø

(b) [+[AGT], +loc, [+OBJ]] : : : RSN : Ø

(c) [+[AGT], -loc, [+OBJ]] : : : RSN : Ø

(d) [-[AGT], -[DAT], +loc, [+OBJ]] : : : RSN : Ø

(e) [-[AGT], -[DAT], -[INS], [+OBJ]] : : : RSN : Ø

(f) [-[AGT], +[DAT], [+OBJ]] : : : RSN : Ø

1. [-cog] : : RSN : LOC :
Chart 7.a. Voice inflectional paradigm and corresponding affixes of primary verb stem classes (with morphological features highlighted)

<table>
<thead>
<tr>
<th>MWF-CF-SF Verb Stem Classes</th>
<th>Voice Inflectional Paradigm and Corresponding Affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UM- : M- : -IN : I- : -AN : Ø</td>
</tr>
</tbody>
</table>

6. [+pot, +act]

(a) [-+[AGT], +[+DAT], +[+OBJ], +per]

7. [+pot, -act]

(a) [-+[AGT], -[+DAT], -[+INS], [+OBJ], +term]

(b) [-+[AGT], [+DAT], [+OBJ]]

(1) [+cog]

(2) [-cog]

(3) [+emo]

(4) [+assm]

Chart 7.a shows readily the restrictions on the general range of the inflectional paradigm and the corresponding affixes of each morphological stem class. For instance, the [-erg] is the only class that manifests the maximum of four inflected forms and the [+pot, +act], the maximum of three. Only these two classes can take an active voice affix in one of their inflected forms; all others are marked by a passive affix(es) or by Ø. On the other hand, the two non-potential classes which are generally restricted to only one voice inflection are the [+ins] and the [-ins], manifesting the instrumental and the reason voice, respectively. Likewise, the [+pot, +act] class manifests only
one inflected voice form, the dative of perception verbs, whereas the
[+pot, -act] class manifests one or two inflected forms of varying
paradigms depending on the case frame and semantic feature
specifications.

3.5 Conclusion

From the foregoing, we find that case frame, semantic and
morphological-voice-related features on verb stems are germane to
their subcategorization. To determine the maximum possible range of
voice forms which can be manifested by a particular verb stem and the
the corresponding voice marking affix or affixes it takes, we need to
refer not only to its case frame and semantic features, but also to its
morphological features. These three types of features bear relevant
information as to the case form realization of the verb's cooccurring
actants, thereby indicating the verb's characteristic voice paradigm.
All together, these features trigger the assignment of the corresponding
affix for each voice inflected form. The chart showing the voice
paradigm and corresponding affixes of each verb stem class reveals two
important characteristics of verb stems. (a) Each verb stem class is
distinguished from every other class by at least one distinct feature,
either case frame, semantic or morphological; and (b) Each stem class
manifests its own voice paradigm and corresponding voice affix or
affixes according to its distinguishing features. Where a stem class
of a given case frame subcategory shares an identical set of morphological
and voice-related features with another stem class in the same case
frame subcategory, the two stem classes must differ in their semantic
subcategorization. If a stem class belongs to the same case frame and semantic feature subcategory as another stem class and they manifest different voice paradigms, then the two stem classes must differ in their morphological and voice-related features. Finally, two stem classes that exhibit identical voice paradigms and morphological and semantic features must differ in their case frame features.

By subcategorizing verb stems according to their case frame, semantic and morphological features, as described here, we are able to isolate the invariant forms of the active and passive voice inflectional affixes and to recognize the characteristic stem forms that these affixes cooccur with to mark specific voices. For instance, we find that with primary verb stems the active affixes um- and m- are in complementary distribution with two morphological classes. Um- occurs only with the [-erg] root stems whereas m- goes only with the derived [-pot, +act] form. Both affixes mark either the agentive voice of agentive verbs or the objective voice of non-agentive non-dative verbs. The affix m- also marks the dative voice of the [-attd] class of psych verbs. The passive affix -in attaches itself only to the root stems [+erg] and [-erg] and marks only the objective voice of primary verb stems. The passive affix -an goes with more forms; it can cooccur with the [+erg] or the [-erg] and the [-pot, +act] form of non-psych verbs. With psych verbs, it can be affixed to the [+pot, -act] and also to one semantic class of the [-ins] form. This affix marks either dative, locative or objective voice. Of the three passive affixes, i- is accommodated by the most number of morphological forms. It cooccurs with the [+erg] to mark objective voice, with the
[-erg] to mark benefactive or sometimes objective voice, with the
[-pot, +act] to mark benefactive voice, with the [+ins] to mark
instrumental voice, and with the [-ins] to mark reason voice.

It has been mentioned that some of the stem classes under a given
case frame subcategory are derivable from other stem classes. For
instance, [-pot, +act] is usually derived from [+erg], [-ins] from
[-erg] and [-pot, +act], and [+ins] from [+erg] and [-erg]. This
creative property of morphological forms indicates that such predictable
stem classes may be accounted for economically by means of derivation
rules. The output of 100% productive derivation rules need not be
entered in the lexicon. Only those stem classes that derive from
verb stem classes and other lexical categories by means of semi­
productive derivation rules are identified in the lexicon. It may
be added that verb stems which deviate from the general rules of voice­
marking have to be marked individually for their respective idiosyncracies.

Being underived from other verb stem classes, the [+erg], [-erg],
[+pot, -act], and certain members of the [-pot, +act] forms may be
regarded as basic among the primary verb stem classes. Interestingly,
these four classes express their preference for a particular cooccurring
case relation to be realized as subject. The [+erg] class always
manifests the objective voice; the [-erg] manifests the objective and
the agentive voices if the latter case relation is specified positively
in the case frame; the [+pot, -act] manifests the objective or the
dative voice; and the [-pot, +act] form that derives from a non-verbal
lexical category manifests either an objective or a dative voice. Based
on these manifestations, Tagalog may be described quite generally as an ergative language, one whose subject choice preference ranks the [+OBJ] case relation first. However, it is not accurate to ascribe the ergative system to Tagalog as a whole in view of the presence of [-erg] and [+pot] forms which cooccur with subjects other than a [+OBJ] actant. Furthermore, the existence of a derived stem class, from another verb stem class, which functions to subjectivize agents, i.e., [-pot, +act] from [+erg], supports the thesis that Tagalog, or Philippine languages in general, is neither completely ergative nor accusative. Seemingly, Tagalog creates a balance between the use of these two systems. Thus, in terms of subject choice, Tagalog may be properly described as exhibiting a mixed ergative and accusative system depending on its verb stem classes.
Footnotes to Chapter III

1 Other works which will be referred to in this chapter, although not included in the review, are Lopez (1939), Institute of National Language (1950), Kess (1967) and Schachter and Otanes (1972).


3 With instrumental passives, in particular, Bloomfield states that roots with the prefix pang- correspond to the active with mang- (1917: 250). There are, however, a good number of such forms with the prefix pang- and the prefix i- which do not have any corresponding active forms with mang-, e.g., ipangdilig 'use for watering,' ipanghako 'use for mixing,' ipangtagpi 'use for patching,' ipangbukas 'use for opening,' ipanghukay 'use for digging', etc. This means that the instrumental passive forms with the prefix pang- do not necessarily correspond to active forms with mang- alone. They may also correspond to active forms with um- or mag-. Moreover, the form ipamili 'use for shopping,' which corresponds to manili 'shop' can also be rendered as ipangpamili 'use for shopping.'

4 Actually the verb forms with i- regularly correspond to ma-forms with the same affix i-, e.g., ma'ikuha 'able to get s.t. for s.o.; ma'itapon 'able to throw s.t.'

5 In fact in some works, Bloomfield has been identified along with SIL linguists as saying that "an affix indicates one and only one grammatical relation" (Constantino, 1971:55; Ramos, 1974:3).

6 An examination of the 'recent past' form of the verb, however, reveals that it has a unique syntactic behavior which the other three forms do not manifest. Thus, it is treated in this study as a derived form (see pp. 142-44).

7 As a variable, tension is closely tied to a given voice. In effect, it is the affix associated with a particular voice. A morphophonemic rule designating an affix for each voice can take care of this realization, and the set or paradigm consisting of the non-finite and finite forms, excluding the absolute form since it is non-verbal, can be accounted for by the variable aspect. Therefore, the tension actualizing functor can be dispensed with.

8 This type of classification is in effect similar to what Kess (1967) suggests in his conclusion that the system should cross classify its verbs both as to which verbal affixes they occur with as well as which particular case relationship these verbal affixes happen to mark.
A similar process of subjectivalization is described by Constantino (1970:6).

The classes of verbs cooccurring with nominalized sentences or sentential complements have not been included in this study because sentential complements unlike nominal complements are not marked for either case relation or case form.

It will be noted that the sentence structure exemplified in 4 is not generated by the Phrase Structure Rules in Chapter II because the rewrite rule for NP does not include the alternant Comp S for the constituents complement and sentence, respectively. This aspect has not been treated here because it is not relevant to the main problem of this study. The category of the predicate marked [+Adj] here is analyzed either as a Verb or as an Adjective in many related languages. This problem certainly needs investigation.

Llamzon labels this subcategory 'immediate past'.

This is one of the problematic verb forms mentioned in the preceding chapter which may turn out to belong to the class of nominalizations, particularly if the criterion used for the subcategorization of verb stems is that the subject actant involved is also a necessary complement appearing in its non-nominative form with the other verb forms in the paradigm. This form differs in meaning from the corresponding locative ergative form in that it is the medium through which the object given and intended for someone else is transmitted. Tentatively, however, this form is analyzed here as a verbal form.

The PANG-stems marked [-pot, +act, +dist] are derived by a semantic DR rather than a syntactic DR, hence, they are not accounted for in this study. The investigation here deals only with syntactic derivation of verb stems. They have been cited here to show the various possibilities of verb stem derivation.

The causative instrumental is not illustrated above. See causative derivation in Chapter IV.

Cf. Schachter and Otanes (1972).

One problem of formalization which needs further investigation is the assignment of the voice affixes for the corresponding forms in the voice paradigm of each stem class. The problem is that there is no specific feature that refers to one unique voice affix manifested by various stem classes. For instance, no single feature unifies the different syntactic, semantic and morphological classes that manifest a voice form, either dative, locative or objective, marked by the affix -an. This feature is necessary for aspect inflection. When a verb stem is inflected for aspect, the rule looks to the particular voice affix the stem takes, and operates on the entire affix-class, regardless of what case relation the affix marks.

Provisionally, Charts 7 and 7.a, which appear at the end of this chapter, simply display the voice inflectional paradigm of each primary verb stem class and the corresponding voice affix that marks each voice form. All voice forms marked by the affix -in are said to belong to the IN-class; those marked by um- fall under the UM-class, etc.

Each alternant form showing the first CV of the root or of the first derivational affix instead of simply the first CV of the verb stem has not been accounted for in the morphophonemic rules due to complications they entail in their formalization. To account for them, boundaries between bases and affixes or roots and derivational affixes have to be marked. Inasmuch as this aspect of the analysis is not relevant to the main thesis of the study, this area has been left for further investigation.

For further distinctions between lexeme and word or word-form, see Matthews (1974:20f.).

Verb derivation from other lexical categories covered in this study includes only those coming from simple N's and Adj's.

These features are adopted from Kullavanijaya (1974: 58).

It will be observed that in the case frame specifications of each subcategory, a feature that is implied by another is no longer specified. For instance, the feature [+loc] or [-loc] implies a [-[+DAT]], a [+INS]) or [-INS]) implies a [-loc] and a [-[+DAT]], hence, these implied features need not be marked. The reason the predictable [+OBJ]] feature is retained is to see readily the basic cooccurring case relations.
24 See constraints on the cooccurrence of a [+COM] discussed in Chapter II, pp. 70f. and the section on social verb derivation in Chapter IV, pp. 70f. It will be recalled that the [+COM] can only be realized in the non-nominative case form when cooccurring with a primary verb, hence in the succeeding discussion of primary verb stem subcategories, this case relation will not be mentioned anymore. In spite of this restriction, it has been introduced here to emphasize the fact that it can be a possible subject of a secondary verb stem identified by the feature social [+soc].

25 The features [+dir] indicate the same meaning implied by Ramos' [+iter] features on the one hand and [+dir] on the other, and [+goal] correspond to her [+cf]. She uses [+goal] to identify two types of directional [our locative [+LOC]] case relations. See Ramos, 1974: 45, 47-48, and 30f.

26 The features [+cs], change of state, and [-cs], no change of state, have been adopted from Ramos (1974: 47) with some modification in meaning.

27 It is recognized here that this observation is compatible with Schachter and Otanes' and Ramos' agentive-directional analysis. However, we have shown earlier that this agentive-directional subcategory can be analyzed more accurately as belonging to the objective-directional or objective-locative subcategory.

28 As will be shown later in the following section, these features are also shared by calamity verbs.

29 Note that no semantic features subcategorize the class of information verbs. Likewise, note that the features [+stric] and [-stric] which pertain to the obligatory and optional cooccurrence, respectively, of the [+Loc] actant have been assumed in the tree since they do not affect the semantic feature subcategorization.

30 Similar verbs are identified by Lakoff (1970:121) as stative verbs and by Chafe (1970:145) as experiential verbs. However, the class of psych verbs posited here do not include adjectives which Chafe classifies as state verbs (1970:98).

31 This class should be distinguished from the set of secondary verb stems designated as indirect effect verbs. The latter has the same morphological structure as the former and it takes the same voice inflection marker -an to denote a dative subject. The difference lies in their semantic content and their derivational history. Indirect effect verbs denote the effect on an experiencer of an event undergone by a [+OBJ] referent. The experiencer is indirectly affected because the [+OBJ] actant involved is related to it as an alienable or inalienable possession. For example, nasumugan silang bahay 'They lost their house in a fire.' Moreover, indirect effect verbs derive from simple intransitive verbs.
Subclasses of the [-pot, +act] class can be derived either syntactically or semantically, and they are usually identified by corresponding derivational affixes. Verbs from the [+erg] and [-erg] classes, for instance, which denote an action which is characterized as being hostile, unfavorable, harmful and usually performed on an adversary, voluntarily and deliberately, derive into the class of [-pot, +act] further specified as adversive or adversative [+advr]. For example, panghampas 'to strike', pambatok 'to hit on nape', pandagan 'to lie on to compress'. Similar to the distributive [+dist] subclass, the [+advr] class is neither a primary verb class nor a syntactically derived class, hence, it is not included in this study.

The first two examples in the first column are exceptions to the voice inflectional affixes presented on p. 140. Instead of the regular i- for the objective voice, these verbs take -in.

Lawrence Reid (personal communication) states that such a subclassification depends on the type or nature of the [+OBJ] involved.

This class of inchoative verbs is not identified as a separate subclass in Ramos (1974). She states that "there are very few examples of verbs marked [+inchoative, -transient] that take ma-.

The writer knows of only one exception. The verb is mamatay 'to die'" (p. 141). On the contrary, it has been shown here that the class has a wider membership than that. The reasons for setting up this class of [+inch, +term, +pot, -act] are its similarity in meaning with the [+inch, +term, +pot, -erg] class and its difference from it in morphological form. Having different morphological forms, their corresponding voice affixes are different.
4.1 Derivation and Lexical Relations

Derivation is the process of creating a new stem on the basis of an existing one. A stem is new if it differs from its related source in at least one syntactic, semantic or morphological feature which is not freely variable with other stems of the same class. The derived stem may or may not differ from its source form in syntactic categorization. When a syntactic or morphological feature modification, having to do with a case feature, is involved in the process, then it is a syntactic derivation and this results in a change in syntactic categorization or subcategorization. If the syntactic features remain unchanged and what is introduced or modified in the derived form is a semantic feature only, then it is a semantic derivation without a corresponding change in syntactic categorization or subcategorization. This study treats only of the more interesting type of lexical derivation, that which is referred to here as syntactic derivation of verb stems. It is interesting in the sense that it is relevant to the theoretical questions pertaining to case relations and to the clarification of the distinction between inflectional and derivational affixes of Tagalog verb stems.

In the preceding chapter, the primary verb stems are subcategorized according to their case frame, semantic and morphological-voice-related features and each subclass exhibits its own voice paradigm matched by the corresponding affixes that mark its voice inflection. It has been observed that an inflectional affix marking a particular voice may be appended to verb stems of different morphological structures. For
instance, the root [-erg] stem kaha 'take s.t. to' is inflected for the
benefactive voice by affixing i-, hence, ikuha 'take s.t. for s.o.' and
the [-pot, +act] stem pagbigay 'give s.t. to' is inflected for the same
voice as ipagbigay 'give s.t. for s.o.' . The [-pot, +act] form pagbigay
corresponds to the [+erg] form bigay which does not allow the agentive
voice inflection and, consequently, the benefactive voice. The stems
bigay and pagbigay are closely related in that they share identical case
frame and semantic features but they differ in their morphological
features and, concomitantly, in their range of voice inflectional
paradigm. This relationship, notwithstanding the difference, can be
captured by means of a formal statement called a derivation rule in
which a [-pot, +act] verb stem can possibly be created from a [+erg]
verb stem. Similarly, other primary verb stem classes such as those
marked [+ins] and [-ins] are also related to certain corresponding verb
stem classes and their properties can also be accounted for by appropriate
derivation rules. On the other hand, there are primary verb stem classes
which do not derive from other verb stem classes, but instead they cor-
respond to roots or stems belonging to a Noun or an Adjective category.
For example, the verb sipon 'be afflicted with cold' and the source N
sipon 'cold'; the verb mabulok 'rot' and the Adj bulok 'rotten'. On the
basis of their shared semantic features, such verb stems cannot but be
related to their non-verbal counterparts. Again, this relationship can
be formalized in terms of derivation rules that account for the formation
of lexically derived primary verb stems from nouns or adjectives. Such
a process of verb formation is undeniably a universal property of natural
languages.
In this chapter, it will be shown how these two kinds of primary verb stems, those derivable from other primary verb stems and those originating from the noun and adjective categories, are lexically related to their corresponding sources and how they differ from them in their feature specifications. In addition, non-primary or secondary verb stems derived from primary verb stem classes via a syntactic derivation rule are also formally accounted for. The major concern in the latter type of verb stem derivation is to determine the 'new' and/or 'related' case frame subcategories with their attendant semantic and morphological features which characterize the derived forms. Needless to say, the features of each secondary stem class include certain semantic features governing its own case frame features, its morphological-voice-related features and corresponding affix markers. Given their syntactic, semantic and morphological features, the secondary verb stem classes are subject to voice and aspect inflection following the same general voice-aspect morphophonemic rules stated in the preceding chapter.

4.2 Form of Derivation Rules

The various types of derived stems with their corresponding lexical relation to the source forms are accounted for by means of a set of rules known in the lexicase framework as derivation rules (DR's). A derivation rule can change, add or delete syntactic, semantic or phonological features to produce new lexical entries or lexemes. These rules, in comparison with transformation rules, are more restrained in their application since they operate on lexical entries and not on trees. This implies that derivation cannot perform permutations, additions, deletions or any other changes in syntactic bracketing or labelling.
Starosta (1971b) and Taylor (1971) have formalized these rules and they, along with others (Li, 1973; Kullavanijaya, 1974; Lee, 1974; Clark, 1975 and Ikranagara, 1975), have demonstrated that derivation rules can best capture generalizations about lexical relations. These rules account systematically for the variety of relationships which hold between lexical entries without adding to the generative power of the grammar. Unlike the devices used by transformationalists and generative semanticists where certain lexical items are derived from underlying sentences or from a complex of semantic primes represented in a hierarchy of branching nodes, derivation rules avoid the unnecessary complications encountered by the former accounts and at the same time prevent the grammar from increasing its generative power (Starosta, 1971d).

Derivation rules are part of the lexicon component of a grammar. Each one shows that a class of items constituting the output of the rule is formally and historically related to the class characterized by the input. The rules operate with varying degrees of generality and, as mentioned previously, the derived stems created by these rules are subject to the same inflection or inflections of the underived members of the class into which they have been derived. The rules that apply quite generally are referred to as productive DR's, those that are fairly restricted in their application are semi-productive, and those that are strictly limited may be called idiomatic. Except for 100% productive rules, such as gerundive nominalization in English and abstract noun formation in Tagalog, every instance of derivation of a lexical item is a separate event which must be separately recorded in the lexicon. The DR's state relationships between sets of items and even after a rule has ceased being used as the basis of forming new items,
the relationship may remain. For instance, the stem pagbili 'sell' exhibits a strong semantic relationship with the stem bili 'buy'. Both stems are marked by the same case frame features [+AGT, +loc,+OBJ]. However, they differ in the marking of the direction of transportation of the [OBJ] referent. The former stem is [+goal] whereas the latter is [-goal]. Furthermore, pagbili is identical in structure with other [+goal] stems marked [-pot, +act], e.g., pagbigay 'give', whereas bili belongs to the [-erg] stem class, and, consequently, their respective agentive voice affix differs. The former is marked by m- and the latter by um-. These outstanding differences tend to widen the gap between the two stems, for seemingly they overrule any kind of suggestion in favor of establishing a formal relation between them. However, there are a few other pairs of verb stems which denote the same similarities and contrasts. They are as follows:

umabot 'reach for'  magabot 'hand over'
umupa 'rent s.t. from s.o.' magupa 'have s.t. rented'
humiram 'borrow'  magpahiram 'lend'
umutang 'take a loan' magpadtang 'grant a loan'

All these pairs indicate that certain [-pot, +act] stems may be derived from [-goal, -erg] stems through one or more DR's which show among others the correspondence between the original feature [-goal] and the opposite feature [+goal] on the derived stem. Presently, however, this rule is no longer used to create new lexical items; yet, native speakers continue to respond positively to this particular type of lexical relationship.

Derivation as a process of word or stem formation is admittedly notoriously sporadic and unpredictable. Even a DR which may be productive
cannot account for certain identical morphological forms which develop a special meaning deviating from the meaning of the regularly derived forms. For example, Starosta (1971c) gives the item *destroyer* meaning a type of warship of a particular size and armament as an example of a form different from the item *destroyer* which means 'a person or device that destroys things' which can be predicted regularly by a derivation rule. These two items are separate lexical items with different derivational histories. The second form derives from the verb destroy via a productive DR which accounts for the nominal class of the form X-er meaning 's.o. or s.t. that Xs'. Because of its predictability, this form need not be fully specified as a lexical entry. In contrast, the first *destroyer* presumably derives from the second *destroyer* with predictable features, as attested by the meaning carried over from the source form, but it is specified with all other idiosyncratic semantic features. For a number of sporadic changes occurring in certain derived items in which the meanings that develop are so removed from the original or source meaning, the derived forms are lexicalized, to mean that they form new lexical items (Matthews, 1974:33-35). For example, *alat* in Tagalog means 'saltiness' and, curiously enough, an identical form means 'bad luck'. From the latter, the same form *alat* is derived to mean in colloquial speech 'policeman', and this form because of the unpredictability and distinctiveness of its features is lexicalized. It is entered as an independent, underived lexeme. In this study, however, the concern is on verb derivations that are more general and predictable.

The form of a derivation rule may be illustrated as follows:
A fletched arrow, ⟷, indicates a derivation rule. Any feature specified on the left side of the arrow which does not appear on the right side means that the feature is absent in the new item or it has been changed to a new but comparable one, e.g., [+N] to [+V]. A feature that appears only on the right side of the arrow refers to a new feature created for the item as a result of the derivation, e.g., case frame and syntactic-semantic features. All other features not mentioned by the rule which are carried over to the derived form but which do not have any syntactic consequences may be said to be embodied in the meaning that the new item acquires. The feature [+Derv] signifies that the output or the new item is a derived form and is therefore lexically related to its source form. The above rule, for example, applies to the noun root *lagnat*'fever' giving the derived verb stem *lagnat*'be afflicted with fever' without any corresponding morphophonemic change. The class of simple intransitive stems marked [+cs] take the objective voice affix -in, hence, the form *lagnatin*.

In general, every derivation rule is accompanied by a corresponding morphophonemic rule which identifies the derivational affix attached to the relevant portion of the source stem or the phonological shape which the derived stem assumes. The rule corresponding to a verb derivation rule (VDR) is marked VDMR to mean verb derivation morphophonemic rule.
To illustrate, a PAG-stem derivation rule involving a change to the feature [-pot, +act] has the following form of morphophonemic rule:

\[ V\left[ \rightarrow V[pag] \]

The rule states that the derived stem created by a particular VDR, which is taken here as the rule that forms [-pot, +act] stems, is prefixed with pag-. Some derivation rules which carry over the exact form of the source item without any morphophonemic modification, as in the sample VDR above, do not require VDMR's.

The pairs of items related by a DR which is not 100% productive are listed in the lexicon of a competence-type grammar. For instance, the example lagnat is entered as a noun with its idiosyncratic syntactic, semantic and phonological features while the derived verb stem is entered with the syntactic feature [+V], denoting that it belongs to the verbal category, and the features [+Derv] and [+afsl]. These features suffice to direct one to look for the DR which formally states that the entry is related to an identical or similar form and which provides it with its relevant syntactic, semantic and morphological and consequent phonological features, if any is specified. In effect, productive DR's make the claim that the lexical relations expressed by them form part of the native speaker's knowledge about the words in his language.

4.3 Verb Derivation Rules in Tagalog

Having identified the voice inflectional affixes um- or m-, -in, i-, -an and Ø and the aspect inflectional affixes -in- for the [+beg] forms of some classes and \((C_1)V_1(C_1)V_1\) of the root or stem for the [-comp] and [-beg] forms, we can strip them off from the verbs and deal with the verb stems. All other affixes occurring in these verb stems are derivational
affixes. Tagalog as a typical agglutinating language makes extensive use of derivation especially with its verbs. As can be observed in the examples given under each verbal subcategory, Tagalog verb stems assume varied morphological forms. There are simple roots manifested by stems marked with the feature [+erg] or [-erg] and affixed stems marked with [-pot, +act], [+ins], [-ins], etc. An affixed stem may vary in complexity of structure according to the number and type of derivations it has undergone. Bloomfield (1933:222) refers to this process as a ranking of construction. For instance, a complex stem such as pagsipagpabigay which appears in the form magsipagpabigay when expressing agentive voice and non-finite aspect meaning 'cause s.o. to give, [-+[AGT,-pl], +loc, +[+DAT], -pot, +act, +caus]' shows the root bigay 'give' preceded by a chain of affixes identifiable as pagsi-, pag-, and pa-. This complex form is analyzed here as a derived stem involving the affixation of pagsi- to its source stem pagpabigay 'cause to give, [-pot, +act, +caus]' to create a plural [+pl] agentive form of the causative stem. In turn, pagpabigay derives from the stem pabigay 'cause to give, [+erg]' to create an active stem counterpart, which process necessitates the affix pag- on the derived stem. Lastly, the stem pabigay is also a derived stem from the simple underived root bigay 'give, [+erg]' to create a causative form which requires the affixation of pa-, with the resulting derived stem also marked [+erg]. This ranking of morphological constructions may be shown as follows:

Root-stem 1: bigay 'give, [+erg]'  
PA-stem 2: pa + bigay 'cause to give, [+caus, +erg]'  
PAG-stem 3: pag + pabigay 'cause to give, [+caus,-pot,+act]'  
PAGSI-stem 4: pagsi + pagpabigay 'cause to give, [-+[AGT,-pl]]'
From the above illustration, the base of a stem is not necessarily always a root. It may be a root, as in PA-stem 2, or an affixed stem, as in PAG-stem 3 and PAGSI-stem 4.

At this juncture, it is relevant to point out that each of the derived stems, stem 2 to 4 above, is formed by a DR whose input is specified with a particular feature and so is its output. The rules that derive these three stems operate quite generally and below they are shown to apply to either or both underived and derived stems.

(a) bigay [+erg]
   pagbigay [-pot,+act]
   pagsipagbigay [-[+AGT,-pl], -pot,+act]

   \[\text{Caus-DR} \implies [+act]-\text{DR} \implies [+pl]-\text{DR}\]
   pabigay [+caus,
   +erg]
   pagpabigay [-pot,+act,
   +caus]
   pagsipagpabigay [-[+AGT,-pl], -pot,+act,+caus]

(b) kuha [-erg]
   \(\emptyset\)
   pagsikuha [-[+AGT,-pl], -pot,+act]
   pagsipagpakuha [-[+AGT,-pl], -pot,+act,+caus]

The causative derivation rule, Caus DR, applies to both simple roots marked [+erg] in a and [-erg] in b. The active DR, [+act] DR, however, applies only to stems that carry the feature [+erg] regardless of whether the stem is also specified [+caus]. It does not apply to [-erg] stems, hence, *pagkuha as a verb stem is ungrammatical. On the contrary, the plural DR, [+pl] DR, has a wider application. It takes in [-pot, +act], either marked [+caus] or not, and [-erg] stems. What it is restricted from applying to is [+erg] stems, and thus when we hear *magsibigay,
*magsipabigay and *magsipakuha, these are detected as ungrammatical. The expected correct forms are magsipagbigay, magsipagpabigay and magsipagpakuha.

The given capacity of DR's to apply to various types of stems, as specified in their input, results in the formation of distinct classes of stems. These classes are identified by particular features and, usually, by given derivational affixes. The members of each of these classes have stem bases of varying complexities. The following classes of causative, active, and plural stems show this property of DR's more vividly:

(a) PA-stems:

pa + bili 'cause to buy'

pa + pag-luto? 'cause to cook'

pa + pa-kulo? 'cause s.o. to boil s.t.'

(b) PAG-stems:

pagbili 'sell'

pag + pa-bili 'cause s.o. to buy'

pag + pa-pagbili 'cause s.o. to sell'

pag + paki-bili 'request s.o. to do the buying of s.t.'

pag + paki-pa-bili 'request s.o. to cause s.o. else to buy'

pag + paka-ba?it 'exert effort to be good'

(c) PAGSI-stems:

pagsi + bili 'buy, [+pl]'

pagsi + pag-pa-bili 'ask s.o. to buy, [+pl]'

pagsi + pag-paki-bili 'request s.o. to do the buying, [+pl]"
Instead of treating a complex affix in a linear fashion such that *pagsipaga-* in *pagsipagpabili* is one affix involving one type of derivation distinct from the affix *pagsi* as in *pagsibili* and from *pagsipag-* as in *pagsipagluto*? or that *paga-* as in *pagaluto*? is distinct from *pag-* as in *pagluto*?, the present analysis deviates from this usual approach common in most of the previous studies and considers a kind of hierarchical derivation as a more adequate, accurate and less redundant account of affixed verb stems. By hierarchical derivation, we mean deriving a class of stems, usually identified by its particular affix and a corresponding feature, from a class of stems which may be either roots or affixed stems. If the base is an affixed stem, then it can be traced back to its source, thus, making it possible to determine the stages of derivation of a given base. As each derivation of a class of stems corresponds to a specific relationship existing between the source and the derived form, a hierarchical type of derivation also provides an explanation for the complex of syntactic and/or semantic features of the resulting derived form.

There are two basic types of verb derivation rules based on the resultant changes in features effected by the process on the derived stem, namely, (a) syntactic derivation rules and (b) semantic derivation rules. A syntactic derivation rule changes the lexical categorization or verb subcategorization of a given stem. It provides the case frame, semantic, and morphological-voice-related features and other idiosyncratic semantic features of a newly created verb stem from another lexical category. On a stem derived from another verb stem subcategory, it modifies either the case frame or the morphological-voice-related features of the source stem, or both, thus creating a new verbal
subcategory or forming a new class of members of an already existing subclass category. Along with these syntactic feature changes, a semantic feature may also be introduced by the rule. In contrast, a semantic derivation does not involve a change in case frame features. Rather, the modification is only in the complex of the idiosyncratic semantic features and in the morphological structure of the stem. The latter type of DR's covers the formation of such semantically derived stem classes identified as plural agentive or objective, multiple or simultaneous plural, intensive, moderative, ability-accidental, insistent, involuntary action, accidental result, distributive/repetitive, recreational, seasonal and requestive. This particular area, however, has not been included in the scope of this investigation. This study focuses only on syntactic derivation of verb stems.

The two types of syntactic derivation rules formulated in this study are distinguished primarily by the change effected on the lexical categorization or the verbal subcategorization of the source stem class. The first type applies to the lexical categories N(oun) and Adj(ective). The second type applies to primary verb stem subcategories.

4.3.1 Syntactic DR's That Change Lexical Categories

The first set of derivation rules involves N's as input and the next set, Adj's.

4.3.1.1 Verb Stems Derived from Nouns

In deriving verbs from N's or Adj's, it is often difficult to determine the precise semantic feature or features that characterize the input. Perhaps, these categories are sometimes best left unmarked, to leave the possibilities of derivation open. It may suffice to say that
certain features $F^x$ of the input are carried over to the derived form. The features adopted here, which may be considered provisional, represent, however, the important regularities that are to be captured about the input and output classes. The semantic feature in the input, where specified, provides the criterion for determining which N's can undergo the rule.

VDR-1: Phenomenal Verbs

$$\begin{align*}
&[+N] \\
&[+\text{phen}] \\
\end{align*} \rightarrow \begin{align*}
&[+V] \\
&[+\text{Derv}] \\
&[-[+\text{NM}]] \\
&+[([+\text{OBJ}])] \\
&[-\text{erg}] \\
\end{align*}$$

A subclass of verbs derives from nouns marked phenomenal [+phen] such as ulan 'rain', bagyo 'storm', bahay 'flood', kulog 'thunder', lindol 'earthquake', kidlat 'lightning' and other natural occurrences. These verbs mean the occurrence of an event involving the natural phenomena designated by the N. Unlike other verbs, they are marked for not cooccurring with a nominative actant. This means that the sentences in which they occur are subjectless sentences. However, even without a subject, these verbs have the potential for cooccurring with an accusative objective actant. The [+OBJ] when it occurs refers to something other than the phenomenal noun itself. It is a kind of 'factive' OBJ referent that results from the event. The meaning of the derived stem suggests whether or not an optional OBJ is situationally possible.

This small set of derived verbs is also marked [-erg] to indicate that it is a root form and that it takes the active voice affix um- without an associated nominative actant. The class manifests a syntactic subcategory which contains no underived members. For example:
1. umu'ulan
   rain
   'It is raining.'

2. bumaha? ng dugo? sa digma?an
   flood blood war
   [+AC [+OBJ]]
   'There was bloodshed in the war.' (Lit.: It flooded blood in the war.)

This DR does not involve any morphophonemic change, hence, no VDMR accompanies it. The derived verb stems remain roots.\(^6\)

VDR-2: Affliction Verbs

\[
\begin{align*}
\text{[+N]} & \rightarrow \\
\text{[+V]} & \rightarrow \\
\text{[+Derv]} & \\
\text{[-[+INS]]} & \\
\text{[+[+OBJ]]} & \\
\text{[+affl]} & \\
\text{[+erg]} &
\end{align*}
\]

Another set of verbs can be derived from nouns that usually refer to insects or creatures that infest, to any natural phenomena that may afflict, or to inanimate nouns that leave a harmful effect on certain objects. In general, the meaning of these verbs is 'to be infested or afflicted by/with N'. They belong to the case frame subcategory of simple intransitive verbs. These verbs are further subclassified into change-of-state \([+cs]\) and non-change-of-state \([-cs]\) verb stems. The former class regularly takes the affix \(-\text{in}\) to mark its objective voice and the latter, the affix \(-\text{an}\).

(a) \([+affl, +cs]\)

(a.1) From nouns referring to insects or creatures

langaw 'fly'  anay 'termite'  ipis 'cockroach'
bulati 'worm'  surot 'bedbug'  langgam 'ant'
3. lalanggamin diyan ang tinapay
ant there bread

'The bread will be ant-infested there.'

(a.2) From phenomenal nouns

ulan 'rain' bagyo 'storm' hangin 'wind'

baha? 'flood' alon 'wave' lindol 'earthquake'

4. inulan ang parada kahapon
rain on parade yesterday

'The parade was overtaken by rain yesterday.'

(a.3) From inanimate nouns

sipon 'cold' amag 'mold' antok 'drowsiness'

lagnat 'fever' kalawang 'rust' malat 'hoarseness'

5. sinipon siya at minalat noong isang linggo
cold he and hoarse last one week

'He suffered from cold and hoarseness last week.'

(Lit.: He was stricken with cold and hoarseness last week.)

(b) [+affl, -cs]

The limited number of verbs derived in this class has been listed previously (see p. 230, Chapter III). The following may be added:

kabag 'gas pain' kaba 'palpitation'

6. kinabagan ang bata? sa ka?i'yak
gas pain child crying

'The child suffered gas pain from crying too much.'

There is a small set of nouns referring to measurement or measurable qualities which can be verbalized. The derived verbs require the cooccurrence of a nominative objective actant and an appropriate
accusative objective. These two actants are coreferential in the sense that the accusative objective refers to a number or quantity of a unit of measure characterizing or describing the nominative objective referent. Thus,

VDR-3: Verbs of Measure

\[
\begin{array}{c}
[+N] [+\text{meas}] \\
\implies [+V] \\
\quad +\text{Derv} \\
\quad [-[+\text{INS}]] \\
\quad [-[+\text{NM}, -\text{OBJ}]] \\
\quad [-[+\text{AC}, +\text{OBJ}, -\text{qty}]] \\
\quad -\text{affl} \\
\quad [-\text{erg}] \\
\end{array}
\]

This class may be identified as a subclass of the simple intransitive subcategory. Like the [-affl] class of non-inchoative verb stems, the objective voice form of these verbs of measure is marked by \textit{um}-.

For example:

- sukat 'measure' timbang 'weigh' ta?as 'grow by'
- tagal 'last for' bigat 'be heavy by' laki 'be big by'

7. tumagal ang miting namin ng dalawang oras
last for meeting our two hours

\[
\begin{array}{c}
[+\text{NM}] \\
[+\text{OBJ}] \\
\implies [+\text{AC}] \\
\quad [+\text{OBJ}] \\
\quad [+\text{qty}] \\
\end{array}
\]

'Our meeting lasted for two hours.'

VDR-4: Active Inchoative Verbs

\[
\begin{array}{c}
[+N] [+\text{root}] \\
\implies [+V] \\
\quad +\text{Derv} \\
\quad [-[+\text{INS}]] \\
\quad [+[+\text{OBJ}]] \\
\quad +\text{term} \\
\quad [-\text{erg}] \\
\end{array}
\]

Certain abstract noun roots serve as the source of inchoative verbs that express 'grow or develop' in what is designated by the N. It expresses a terminal change in the [+OBJ] rather than a temporary one.
The root derived stems are marked by the active voice affix um-. For example:

- ganda 'grow in beauty; become beautiful'
- laki 'increase in size; become big'
- hina? 'become weak; develop weakness'
- taba? 'become stout; develop fatness'
- bai?it 'become good; develop goodness'
- dtmong 'develop in intelligence; become intelligent'
- taba? 'become stout; develop fatness'
- hina? 'become weak; develop weakness'
- bai?it 'become good; develop goodness'
- ganda 'grow in beauty; become beautiful'
- laki 'increase in size; become big'
- hina? 'become weak; develop weakness'
- taba? 'become stout; develop fatness'
- bai?it 'become good; develop goodness'
- dtmong 'develop in intelligence; become intelligent'

8. lumaki na ang halamang ibinigay mo sa akin
   become already plant give you me
   big
   [+NM] [+OBJ]

'The plant you gave me has grown.'

Other classes of primary verbs that derive from certain noun roots, but which largely derive from adjective roots, are accounted for by DR's in the following section. The rules show both Adj's and N's as the sources of the derived verb stems. Thus, VDR-4 is also reflected in VDR-14. (See also VDR-15, 16, 20, 21 and 24 which derive potential terminal inchoative, non-terminal inchoative, provocation, assessment, and exertion verbs, respectively, from both N's and Adj's.)

VDR-5: Verbs of Use

\[ [+N] \rightarrow [+V] \]
\[ [+V] \rightarrow [+\text{Derv}] \]
\[ [+\text{Derv}] \rightarrow [+\text{AGT}] \]
\[ [+\text{AGT}] \rightarrow [-\text{loc}] \]
\[ [+\text{loc}] \rightarrow [+\text{OBJ}] \]
\[ [+\text{OBJ}] \rightarrow [-\text{extn}] \]
\[ [-\text{extn}] \rightarrow [+cs] \]
\[ [+cs] \rightarrow [+\text{erg}] \]

This rule creates verb stems that fall under the same class as the [-extn, +cs, +erg] type of simple transitive verbs, hence, they are also marked by the voice affix -in in the objective voice. These verbs denote three general ideas which are situationally determined:
(a) making or turning the OBJ referent into what is designated by the base N; (b) using the OBJ referent for the function designated by the base N; or (c) using the tool N on the OBJ referent. Each meaning depends on the external knowledge about the situational behavior of the referents of the source N's. For example:

(a) Making N

- adobo 'braised dish'
- litson 'roast dish'
- saya 'long skirt'

(b) Use as N substitute

- kahoy 'firewood'
- kumot 'blanket'
- unan 'pillow'

(c) Use N on something

- araro 'plow'
- gunting 'scissors'
- karit 'scythe'

9. aadobohin ng nanay ang manok braised- mother chicken
dish [+AC] [+NM] [+OBJ]

'Mother will cook chicken-adobo.' (Lit.: The chicken will be made into adobo by mother.)

10. uunanin niya ang almohadon pillow he cushion
    [+AC] [+NM] [+OBJ]

'The cushion will be used by him as pillow.'

11. aararuhin niya bukas ang isang bahagi ng bukid plow he tomorrow one part field
    [+AC] [+NM] [+OBJ]

'A part of the field will be plowed by him tomorrow.'
VDR-6: Verbs of Affect

\[ [+N] \rightarrow [+V \\
+Derv \\
+[+AGT] \\
-loc \\
+[+OBJ] \\
-extn \\
-cs \\
[+erg] \]

One other subclass of verb stems derived by VDR-6 belongs to the class of \([-\text{extn}, -\text{cs}, +\text{erg}]\) simple transitive verbs. It takes the affix \(-\text{an}\) to indicate its objective voice. It means the application or extraction of what the N base designates on or from the OBJ referent.

For example:

- pinta 'paint' tali? 'tie' laso 'put a ribbon on'
- benda 'bandage' asin 'put some salt' bakod 'fence'
- ganda 'make pretty' talbos 'pick young shoots'
- gatas 'milk' laki 'enlarge' tamis 'sweeten'

12. binendahan ng manlalaro? ang kaniyang tuhod
   bandage player his knee
   \[ [+\text{AC} ] \\
   [+\text{AGT} ] \\
   [+\text{NM} ] \\
   [+\text{OBJ} ] \]
   'The player bandaged his knee.'

13. gagatasan ni Juan ang kanilang kambing
   milk their goat
   \[ [+\text{AC} ] \\
   [+\text{AGT} ] \\
   [+\text{NM} ] \\
   [+\text{OBJ} ] \]
   'Juan will milk their goat.'

While the verb stems derived through the first six DR's are morphologically identical to their source N's, the stems which are created by the succeeding DR's require the presence of certain derivational affixes.
VDR-7: Time Verbs

\[
\begin{array}{c}
\text{[} +N \text{]}
\end{array}
\begin{array}{c}
\text{[} +\text{time of day} \text{]}
\end{array}
\rightarrow
\begin{array}{c}
\text{[} +V \text{]}
\end{array}
\begin{array}{c}
+\text{Derv}
\end{array}
\begin{array}{c}
- [+]\text{NM}
\end{array}
\begin{array}{c}
- [+]\text{OBJ}
\end{array}
\begin{array}{c}
-\text{pot}
\end{array}
\begin{array}{c}
+\text{act}
\end{array}
\]

VDMR-7: \[ v \[ \rightarrow \] v[pag] \]

VDR-7 states that a time verb can be derived from a noun which pertains to the time of day, season or occasion. Like derived phenomenal verbs, time verbs are marked for not cooccurring with a nominative actant nor any other obligatory actant. The nouns are usually non-roots, and the derived verb stems are marked [-pot, +act] and they require the prefixing of the affix pag- as indicated by the accompanying VDMR-7. Being a PAG-stem, the time verb stem class is marked by the active affix m-, instead of um-. For example:

- pag?umaga 'become morning'
- pagtag?ulan 'be rainy season'
- pagmadaling-araw 'be dawn'
- pagdapat-hapon 'be twilight'
- pagbukang-liwayway 'be sun-rise time'
- pag?ala-una 'be one o'clock'

14. magbubukang-liwayway na sun-rise already

'It will be sunrise soon.'

VDR-8: Verbs of Occupation or Trade

\[
\begin{array}{c}
\text{[} +N \text{]}
\end{array}
\rightarrow
\begin{array}{c}
\text{[} +V \text{]}
\end{array}
\begin{array}{c}
+\text{Derv}
\end{array}
\begin{array}{c}
- [+]\text{INS}
\end{array}
\begin{array}{c}
+ [+]\text{OBJ}
\end{array}
\begin{array}{c}
-\text{affl}
\end{array}
\begin{array}{c}
-\text{pot}
\end{array}
\begin{array}{c}
+\text{act}
\end{array}
\]

VDMR-8: \[ v \[ \rightarrow \] v[pag] \]
One class of simple intransitive verbs derived by VDR-8 denotes doing something to be in a particular profession or occupation, or engaging in a trade expressed by the base N. The stems in this class are prefixed by pag- and marked by the active voice affix m-. For example:

- pagdoktor 'to be a doctor'
- pagmanok 'be in the chicken business'
- pagpulis 'to be a policeman'
- pagbigas 'be in the rice trade'
- pagpare? 'to be a clergyman'
- paghampas-lupa? 'be a vagabond'

15. magmementra ang anak ni Mang Ado
   be a teacher  child
   [+NM]       [+OBJ]

'Mang Ado's child will study to be a teacher.'

Another set of verb stems belonging to a similar subcategory as above derives by the following rule:

VDR-9: Verbs of Growth

\[
\begin{align*}
  [+N] & \rightarrow [+V \\
  & +Derv \\
  & -[+INS] \\
  & [+OBJ] \\
  & -([-AC, +OBJ])^7 \\
  & -affl \\
  & -pot \\
  & [+act]
\end{align*}
\]

VDMR-9: \( v[ \rightarrow v[pag] \)

This set of verbs derived by VDR-9 denotes growth. It may optionally cooccur with a [+OBJ] which can be expressed only in the accusative case form and some of whose features are shared by the base N. The accusative objective is interpreted as an inalienable part of the nominative objective referent. These two actants are said to be coreferential and, therefore, the cooccurrence of two identical case relations is permitted.
If the item selected for the role of the accusative is identical to the base N, meaning that the verb already expresses it, the sentence is rejected by the speakers not because it is ungrammatical, but rather because it is totally redundant and thus carries no information; it has no use in communicating anything. The verbs of growth are also sub-classified under the [-pot, +act] stems, hence, they exhibit the derivational affix pag- and take the voice affix m-. For example:

- pagbunga 'bear fruit'
- pagdalantao 'bear a child; be pregnant'
- pagbulaklak 'bear flowers; grow tissue; blossom'
- pagusbong 'grow shoots'
- pag?asin 'develop salt crystals'

16. hindi? magbubunga ng talong ang kamatis
not bear fruit eggplant tomato (plant)

'The tomato plant will not bear eggplants.'

VDR-10: Verbs of Wearing or Utilizing

\[ [+N] \rightarrow [+V +Derv [+AGT]] [-loc [+OBJ] [+NM, -AGT] [-AC, +OBJ] -affl -pot +act] \]

VDMR-10: \[ V \rightarrow V[pag] \]

Any noun the speaker conceives of as possible to wear or utilize either internally, i.e., consume, or externally may serve as base for VDR-10. The derived verb stems express the wearing or utilizing of what is designated by the base N. These verbs may cooccur with an optional [+OBJ] actant which Jespersen (1924:133) refers to as cognate object.
In general, this actant is unexpressed although implied. When it is manifested, it refers to a specific subtype or brand of what is designated by the base N. This situation is similar to the preceding verbs of growth where the OBJ referent is already expressed by the verb base. This [-pot, +act] class of verbs of wearing can be distinguished from the [+erg] verbs of using derived by VDR-4 in that the former's overriding meaning is that of a continued or repeated activity rather than a single instance of an action, which is what the latter indicates.

Like other PAG-stems, this derived set of [-pot, +act] verbs takes the m- marker to indicate its agentive voice. For example:

- pagsapatos 'wear shoes'
- pagpabango 'wear perfume'
- pagbarong-tagalog 'wear barong-Tagalog shirt'
- pag-'make-up' 'wear make-up'
- pagsaging 'eat a banana'
- pagkuwintas 'wear a necklace'
- pagpurga 'take laxative'
- pag-ero plano 'take an airplane'
- pagpabango siya pagkapaligo? (ng 'Worth') [+[NM] [+[AGT] [+[AC] [+[OBJ]]

'After bathing, she wears Worth perfume.'

- mag-ero plano siya (ng 'Western') pagpunta niya sa 'Morgantown' [+[NM] [+[AC] [+[OBJ]]

'She will take a (Western Airlines) airplane when she goes to Morgantown.'
VDR-ll: Verbs of Acquisition

\[ [+N] \rightarrow [+V
+Derv
-[-INS]
+:OBJ]
-\text{aff1}
-pot
+:act ]

VDMR-ll: \( V \rightarrow V[pagka] \)

Verb stems can be derived from N's which designate objects that can be acquired by a OBJ referent. They express the meaning 'appearance or development of the N on a OBJ referent' or the unexpected occurrence of 'having N'. The OBJ referent is not cognate with the N in the verb base and the event is beyond the control of the OBJ actant. This class is a member of the subclass of simple intransitive verbs.

The corresponding morphophonemic rule VDMR-ll attaches the derivational affix \text{pagka} to the N base. Rather than treat the affix as a composite of two separate units \text{pag} and \text{-ka} (see Bloomfield, 1917: 268-69 and Llamzon, 1968:178,195) and label \text{-ka} as distinct from other instances of the same affix, the present analysis follows Blake (1925) in part in considering it a single unit which is a member of the \text{[-pot, +act]} affixes. It expresses the meaning acquisition. The rationale behind this approach is that the stem forms, in any of its related or inflected variety, never occur with this \text{-ka} without the accompanying \text{pag}. Moreover, this is the preferable analysis since it offers the advantage of a simpler, more direct reference to rule formulation without any loss in generalization. Like PAG-stems, PAGKA-stems are also marked by the voice affix \text{m}. For example:

pagkapera 'acquire money' pagkasakit 'come to have illness'
pagkalamat 'develop a crack'  pagkasugat 'come to have a wound'
pagkasuwerte 'come to be fortunate'  pagkabukol 'come to have a boil'

19. nagkalamat ang baso nang buhusan ko
develop a crack glass when pour I

ng ma'init na tubig
hot water

'The glass developed a crack when I poured hot water in it.'

Where an unexpected event is not attributed to a OBJ referent, but simply occurs, the derived verb stem is referred to as an 'event' verb. The rule that accounts for this limited class of verbs is as follows:

VDR-12: Event Verbs

\[
\begin{align*}
\text{[+N} & \quad \text{[+V} \\
\text{+event] } & \rightarrow \text{ [+V} \\
& \quad \text{+Derv} \\
& \quad \text{-[+OBJ]} \\
& \quad \text{-[+NM]} \\
& \quad \text{-pot} \\
& \quad \text{+act}
\end{align*}
\]

VDMR-12: \( \forall \rightarrow \forall \text{[pagka} \\
pagkagera 'have a war'  pagkagulo 'have trouble'
pagkasalot 'have pestilence'  pagkasakuna? 'have an accident'
pagkasunog 'have a fire'  pagka?aksidente 'have an accident'

20. nagkagulo sa plasa kagabi
have trouble town-square last night

'There was trouble at the town-square last night.'

Event verbs are similar to phenomenal and time verbs in being subjectless. On the basis of this feature, all three classes may belong together. It is interesting to note that both acquisition and event verbs are related in meaning to one type of special verb, the verb
pagkaro'on 'come to have; come to occur' which is in turn related to another special verb, the existential verb mayro'on 'have; exist'. The verb pagkaro'on expresses the meaning acquisition or event as in the following sentences:

19.a. nagkaro'on ng lamat ang baso
    come to have crack glass
    [+AC] [+NM] [+OBJ]

    'The glass came to have/developed a crack.'

20.a. nagkaro'on ng gulo (sa plasa kagabi)
    there occur trouble
    [+AC] [+OBJ]

    'There was trouble (at the town-square last night).'

Syntactically, the verb pagkaro'on is marked for two coreferential OBJ's, the accusative one being interpreted as part of or is contained in the nominative OBJ. In both acquisition and event verbs, this accusative OBJ referent does not cooccur because the verbs themselves already express the 'occurrence' of what is indicated by their bases derived from corresponding N's.

VDR-13: Verbs of Imitation

\[
(+N) \rightarrow (+V \\
+Derv \\
- [+INS] \\
+ [+OBJ] \\
- affl \\
- pot \\
+ act)
\]

VDMR-13: \[ V[ \rightarrow V[pagsa

Nouns that depict a peculiar behavior can be verbalized to mean 'pretend to be or behave like N'. The noun may be a profession or occupation, a nationality, an animal or creature, a social class, etc.
These verbs are referred to as verbs of imitation acted out by the cooccurring OBJ referent. They belong to the class of simple intransitive verbs and to the morphological type [-pot, +act] marked by the derivational affix pagsa-. Like the other subtypes of [-pot, +act], these verbs of imitation also take the voice affix m-. For example:

- pagsapari? 'pretend to be or act like a priest'
- pagsakastila? 'act like a Spaniard'
- pagsapulubi 'pretend to be a beggar'
- pagsatengang-kawali? 'pretend to be deaf' (Lit.: pretend to have ears like a frying pan)
- nagsamangingisda? pretends to be a fisherman
- ang espiya spy

'The spy posed as a fisherman.'

The affix pagsa- is treated as a whole unit rather than as consisting of two individual affixes pag- and sa- attached to the stems by two derivational processes because the affix sa- never occurs as a separate verb derivational affix. Similar to ka- in pagka- and si- in pagsi-, discussed previously, sa- is considered an inextricable part of pag-. These three affixes having the distinct initial syllable pag- are related to the active stem marker pag-. They all belong to the morphological class [-pot, +act] and thus all take the active inflectional affix m-.

4.3.1.2 Verb Stems Derived from Adjectives

4.3.1.2.1 Adj Category in Contrast with N and V Categories

To say that a verb stem derives from an adjective instead of from a noun implies a distinction between the lexical categories Adj and N,
Adjectives are usually affixed and they may be derived from noun or verb stems. When they are simple roots, it is sometimes difficult to determine whether they are Adj's or N's since both can occur in certain identical contexts. However, there are other constructions which admit only Adj's and not N's and vice versa. The forms that can serve as test structures for Adj's are as follows:

(a) An adjective can be fully reduplicated with the linker na/-ng between the items to denote an intense degree of the quality expressed by the adjective base. For example:

- payat 'thin'  
- pihikan 'fastidious'  
- pangit 'ugly'  
- dakila? 'great; sublime'

-payat na payat 'very thin'  
-pihikang-pihikan 'very fastidious'  
-pangit na pangit 'very ugly'  
-dakilang-dakila? 'very great'

(b) An adjective referring to a quality or characteristic takes the prefix pinaka- to indicate a superlative form. For example:

- pinakapayat 'thinnest'  
- pinakapihikan 'most fastidious'  
- pinakapangit 'ugliest'  
- pinakadakila? 'greatest; most sublime'

(c) A degree adjective occurs in the construction with mas/ lalo-ng/ higit na ... sa/kaysa sa to express comparison of quality which is ascribed more to one object than to another. For example:

- mas mahal 'more expensive'  
- higit na bantog 'more popular'  
- lalong tamad 'more lazy'  
- mas bago 'newer'

Neither nouns with objective referents nor abstract nouns can occur in the above constructions. Thus, the following forms are ungrammatical:

*payat na payat (bahay 'house')  
*dunong na dunong (dunong 'wisdom')
In contrast, there is a structure which allows the occurrence of abstract nouns, roots or derived nouns, but never adjective roots or stems. Compare the following pairs of sentences:

22.a. balita sa kapayatan ang batang iyan
   popular thinness child that
   'That child is known for his thinness.'

22.b. balita sa kadunungan ang batang iyan
   intelligence
   'That child is known for his intelligence.'

In the nominal position occupied by the abstract nouns kapayatan 'thinness', derived from the adjective payat 'thin', and kadunungan 'intelligence; wisdom', derived from the noun dunong 'intelligence', only the root dunong can occur unaffixed with the same meaning as the derived abstract noun. 9 Thus,

23.a. *balita sa payat ang batang iyan

23.b. balita sa dunong ang batang iyan

If both payat and dunong belong to either Adj or N, then we would expect them to occur in identical environments. From the illustrations above, we observe that where payat occurs, as in a, b and c, dunong does not; and where dunong occurs, as in 23.b, payat does not. These contextual restrictions are evidences which justify a categorial distinction between N roots and Adj roots. The identical structure of the two abstract nouns in 22.a and 22.b is brought about by a derivation rule operating on both N and Adj root inputs to derive abstract noun forms with the affix ka- -an. These forms now belong to the class
of abstract nouns which already contains the underived member *dunong*.

The noun root *dunong*, however, just like other abstract and concrete nouns can be the source of derived adjectives. The most common formation is with the affix *ma*- which may be historically connected with *may* 'to have'. Hence, with the adjective form *madunong* 'intelligent', we can predict the corresponding forms:

(a) *madunong na madunong* 'very intelligent'

(b) *pinakamadunong* 'most intelligent'

(c) *mas / lalong / higit na madunong* 'more intelligent'

To show that the two categories *N* and *Adj* differ from the category *V*, for verbs, we have to cite instances where verb roots occur but *N* or *Adj* roots do not. Generally, verbs must occur with a voice inflectional affix and an aspectual manifestation. On this count, the roots *payat* and *dunong* do not qualify as verbs since they can freely occur unaffixed. In addition, in the limited contexts where verb roots can serve as alternant forms of voice and aspect inflected forms, as in the two instances below, the *N* and *Adj* roots in question cannot occur.

These two instances pertain to imperative [+imp] and repetitive [+rep] forms. For example:

24.a. tumayo° ka
stand up you

[+imp]

'Stand up.'

24.b. tayo° ka

[+imp]

'Stand up.'
25.a. kuma?in kayo ng saging
    eat      you     banana
    [+imp]
    'Eat some bananas.'

25.b. ka?in kayo ng saging
    [+imp]
    'Eat some bananas.'

The [-comp] aspect form of a verb stem such as iyak 'cry' umi?iyak.

To express a [-comp], [+rep] form, the verb root is fully reduplicated
with the particle nang between them. For example:

26. iyak nang iyak ang bata?
    cry           child
    [+rep]
    'The child keeps crying/The child is crying incessantly.'

27. ka?in nang ka?in ang bata? ng saging
    eat          child     banana
    [+rep]
    'The child keeps eating bananas.'

Being qualities, it is evident that neither payat nor dunong can
take the imperative form. Under a special situation where a command is
used for some hypnotic stunt, these two roots can occur but only with
an accompanying voice affix um- as in the following:

28. pumayat      ka
    become thin  you
    'Grow thin.'

29. dumunong      ka
    become wise  you
    'Grow wise.'

Similarly, the only way to express a [+rep] process of becoming thin
or becoming wise is by using the affixed forms as in:
30. **pumayat nang pumayat ang bata?**  
become thin child  
'The child grew thin increasingly.'

31. **dumunong nang dumunong ang bata?**  
become knowledgeable child  
'The child increasingly became knowledgeable.'

The non-occurrence in verbal position of **payat** and **dunong** as independent roots (cf. 24.b, 25.b, 26 and 27 above) indicates that they are not basically verb roots. However, they can serve as base for derived verb stems. From the adjective root **payat**, we can regularly derive the verb **pumayat** 'become thin' (see VDR-14). Within the derived form **dumunong** 'become wise', it could have come from either the noun root **dunong** or from the derived adjective stem **madunong**. Based on the semantic feature [+inch], which generally means 'become', shared by derived verbs **pumayat** and **dumunong**, it is reasonable to suppose that both derive from their adjective counterparts **payat** and **madunong**. Without regard to the difference in morphological structure of their source stems, such an analysis may look more convincing because of the fact that a rule deriving [+inch] verbs from either underived or derived adjectives states a wider generalization rather than if the class comes from two different lexical categories. However, the morphological structure of the derived verb stems provides evidence for the more plausible and tenable analysis of two separate derivations, one from the Adj root class and another from the N root class. (See pp.226-28, Chapter III, for reasons for preferring the latter analysis.) This is to propose that where a ma-Adj can be derived from a N, a [+inch] verb can be potentially derived from the same N, too. A descriptive Adj in
root form also provides a potential source for inchoative verbs. Thus,

(a) \[ [+N] \rightarrow [+Adj] \]

\[
\text{dunong} \rightarrow \text{madunong}
\]

'intelligent' \rightarrow 'intelligent'

(b) \[ [+N] \rightarrow [+V] \]

\[
\text{dunong} \rightarrow \text{dumurtong (dumurtong is the voice-inflected form)}
\]

'become intelligent; develop in intelligence'

(c) \[ [+Adj] \rightarrow [+V] \]

\[
\text{payat} \rightarrow \text{pumayat (pumayat is the voice-inflected form)}
\]

'become thin'

The above examples show the existence of three distinct categories N, Adj and V.

One other piece of evidence to show the difference between verb roots and noun roots is the presence of two types of derived adjectives with the affix ma-. McGinn (1970) cites one form mabili 'marketable/saleable' from the verb bili 'buy' as an instance of an adjective derived from a verb. To this one, we can add a few other examples such as magalaw 'easily moved; unsteady' from the verb galaw 'move', mabuwal 'easily toppled; unstable' from the verb buwal 'fall headlong', malikot 'restless' from likot 'meddle with; tamper with'. This class of adjectives meaning 'be V-ed or able to V' expresses the capacity or quality of the cooccurring objective referent to undergo a process or perform an action. It differs from the class which derives from noun roots, e.g., marunong 'wise' from dunong 'wisdom', malakas 'strong' from lakas 'strength', matinik 'thorny' from tinik 'thorn', etc. The latter set denotes adjective stems meaning 'having the quality
designated by N' or 'being abundant in what the N indicates'. The semantic difference between these two sets of derived adjective stems supports the hypothesis that their respective sources do not belong to the same class. Another type of adjectives that derive from verb stems does not take the affix ma-. Instead, it is marked by an accent shift. For example: tunaw 'melted; dissolved' from tunaw 'to dissolve', durog 'crushed; pulverized' from durog 'to crush', basag 'broken; cracked' from basag 'to break', etc.

The preceding discussion has shown in one sense a kind of symbiotic relationship that exists among the different lexical categories whereby one category makes itself available as a base to create new items in another category. This relationship can best be depicted by the following diagram:

Thus, while N's and Adj's provide bases for derived V's, so do N's and V's for derived Adj's, and, likewise, Adj's and V's for derived N's. It is this dynamic process of lexical derivation which all languages employ to a considerable extent which accounts for the presence of one identifiable root in various morphological forms which correspond to certain specifiable functions.

4.3.1.2.2 DR's with Adj Input

Having justified the existence of the category Adj, we can now proceed with the rules for deriving verb stems from adjectives.
VDR-14: Active Inchoative Verbs

\[
\begin{align*}
\{[+\text{Adj}] \} \\
\{[+N] \} \\
[+\text{root}] \\
\rightarrow \\
\{[+\text{V}] \} \\
[+\text{Deriv}] \\
-\{[+\text{INS}]\} \\
+[\{+[+\text{OBJ}]\}] \\
[+\text{term}] \\
-\text{erg}
\end{align*}
\]

From underrived descriptive adjectives or abstract nouns, usually expressing quality or color, verbs of becoming can be derived with the features \([+\text{inch}, +\text{term}]\) and \([-\text{erg}]\). Similar to the inchoative verbs derived from \(N's\), this set of verbs means that the OBJ referent undergoes the process of becoming what the Adj indicates in a permanent or terminal nature. For example:

- pula 'become red'
- sariwa 'become fresh'
- dunong 'increase in intelligence'
- itim 'turn black'
- pangit 'become ugly'
- laki 'grow in size'
- puti 'turn white'
- bata 'become young'
- bigat 'increase in weight'

32. bumata? si Pat nang manggaling sa 'Australia'
look young when come-from

'Pat looked younger when she arrived from Australia.'

Another class of inchoative verbs derive from unaffixed adjectives or nouns. These adjectives are characteristically accented on the final syllable. The derived verb stems are identified as potential inchoative verbs. Unlike the preceding active inchoative verbs, the potential ones are marked by the derivational prefix \(\text{ma-}\), but the same meaning of terminal process of change-of-state is expressed. The process of getting into or being in a changed state may be gradual or cumulative or, on the other hand, it may be instantaneous, a transformation from one state to another occurring in a moment of time.
This set is accounted for by the following rule:

VDR-15: Potential Inchoative Verbs

\[
\begin{array}{c}
\{ +\text{Adj} \} \\
\{ +\text{N} \} \\
\text{root} \\
\rightarrow \\
\begin{array}{c}
\{ +\text{V} \} \\
+\text{Derv} \\
-\{ +\text{INS} \} \\
+\{ +\text{OBJ} \} \\
+\text{term} \\
+\text{pot} \\
-\text{act}
\end{array}
\end{array}
\]

VDMR-15: \[ \text{v} \rightarrow \text{v}[\text{ma}\text{]} \]

The resulting class of \([+\text{pot}, -\text{act}]\) inchoative stems identified by the affix \text{ma-} does not require any affix to indicate its objective voice. For example:

- mabuhay 'become alive'  
- malanta 'become wilted'
- magutom 'become hungry'  
- matuyo? 'become dry'
- mapagod 'become tired'  
- mabulok 'become rotten'
- mahibang 'become delirious'
- mabaliw 'become crazy'

33. nalanta ang mga halaman sa tindi ng init plant intense heat

'The plants withered due to the intense heat.'

Both classes of inchoative verbs may be related semantically to the special intransitive verb \text{paging} 'become' whose inflected objective voice form is \text{maging}, affixed with \text{m-}. It requires a cooccurring adjective or noun complement that expresses the state or form into which the nominative objective actant transforms. For example:

34. naging maliwanag ang panining niya (cf. \text{lumiiwanag} 'become clear')

'This vision became clear.'
35. magising mahal daw ang kape (cf. mamahal 'become expensive')
    [+Adj] [+NM] [+OBJ]

'It is said that coffee will become expensive.'

36. naging prinsipe ang palaka?
    become prince frog
    [+AC] [+NM] [+OBJ]

'The frog turned into a prince.'

A third set of inchoative verbs can be derived from some of the sources of the active inchoative verbs and of the potential inchoative verbs. In contrast to the two preceding types of inchoative verbs, this class expresses a non-terminal or temporal change-of-state or becoming. It belongs to the class of [-pot, +act] form class manifesting the derivational affix pang- and the active voice affix m-.

The examples below show the resulting forms after the nasal assimilation rule has applied on the final nasal of the affix and the initial sound of the base.

pamula 'turn reddish'    panlaki 'turn big'
pangitim 'turn blackish'  panghina? 'turn weak'
pamuti? 'turn white'     pangalogue 'turn shaky'

37. namula ang mukha niya nang mapahiya? siya
    turn red face his embarrass he
    [+NM] [+OBJ]

'He blushed when he got embarrassed.'

The rule that accounts for this class is as follows:
VDR-16: Non-terminal Inchoative Verbs

\[
\begin{align*}
\{+\text{Adj}\} & \quad \rightarrow \quad \{+V\} \\
+\text{root} & \quad \rightarrow \quad +\text{Derv} \\
\text{+cog} & \quad \rightarrow \quad +[+\text{AGT}] \\
\text{+cog} & \quad \rightarrow \quad +[+\text{DAT}] \\
\text{+cog} & \quad \rightarrow \quad +[+\text{OBJ}] \\
\text{+cog} & \quad \rightarrow \quad [+\text{pot}, [+\text{act}] \\
\text{+cog} & \quad \rightarrow \quad [+\text{pot}, [-\text{act}] \\
\text{\{+pot, +act\}} & \quad \rightarrow \quad [+\text{ins}] \\
\text{\{+pot, -act\}} & \quad \rightarrow \quad [-\text{ins}] \\
\end{align*}
\]

VDMR-16: \text{v[} \quad \rightarrow \quad \text{v[pang]}

The classes of perception and emotion verbs are also analyzed as having been derived from adjective and/or noun roots. The following rules account for these verb stems:

VDR-17: Perception Verbs

\[
\begin{align*}
\{+\text{Adj}\} & \quad \rightarrow \quad \{+V\} \\
+\text{root} & \quad \rightarrow \quad +\text{Derv} \\
\text{+cog} & \quad \rightarrow \quad +[+\text{AGT}] \\
\text{+cog} & \quad \rightarrow \quad +[+\text{DAT}] \\
\text{+cog} & \quad \rightarrow \quad +[+\text{OBJ}] \\
\text{+cog} & \quad \rightarrow \quad [+\text{pot}, [+\text{act}] \\
\text{+cog} & \quad \rightarrow \quad [+\text{pot}, [-\text{act}] \\
\end{align*}
\]

VDMR-17: (a) \text{v[} \quad \rightarrow \quad \text{v[ma] \quad / \quad [+\text{act}]}

(b) \text{v[} \quad \rightarrow \quad \text{v[ma] \quad / \quad [-\text{act}]}

(c) \text{v[} \quad \rightarrow \quad \text{v[ka] \quad / \quad [-\text{ins}]}

VDR-18: Verbs of Emotion

\[
\begin{align*}
\{+\text{Adj}\} & \quad \rightarrow \quad \{+V\} \\
+\text{root} & \quad \rightarrow \quad +\text{Derv} \\
\text{+emo} & \quad \rightarrow \quad +[+\text{AGT}] \\
\text{+emo} & \quad \rightarrow \quad +[+\text{DAT}] \\
\text{+emo} & \quad \rightarrow \quad +[+\text{OBJ}] \\
\text{+emo} & \quad \rightarrow \quad [+\text{pot}, [+\text{act}] \\
\text{+emo} & \quad \rightarrow \quad [+\text{pot}, [-\text{act}] \\
\end{align*}
\]

VDMR-18: (a) \text{v[} \quad \rightarrow \quad \text{v[ma] \quad / \quad [-\text{act}]}

(b) \text{v[} \quad \rightarrow \quad \text{v[ka] \quad / \quad [-\text{ins}]}


Based on the meaning of the source stems, the derived stems are marked either as [+cog] or [-cog], and, likewise, as [+emo]. The morphological-voice features on the verb trigger the assignment of their corresponding derivational affixes. (For examples, see pp. 238-42, Chapter III.)

Two other classes of verbs can be derived from the same sources of perception and emotion verb classes. They are labelled intentional perception verbs and verbs of provocation.

VDR-19: Intentional Perception Verbs

\[
\begin{array}{c|c}
\text{+Adj} & +V \\
\text{+root} & +Derv \\
\text{acog} & -[+AGT] \\
 & [+DAT] \\
 & [+OBJ] \\
 & -[+NM,-OBJ] \\
 & \text{acog} \\
 & \text{ntn} \\
 & \text{erg} \\
\end{array}
\]

The intentional perception verbs derived through VDR-19 differ from the output of VDR-17 in three ways: (a) they inflect only for the objective voice as restricted by the feature [-[+NM,-OBJ]]; (b) they manifest only one morphological form, the [+erg]; and (c) they denote intention indicated by the feature [+ntn] which accounts for the semantic difference between verbs such as listen versus hear, look versus see, and the like. Below are pairs of perception and intentional perception verbs in their objective voice inflected forms for comparison.

(a) [+cog] Verbs

malaman 'know'
ma?unawa?an 'comprehend'
ma?intindihan 'understand'
malimutan 'forget'

(a') Intentional [+cog] Verbs

alamin 'try to know; find out'
unawa?in 'try to comprehend'
imindihin 'try to understand'
limutin 'try to forget'
(b) [-cog] Verbs

madinig 'hear'
matanaw 'see from a distance'
mapuna 'notice'
ma'amoy 'smell'

(b') Intentional [-cog] Verbs
dinggin 'listen to'
tanawin 'look at from a distance'
punahin 'try to notice'
amuyin 'try to smell'

38.a. malalaman mo rin ang problema niya
know you too problem his
[+AC] [+NM] [+OBJ]

'You will know of his problem, too.'

38.b. aalamin mo ba ang problema niya
find out you problem his
[+AC] [+NM] [+OBJ]

'Will you find out what his problem is?'

VDR-20: Verbs of Provocation

\[
\begin{array}{c}
[+Adj] \\
[+N] \\
[+root] \\
[+emo]
\end{array} \rightarrow \\
[+V] \\
+Derv \\
[+[+AGT] \\
-[-[+DAT] \\
-[-[+OBJ,-hum] \\
+cs \\
+erg
\end{array}
\]

The class of verbs of provocation derived via VDR-20 differs from the class of emotion verbs derived by VDR-18 in that the former belongs to the case frame subcategory of simple transitive verbs. Although the agentive actant intends to provoke an emotional change-of-state in the objective referent, as designated by the verb base, the [+OBJ] actant, being human, may be indifferent to the action, and, thus, not necessarily experiencing a change in emotional state. Pairs of examples are listed below to show contrast between verbs of emotion and verbs of provocation.
(a) Verbs of Emotion

- matakot 'be afraid of s.t.'
- ma'inis 'be irritated with s.t.'
- magalit 'be angry at s.t. or with s.o.'
- magulat 'be surprised with s.t.'

(a') Verbs of Provocation

- takutin 'scare s.o.'
- inisin 'irritate s.o.'
- galitin 'make s.o. angry'
- gulatin 'surprise s.o.'

39.a. nagulat si Boombie kay Grace

- be surprised

\[ [+\text{NM} ] \quad [+\text{L} ] \quad [+\text{DAT} ] \quad [+\text{OBJ} ] \]

'Boombie was surprised with Grace.'

39.b. ginulat ni Grace si Boombie

- surprise

\[ [+\text{AC} ] \quad [+\text{NM} ] \quad [+\text{DAT} ] \quad [+\text{OBJ} ] \]

'Grace surprised Boombie.'

Adjective roots and abstract noun roots denoting quality such as appearance, size, color, taste, abstract quality, etc. can also be the source of another class of derived verb stems which may be referred to as verbs of assessment.

VDR-21: Verbs of Assessment

\[
\begin{array}{c}
[+[\text{Adj}]} \quad [+\text{V}] \\
[+[\text{N}]} \quad [+\text{Derv}] \\
[+\text{root}] \quad -[+[\text{AGT}]} \\
\rightarrow \\
[+[\text{DAT}]} \\
[+\text{OBJ}]} \\
+\text{assm} \\
+\text{pot} \\
-\text{act} \\
\end{array}
\]

VDMR-21: \[ \psi [+] \rightarrow \psi [\text{ma}] \]

This class can be distinguished from the active inchoative verbs not only in its syntactic and semantic features but in its morphological
form as well. In comparison with potential inchoatives, whose morphological form is identical to the verbs of assessment, the latter has a different set of case frame features. By CFRR-13 (see p.194, Chapter III), this class is marked as taking only the [+DAT] as its subject and manifesting its [+OBJ] only in the locative case form. The single voice form in its paradigm is marked by -an.

Verbs of assessment, as mentioned before, express the [+DAT] actant's judgment or assessment of the quality ascribed to a definite [+OBJ] actant. When the verb refers to natural conditions such as the weather, the [+OBJ] is usually unexpressed. For example:

- ma?init 'consider hot'
- mali?it 'consider small'
- malamig 'consider cold'
- mapayat 'consider thin'
- masansang 'consider as strong-scented'
- mali?it 'consider small'
- mapayat 'consider thin'
- masansang 'consider as strong-scented'

40. nagandahan kami sa palabas sa TV kagabi
    consider pretty we show TV last night
    [+NM] [+L]
    [+DAT] [+OBJ]

'We considered the TV show last night good.'

Two other subclasses of psych verbs derived from adjectives, roots or derived forms, are more limited than those created by the preceding VDR's. They are labelled verbs of attitude and verbs of enactment.

VDR-22: Verbs of Attitude

\[ [+Adj] \to [+V
    \quad [+Deriv
    \quad -[+AGT]
    \quad [+DAT]
    \quad [+OBJ]
    \quad \text{attd}
    \quad \text{erg} \]
Adjectives which may designate an attitude a [+DAT] experiencer may take towards a OBJ referent, be it a person or a state of affairs, may have corresponding derived verbs of attitude. In this class, the full form of the adjective, unaffixed or ma- affixed, is carried over to the derived stem. They belong to the [+erg] morphological class. Its voice paradigm consists of only the objective voice and it is marked by the affix -in. For example:

- dakila? 'honor; exalt'
- masama? 'take as adverse'
- mali?it 'take as trivial'
- malaki 'take as enormous'
- mabuti 'take as good'
- mabigat 'take as insurmountable'
- mahal 'take as valuable; love'
- mahalaga 'take as precious'

41. dinadakila? ng mga Filipino si Rizal
   
   Consider great Filipino
   
   [+AC] [+NM] [+DAT] [+OBJ]

   'Rizal is considered great by the Filipinos.'

42. mamatamisin pa niya ang mamatay kaysa sa pumatay
   
   Take as sweet he die kill
   
   [+AC] [+NM] [+DAT] [+OBJ]

   'For him to die rather than to kill is considered by him sweeter.'

This class of verbs, having the feature [+erg] and taking the -in affix, can be easily confused with agentive verbs of the same morphological structure and taking the same voice affix. For instance, compare the following:

43. mamabutihin niya ang tulong mo
   
   Take as good he help your
   
   [+AC] [+NM] [+DAT] [+OBJ]

   'Your help will please him.' (Lit.: Your help will be taken by him as good.)
44. babasagin niya ang bote
break he bottle

[+AC] [+NM]
[+AGT] [+OBJ]

'The bottle will be broken by him.'

The two constructions are identical in form except for their case relation and semantic features. The features on the former class are accounted for by VDR-22, without which it would have been difficult to distinguish the two classes and relate the [+attd] to other [-emo] verbs.

VDR-23: Verbs of Enactment

[+Adj] \rightarrow [ +V \\
+Deriv \\
-[- +AGT] \\
+ [+DAT] \\
-[+OBJ, -def] \\
-attd \\
-pot \\
+act ]

VDRM-23: \( v[ \rightarrow v[pag \)

Verbs marked [-attd] are verbs of enactment. They derive from Adj's that refer to a personal trait or quality. They mean the intentional performance or display of the trait indicated by the Adj base. The behavior exhibited by the [+DAT] actant is always in relation to a definite [+OBJ] actant. This means that in the non-nominative case form, the [+OBJ] is realized in the locative. The stem form of this class is the [-pot, +act] and its paradigm consists of the dative voice marked by \( m- \) and the objective voice marked by -\( an \). For example:

pagmata'as 'be snobbish'  pagmabuti 'act kindly'
pagmasama? 'behave badly'  pagmaba?it 'behave well'
pagmarahas 'act aggressively'  pagmasungit 'be ill-tempered'
45.a. nagmamaba?it na ang anak ni Rosa sa mga kalaro? niya
be good child playmates his

'Rosa's child is now behaving well towards his playmates.'

45.b. pinagmamaba?itan na ng anak ni Rosa ang mga kalaro? niya

Related to the preceding class of verbs of enactment is a similar
set which expresses the exertion of effort to appropriate for one's self
the personal quality or characteristic designated by the source noun or
adjective. These verbs are referred to as verbs of exertion, and they
are derived as follows:

VDR-24: Verbs of Exertion

\[
\begin{array}{l}
\left\{ \begin{array}{l}
\text{Adj} \\
\text{N}
\end{array} \right\} \\
\text{root}
\end{array} \rightarrow 
\begin{array}{l}
+V \\
+\text{Derv} \\
-[-+\text{INS}] \\
+ [+\text{OBJ}] \\
-\text{affl} \\
-\text{pot} \\
+\text{act}
\end{array}
\]

VDMR-24: \( \begin{array}{l}
v_1 \\
v_1\text{[pagpaka]}
\end{array} \)

VDR-24 shows that only root adjectives and nouns can be the source of
these derived verb stems preceded by the affix pagpaka-. Belonging to
the PAG-stem class, these verbs take the affix m- to mark the objective
voice. Since these verbs express deliberateness, intention or volition
in attaining the quality indicated by the verb base to the utmost, the
OBJ referent can only be a human actant. This class belongs to the
broad class of [-affl, -pot, +act] simple intransitive verbs. For
example:

pagpakabanal 'exert effort to be virtuous'
pagpakatino? 'exert effort to be righteous'
pagpakababa? 'exert effort to be humble'
pagpakatatag 'exert effort to be stable'
pagpakasikap 'exert effort to be diligent'  pagpakahinahon 'exert effort to be calm'

46. nagpapakaba?it na kaya? ang bilanggo?
   try to be good       prisoner
   [+NM]                [+OBJ]

'Could the prisoner be exerting effort to be good?

Although there is a strong resemblance between verbs of enactment and verbs of exertion in the sense that both involve a deliberate or conscious display of a personal quality, they cannot be equated. The former involves a [+OBJ], grammatically present or not, to whom the quality exhibited is directed. With the latter, there is no such requirement. One may strive to be virtuous for its own sake. Also, we cannot posit that verbs of exertion derive from verbs of enactment, granted that they have identical case features, for two reasons. First, such an account will entail a morphophonemic complexity which is not at all felicitous. It will be necessary for the morphophonemic rule to delete the ma- given in the verbs of enactment and in its place substitute paka- while retaining the prefix pag- to account for the proper form of the verbs of exertion. Second, there are forms resulting from VDR-24 which do not have counterparts in the class derived by VDR-23, e.g., *magbanal, *magmababa? are both non-occurrent but magpakabanal and magpakababa? are. In view of these differences, verbs of exertion are considered as being directly derived from Adj's and N's.

4.3.2 Syntactic DR's That Change Verb Subcategories

The bases for subcategorizing primary verb stems in this study are the characteristic case frame, semantic and morphological-voice feature
It has been observed in the preceding chapter that some verb stems which differ from other related stems only in their morphological structure and associated voice inflectional paradigm can be derived from the more 'basic' verb stem form. The term 'basic' refers to the morphologically simplest stem form as compared with the same stem plus an affix, e.g. bigay 'give' is basic; the related affixed stem pagbigay can be derived from the basic form. These two stem forms may be related by a derivation rule in which the only difference lies in their morphological-voice features which correspond to the individual stem's voice inflectional paradigm and voice marking. This new feature introduced by the DR, then, indicates a new subcategory, separate from but related to the subcategory of the basic source form. The DR's that account for this type of lexical relation among verb stems may be referred to as DR's that do not change the array of case relation features. What they do is create a new stem class that manifests a voice paradigm different from its source.

On the other hand, there are verb stems which derive from a primary verb stem subcategory already established whose case relation features differ from their source. The difference lies in one of the following ways:

(a) A case relation feature is deleted without loss of semantic implication.

(b) A case relation is incorporated in another.

(c) A new case relation feature is introduced without altering the case features carried over from the source stem.

(d) A new case relation feature is introduced and the original
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case features carried over are altered.
The DR's that account for this second type of syntactic derivation are referred to as DR's that change case features.

4.3.2.1 DR's That Change Morphological-voice Features

The seven major case frame subcategories set up for primary verb stems are each further specified by semantic and morphological-voice features. The last set of features are identified as [+erg], [-erg], [-pot, +act], [+ins], [-ins], [+pot, +act] and [+pot, -act]. Although each of these classes represents a morphological structure corresponding to its own voice paradigm and voice affixes, some of them are related to a more basic stem class. The bases for determining which of two stem classes is more basic are as follows:

(a) its voice paradigm includes a major case relation, i.e., one which is not predictable from the occurrence of another case relation, e.g., [+OBJ], [+AGT], [+DAT] or [+LOC], and

(b) its morphological structure is the simplest of all stems manifesting a given root.

Of the seven morphological stem classes identified in the various case frame and semantic subcategories, the [+erg] and [-erg] are the basic classes from which some of the other non-root classes derive. From the different subclasses of agentive verbs, it can be observed that the [+erg] form does not allow the [+AGT] to cooccur as its subject. What it allows as subject is either the [+OBJ] or the [+LOC], if the latter is also specified. In comparison to this highly selective property of the [+erg], the [-erg] form is rather permissive and impartial to its cooccurring case relations. Each of its major case relations,
including a minor, one, the [+BEN], can be realized as subject. It is marked by either the active or the passive affix. The active affix um- marks the agentive voice while each of the passive affixes -in, -an and i- marks the objective, locative or dative, and benefactive voice. The class of [-pot, +act], which is marked by certain derivational affixes pag- or pang- and other prefixes with initial pag- or pang-, complements the corresponding [+erg] class in allowing its cooccurring [+AGT] to become subject. It takes the active affix m- to mark its agentive voice. In this respect, the [-pot, +act] class is related to the [+erg]. If it is not related to a [+erg], it may be any one of the following manifesting its own case frame:

(a) analogically formed with an affix and a base which is non-existent as an independent verb stem, e.g., paghilom 'heal' with the base *hilom;

(b) lexically derived from another lexical category, e.g., pagbunga 'bear fruit', pagSakastila? 'pretend to be a Spaniard', pagkapera 'acquire money'; and

(c) a form with a petrified affix, whose base does not exist as an independent form, e.g., pano?od 'watch', pakinig 'listen'.

With the basic stems [+erg] and [-erg], we will show how the other non-psychological, non-potential verb stem classes marked [-pot, +act], [+ins] and [-ins] are derived. The derivation rules that account for these stem classes are identified as primary verb derivation rules (PVDR's).
4.3.2.1.1 [-pot, +act] Stem Class

The [+erg] class of agentive verbs derive into the class of [-pot, +act] verbs by the following rule:

PVDR-1: [-pot, +act] Stem Class

\[
\begin{align*}
&\begin{array}{c}
  +[+AGT] \\
  +\text{erg} \\
  aF_i
\end{array} \\
\rightarrow \\
&\begin{array}{c}
  +V \\
  +\text{Derv} \\
  +[+AGT] \\
  -\text{pot} \\
  +\text{act} \\
  aF_i
\end{array}
\end{align*}
\]

PVDMR-1: \( \nu \) \rightarrow \( \nu[pag] \)

The rule states that an agentive verb marked [+erg] corresponds to a derived verb whose features are the same as its source except for the features [-pot, +act] which replace the feature [+erg]. The new features mean that the verb allows its cooccurring [+AGT] to be realized in the nominative case form marked by the active affix m-. The features \( aF_i \) indicate that all other syntactic and semantic features in the input are carried over to the output. The accompanying morphophonemic rule states that the verb stem is prefixed with pag-.

With this rule, all subclasses of agentive verbs marked [+erg] can predictably have a corresponding [-pot, +act] form. Thus, the classes of information verbs, of [+goal] and [-dir] subclasses of location verbs, and of the subclasses of simple transitive verbs, each of which manifests a [+erg] form, need not list separately their [-pot, +act] forms because the rule is 100% productive.

4.3.2.1.2 [+ins] Stem Class

The [+ins] stem class manifests only the subclasses under the location and simple transitive verb subcategories. As has been mentioned
previously, the [+INS] actant as a tool employed by the cooccurring
[+AGT] in the performance of an action is a minor case relation. As
specified by CFRR-5, its presence is conditioned by the case features
[+[+AGT],-[+DAT]]. The [+ins] stem class can be derived from the
[+erg] and [-erg] classes of the same case feature specifications.

PVDR-2: [+ins] Stem Class

\[
\begin{array}{c}
[+\text{AGT}] \\
-\text{[+DAT]} \\
\text{+root} \\
\alpha F_i \\
\end{array}
\xrightarrow{\text{+V}}
\begin{array}{c}
[+\text{AGT}] \\
-\text{[+DAT]} \\
\text{+INS} \\
\alpha F_i \\
\end{array}
\]

PVDMR-2: \( v \rightarrow v[pang] \)

By PVDR-2, [+ins] stems are created from either the [+erg] or the
[-erg] class of location and simple transitive verb subcategories. Other
features specified under each source, indicated by \( \alpha F_i \), are carried over
to the derived stem. By PVDMR-2, the instrumental stem is prefixed with
\textit{pang}.

In some instances, the [+ins] form is observed to be used by native
speakers without the derivational affix \textit{pang}, especially when the
objective voice of the source stem is not marked by the affix \textit{i}-. Thus,
one hears the inflected forms \textit{itulong} 'use for helping', \textit{ihiwa} 'use for
slicing', \textit{ibunot} 'use for plucking', \textit{ipunas} 'use for wiping', \textit{ibato} 'use
for hitting' substituting for the expected forms, based on the given
rule above, \textit{ipantulong}, \textit{ipanghiwa}, \textit{ipambunot}, \textit{ipampunas}, or \textit{ipambato},
respectively. Allowing a free alternation between the \textit{pang}- affixed
and the simplified (unaffixed) form of the [+ins] results in the ambi-
guity of a good number of [+erg] and [-erg] stems. For example:
47. itutulong niya ito sa mga mahihirap
   help he this poor
   [+NM]

   (a) 'This is what he will help the poor for./
       This is for whom he will help the poor.'
       (With benefactive voice meaning)

   (b) 'This is what he will help the poor with.'
       (With instrumental voice meaning)

48. ibukas mo ito
   open you this
   [+NM]

   (a) 'Open this.' (With objective voice meaning)

   (b) 'Open with this.' (With instrumental voice meaning)

While it is true that there are stems which may permit the absence of
the affix pang- and still express the meaning of an instrumental stem
unambiguously, there are many others that cannot be used without pang-
which do not become ambiguous, e.g., tapon 'throw; use for throwing',
?abot 'hand over; use for handing over', etc. It will be observed,
however, that every abbreviated [+ins] stem form has a corresponding
form with the affix pang- which is categorically unambiguous. This
situation shows the development of a competing DR which allows the non-
application of PVDMR-2 creating [+ins] stems without the affix pang-.
This process is an evidence of the tendency for the speakers to use the
simpler stem form to the degree where ambiguity is tolerable.

Another point that needs clarification in connection with [+ins]
verb stems is the distinction that must be made between two similar
pang- stem forms both of which express the meaning 'use something'.
Compare the following sentences:
49. ipampapano?od niya ng karera ang larga-bistang ito
watch he race binoculars this
[+AC] [+AC] [+NM] [+INS]

'These binoculars will be used by him to watch the race.'

50. ipambabahay niya ang tsinelas na iyan
house-wear he slippers that
[+AC] [+NM] [+AGT] [+OBJ]

'Those slippers will be used by him in the house.'
Lit.: 'Those slippers will be house-worn by him.'

The two verbs in the examples above are identical in morphological structure except that 49 has a verb base pano?od 'watch' and 50 has a noun base bahay 'house'. The pang-form pampano?od 'use for watching' is related to the verb stem pano?od but pambahay 'use for housewear' does not show precisely the same type of relationship with the base bahay which is the noun 'house'. Their respective case frames are also different; 49 consists of a cooccurring [+AGT], [+OBJ] and [+INS] which is shared by its source stem, and 50, by the meaning of the stem itself, does not permit a cooccurring [+INS]. These stems are marked for not cooccurring with [+INS]. The latter verb stem cannot express an agentive voice unless it is derived as a [-pot, +act] stem. Thus,

50.a. nagpambahay siya ng tsinelas
house-wear he slippers
[+NM] [+AC] [+AGT] [+OBJ]

'He used slippers for housewear.' (Lit.: He house-wore slippers.)

The correspondence indicates that the verb stem pambahay 'use for housewear' is not an instrumental stem in the same sense that pampano?od is. It is analyzed as a derived [+erg] stem from the noun bahay and affixed with pang- which in turn derives into the noun pambahay.
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This type of verb stem derivation is beyond the scope of the present study, however.

4.3.2.1.3 [-ins] Stem Class

Unless otherwise marked, a verb stem can cooccur with a [+RSN] actant, and as such it can be predicted that there is a form which expresses the reason voice. This stem is marked with the feature [-ins], and it can be derived directly from a basic stem class or from another derived stem class. As has been shown previously, [-ins] verbs of perception and emotion derive from Adj and/or N roots, hence, the following rule applies only to the morphological and semantic verb classes specified as follows:

PVDR-3: [-ins] Stem Class

\[
\begin{align*}
&\left[\text{-erg} \atop \text{aF}_i\right] \\
&\left[\text{-pot, +act} \atop \text{aF}_i\right] \quad \rightarrow \\
&\left[\text{+V} \atop \text{+Derv} \atop \text{-ins} \atop \text{aF}_i\right]
\end{align*}
\]

PVDMR-3: \[\text{y} \quad \rightarrow \quad \text{y}[\text{ka}]

PVDR-3 means that a derived [-ins] or reason stem can be created from either the basic stem class [-erg] or the derived stem class [-pot, +act] or even a [+ins]. The case frame and semantic features specified in any of these classes, identified by \(aF_i\), are carried over to the derived stem class. PVDMR-3 states that every derived stem form carried over from its source is prefixed with the derivational affix \(ka\). As has been observed in the preceding chapter, the verb stem classes indicating a cooccurring [+RSN] or the two other minor case relations [+BEN] and [+INS] as subject, are invariably marked by the voice affix \(i\). By this DR, instances of actually occurring verbs such
as *ikabigay, ikalaba*, supposedly derived directly from the [+erg] stems *bigay* 'give' and *laba* 'laundry', respectively, are labelled anomalous. Apparently, they are analogical reductions of the grammatical forms derived from the corresponding [-pot, +act] forms *ikapagbigay* and *ikapaglaba*. Simplification of these forms must have been motivated by the general resemblance of the [+erg] and the [-erg] morphological structure and by the fact that such a reduction does not result in a form which is homophonous with preexisting forms.

It is interesting to note that through this DR, we can account for the various kinds of bases the derived [-ins] stems acquire from their sources, thereby showing how certain combinations of affixes grow or expand. For example:

(a) From [-erg] class:
   
   (1) *tawag* 'call up for s.t.' $\rightarrow$ *katawag*
   (2) *hiram* 'borrow' $\rightarrow$ *kahiram*
   (3) *punta* 'go to' $\rightarrow$ *kapunta*

(b) From [-pot, +act] class:
   
   (1) *pagsabi* 'tell' $\rightarrow$ *kapagsabi*
   (2) *pamili* 'shop' $\rightarrow$ *kapamili*
   (3) *pano?od* 'watch' $\rightarrow$ *kapano?od*
   (4) *pagkakotse* 'acquire a car' $\rightarrow$ *kapagkakotse*
   (5) *pagpakasikap* 'work diligently' $\rightarrow$ *kapagpakasikap*

(c) From [+ins] class:
   
   (1) *panghiram* 'use for borrowing' $\rightarrow$ *kapanghiram*
   (2) *pangluto?* 'use for cooking' $\rightarrow$ *kapangluto?*
   (3) *pansibak* 'use for chopping' $\rightarrow$ *kapansibak*
4.3.2.2 DR's That Change Case Relation Features

The second type of syntactic DR's affect the case relation features registered in the source verb in one of four different ways. These changes are described under the following headings: (a) DR's that delete DR, (b) DR's that incorporate CR, (c) DR's that add CR without changing CR of source, and (d) DR's that add CR and change CR of source. Each of these rules is referred to as a secondary verb derivation rule (SVDR) because the input or source is a primary verb stem of a given case frame subcategory and the output or derived stem is of a different case frame subcategory, which may or may not be a major case frame subcategory. Its accompanying morphophonemic rule, if any, is identified as a secondary verb derivation morphophonemic rule (SVDMR).

4.3.2.2.1 DR's That Delete CR

SVDR-l: Derived Potential Process Verbs

\[
\begin{align*}
&\begin{bmatrix}
+V \\
+ [+\text{AGT}] \\
- [+\text{DAT}] \\
+ [+\text{OBJ}] \\
+\text{cs} \\
+\text{root} \\
\alpha F_{1} \\
\end{bmatrix} \\
&\end{align*} \quad \longrightarrow \quad \begin{align*}
&\begin{bmatrix}
+V \\
+\text{Der} \\
- [+\text{INS}] \\
+ [+\text{OBJ}] \\
-\text{affl} \\
+\text{pot} \\
-\text{act} \\
\alpha F_{i} \\
\beta F_{x} \\
\end{bmatrix} \\
&\end{align*}
\]

SVDMR-l: \( \nu \rightarrow \nu[\text{ma}] \)

The rule states that the class of agentive verbs marked [+cs] in root form corresponds to a class of derived simple intransitive verbs marked [-affl] with the morphological features [+pot, -act] and identified by the derivational affix ma-. From the array of case relation features, only the [+OBJ] actant in the input corresponds to the same
actant in the output. The derived verb no longer expresses an agentive referent responsible for bringing about the changed state of the [+OBJ] referent. The agent is merely implied or presupposed. The features $\alpha F_1$ represent other feature constraints in the source verb which also apply to the derived stem and $\beta F_x$ in the latter form are certain other features sporadically developed in the derivation. In the other succeeding rules, these last two types of features--$\alpha F_1$ and $\beta F_x$--will not be indicated in the feature matrices, but they will be presumed. Some examples of derived potential process verbs are as follows:

- masibak 'be chopped'
- masulat 'be written'
- maluto? 'be cooked'
- magawa? 'be made'
- mas ira? 'be torn'
- matahi? 'be sewn'

51. magagawa? na ang bahay ni Del

'make house

'Del's house will soon be built/finished.'

Having a morphological form and case frame identical to that of the [+inch, +term, +pot, -act] class, the new set of derived process verbs can be distinguished in terms of its meaning. Whereas the feature [+inch] expresses 'becoming' or developing into another state, the derived [-affl] means 'to be V-ed'. It is semantically similar to the primary class of [-inch, -affl, -erg] in expressing a process or event undergone by the object involved. It may be noted further that the class of [+inch] verbs in contrast to the derived [-affl] verbs do not have a corresponding primary agentive form. Thus, mahinog 'become ripe' does not have an underived agentive counterpart *hinog, which indicates that this verb is not intrinsically an agentive verb. However, an agentive
form can be derived from the same source of the verb mahinog, which is the adjective hinog, through a causative derivation resulting in the form pahinog 'allow to ripen'.

The rule above exemplifies the process referred to as intransitivization. Like the agentive verb input, calamity verbs and non-emotion psych verbs may also derive into the same class of potential intransitive verbs.

SVDR-2: Derived Potential Calamity Verbs

\[
\begin{align*}
\text{SVDR-2:} & \quad \text{Derived Potential Calamity Verbs} \\
\left[ +V \right] & \rightarrow \left[ +V \right] \\
\left[ +[+AGT] \right] & \rightarrow +[\text{Derv}] \\
\left[ +[+INS] \right] & \rightarrow -[+INS] \\
\left[ +[+OBJ] \right] & \rightarrow +[+OBJ] \\
\left[ +cs \right] & \rightarrow -\text{aff1} \\
\left[ \right] & \rightarrow +\text{pot} \\
\left[ \right] & \rightarrow -\text{act} \\
\end{align*}
\]

SVDMR-2: \[ \text{V} \rightarrow \text{V}[ma] \]

Similar to the preceding rule, SVDR-2 states that a simple non-inchoative, non-afflicted intransitive verb can be derived from a calamity verb marked [+cs]. By SVDMR-2, the derived stem is prefixed with ma-. For example:

- matupok 'be charred'
- mabali? 'be broken'
- matuklap 'be blown off'
- mawasak 'be destroyed'
- masunog 'be burned'
- malipad 'be blown away'

52. nasunog ang pabrika
burn factory
[+NM ]
[+OBJ ]

'The factory was burned.'
SVDR-3: Derived Intransitive Psych Verbs

\[
\begin{align*}
[+V] & \quad \rightarrow \quad [+V] \\
[-[+AGT]] & \quad \rightarrow \quad +[+AGT] \\
+[+DAT, -AO] & \quad \rightarrow \quad -[+DAT, -AO] \\
+[+OBJ] & \quad \rightarrow \quad -[+OBJ] \\
[+act] & \quad \rightarrow \quad -[+act] \\
[-att] & \quad \rightarrow \quad [+att] \\
[-pot, +act] & \quad \rightarrow \quad [+pot, -act] \\
\end{align*}
\]

SVDR-3 states that either a verb of emotion marked [+pot, -act] or a verb of non-attitude or enactment marked [-pot, +act] can be the source of simple intransitive verbs marked [-aff1] whose [+OBJ] corresponds to the [+DAT] of the source verb. The [+OBJ] in the source does not correspond to any actant in the output. The exact morphological features of the source verb are carried over unchanged to the derived verb. For example:

(a) [+pot, -act] Verbs
- matakot 'be afraid'
- matuwa? 'be joyful'
- magalit 'be angry'

(b) [-pot, +act] Verbs
- pagmata?as 'be snobbish'
- pagmabuti 'pretend to be good'
- pagmaramot 'be selfish'

53. natatakot ka pa ba
afraid you still
[+NM ]
[+OBJ ]

'Are you still afraid?'

54. nagmamata?as na siya ngayon
be snobbish he now
[+NM ]
[+OBJ ]

'He is snobbish now.'

In the last rule, there has been not only a deletion of a case relation but also a change in the marking of an original case relation,
i.e., the original [+DAT] corresponds to the [+OBJ] in the derived form.

4.3.2.2.2 DR's That Incorporate CR

A SVDR may have the effect of eliminating a case frame feature specified in the input on account of its being absorbed by or incorporated with another dominant case relation. In some cases, a CR that has been incorporated has the option of being expressed overtly but in a different role specified as [+COM] functioning as an attributive to the head N marked for the dominant case relation. In this function, however, the [+COM] is not part of the verb's case frame. The incorporation rule applies to verbs whose lexical content denotes an action which can be performed mutually by two agents or a psychological process which can be undergone mutually by two experiencers. The stems derived by this kind of rule are referred to as reciprocal verbs meaning 'to V each other'.

In view of the different case relations incorporated in each of the classes of agentive verbs, two separate DR's account for reciprocal agentive verbs. Another rule accounts for reciprocal psych verbs because they cooccur with a different dominant case relation which incorporates the meaning of the [+OBJ] referent and they manifest a different derivational affix.

SVDR-4: Reciprocal Transitive Verbs

\[
\begin{align*}
& [+V \\
& [+{AGT, aF_i}] \\
& {+[DAT, aF_i]} \\
& {+[LOC, aF_i]} \\
& {+[OBJ]} \\
& {+\text{root}} \quad \rightarrow \quad [+V \\
& {+\text{Derv}} \\
& -[+AGT, -p1] \\
& -[+AGT, -aF_i] \\
& -[+DAT] \\
& -[+LOC] \\
& {+[OBJ]} \\
& \text{recip} \\
& \text{pot} \\
& \text{act}
\end{align*}
\]
SVDMR-4: (a) \( \mathcal{V} \rightarrow \mathcal{V}[\text{an}] \)
(b) \( \mathcal{V}[\text{pag}] \)

The rule states that a verb exemplifying an information or a location subcategory can have a corresponding derived reciprocal verb whose [+AGT] must always be plural and must have the same selectional features as the actants identified in the source verb to indicate the combined meanings of the [+AGT] and the [+DAT] or [+LOC] in the original verb. Since the original DAT or LOC has been transformed, a new [+DAT] or [+LOC] is now prohibited from cooccurring with the derived verb. The derived verb is further specified with the semantic feature reciprocal [+recip] and the morphological features [-pot, +act].

SVDMR-4 comes in two parts. The first rule attaches to the root the affix \(-\text{an}\), which signifies reciprocation, and the second attaches the regular active derivational affix \(\text{pag}_-\).¹³

The derived reciprocal verbs exhibit only the agentive voice marked by the affix \(\text{m}_-\).¹⁴ The examples below show the sources and their corresponding derived forms.

(a) Information Verbs
   (a') Reciprocal Transitive Verbs

   balita? 'give news report'
   pagbalita?an 'exchange news'
   kuwento 'narrate stories'
   pagkuwentuhan 'exchange stories'
   tanong 'ask'
   pagtanungan 'ask each other'
   sulat 'inform by writing'
   pagsulatan 'write letters to each other'

55.a. ikinwento niya kay Maria ang nangyari
   narrate she she happening
   \([+\text{AC}] \quad [+L] \quad [+\text{NM}] \quad [+\text{OBJ}] \)

   'The happening was narrated by her to Maria.'
55.b. nagkuwentuhan sila (ni Maria) ng nangyari
tell each other they happening
[+NM ] [+AC ] [+OBJ ]

'They (with Maria) told each other what had happened.'

(b) Location Verbs (b’) Reciprocal Transitive Verbs

hiram 'borrow'
paghiraman 'borrow from each other'

utang 'take a loan'
pagutangan 'take a loan from each other'

bigay 'give'
pagbigayan 'give each other s.t.'

palit 'exchange; trade'
pagpalitan 'trade s.t. with each other'

wisik 'spray s.t. on s.o.'
pagwisikan 'spray s.t. on each other'

56.a. ipapalit ko ang selyo ko kay Mel
exchange I stamp my
[+AC ] [+NM ] [+L ] [+LOC ]

'I will trade my stamp with Mel.' (Lit.: I will exchange my stamp with Mel's.)

56.b. magpapalitan kami (ni Mel) ng selyo
exchange we stamp
with each [+NM ] [+AC ] [+OBJ ]
other [+AGT ] [+OBJ ]

'Mel and I will exchange stamps.'

SVDR-5: Reciprocal Intransitive Verbs

[+V ] [+[+AGT, αF₁ ] ] -> [+V ] [+Derv ]
[ -[+DAT ] ] [-loc ] [+OBJ, αF₁ ] [+root ]
[ +recip ] -pot [+act ]
With a simple transitive verb stem as input, the derived reciprocal stem becomes an intransitive verb. The original [+AGT] and [+OBJ] together correspond to the [+OBJ] of the derived verb which is thus required to occur only in the plural form. This OBJ incorporates the selectional features of the original AGT and OBJ identified by $aFi$. The semantic and morphological features that specify the derived verb further are identical with those in the preceding rule. Likewise, SVDMR-5 is identical to SVDMR-4. The only member of the voice paradigm of the derived reciprocal intransitive, which is the objective voice, is marked also by the active affix $m$-. For example:

(a) Simple Transitive Verbs (a') Reciprocal Intransitive Verbs

hampas 'hit s.o.' paghampasan 'hit each other'
suntok 'give s.o. a fist blow' pagsuntukan 'exchange fist blows'
hintay 'wait for s.o.' paghintayan 'wait for each other'
tulong 'help s.o.' pagtulungan 'help each other'
halik 'kiss s.o.' paghalikan 'kiss each other'
takot 'scare s.o.' pagtakutan 'scare each other'

57.a. kinamayan niya ang ka?ibigan niya
shake hands he friend his

[+AC] [+NM]
[+AGT] [+OBJ]

'He shook his friend's hand.'

57.b. nagkamayan sila (ng ka?ibigan niya)
shake hands they with each other

[+NM] [+OBJ]

'They (with his friend) shook hands with each other.'
SVDR-6: Reciprocal Psych Verbs

\[
\begin{align*}
\begin{array}{c}
+V \\
- [+AGT] \\
+ [+DAT, aF_i] \\
+ [+OBJ, aF_i] \\
+ \text{per} \\
+ \text{ntn}
\end{array} & \rightarrow & \\
\begin{array}{c}
+V \\
+ \text{Der} \\
- [+INS] \\
- [+OBJ, -\text{pl}] \\
- [+OBJ, -aF_i] \\
+ \text{recip} \\
+ \text{per} \\
- \text{pot} \\
+ \text{act} \\
+ \text{ntn}
\end{array}
\end{align*}
\]

SVDMR-6: (a) \[ \text{a}_V \rightarrow \text{an}_V \]

(b) \[ \text{b}_V \rightarrow \text{b}_V \text{ag} \]

By SVDR-6, intentional perception verbs can derive into intentional reciprocal psych verbs. Based on their case frame, the resulting derived verbs fall under the subcategory of simple intransitive verbs. The constraints on the [+OBJ] in the output are precisely the same as those in SVDR-5. In the above rule, however, the [+OBJ] in the derived verb corresponds to the combined original [+DAT] and [+OBJ]. Furthermore, the derived verb reflects the feature [+ntn] carried over from the source verb. The derived verb means that each pair of members of the [+OBJ] referents tries to do a mutual action which leaves on both members the psychological experience designated by the verb base. By SVDMR-6, the morphological structure of the new stem becomes identical to the preceding derived sets. It is also marked with the active affix \text{m-} to indicate its objective voice.

It will be noted that no reciprocal verbs can be derived from psych verbs of assessment nor verbs of attitude. However, there is a separate but similar rule as SVDR-6 which applies to non-attitude verbs (see VDR-23) to derive another set of reciprocal psych verbs. The only difference is that the accompanying morphophonemic rule does not need
part b since the input already carries the affix pag-. Because of this similarity, the rule for this particular verb subclass need not be shown. Its application is illustrated in the examples given below under c'.

(a) [+cog, +ntn] Verbs
intindi 'understand s.t.'
limit 'forget s.t.'
alala 'remember s.t.'

(a') Reciprocal [+cog] Verbs
pagintindihan 'try to understand each other'
paglimutan 'try to forget each other'
pagalalahian 'remember each other'

58.a. uunawain ng nanay ang tatay
understand mother father
[+AC ] [+NM ]
[+DAT ] [+OBJ ]
'Mother will try to understand father.'

58.b. nagunawain ang nanay at tatay
understand mother father
each other [+NM ]
[+OBJ ]
'Mother and father tried to understand each other.'

(b) [-cog, +ntn] Verbs

(b') Reciprocal [-cog] Verbs
tanaw 'take a glimpse at s.t.'
aninaw 'try to see s.t.'
puna 'notice'
pagtanawan 'try to take a glimpse of each other'
paginawan 'try to see each other'
pagpunahan 'take notice of each other'

59.a. tinanaw ni Loty si Nene
look at [+AC ] [+NM ]
[+DAT ] [+OBJ ]
'Loty looked at Nene.'

59.b. nagtanaw sila (ni Nene)
look at they each other [+NM ]
[+OBJ ]
'They looked at each other.'
(c) [-attd] Verbs

- pagmatañas 'be snobbish to s.o.'
- pagmabuti 'act kindly towards s.o.'
- pagmarahas 'act harshly toward s.o.'

(c') Reciprocal [-attd] Verbs

- pagmatañas 'snub each other'
- pagmabutihan 'show kindness to each other'
- pagmarahasan 'act harshly to each other'

60.a. nagmatañas si Rosa sa kamagáral niya
snub classmate her

\([+NM]\) \([+L]\)
\([+DAT]\) \([+OBJ]\)

'Rosa snubbed her classmate.'

60.b. nagmatañasan sila (ng kamagáral niya)
snub each they
other

\([+NM]\)
\([+OBJ]\)

'They snubbed each other.'

4.3.2.2.3 DR's That Add a CR Without Changing CR of Source

Two productive rules for deriving secondary verb stems without causing a change in the case feature specifications on the source stem may be referred to as 'transitivization'. The term is used to mean adding either a [+AGT] or a [+DAT] case feature in the case frame where there used to be none. The verb stem derived with an added [+AGT] expresses that what is indicated by the verb is now instigated or performed by an agent. The process or action is under the agent's control. These derived verb stems become new members of the agentive subcategory. On the other hand, a verb stem derived with an added [+DAT] actant expresses that the change of state undergone by a [+OBJ] as indicated by the verb base is suffered by the [+DAT] referent. These new stems fall under the subcategory of psych verbs.
SVDR-7: Derived Location and Simple Transitive Verbs

\[
\begin{array}{c}
+V \\
[-[+AGf]] \\
[-[+DAT]] \\
+[+OBJ] \\
[+loc] \\
[-affl] \\
[-erg]
\end{array}
\quad \rightarrow \quad
\begin{array}{c}
+V \\
+[+AGf] \\
[-[+DAT]] \\
+[+OBJ] \\
[+loc] \\
[-af] \\
+erg
\end{array}
\]

The rule states two sources of derived agentive verbs. They are the set of locomotion verbs marked [+loc] and the subclass of non-afflicted [-affl] verbs, both further marked [-erg]. With the introduction of a [+AGf], the corresponding derived stems have case relation features identical to those classified under location and simple transitive verbs. The syntactic and semantic features of the locomotion verbs identified as [+loc] are carried over to the derived stem, while the feature [-affl] of the intransitive input is replaced by [-af]. These derived stems, which originally are marked [-erg], are now marked [+erg].

In the following examples, the objective voice inflected forms rather than the stems are given to show readily and more vividly the distinction between the source and the derived forms.

(a) Locomotion Verbs

- pumasok 'enter'
- bumalik 'return to'
- lumayo? 'go away from'
- humiwalay 'separate from'
- humiga? 'lie down'
- sumakay 'ride on'

(a') Derived Location Verbs

- ipasok 'take s.t. in'
- ibalik 'return s.t. to'
- ilayo? 'take s.t. away from'
- ihiwalay 'separate s.t. from'
- ihiga? 'lay s.t. down'
- isakay 'put s.t. on a vehicle; take s.t. for a ride'
61.a. tumakas ang bilanggo sa bilibid
   escape prisoner prison
   [-erg] [+NM] [+L]
   [+OBJ] [+LOC]

'The prisoner escaped from prison.'

61.b. itinakas niya ang bilanggo sa bilibid
   [+erg] [+AC] [+NM] [+L]
   [+AGT] [+OBJ] [+LOC]

'He took the prisoner away from prison.'

(b) Simple Intransitive
( b' ) Derived Simple Transitive
Verbs, [-affl] Verbs, [-af]
bumukas 'open'
ibukas 'open s.t.'
umikot 'rotate; turn'
i?ikot 'turn s.t. around'
tumungo 'bow; bend'
itungo 'bend s.t.'
tumakbo 'run'
itakbo 'run s.t. away'

62.a. bumagsak ang mga libro
   fall book
   [-affl] [+NM]
   [+OBJ]

'The books fell.'

62.b. ibinagsak niya ang mga libro
   drop he book
   [-af] [+AC]
   [+AGT]
   [+NM]
   [+OBJ]

'The books were dropped by him.'

At this point, it may be instructive to call attention to the
direction of derivation that has been adopted in this analysis as stated
by SVDR-7. While this rule says that location and simple transitive
verbs can be derived from locomotion and simple intransitive verbs,
respectively, it is also conceivable to have a rule stating a derivation
in the reverse direction. Such a rule will entail the deletion of the
AGT actant. As two equally plausible possibilities, both directions of
of derivation must be assessed on the basis of their semantic and syntactic implications as well as their relationship with other DR's. Semantically speaking, the meaning conveyed by the locomotion and simple intransitive verbs is that the process or event can occur without the intervention of an agent, i.e., the OBJ is capable of undergoing the process by itself, the process being a natural one. It is possible to conceive of an object falling as in bumagsak without any agent dropping it or causing it to fall. With an added AGT, the derived verb is saying that it is now an action performed by someone on an object. Thus, the derived form ibagsak means to drop something. By following the direction of derivation as given in SVDR-7, it can be expected that some process verbs will not undergo the DR, since it is not 100% productive, and these verbs are those without any corresponding derived forms. For example, pumunta 'go to' has no corresponding *ipunta or lumisan 'depart' has no *ilisan. These lexical gaps reveal the limitations on the application of the derivation rule. If the direction of derivation were from the agentive verb to the locomotion or simple intransitive verb with a concomitant agent deletion, we cannot account for the existence of the latter forms which do not correspond to any source or agentive forms.

It will be recalled that in DR's where a case relation is deleted (see SVDR-1 to SVDR-3), the derived stem continues to imply the role of the actant that has been deleted. If this is true of all types of deletions, then we would expect the same condition for the proposed agentive actant deletion. Reviewing the examples given above as input and considering them as the supposed output of the proposed alternative rule, we find that they do not convey even the slightest suggestion of
the role of a deleted AGT. For this reason, these verbs are considered inherently intransitive in the sense of being non-agentive. These two counter-arguments to the proposal indicate that the present analysis is much more convincing.

The relation established by SVDR-7 between the locomotion-location and simple intransitive-simple transitive correlates can be shown to differ from the inchoative-simple transitive verbs which may erroneously be identified as resulting from SVDR-7. The inchoative verbs marked [+term, -erg] and those marked [+term, +pot, -act] have been shown through VDR-4, VDR-14 and VDR-15 to derive from N and Adj roots. Similarly, by VDR-6, simple transitive verbs marked [-cs, +erg] are derived from N roots. The few transitive verbs marked [+cs, +erg] that derive from Adj roots have not been accounted for here by a DR. These VDR's show an indirect relationship between the inchoative and simple transitive verbs that have a common base. The direction of derivation may be shown as follows:

(a) \[ N \rightarrow \text{Intransitive Verb} \]
\[ +\text{inch}, +\text{term}, -\text{erg} \]
\[ \text{laki 'size'} \rightarrow \text{lumaki 'increase in size; become big'} \]
\[ \text{ganda 'beauty'} \rightarrow \text{gumanda 'grow in beauty; become pretty'} \]

\[ \text{Adj} \rightarrow \text{Intransitive Verb} \]
\[ +\text{inch}, +\text{term}, -\text{erg} \]
\[ \text{payat 'thin'} \rightarrow \text{pumayat 'become thin'} \]

\[ \{N, \text{Adj}\} \rightarrow \text{Transitive Verb} \]
\[ \text{laki} \rightarrow \text{lakihan 'enlarge s.t.'} \]
\[ \text{ganda} \rightarrow \text{gandahan 'make s.t. pretty'} \]
\[ \text{payat} \rightarrow \text{payatan 'make s.t. thin'} \]
In a, both intransitive and transitive verbs are shown to derive directly from N or Adj roots and adjectives can derive from N roots as well. In b, they derive directly from Adj roots. By this manner of derivation, we find that each intransitive or transitive form is derived independently of the other. This account looks appealing especially when we consider the morphological structure in b of the three forms lanta, malanta and lantahin. It is more efficient to derive lantahin from the Adj lanta than from the verb malanta [+term] since as we have stated previously the latter derivation will entail the more complex process of subtracting the derivational affix ma- from the source. The former analysis lends support to the system of derivation illustrated in a where both intransitive and transitive verbs appear in the same stem form as their source N or Adj. Thus, these primary verbs can be distinguished from the secondary verbs derived in SVDR-7.

Finally, the account as described above is the only approach that is closely related to the other DR's that similarly introduce a case
relation feature. As will be seen more clearly in the derivation of causative and social verbs, the direction from intransitive to transitive agentive can explain more adequately the linear arrangement of derivational affixes.

SVDR-8: Derived Psych Verbs

\[
\begin{align*}
&\begin{array}{c}
+[V] \\
-[-INS] \\
+[+OBJ, \alpha F_i] \\
{[+inch]} \\
{[-affl]} \\
[-erg] \\
{[+pot, -act]} \\
{[-pot, +act]}_1
\end{array} & \rightarrow & \begin{array}{c}
+[V] \\
{+Derv} \\
-[-AGT] \\
{+[+DAT]} \\
{[-+OBJ, -\alpha F_i]} \\
{-[-AC, +OBJ]} \\
{+[erg]} \\
{[+pot, -act]} \\
{[-pot, +act]}_1
\end{array}
\end{align*}
\]

SVDR-8 states that a simple intransitive verb marked [+inch] or [-affl] and [-erg], [+pot, -act] or [-pot, +act] corresponds to a psych verb marked experience [+exp] showing a [+DAT] which has been added and a [+OBJ] carried over from the source verb. It denotes that the DAT referent suffers from or is affected by what the cooccurring OBJ referent undergoes as indicated by the verb base. The experience is usually adverse in terms of physical, emotional or psychological disposition. This effect arises from the fact that the OBJ is the alienable or inalienable possession of the DAT. This derived class imposes the implication that the DAT suffers from what happens to the OBJ. The [+OBJ] can only be realized in the accusative form which implies that the only voice the stem can inflected in is the dative. Each verb stem form carried over from the source is marked by the voice affix -an to indicate the dative voice. For example:
(a) Simple Intransitive Verbs, [+inch]

sumakit 'become painful'
lumaki 'increase in size'
mabulok 'become rotten'
mangatog 'tremble'
mangitim 'turn black and blue'

(a') Derived Psych Verbs, [+exp]
sakitan 'pain on'
lakihan 'become big on'
mabulukan 'suffer rotting of s.t.'
pangatugan 'suffer trembling'
pangitiman 'suffer bruising'

63.a. sumakit ang ulo ni Bobby

\[\text{pain head} \quad \text{[+NM]} \quad \text{[+OBJ]}\]

'Bobby's head ached.'

63.b. sinakitan si Bobby ng ulo

\[\text{[+exp]} \quad \text{[+NM]} \quad \text{[+AC]} \quad \text{[+DAT]} \quad \text{[+OBJ]}\]

'Bobby suffered a headache.'

(b) Simple Intransitive Verbs, [-aff1]

pumutok 'burst'
tumagas 'leak; spill'
masunog 'be burned'
masira? 'be broken'
mabali? 'be broken/fractured'

(b') Derived Psych Verbs, [+exp]

putukan 'suffer from a bursting of s.t.'
tagasan 'suffer from a leak of s.t., usually a hemorrhage'
masunugan 'suffer burning of s.t.'
masira?an 'suffer breaking of s.t.'
mabali?an 'suffer a fracture of s.t.'

64.a. pumutok ang apendisitis niya

\[\text{burst appendix his} \quad \text{[+NM]} \quad \text{[+OBJ]}\]

'His appendix burst.'
64.b. pinutukan siyang apendisitis

'+exp] [+NM] [+AC] [+DAT] [+OBJ]

'His appendix burst on him.'

The derived stems in this class are always passive in meaning. The cooccurring DAT as an affected participant should be distinguished from a OBJ actant that is directly affected by a cooccurring INS in similar derived verbs.16

4.3.2.2.4 DR's That Add CR and Change CR of Source

The sets of DR's that involve the addition of a case relation feature and at the same time a change in the case feature specifications of the source stem as they are carried over to the derived stem create three classes of derived verb stems, namely, (a) derived calamity and transitive verbs, (b) derived causative verbs, and (c) derived social verbs.

4.3.2.2.4.1 Derived Calamity Verbs

SVDR-9: Derived Calamity Verbs

\[
\begin{align*}
\text{[+V]} & \quad \text{[+INS]} \quad \text{[+OBJ, } \alpha F_1] \quad \text{[-aff]} \quad \text{[-erg]} \\
\text{[+V]} & \quad \text{+Der} \quad \text{-[INS, } \alpha F_1] \quad \text{+[OBJ]} \quad \text{-cs} \\
\text{+erg} & \quad \text{+erg}
\end{align*}
\]

The rule states that verb stems specified with case frame features manifesting calamity verbs and further specified with the features [-cs, +erg] can be derived from simple intransitive verbs marked [-affl, -erg]. The derived stem has a new [+OBJ] actant introduced while the original [+OBJ] identified by the features \( \alpha F_1 \) assumes the role of a INS. Meeting the case feature specifications in the input
of CFRR-9 (see p. 177, Chapter III), the derived verb stem is marked
[-[-AC, +INS]] which implies that the only member of its voice paradigm
is the objective voice. The root stem is carried over to the derived
stem and it takes the voice affix -an. It usually expresses an event
which is adverse, and it is usually rederived and is more commonly
occurring in the semantically derived accidental or unexpected form.

For example:

(a) Simple Intransitive
Verbs, [-affl]
kumulo 'boil'
pumutok 'burst; explode'
bumagsak 'fall'
gumulong 'rollover'
sumingaw 'steam'
umiyak 'cry'

(a') Derived Calamity Verbs, [-cs]
kulu?an 'be boiled over'
putukan 'be hit by an explosion'
bagsakan 'be fallen over'
gulungan 'be rolled over'
singawan 'be steamed by'
iyakan 'be cried on'

65.a. pumutok ang rebentador firecracker
explose [+NM ] [+OBJ ]

'The firecracker exploded.'

65.b. pinutukan ng rebentador ang silya namin
[-cs ] [+AC ] [+NM ] [+INS ] [+OBJ ]

'The firecracker blew up our chair.'

Based on the morphological-voice form and case form cooccurrences,
the derived calamity verbs are identical to the derived psych verbs
discussed above. The difference between the two classes becomes more
apparent when the [+DAT] actant of the psych verb is compared with the
[+OBJ] actant of the calamity verb. The former actant is indirectly
affected by what happens to a related [+OBJ] actant, except when the OBJ is its inalienable possession, while the latter is directly affected by the cooccurring external [+INS].

Another type of DR accounts for similar derived calamity verbs when the input is a locomotion verb subcategory. It is stated as follows:

**SVDR-10: Derived Calamity Verbs (without a CR added)**

\[
\begin{array}{c}
[+V] \\
- [+AGT] \\
- [+DAT] \\
[+LOC, aF_1] \\
[+OBJ, \beta F_x] \\
goal \\
- erg
\end{array} \quad \rightarrow \quad \begin{array}{c}
[+V] \\
+ Deriv \\
- [+INS, - \beta F_x] \\
- [+OBJ, - aF_1] \\
+ cs \\
+ erg
\end{array}
\]

By SVDR-10, a more limited set of calamity verbs can be derived from the [+goal, -erg] locomotion verbs without the necessity of adding a new case relation feature as given in SVDR-9. What happens is that the two original case relations specified in the input assume different roles in the output. The former [+OBJ] actant becomes a [+INS], their correspondence being marked by \( \beta F_x \), and the former [+LOC] acts as a [+OBJ], both identified by \( aF_1 \). The [+OBJ] of the derived stem denotes that which is directly affected by the event designated by the verb base, and, at the same time, it implies that it is the terminal goal or location of the [+INS]. Unlike the output of SVDR-9, the stems derived by SVDR-10 are marked by -in to indicate the objective voice. For example:

(a) Locomotion Verbs, [+goal] (a') Derived Calamity Verbs, [+cs]

pumasok 'go in; enter' pasukin 'enter in; break in'

umakyat 'climb' akyatin 'be climbed on'
66.a. pumasok ang tubig sa sapatos niya
   go in water shoes his
   [+NM] [+L] [+OBJ] [+LOC]  
   'The water went into his shoes.'

66.b. pinasok ng tubig ang sapatos niya
   [+cs] [+AC] [+NM] [+INS] [+OBJ] 
   'His shoes were drenched with water.' (Lit.: His shoes were into by the water.)

4.3.2.2.4.2 Derived Causative Verbs

Most productive of all syntactic derivation rules is the set that creates verb stems labelled causative, [+caus]. Causative verbs in Tagalog are morphologically marked. They can be distinguished from their non-causative counterparts in having the affix pa-. Syntactically, they differ from their non-causative source forms in having a 'new' agentive act ant in their case frames. While the source verb may or may not have a cooccurring AGT, the derived causative verb always has one. The AGT introduced by the rule is referred to as the causer or director of the action, event or state characterized by the verb base. With this particular case feature, all causative verbs may be said to be transitive verbs, and, in fact, based on the case features of their corresponding source verbs, different types of transitive causative verbs are created. As has been noted previously, some items that meet the specifications on the input for the rule that derives transitive verbs do not undergo the rule. Instead, these elements which may be
either Adj or N roots or primary and simple intransitive verbs undergo the causativization rule. The causative derived stems denote an 'indirect action' (Schachter and Otanes, 1972:321) with a [+AGT] causing, directing or allowing the occurrence of what is designated by the verb base. The reason for setting up a separate rule for deriving the causative stem is not only for its characteristic form and meaning but also for the generality of its application. It has been observed that a derived causative verb from a locomotion or simple intransitive verb source can also express the idea of 'indirect' or passive control which is different from the meaning of a non-derived or derived transitive verb. We can compare a derived transitive verb (by SVDR-7) and a derived causative verb from the same source as follows:

67.a. itutumba niya ang lata
   upset    he     tin can
   [+Derv]  [+AC]  [+NM] [-af] [+AGT] [+OBJ]
   'He will upset the tin can.'

67.b. patutumbahin niya ang lata
   upset    [+AC]    [+NM] [+caus] [+AGT] [+OBJ]
   'He will let the tin can cause the tin can to tumble.'

Both verbs in the examples above are derived from the intransitive verb tumba 'tumble' as in tumumba ang lata 'The tin can tumbled'. In 67.a, the meaning implied by the verb is that the agent will handle the tin can and put it in a lying position. In 67.b where the derived verb is causative, the agent will do something that will cause the can to tumble, e.g. jar the table on which the tin can sits, throw something at the can, or even exercise some magical influence on the tin can.
In a sense, the distinction rests on the agent's direct control of the action in the first sentence in contrast to its indirect control in the second. In the former case, performing the action implies the successful attainment of the changed state of the object involved, which is not necessarily true of the latter case. If one says that he did what is expressed by 67.a, it cannot be the case that the tin can was not upset. On the contrary, if one says that he did 67.b, it is logically possible to ask whether or not the tin can did in fact get upset. It is emphasized, however, that the two classes of derived stems exemplified above are syntactically identical and both of them belong to the simple transitive case frame subcategory. The first causativization rule, like SVDR-7, introduces a case relation feature but does not change the case frame features carried over from the source.

4.3.2.2.4.2.1 Causative Verbs Derived from Non-agentive, Non-dative Verb Stems

SVDR-11: Causative Transitive Verbs

\[
\begin{align*}
+V & - [+AGT] \\
- [+DAT] & [ < + loc > ] \\
- [ - affl ] & + [+OBJ, aF_1 ] \\
{ - erg } & \{ - pot, + act \} \\
\end{align*}
\]

SVDRM-11: \( V \rightarrow V[p\text{a}] \)

The rule states that a locomotion verb, where the feature within angled brackets is included, corresponds to a derived causative verb of location, and a simple intransitive verb marked [-affl] corresponds
to a derived causative [-af] simple transitive verb. The source verbs are further specified with either [-erg] or [-pot, +act] which features are replaced by [+erg] in the derived stem. In both instances, a AGT is introduced in the case frame which is carried over from the source stem. The derived stem expresses causation, direction or permission by the AGT as indicated by the feature [+caus]. The feature [+erg] indicates that its voice paradigm consists of only the objective voice or the objective and locative, as the case may be. By SVDMR-11, the derived stem is marked by the derivational affix pa-. The objective voice marker of the derived stem is -in, and the locative voice marker is -an. For example:

(a) Locomotion Verbs

pumunta 'go to'
bumalik 'return to'
layu?in 'go away from'

humiga? 'lie down'

(a') Derived Causative Location Verbs

papuntahin 'cause to go to'
pabalikin 'cause to return to'
palayu?in 'cause to go away from'
pahiga?in 'cause to lie down'

68.a. umalis ang pusa sa sopa
leave cat sofa
[+NM] [+L]
[+OBJ] [+LOC]

'The cat departed from the sofa.'

68.b. pa?alisin mo ang pusa sa sopa
leave you cat sofa
[+caus] [+AC] [+NM] [+L]
[+AGT] [+OBJ] [+LOC]

'Drive the cat away from the sofa.' (Lit.: Make the cat leave the sofa.)

In most cases, the locative voice requires the cooccurring [+OBJ] to be realized in the locative form, thus:
69. pinatirahan ni Jay sa katiwala? ang bahay nila sa bukid
live in overseer house their farm
[+caus] [+AC] [+L] [+NM] [+OBJ]

"Jay had/let the overseer live in their house on the farm."

(b) Simple Intransitive Verbs, [-affl]

- gumaraw 'move'
- umiyak 'cry'
- tumakbo 'run'
- pumutok 'explode'
- pagdoktor 'study to be a doctor'
- pagpakaba?it 'try to be good'
- pagkaswerte 'have some fortune'

(b') Derived Causative Transitive Verbs, [-af]

- pagalawin 'cause to move'
- pa?iyakin 'cause to cry'
- patakbuhin 'cause to run'
- paputukin 'cause to explode'
- papagdoktorin 'cause to/let s.o. study to be a doctor'
- papagpakaba?itin 'cause to/let s.o. try to be good'
- papagkaswertehin 'cause s.o. to have good fortune'

70 a. naghilom na ang tahi? sa kaniyang kamay
heal stitches her hand
[+NM] [+OBJ]

"The stitches on her hand have healed."

70 b. pinapaghilom ng doktor ang tahi? sa kaniyang kamay
[+caus] [+AC] [+NM] [+OBJ]

"The stitches on her hand were caused/allowed to heal by the doctor."

It may be stressed that DR's do not apply automatically to all members of a given class; each derivation of a new stem is a separate historical event that takes place when there is a need for the new item. Within the class of derived simple intransitive verbs of affliction (see VDR-2), certain verbs which indicate events that can be subjected to an agent's control have entered the lexicon via SVDR-11.
Some of these causative simple transitive verbs can mean either direct or indirect action, e.g., pa'ullanin 'cause to rain' as can be used, say, to denote what a rainmaker can do, and certain others can only mean 'allow/let the event occur', e.g., palamukin 'allow to be swarmed by mosquitoes'.

The observable lexical gaps which the rules cannot account for are by no means an indication of the rule's shortcoming. What they suggest is that the expected derived counterparts have not entered the lexicon, perhaps, due to some extra-linguistic factors, but the possibility of their formation as the need for them arises is guaranteed by the rule. Partly for this reason, Starosta (1974:8) claims that "causatives are not and cannot be derived by a synchronic rule of grammar. Each one enters the lexicon at a different period of time and all must be listed in the lexicon," that is, the lexicon of a competence-grammar.

4.3.2.2.4.2.2 Causative Verbs Derived from Agentive Verb Stems

SVDR-12: Causative Ditransitive Verbs

\[
\begin{align*}
  &\begin{bmatrix}
    +V \\
    [+AGT, +F] \\
    [-DAT] \\
    [+OBJ, +F] \\
  \end{bmatrix} \\
  \rightarrow \\
  &\begin{bmatrix}
    +V \\
    +Der \\
    [+AGT] \\
    [-DAT, -F] \\
    [-OBJ, -F] \\
    +caus \\
    [+erg] \\
    [-pot, +act] \\
    [+dat] \\
  \end{bmatrix}
\end{align*}
\]

SVDMR-12: \( V[pa] \rightarrow V[pa] \)

SVDR-12 states that agentive non-dative verbs marked [+erg], [-erg] or [-pot, +act] correspond to derived causative verbs whose case frame features are similar to those of information verbs in having at least
a cooccurring [+AGT], [+DAT] and [+OBJ]. For lack of a better term, we will refer to this characteristic case frame as the broad class of ditransitive verbs. As in the preceding causativization rule, the derived verb stem is marked with the feature [+caus] to denote the meaning of a causative verb. Likewise, it also adds a new [+AGT], the actant which directs or orders the performance of the action designated by the verb base. The directed actant is realized as the [+DAT] which corresponds to the [+AGT] in the source verb, the correspondence of these two case relations being marked by $\alpha F_i$. The shift to this particular role is semantically and syntactically motivated. As the actant directed or ordered to do something, it is similar to the [+DAT] of information verbs in receiving what is being communicated. Similar to the [+DAT] of psych verbs, it experiences being given a direction, command or permission. When occurring with a causative verb, this actant in question is marked by the locative case form in its non-nominative form which is similar to the marking of the non-nominative [+DAT] of information verbs. Thus, the following redundancy rule applies:

\[
\text{CFRR-17: } \begin{bmatrix} +\text{caus} \\ +\text{erg} \\ +[+\text{AGT}] \\ [+\text{DAT}] \\ [+\text{NM}] \\ [-+\text{DAT}] \end{bmatrix} \rightarrow [-[-L]]
\]

The above rule states that when the causative verb is not inflected for the dative voice, the [+DAT] can only be realized in the locative case form.

All other case relation features in the source verb are carried over to the derived stem, e.g., the [+LOC] where the input is a location verb and/or the [+OBJ]. The derived form is marked [+erg] when the
source is [+erg], but it is marked [+dat], for dative, when the source is either [-erg] or [-pot, +act]. The derived [+caus, +erg] does not allow a dative voice inflection whereas the derived [+caus, +dat] does, as implied by the following redundancy rule:

\[
\text{MVRRR-9: } \begin{bmatrix} [+\text{caus}] \\ [+\text{dat}] \end{bmatrix} \rightarrow \begin{bmatrix} [+\text{NM}] \\ [- +\text{AGT}] \\ [+\text{NM}] \\ [- +\text{INS}] \\ [+\text{NM}] \\ [- +\text{RSN}] \end{bmatrix}
\]

SVDIRR-12 marks the derived stem with the causative derivational affix \( \text{pa}^- \). To indicate the dative voice, the stem takes \(-\text{in}\); it takes \(-\text{an}\) to mark the locative voice. The objective voice form maintains at least two major distinctions, namely, those marked [+extn] and [-cs] in the source continue to take the \(-\text{an}\) affix and all other subclasses take only the affix \(-\text{i}\). In the following examples of causative ditransitive verbs, the objective voice inflected forms are cited.

(a) Location Verbs

- ibigay 'give'
- itapong 'throw away'
- kunin 'take'
- bilhin 'buy'

(a') Causative Ditransitive Location Verbs

- ipabigay 'cause s.t. to be given by s.o. to s.o. else'
- ipatapon 'cause s.t. to be thrown away by s.o.'
- ipakuha 'cause s.t. to be taken by s.o. from some place'
- ipabili 'cause s.t. to be bought by s.o.'

71.a. ibibigay ni Ruby ang Bibliya kay Lynn

'give Bible [+AC] [+NM] [+L]
 [+AGT] [+OBJ] [+LOC]

'The Bible will be given to Lynn by Ruby.'
71.b. ipapabigay ni Jim kay Ruby ang Bibliya kay Lynn
 [+caus] [+AC] [+L] [+NM] [+L]

'Jim will have Ruby give the Bible to Lynn.'

(b) Simple Transitive Verbs, [+extn]

(b') Causative Ditransitive Verbs, [+extn]

'b. ipapabigay ni Jim kay Ruby ang Bibliya kay Lynn
 [ + caus] [+ AC] [+ L] [+ NM] [+ L]

J im will have Ruby give the Bible to Lynn.'

(b) Simple Transitive Verbs, [+extn]

tulungan 'help'

patulungan 'cause s.o. to be helped by s.o. else'

daluhan 'attend to; succor'

padaluhan 'cause s.o. to be attended to by s.o. else'

bantayan 'guard; look after'

pabantayan 'cause s.o./s.t. to be looked after by s.o. else'

72.a. binabantayan ni Onya si Melinda

look after [+AC] [+NM] [+AGT] [+OBJ]

'Melinda is being looked after by Onya.'

72.b. pinabantayan ni Clara kay Onya si Melinda

[+caus] [+AC] [+L] [+NM] [+DAT] [+OBJ]

'Clara had Onya look after Melinda.'

72.c. [papagbabantayin] ni Clara si Onya kay Melinda

[papagbabantayin] [+AC] [+NM] [+L] [+AGT] [+DAT] [+OBJ]

'Onya will be asked by Clara to look after Melinda.'

(c) Simple Transitive Verbs, [+cs] or [-af]

(c') Causative Ditransitive Verbs

.lutu'in 'cook'

ipaluto? 'cause s.t. to be cooked by s.o.'

.gawa'in 'make'

ipagawa? 'cause s.t. to be made by s.o.'

.hampasin 'strike'

ipahampas 'cause s.t. to be struck by s.o.'

.ilatag 'spread out'

ipalatag 'cause s.t. to be spread out by s.o.'
From the examples given above to illustrate the application of rules SVDR-11 and SVDR-12, we can observe the changes in the subcategorization of the verb base as a result of the addition of a new [+AGT] actant. Note the shift from a non-causative verb stem subcategory to the causative verb stem subcategory as follows:

(a) a simple intransitive stem becomes a simple transitive stem;

(b) a locomotion stem becomes a location stem;

(c) a simple transitive becomes a ditransitive; and

(d) a location becomes a ditransitive location stem.

These modifications imply two things: 1) there are causative verb stems that belong to already existing case frame subcategories, e.g.,
a and b; c may be identical to the case frame subcategory of information verbs but they differ in their meanings, hence, they should be distinguished, and 2) a new subcategory manifested by the secondary verb class d which consists of the case relations [+AGT], [+DAT], [+OBJ] and [+LOC] must be set up. To this subcategory may be added another class of secondary verb stems. They are the causative stems that correspond to the class of information verbs which are accounted for by the following rule:

\[
\begin{align*}
\text{SVDR-13: Causative Ditransitive Information Verbs} \\
\begin{array}{c}
\left\{ +V, +[\text{AGT}, \alpha F_i], +[\text{DAT}, \beta F_x], +[\text{erg}] \right\} \\
\left\{ [-\text{erg}], [-\text{pot}, +\text{act}] \right\}
\end{array} \\
\rightarrow \\
\begin{array}{c}
\left\{ +V, +[\text{AGT}], -[\text{DAT}, -\alpha F_i], -[\text{loc}, -\beta F_x], +\text{caus} \right\} \\
\left\{ [-\text{erg}], [+\text{dat}] \right\}
\end{array}
\end{align*}
\]

\text{SVDMR-13: } v[f \rightarrow v[pa]}

When the input is a verb of information which is identified by a cooccurring [+AGT] and [+DAT] and further marked by [+erg], [-erg] or [-pot, +act], the corresponding output in the causative form avoids duplication of case relations by assigning them to the [+DAT] and [+LOC] roles, respectively. Both new roles manifest the semantic selectional features of the original case relations identified by \(\alpha F_i\) and \(\beta F_x\), respectively. This derived stem denotes causing or letting someone, the [+DAT] referent, pass on some information to someone else, the [+LOC] referent. The features [+erg] and [-erg] or [-pot, +act] signifying the classes of basic forms of the source become [+erg] or [+dat], respectively. The features on the derived causative stem also trigger the appli-
cation of CFRR-17 on the class of causative information verbs. The derived [+erg] class like its [+erg] source has a voice paradigm consisting of the objective and locative voices. If the source is a [-erg], the voice paradigm of the derived [+dat] consists of the objective, locative and dative. With a [-pot, +act] source, the only voice of the derived [+dat] stem is the dative. The objective voice is always marked by i-, the locative by -an, and the dative by -in. For example:

(a) Information Verbs, [+erg]
    i?utos 'order; command'
    i?ulat 'give a report'
    ibalita? 'inform'
    ituro? 'teach'

(a') Causative. Ditransitive Information Verbs, [+erg]
    ipa?utos 'cause s.t. to be ordered by s.o.'
    ipa?ulat 'cause s.t. to be reported by s.o.'
    ipabalita? 'cause s.t. to be relayed by s.o.'
    ipaturo? 'cause s.t. to be taught by s.o.'

74.a. ibinalita niya sa nanay ang nangyari
    relate she mother happening
    [+erg] [+AC] [+L] [+NM]
    [+AGT] [+DAT] [+OBJ]

    'The happening was related to mother by her.'

74.b. ipinabalita ni Pepe sa kaniya sa nanay ang nangyari
    [+caus] [+AC] [+L] [+NM]
    [+erg] [+AGT] [+DAT] [+LOC] [+OBJ]

    'Pepe asked her to relate the happening to mother.'

Since there is no formal difference between the case forms of the [+DAT] and [+LOC] actants when they are non-nominative, only the preferred ordering indicates that the [+DAT] comes right after the [+AGT]. However, if either the [+DAT] or the [+LOC] is not overtly expressed, only the context of situation can provide the proper interpretation for
for the actant marked by the locative case form, for it may very well be either one of these actants.

(b) Information Verbs, [-erg]  (b') Causative. Ditransitive Information Verbs, [+dat]

isulat 'inform s.o. by writing'

ipasulat 'cause s.t. to be related to s.o. by writing'

itawag 'inform s.o. by calling up'

ipatawag 'cause s.t. to be related to s.o. over the phone'

75.a. isinulat niya sa tatay ang kaniyang problema
    write she father her problem
    [-erg] [+AC] [+L] [+AGT] [+DAT] [+NM] [+OBJ]

'She wrote her father about her problem.'

75.b. ipinasulat ko sa kaniya sa tatay niya
    [+caus] [+AC] [+L] [+AGT] [+DAT] [+L] [+LOC] [+NM]
    ang kaniyang problema
    [+NM] [+OBJ]

'I told her to write her father about her problem.'

75.c. pasusulatin ko siya sa tatay tungkol sa kaniyang problema
    [+caus] [+AC] [+NM] [+L] [+P] [+DAT] [+LOC] [+AGT] [+L] [+OBJ]

'I will tell her to write father about her problem.'

(c) Information Verbs, [-pot, +act]

(c') Causative Ditransitive Information Verbs, [+dat]

mag?utos 'order'

papag?utusin 'cause s.o. to order'

mag?ulat 'give a report'

papag?ulat 'cause s.o. to give a report'
4.3.2.2.4.2.3. Causative Verbs Derived from Intentional Perception Verb Stems

One other source of derived causative verbs is the class of derived intentional perception verbs. (See VDR-19, pp. 298-99). The following rule accounts for what may be labelled 'causative perception verbs' whose case frame features are identical to non-causative psych verbs except for the additional [+AGT], which feature is characteristic of all other causative verbs.
SVDR-14: Causative Perception Verbs

| [+V]  | [+Derv]  |
|       | [-[+AGT]] |
| [+DAT, cF_i] | [+OBJ, cF_X] |
| -[+NM, -OBJ] | 

SVDMR-14: \( \gamma_cog \) → \( \gamma_cog \)

With an intentional perception verb as input to SVDR-14, we can derive a corresponding causative perception verb which denotes 'to have or let someone, the [+DAT] referent, perceive or recognize something, the [+OBJ] referent'. Like the causative ditransitive verbs derived from agentive verbs by SVDR-12, this class of causative perception verbs also undergoes CFRR-17 which realizes its cooccurring [+DAT] in no other case form but the locative when the verb is not in the dative voice.

This class of causative verbs can express the objective and the more rarely used dative voice. Similar to the other causative verbs, the objective voice is marked by \( i \) and the dative by \( in \), except the subclass of [-cog] verbs and some other irregular forms which are marked by \( an \). For example:

(a) Intentional [+cog] Verbs

<table>
<thead>
<tr>
<th>Verbs</th>
<th>(a') Causative [+cog] Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>alamin 'try to know'</td>
<td>ipa?alam 'cause s.o. to know'</td>
</tr>
<tr>
<td>limutin 'try to forget'</td>
<td>ipalimot 'cause s.o. to forget'</td>
</tr>
<tr>
<td>{alalahin } 'remember'</td>
<td>ipa?alala 'cause s.o. to remember or recall'</td>
</tr>
<tr>
<td>{alalahaning}</td>
<td></td>
</tr>
</tbody>
</table>
unawa?in 'try to comprehend' ipa?unawa? 'cause s.o. to comprehend'

77.a. aalamin ko ang problema niya
try to know I problem his
[+Deriv] [+AC] [+NM]
[+cog] [+DAT] [+OBJ]

'I will find out what his problem is.'

77.b. ipina?alam ni Lucy sa akin ang problema niya
let know me
[+caus] [+AC] [+L] [+NM]
[+cog]

'Lucy let me know of her problem.'

From the examples above, we can detect the close similarity between
the subclass of [+cog] causative verbs and the class of non-causative
information verbs in terms of their syntactic features as well as the
meaning of their case relations. Both subclasses belong to the case
frame consisting of cooccurring [+AGT],[+DAT] and [+OBJ].

(b) Intentional [-cog] (b') Causative [-cog] Verbs
Verbs

din(i) gin 'listen to'
ipadinig 'let s.o. hear s.t.'

tanawin 'look at from a
distance'
ipatanaw 'let s.o. view s.t.'

halata?in 'take notice'
ipahalata? 'let s.o.
notice s.t.'

*kita?in

ipakita 'show s.o.s.t.'

78.a. didinggin namin ang awit ni Charito
listen to we song
[+AC] [+NM]
[+DAT] [+OBJ]

'We will listen to Charito's song.'
78.b. ipapadinig niya sa amin ang awit ni Charito
    let hear he us [+caus] [+AC] [+L] [+NM] [+AGT] [+DAT] [+OBJ]
    'He will let us hear Charito's song.'

78.c. papadinggan niya kami ng awit ni Charito
    [+caus] [+AC] [+NM] [+AC] [+AGT] [+DAT] [+OBJ]

The non-occurrent form *kita?in above is considered a lexical gap. There is no need for this particular item to be used because of the presence of an equivalent item tingnan 'look at'. The non-occurrence of *kita?in, however, did not prevent the formation of its corresponding causative forms ipakita and pakita?an.

To the four case frame subcategories of derived causative verbs from primary verb classes, we can add a fifth, the set of causative perception verbs created from a class of secondary verb stems. This last set manifests the case frame subcategory identical to what has been labelled 'causative ditransitive' verbs derived from the simple transitive subcategory. Altogether, there are now three subtypes of verbs belonging to the 'ditransitive', i.e. [+AGT], [+DAT], [+OBJ], subcategory. To illustrate this syntactic identity, compare the following sentences:

79.a. itinanong niya sa pastor ang kahulugan ng mga
    ask he pastor meaning [+erg] [+AC] [+L] [+NM] [+AGT] [+DAT] [+OBJ]
    karanasan niya experiences his
    'He asked the pastor the meaning of his experiences.'
In all three sentences, the [+DAT] actant is directed by the agent to do or experience what is designated by the verb. It is interesting to note that through the process of lexical derivation, basic primary verb stems which are classified under different syntactic subcategories, e.g., tanong 'ask' [+[AGT], [+DAT], [+OBJ]], guhit 'draw' [+[AGT], -[+DAT], [+OBJ]], and a verb stem alala 'remember' [-[AGT], [+DAT], [+OBJ]] derived from another lexical category can all end up in one case frame subcategory when derived into causative verbs. The same observation can be noted of verbs derived from N's and Adj's being subcategorized with underived simple intransitive verbs and simple transitive or psych verbs. Thus, in the final accounting of all verb stems, primary and non-primary, we find various morphological types and differing types of bases manifesting a single case frame subcategory. It is also because of this powerful derivational capacity of verbs that a subcategorization by verb roots, rather than by verb stems, can obscure rather than
reveal regularities and generalizations.

One other significant characteristic of syntactic derivation rules, besides the possibility of changing the syntactic subcategories of their inputs, is their ability to accommodate more than just basic primary stems. In general, derived verbs which become members of an existing subcategory can be rederived, that is, be able to go through another derivation, by means of a DR other than that which created them. This productive process, or perhaps, more appropriately, reproductive process can be seen actively operating on newly derived basic stem classes. For instance, a simple transitive verb derived from a simple intransitive verb can serve as a new input to other DR's that create a new morphological stem class manifesting a voice paradigm different from its source's, and a new syntactic stem class manifesting a different case frame subcategory. To illustrate:
Further accentuating this creative, productive power of DR’s in which the output of one rule feeds another rule is the rederivation of causative verb stems. When a causativization DR applies to an input which is already a causative stem, the corresponding output is what is referred to as a double causative stem. By examining the requirements of SVDR-11 through SVDR-13, we find the following correspondences as potential rederivations:
<table>
<thead>
<tr>
<th>I. Intransitive</th>
<th>II. Transitive</th>
<th>III. Ditransitive</th>
<th>IV. Causative Ditransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>[-[+INS]]</td>
<td>[+[+AGT]]</td>
<td>[+[+AGT]]</td>
<td>[+[+AGT]]</td>
</tr>
<tr>
<td>[+[+OBJ]]</td>
<td>[-[+DAT]]</td>
<td>[+[+DAT]]</td>
<td>[+[+DAT]]</td>
</tr>
<tr>
<td></td>
<td>[+[+OBJ]]</td>
<td>[+[+OBJ]]</td>
<td>[+[+OBJ]]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>&gt;SVDR</th>
<th>Causative</th>
<th>&gt;SVDR</th>
<th>Causative</th>
<th>&gt;SVDR</th>
<th>Double causative</th>
</tr>
</thead>
<tbody>
<tr>
<td>kulo?</td>
<td></td>
<td>luto?</td>
<td></td>
<td>pakita</td>
<td></td>
<td>papa luto?</td>
</tr>
<tr>
<td>'boil'</td>
<td></td>
<td>'cook s.t.'</td>
<td></td>
<td>'show s.t. to s.o.'</td>
<td></td>
<td>'cause s.o. to show s.t. to s.o. else'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pakakulo?</td>
<td></td>
<td>paluto?</td>
<td></td>
<td>papakita</td>
<td></td>
<td>patanong</td>
</tr>
<tr>
<td>'cause s.t. to boil'</td>
<td></td>
<td>'cause s.t. to be cooked by s.o.'</td>
<td></td>
<td>'cause s.o. to show s.t. to s.o. else'</td>
<td></td>
<td>'cause s.t. to be asked by s.o.'</td>
</tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Papakulo?</td>
<td></td>
<td>Papakito</td>
<td></td>
<td>Papakita</td>
<td></td>
<td>Papakita</td>
</tr>
<tr>
<td>'cause s.o. to have s.t. be boiled by s.o. else'</td>
<td></td>
<td>'cause s.o. to have s.t. be cooked by s.o. else'</td>
<td></td>
<td>'cause s.o. to have s.t. to be asked by s.o.'</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Papapakulo?</td>
<td></td>
<td>Papaluto</td>
<td></td>
<td>Papakita</td>
<td></td>
<td>Papakita</td>
</tr>
<tr>
<td>'cause s.o. to have s.t. be boiled by s.o. else'</td>
<td></td>
<td>'cause s.o. to have s.t. be cooked by s.o. else'</td>
<td></td>
<td>'cause s.o. to show s.t. to s.o. else'</td>
<td></td>
<td>'cause s.t. to be asked by s.o.'</td>
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</tr>
</tbody>
</table>
Every DR that is boxed shows the correspondence between a causative source and a double causative output. Some sample sentences with double causative verbs follow:

80.a. pinakulo? ni Gloria ang tubig para sa kape
boil water for coffee
[+caus] [+AC] [+NM]

'Gloria boiled the water for coffee.'

80.b. ipinapakulo? nya kay Gloria ang tubig para sa kape
cause to boil water for coffee
[+caus] [+AC] [+L] [+NM]

'He let Gloria boil the water for coffee.'

81.a. ipinaluto? ni Del kay Virgie ang manok
cause to cook chicken
[+caus] [+AC] [+L] [+NM]

'Del had Virgie cook the chicken.'

81.b. ipinapaluto? nya kay Del kay Virgie ang manok
cause s.o. to have s.o. else to cook chicken
[+caus] [+AC] [+L] [+L] [+NM]

'He had Del ask Virgie to cook the chicken.'

82.a. ipinakita ng guro? sa mga magulang ang marka
show teacher parents grades
[+caus] [+AC] [+L] [+NM]

ng anak nila
child their

'The teacher showed the parents their child's grades.'
82.b. ipinapakita ng guro sa mga magulang ang marka
cause to show
[+caus] [+AC] [+L] [+NM] [+DAT] [+LOC] [+OBJ]
ng anak nila

(1) 'The teacher had the parents ([+DAT]) show the grades of their child to s.o.'

(2) 'The teacher had s.o. show the parents ([+LOC]) the grade of their child.'

SVDR-13 appearing after the boxed SVDR-12 in the first row is a grammatically possible derivation although it is not acceptable for performance reasons. Conceptually, it is possible to have someone ask someone else to boil something. However, if such a situation occurs and the form above papapakuolo? is used, performance is greatly impeded. Firstly, keeping track of the number of uninterrupted series of the same syllable can prove rather taxing on one's memory. Secondly, as has been pointed out in the discussion of SVDR-13, the cooccurrence of identical case forms representing different case relations, e.g., [+DAT] and [+LOC], that do not have any outstanding semantic features which may contrast them is rather confusing even to the speaker himself. Thus, when the lexical item or the syntactic structure becomes encumbered so that it impedes the efficient functioning of performance, this item or structure is imply avoided. To express the same message carried by the phonologically unappealing lexical item papapakuolo?, not to mention the possible appearance of another pa- to indicate [-comp] aspect inflection, one uses a simpler form in a more complex sentence. It may be said that Tagalog has a perceptually motivated 'word structure constraint' that marks triple causatives, i.e., two causative rederiva-
tions of a single causative stem, as anomalous. To combat the second difficulty, one of the two actants with identical case forms in LOC-DAT ditransitives may be suppressed from occurring overtly. For the resulting sentence structure, only the context of situation provides the proper interpretation of the remaining locative case form.

4.3.2.4.2.4. Double Causative Ditransitive Information Verbs

Similar to SVDR-12 and SVDR-13 which can create single and double causative stems depending on their inputs, another causativization rule can account for a set of double causative stems whose input is a causative stem derived from information verbs. This is stated as follows:

SVDR-15: Double Causative Ditransitive Information Verbs

\[
\begin{array}{c}
+[V] \\
+[AGT, aF_i] \\
+[DAT, bF_x] \\
+[LOC] \\
+[OBJ] \\
\end{array}
\leftrightarrow
\begin{array}{c}
+[V] \\
+Derv \\
+[AGT] \\
-[DAT, aF_i] \\
+[LOC] \\
+[OBJ] \\
+caus \\
+erg \\
\end{array}
\]

SVDRMR-15: \( V[ \rightarrow V[pa \)

Interestingly, when all four major case relations are participating as specified in the input, no other case relation is available which can be assigned to one of the two identical [+DAT] actants resulting from the process. One principle in case grammar is that no two identical case relations with different referents in one clause can be allowed to cooccur. In this case then, the only recourse is to permit only one of the [+DAT] actants to be overtly expressed. With this obligatory suppression of one dative actant, the context of situation again has
to provide the means for interpreting the [+DAT] chosen to occur. Even with this deletion, the meaning of double causativization is kept intact in the morphological structure of the stem. It carries another pa-as affixed by SVDR-15. Going by the demands of performance simplification, one of the remaining locative case forms of this set of double causative stems may or may not be overtly expressed either. For example:

83.a. ipatanong mo kay Niki sa Mama ang kapanganakan cause to you mother birthday
ask [+AC] [+L] [+L] [+NM] [+OBJ]
ng Lolo
grandfather

'Have Niki ask Mother Grandfather's birthdate.'

83.b. ipapatanong mo (kay Mike/kay Niki) (sa Mama) cause s.o. [+AC] [+L] [+L]
to have s.o. [+AGT] [+DAT] [+DAT] [+LOC]
ask s.t. [+caus]
ang kapanganakan ng Lolo
[+NM]
[+OBJ]

(1) 'Have Mike ask s.o. to ask Mama Grandfather's birthdate.'

(2) 'Have s.o. ask Niki to ask Mama Grandfather's birthdate.'

(3) 'Have Mike ask Niki to ask s.o. Grandfather's birthdate.'

With SVDR-15 available, it is possible to rederive new classes from the double causative sets resulting from the application of SVDR-13 as exemplified above. Nevertheless, for the same reasons that warrant the non-occurrence of such outputs as *papapakulo? derived by SVDR-13, SVDR-15 is utilized only with causative stem inputs which originate from
information verbs. This implies that the most a causative verb can be derived into is a double causative. The same constraint seems to apply in Hindi, where morphologically-marked causative verbs do not go beyond expressing a double causative. (See Balachandran, 1971.)

The following summary chart containing an example from each class shows schematically the morphological expansion of the basic primary stem classes and one secondary stem class in terms of acquiring derivational affixes by undergoing causativization. The examples are in their objective voice forms since all basic stems include this voice in their paradigm.
<table>
<thead>
<tr>
<th>I. Intransitive</th>
<th>II. Transitive</th>
<th>III. Ditransitive</th>
<th>IV. Causative Ditransitive</th>
<th>V. Double Causative Ditransitive</th>
</tr>
</thead>
</table>

A. 

- [+AGT] -> SVDR
- [+DAT] -> SVDR
- [+INS] 11 -> [+caus] 12 -> [+caus]

<table>
<thead>
<tr>
<th>(1) [+loc]</th>
</tr>
</thead>
</table>
| pumunta  
'go to' | papuntahin  
'cause s.t. to go to; to send' | ipapunta  
'cause s.o. to have s.t. go to; cause s.o. to send s.t.' |

<table>
<thead>
<tr>
<th>(2) [-affl]</th>
</tr>
</thead>
</table>
| gumalaw  
'move' | pagalawin  
'cause s.t. to move' | ipapagalaw  
'cause s.o. to move s.t.' |
| magdoktor  
'study to be a doctor' | papagdoktorin  
'cause s.o. to study to be a doctor' | ipapagdoktor (rare)  
'cause s.o. to have s.o. else study to be a doctor' |
| magpakaba?it  
'try to be good' | papapakaba?itin  
'cause s.o. to try to be good' | papapagpakaba?itin (rare)  
'cause s.o. to have s.o. else try to be good.' |
<table>
<thead>
<tr>
<th>I. Intransitive</th>
<th>II. Transitive</th>
<th>III. Ditransitive</th>
<th>IV. Causative</th>
<th>V. Double Causative Ditransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. [+AGT]</td>
<td>( \rightarrow ) SVDR</td>
<td>12 ( \rightarrow ) [+caus]</td>
<td>13 ( \rightarrow ) [+caus]</td>
<td></td>
</tr>
</tbody>
</table>

1. [+loc]

   (a) [+goal]
   
   \[ \text{ibigay} \rightarrow \text{ipabigay} \rightarrow \text{ipapabigay} \]
   
   'give' \rightarrow 'cause s.t. to be given \rightarrow 'cause s.o. to have s.o. else give s.t. by s.o.'

   (b) [-goal]
   
   \[ \text{kunin} \rightarrow \text{ipakuha} \rightarrow \text{ipapakuha} \]
   
   'take' \rightarrow 'cause s.t. to be taken \rightarrow 'cause s.o. to ask s.o. else to have s.t. taken by s.o.'

   (c) [-dir]
   
   \[ \text{isulat} \rightarrow \text{ipasulat} \rightarrow \text{ipapasulat} \]
   
   'write on' \rightarrow 'cause s.o. to have s.t. written on' \rightarrow 'cause s.o. to ask s.o. else to write s.t.'
<table>
<thead>
<tr>
<th>I. Intransitive</th>
<th>II. Transitive</th>
<th>III. Ditransitive</th>
<th>IV. Causative Ditransitive</th>
<th>V. Double Causative Ditransitive</th>
</tr>
</thead>
</table>

(2) [-loc]

(a.1) [+cs]

lutu?ín ́ 'cook s.t.'  →  ipaluto? ́ 'cause s.o. to cook s.t.'  →  ipapaluto? ́ 'cause s.o. to have s.o. else cook s.t.'

(a.2) [+cs, +caus]

pahinugín ́ 'cause to/let ripen'  →  ipapahinog ́ 'cause s.o. to let s.t. ripen'

palakihín ́ 'cause to/let become big or grow'  →  ipapalaki ́ 'cause s.o. to let s.t. grow or become big'

(b) [-cs]

hugasan ́ 'wash s.t.'  →  pahugasan ́ 'have s.t. washed by s.o.'  →  papahugasan ́ 'cause s.o. to ask s.o. else to wash s.t.'
<table>
<thead>
<tr>
<th>I. Intransitive</th>
<th>II. Transitive</th>
<th>III. Ditransitive</th>
<th>IV. Causative Ditransitive</th>
<th>V. Double Causative Ditransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>(c) [-af]</td>
<td>ilatag</td>
<td>ipalatag</td>
<td>ipapalatag</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'spread out s.t.'</td>
<td>'have s.o. spread out s.t.'</td>
<td>'cause s.o. to ask s.o. else to spread s.t.'</td>
<td></td>
</tr>
<tr>
<td>(d) [+extn]</td>
<td>tulungan</td>
<td>patulungan</td>
<td>papatulungan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'help s.o.'</td>
<td>'cause s.o. to help s.o. else'</td>
<td>'cause s.o. to ask s.o. else to help another'</td>
<td></td>
</tr>
<tr>
<td>C. [-[+AGT]]</td>
<td>[+DAT]</td>
<td>[+OBJ]</td>
<td>[+caus]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[-SVDR]</td>
<td>[+caus]</td>
<td>[+caus]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) [+cog]</td>
<td>alamin</td>
<td>ipa?alam</td>
<td>ipapa?alam</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'try/to know'</td>
<td>'cause to/let s.o. know s.t.'</td>
<td>'cause s.o. to have s.o. else know s.t.'</td>
<td></td>
</tr>
<tr>
<td>I. Intransitive</td>
<td>II. Transitive</td>
<td>III. Ditransitive</td>
<td>IV. Causative Ditransitive</td>
<td>V. Double Causative Ditransitive</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------</td>
<td>-----------------</td>
<td>---------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>(2) [-cog]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dinggin</td>
<td>ipadinig</td>
<td>ipapadinig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'listen'</td>
<td>'let s.o. hear s.t.'</td>
<td>'cause s.o. to let s.t. be heard by s.o. else'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| D.             |                |                 |                           |                                 |
| [+[AGT]]       | [+[DAT]]       | [+[OBJ]]        | [+CAUS]                   | [+CAUS]                         |
| [SVDR]         | 13             | [SVDR]          | 15                        |                                 |

| (1) [+erg]     |                |                 |                           |                                 |
| i?utos         | ipa?utos       | ipapa?utos      |                           |                                 |
| 'order s.o. s.t.' | 'cause s.t. to be ordered by s.o.' | 'cause s.o. to order s.o. s.t.' |                           |                                 |

| (2) [-erg]     |                |                 |                           |                                 |
| itawag         | ipatawag       | ipapatawag      |                           |                                 |
| 'relay s.t. to s.o. by phone' | 'cause s.t. to be relayed to s.o. over the telephone' | 'cause s.o. to have s.t. relayed over the phone by s.o. else to another person' |                           |                                 |
The first four column divisions in the chart represent the four general subcategories on which causativization operates. The fifth subcategory, although showing a distinct morphological class of double causative ditransitive stems, manifests a case frame identical to its input which is a causative ditransitive. It is set up here for morphological comparison of structures. In effect, therefore, the last subcategory falls together syntactically with the fourth subcategory. The first subcategory labelled 'intransitive' is identified by the case frame \([-\text{+AGT}], -\text{+DAT}], -\text{+INS}], +\text{+OBJ}]\) which consists of two subclasses, one with and the other without a cooccurring \(+\text{LOC}]\) actant. The verb stems in this subcategory may be underived or derived from N's or Adj's but all of them are non-causative. From these verbs there is a potential of creating corresponding causative forms which are characterized by the second subcategory of 'transitive' verbs. This is possible through the application of SVDR-11, which does not give any importance to whether the intransitive source has a cooccurring \(+\text{LOC}]\) actant or not. The resulting causative stems fall together with other underived verbs identified by the case frame \([+\text{+AGT}], -\text{+DAT}], +\text{+OBJ}]\) with or without a cooccurring \(+\text{LOC}]\) actant, as in B. The column of 'transitive' verbs also includes the class of \([-\text{+AGT}], +\text{+DAT}], +\text{+OBJ}]\) verbs under C derived directly from Adj's through VDR-19. These three general subclasses of transitive verbs--II.A, II.B, II.C--can correspond to another type of causative verbs through the application of SVDR-12 and SVDR-14. Each of these new causative stems, III.A, III.B, and III.C allows a directed performer or experiencer identified as \(+\text{DAT}]\). With this feature, in particular, they fall under the third subcategory labelled
'ditransitive' and belong with the underived verbs of information, as in III.D and the derived causative perception verbs in III.C. While all four sets of verbs under the subcategory of ditransitive verbs exhibit the same syntactic structure, not considering a [+LOC] that may or may not cooccur, they differ from each other in the presence or absence of the semantic feature [+caus] as well as in their morphological structure. For instance, verbs under III.D are primary information verbs and do not have the feature [+caus] while those under III.A through III.C are marked [+caus]. Although the causative verbs in III.A derive from existing causative verbs in II.A, the feature [+caus] from the source stem is simply carried over to the derived stem since the same meaning of causativization is conveyed by that feature. Thus, there is no difference between these two stem classes in terms of the semantic feature [+caus]. Morphologically, the stems under III.D are roots, those under III.B, except 2.a [+cs, +caus] subclass which derives from Adj or N, and III.C are single causatives. They have one instance of the derivational causative affix pa- indicating that their source stems are not causative verbs. On the other hand, the stems under III.A and III.B, 2.a [+cs, +caus] show a pa- prefixed before another pa- stem indicating that these verbs have undergone two causativization rules, hence, they are referred to as double causative stems. Having similar case features as III.D, the single causative stems under III.B and III.C can undergo SVDR-13 creating double causative stems IV.B and IV.C. The same rule accounts for single causative stems IV.D from III.D. These new derived classes via SVDR-13 belong to the syntactic subcategory identified as 'causative ditransitive'. Since performance efficiency discourages
application of any of the causativization rules on double causative stems, only IV.D can undergo SVDR-15 which results in a set labelled 'double causative ditransitive' but whose syntactic structure manifested is identical to the fourth class.

From the preceding, we have formally accounted for the syntactic, semantic and morphological relationships between corresponding verb stem classes under I and II, those under II and III, those under III and IV and, lastly, those under IV and V. Concomitantly, we find derived stems being syntactically related to underived members of the particular subcategory the new stems are derived into. Furthermore, following the direction of derivations, as illustrated in the above chart and on p.355, we can account systematically for the affixal layering or build-up in derived stems derivation after derivation.

4.3.2.2.4.3. Derived Social Verbs

A general class of verb stems labelled 'social' can be derived from either transitive or intransitive verbs that may or may not cooccur with a [+LOC]. The derived social verbs express 'joining in or participating' in the action or process designated by the source verb as performed or undergone by the original [+AGT] or [+OBJ] referent. The three types of social verbs derived under separate DR's are identified as Social Agentive Verbs, Social Reciprocal Verbs, and Social Intransitive Verbs, all of which are marked with the redundant feature intention [+ntn] predictable from the feature social [+soc].
4.3.2.2.4.3.1 Social Verbs Derived from Non-reciprocal Agentive Verb Stems

A set of verbs identified as social agentive can be derived from the non-reciprocal agentive class of verb stems by introducing a new [+AGT] actant. The original [+AGT] corresponds to the role of a [+COM] in the newly created stem. The rule for deriving this type of social verbs is stated as follows:

SVDR-16: Social Agentive Verbs

\[
\begin{align*}
{+V} & \quad {+[+AGT, aF_1]} \\
{-[erg, -pot, +act]} & \quad \rightarrow \quad \\
{-recip^{19}} & \quad \rightarrow \quad \\
{+V} & \quad {+DerV} \\
{+[+AGT]} & \quad -[+COM, -aF_1]} \\
{+soc} & \quad -pot \\
{+act} & \quad \end{align*}
\]

SVDMR-16: \( \nu \rightarrow \nu[paki] \)

The input in the above rule specifies a non-reciprocal agentive stem which is either [-erg] or [-pot, +act]. This implies that the [+erg] stem does not undergo this rule. The derived stem is prefixed with \( paki- \) by SVDMR-16. In this form, the voice paradigm of the stem consists of the agentive and the comitative voice. The former is marked by \( m- \) and the latter, by \( -an^{21} \).

As we have seen, there are various syntactic classes of agentive verbs. From the major subcategories, we have the information and the transitive subclasses, with or without a cooccurring [+LOC]. In these two broad classes are now included certain derived causative verbs. We will show by examples each of these possible sources.
(a) Agentive Non-dative Transitive Verbs

(1) [+loc]

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>paglagay 'put'</td>
<td>pakipaglagay 'join others in putting s.t. on some place'</td>
</tr>
<tr>
<td>pag'alay 'offer'</td>
<td>pakipag'alay 'participate in making an offering'</td>
</tr>
<tr>
<td>kuha 'take'</td>
<td>pakikuha 'join others in taking s.t.'</td>
</tr>
<tr>
<td>bili 'buy'</td>
<td>pakibili 'join others in buying s.t.'</td>
</tr>
<tr>
<td>pirma 'sign'</td>
<td>pakipirma 'participate in signing s.t.'</td>
</tr>
</tbody>
</table>

(a') Social Verbs

(1) [+loc]

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pakipaglagay 'join others in putting s.t. on some place'</td>
<td></td>
</tr>
<tr>
<td>pakipag'alay 'participate in making an offering'</td>
<td></td>
</tr>
<tr>
<td>pakikuha 'join others in taking s.t.'</td>
<td></td>
</tr>
<tr>
<td>pakibili 'join others in buying s.t.'</td>
<td></td>
</tr>
<tr>
<td>pakipirma 'participate in signing s.t.'</td>
<td></td>
</tr>
</tbody>
</table>

84.a. nag'alay ang mga bata ng bulaklak sa puntod

offer children flower grave

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

ng mga bayani heroes

'The children laid flowers on the heroes' grave.'

84.b. nakipag'alay ang ilang mga turista (sa mga bata) ng

[+soc] tourists children

[+NM] [+AGT] [+L]

bulaklak sa puntod ng mga bayani

[+L] [+LOC]

'A few tourists joined (with the children) in laying flowers on the heroes' grave.'

84.c. pinakipag'alayan ng ilang mga turista ang mga

[+soc] tourists

[+NM] [+AGT] [+AC]

bata ng bulaklak sa puntod ng mga bayani

[+NM] [+AC] [+L] [+AGT] [+OBJ] [+LOC]
Lit.: 'The children were joined by a few tourists in laying flowers on the heroes' grave.'

(2) [-loc] (2') [-loc]

paglaro? 'play s.t.' pakipaglaro? 'participate in playing s.t. with others'

paglinis 'clean s.t.' pakipaglinis 'join s.o. in cleaning s.t.'

pano?od 'watch s.t.' pakipano?od 'join s.o./others in watching s.t.'

?ani 'harvest' pakia?ani 'participate in harvesting'

basa 'read' pakibasa 'join others in reading s.t.'

tulong 'help' pakitulong 'participate in helping'

85.a. inani ng mga magbubukid ang palay
harvest farmers rice stalks
[+AC] [+NM] [+AGT] [+OBJ]

'The rice stalks were harvested by the farmers.'

85.b. naki?ani ang 'Peace Corps Volunteer' ng palay
[+soc] [+NM] [+AGT] [+AC] [+OBJ]

sa mga magbubukid
[+L] [+COM]

'The Peace Corps Volunteer joined the farmers in harvesting rice stalks.'

85.c. pinaki?anihan ng 'Peace Corps Volunteer' ng palay
[+soc] [+AC] [+AGT] [+AC] [+OBJ]

ang mga magbubukid
[+NM] [+COM]

'The farmers were joined in by the Peace Corps Volunteer in harvesting rice.'
(b) **Information Verbs**

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pagbalita?</td>
<td>'inform'</td>
</tr>
<tr>
<td>pag\textsuperscript{utos}</td>
<td>'order'</td>
</tr>
<tr>
<td>pagtanong</td>
<td>'ask'</td>
</tr>
<tr>
<td>pagturo?</td>
<td>'teach'</td>
</tr>
</tbody>
</table>

(b') **Social Verbs**

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pakipagbalita?</td>
<td>'join in informing'</td>
</tr>
<tr>
<td>pakipag\textsuperscript{utos}</td>
<td>'join in ordering'</td>
</tr>
<tr>
<td>pakipagtanong</td>
<td>'join in asking'</td>
</tr>
<tr>
<td>pakipagturo?</td>
<td>'participate in teaching'</td>
</tr>
</tbody>
</table>

86.a. nagbalita? siya sa nanay ng nangyari inform she mother happening

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

'She informed mother of the happening.'

86.b. nakipagbalita? si Jun (sa kaniya) sa nanay

\[
\begin{array}{c}
\text{[+soc]} \\
\text{[+NM]} \\
\text{[+AGT]} \\
\text{[+L]} \\
\text{[+COM]} \\
\text{[+DAT]}
\end{array}
\]

ng nangyari

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

'Jun joined (her) in informing mother of the happening.'

In the use of social verbs, three things commonly occur.

(a) When the [+COM] actant, which is realized in the locative case form when non-subject, cooccurs with another actant in the same case form, the [+COM] actant is usually grammatically unexpressed. Thus, 84.b and 86.b are normally rendered without the [+COM] actant. This condition is similar to the performance restrictions observed in causative forms of transportation and information verbs. That is, when two cooccurring actants which are hardly distinguishable by any semantic features are realized in identical case forms, one of them is usually unexpressed. With causative verbs either the [+DAT] or [+LOC] may be
omitted, whereas with social verbs the preference between a [+COM] and a [+LOC] or [+DAT] is usually for the former actant to go.

(b) As a minor case relation, the [+COM] occurs more often in the non-nominative case form. However, this does not mean that it is restricted from being realized as a subject. For instance:

87.a. naglaro? ang mga bata? ng 'Monopoly'

play

children

+[act] [+NM] [+AGT] [+OBJ]

'The children played monopoly.'

87.b. pinakipaglaruan niya ang mga bata? ng 'Monopoly'

[+soc] [+AC] [+NM] [+AC] [+OBJ]

'He played monopoly with the children.'

The comitative voice can be observed to occur more commonly when the social verb stem is derived from simple transitive verbs, especially when it does not correspond to a homophonous 'request/permission' form.

(c) The reason for the rare use of the comitative voice form is probably its ambiguity with the dative or locative voice form of a request verb. For example:

88.a. nakibili ang Mama kay Chitong ng kwintas kay Jay

[+req] mother necklace

[+NM] [+L] [+AC] [+OBJ] [+L]

'Mother requested Chitong to buy a necklace from Jay.'

88.b. pinakibilhan ng Mama kay Chitong ng kwintas si Jay

[+req] [+AC] [+L] [+DAT] [+OBJ] [+LOC]

88.c. pinakibilhan ng Mama si Chitong ng kwintas kay Jay

[+req] [+AC] [+NM] [+AC] [+L]

[+AGT] [+DAT] [+OBJ] [+LOC]
To minimize confusion, the preferred form of the social verb is the agentive voice. Its ambiguity with a possible corresponding request form in the agentive voice is dispelled by asking whether the [+AGT] referent is performing what is indicated by the verb base or it is directing or requesting someone else to do the action.

With the active form of causative verbs as input, the social verb counterparts may have a maximal cooccurrence of three locative case forms. For example:

90.a. nagpabigay si Fe kay Minda ng regalo sa Ate

90.b. nakipagpabigay siya (kay Fe) kay Minda ng regalo sa Ate

As in the previous cases of multiple case form cooccurrences of actants without other distinguishing semantic features, one or two are normally
omitted leaving the resulting sentence accordingly two or three ways ambiguous.

The following correspondences of active causative and social verbs are given to illustrate the affix expansion in the derived forms:

(c) Causative Verbs, [-pot, +act]

(1) pagpapasok 'have s.o./s.t. enter'
pagpagalaw 'have s.t. move'

(2) pagpakuhia 'cause s.o. to take s.t.'
pagpagawa? 'have s.o. make s.t.'

(3) pagpakita 'show s.o. s.t.'
pagpa?alam 'let s.o. know s.t.'

(4) pagpa?utos 'cause s.t. to be ordered by s.o.'
pagpatanong 'cause s.o. to ask s.t.'

(c') Social Verbs

(1) pakipagpapasok 'participate in having s.o./s.t. enter'
pakipagpalaw 'join others in having s.t. move'

(2) pakipagpakuhia 'join others in having s.o. take s.t.'
pakipagpaha 'join others in having s.o. make s.t.'

(3) pakipagpakita 'join others in showing s.t.'
pakipagpa?alam 'participate in letting s.o. know s.t.'

(4) pakipagpa?utos 'join in having s.t. be ordered'
pakipagpatanong 'join others in having s.o. ask s.t.'

4.3.2.2.4.3.2. Social Verbs Derived from Reciprocal Verb Stems

When the agentive verb is marked reciprocal, it does not undergo SVDR-16, but it can undergo a similar rule stated as follows:
SVDR-17: Social Reciprocal Transitive Verbs

\[
\begin{array}{c|c}
+V & +V \\
- [+\text{AGT}, -p_1] & +\text{Derv} \\
- [+\text{AGT}, -\alpha F_i] & - [+\text{AGT}, -\alpha F_i] \\
+ [+\text{OBJ}] & - [+\text{COM}, -\alpha F_i] \\
+\text{recip} & + [+\text{OBJ}] \\
- \text{pot} & + \text{soc} \\
+ \text{act} & + \text{recip} \\
\end{array}
\]

SVDVR-17: \( \gamma \rightarrow \gamma \text{paki} \)

A reciprocal transitive verb denotes in part a 'social' affair in being a mutual action between the referents of the [+AGT] actant. It implies agreement of the two parties involved to do the designated action mutually. A social verb that can be derived from a reciprocal transitive verb, on the other hand, expresses a [+AGT] referent engaging someone or some others, marked [+COM], to do a mutual action with it. Structurally, the derived social verb manifests a cooccurring [+COM] which is implicit in the cooccurring [+AGT] of the reciprocal stem source. The relationship between the [+AGT] and [+COM] of the social verb with the original [+AGT] is indicated by their shared selectional features \( \alpha F_i \). It will be observed that the feature plural is no longer a requirement on the [+AGT] of the social verb since the [+COM] is expressed separately.

In terms of form, the reciprocal stem, which is generally identified by the derivational affixes \( \text{pagn} \) and \( \text{an} \), is carried over to the derived social verb and marked [-pot, +act]. By SVDVR-17, the derived social stem is prefixed with \( \text{paki} \). The new stem has a voice paradigm consisting of an agentive, an objective and a comitative voice, marked by \( m, i \) and \( \emptyset \), respectively. Reciprocal verbs which are not derived
via SVDR-4, but derived by other special DR's, do not have the derivational affix -an, e.g., pag?usap 'talk with each other,' pag?away 'quarrel with each other,' pagtalo 'argue with each other'. The comitative voice of social verbs derived from such verb forms is then marked not by Ø but by -an. Evidently, the Ø marking of the comitative voice in stems that already carry the affix -an is a prohibition on the occurrence of identical affixes one after another.

Below are some examples showing social reciprocal transitive verbs and their corresponding sources.

(a) Reciprocal Transitive Verbs

| pagbalita?an 'exchange news' | pakipagbalita?an 'engage in exchanging news' |
| pagtanungan 'ask each other' | pakipagtanungan 'engage in asking each other s.t.' |
| pag?usap 'talk with each other' | pakipag?usap 'engage in a conversation' |
| pagpalitan 'trade with each other' | pakipagpalitan 'engage in trading with each other' |
| paghalinhinan 'alternate with each other' | pakipaghalinhinan 'engage in alternating with each other' |

91.a. nagkuwentuhan sila (ni Ana) ng kanilang karanasan

.tell stories they [ +recip ] [ +NM ] [ +AGT ] [ +AC ] [ +OBJ ]

'They (with Ana) told each other their experiences.'

91.b. nakipagkwentuhan siya kay Ana ng kanilang karanasan

[ +soc ] [ +recip ] [ +NM ] [ +AGT ] [ +L ] [ +COM ] [ +AC ] [ +OBJ ]

'She engaged Ana in telling their experiences to each other.'
92.a. nag-usap ang estudyante at ang guro? tungkol 
   talk student teacher about 
   [+recip] [+NM] [+P] [+AC] 
   sa eksamen 
   examination 
   [+L] [+OBJ] 

   'The student and the teacher talked about the examination.'

92.b. nakipag-usap ang estudyante sa guro? tungkol 
   [+soc] [+NM] [+L] 
   [+recip] [+AGT] [+COM] 
   sa eksamen 
   examination 
   [+L] [+OBJ] 

   'The student talked the examination over with the teacher.'

92.c. pinakipag-usapan ng estudyante ang guro? tungkol 
   [+soc] [+AC] [+NM] [+P] 
   [+recip] [+AGT] [+COM] [+AC] 
   sa eksamen 
   examination 
   [+L] [+OBJ] 

   'The teacher was engaged in a conversation by the student about the examination.'

Two other types of social verbs can be derived from reciprocal intransitive and reciprocal psych verbs. It may be added that while reciprocal verbs express a casual exchange of what is indicated by the verb, social reciprocal verbs denote a purposeful or a more intense involvement. Similar to the preceding rule, social reciprocal intransitive verbs are derived as follows:
SVDR-18: Social Reciprocal Intransitive Verbs

SVDMR-18: vI $\rightarrow$ v[paki]

The case relation features of the social reciprocal intransitive verbs derived by SVDR-18 consisting of [+OBJ] and [+COM] are related to the corresponding [+OBJ] in the source verb by their common features $\alpha F_i$. Like other OBJ's in intransitive verbs, which show that this actant can perform an action intentionally, the [+OBJ] of the social verb here is interpreted as engaging the [+COM] referent in an exchange of what the verb designates. SVDMR-18 is identical to SVDR-17, thus, the derived set above is also prefixed with paki-. The voice paradigm manifested by this set is marked by the voice affix m- for the objective and $\emptyset$ or -an for the comitative. The latter voice form is less commonly used. Examples of derived social reciprocal intransitive verbs follow:

(a) Reciprocal Intransitive Verbs

- paghampasan 'hit each other'
- pagsumtukan 'exchange fist blows'
- pag?away 'quarrel'
- paghiwalay 'separate from each other'

(b') Social Reciprocal Intransitive Verbs

- pakipaghampasan 'engage in hitting each other'
- pakipagsuntukan 'engage in boxing each other'
- pakipag?away 'engage in quarrelling'
- pakipaghiwalay 'engage in separation'
93.a. nagsuntukan si Ali at si Fraser
   fight [+NM] [+recip] [+OBJ]

   'Ali and Fraser fought with each other.'

93.b. nakipagsuntukan si Ali kay Fraser
   engage in fight [+NM] [+L] [+SOC] [+OBJ] [+recip]

   'Ali engaged Fraser in a fight with each other.'

93.c. pinakipagsuntukan ni Ali si Fraser (rare)
   [+SOC] [+recip] [+AC] [+NM] [+OBJ] [+COM]

   'It was Fraser whom Ali engaged in a fight with each other.'

SVDR-19: Social Reciprocal Psych Verbs

\[
\begin{align*}
  [+V] & \rightarrow [+V] \\
  [-[+OBJ, -p1]] & \rightarrow [+Derv] \\
  [-[+OBJ, -aFi]] & \rightarrow [-[+AGT]] \\
  [+recip] & \rightarrow [-[+DAT, -aFi]] \\
  [-pot] & \rightarrow [+soc] \\
  [+act] & \rightarrow [+recip] \\
  & \rightarrow [-pot] \\
  & \rightarrow [+act] \\
  & \rightarrow [+act]
\end{align*}
\]

SVDR-19 creates a subclass of psych verbs which is further identified as being reciprocal and social, thus, intentional. The actants [+DAT] and [+OBJ] are again related to the [+OBJ] in the source reciprocal stem as indicated by the selectional features aFi. The derived social reciprocal psych verb means that the [+DAT] engages the [+OBJ] which it perceives in a mutual psychological experience. The [+OBJ] as the object perceived by the [+DAT] is interpreted at the same time as playing the role of a [+COM], it being the party engaged in the psychological experience. The morphological structure of this derived
set is no different from those of the other social reciprocal verbs by
SVDNR-19. The voice paradigm of this derived class is marked by m- for
the dative and by Ø or -an for the objective. For example:

(a) Reciprocal Psych
Verbs
pagśintindihan 'try
to understand
each other'
paglimutan 'try to
forget each other'
pagkita 'see each
other'

(b') Social Reciprocal Psych
Verbs
pakipagśintindihan 'engage
s.o. in understanding
each other'
pakipaglimutan 'engage
in forgetting each other'
pakipagkita 'arrange to
meet each other'

94.a. nagkita kami (ni Harmony) sa New York
see each we
other [+NM] [+recip] [+OBJ]
'We (Harmony and I) saw each other in New York.'

94.b. nakipagkita ako kay Harmony sa New York
arrange to meet I
[+soc] [+NM] [+L]
'I arranged to meet with Harmony in New York.'

94.c. pinakipagkita?an ko si Harmony sa New York
[+soc] [+AC] [+NM]
'It was Harmony whom I arranged to meet with in New York'

4.3.2.4.3.3 Social Verbs Derived from Non-agentive,
Non-dative Verb Stems
A third type of social verbs derive from non-agentive, non-dative
verb stems according to the following rule:
SVDR-20: Social Intransitive Verbs

The rule states that a locomotion or a simple intransitive verb can have a corresponding social verb, marked as in other 'socialization' rules with the features [+soc, -pot, +act]. The derived stem denotes likewise, 'joining in or participating in' an intentional action performed by a [+COM] actant. The participant that 'joins in' is the [+OBJ] that is introduced in the case frame and the actant already performing what is designated by the verb base is the [+COM] actant which corresponds to the original [+OBJ] as marked by the features aF. By SVDMR-20, the stem which is usually a simple root is prefixed by paki-. Although the voice paradigm includes both objective and comitative voices, the more frequently used form is the objective. It is marked by the affix m- while the comitative voice is marked by -an.

For example:

(a) Locomotion Verbs       (a') Social Intransitive Verbs
    silong 'take shelter'     pakisilong 'take shelter with'
    sakay 'ride on'           pakisakay 'take a ride with'
    pasok 'enter'             pakipasok 'enter with'
    punta 'go to'             pakipunta 'go with; go to as others do'
(b) Simple Intransitive Verbs

- takbo 'run'
- tawa 'laugh'
- sigaw 'shout'
- tindig 'stand'
- iyak 'cry'

(b') Social Intransitive Verbs

- pakitakbo 'join in running'
- pakitawa 'join in laughing'
- pakisigaw 'join in shouting'
- pakitindig 'join in standing'
- pakiyak 'join in crying'

95.a. tumakbo ang mga bata? nang marinig ang banda
run children when hear band (music)

'The children scampered when they heard the band.'

95.b. nakitakbo si Buddy sa mga bata?
join in running along with the children

'Buddy ran along with the children.'

When the source stem is a verb of locomotion, the [+COM] takes precedence over the [+LOC] in being realized as subject. Since a [+LOC] as subject is regularly marked by the affix -an on the verb, and the same affix already marks the [+COM], an imminent ambiguity between the identical forms is avoided by requiring the [+LOC] actant to be realized only in the locative case form in all social verbs as follows:

CFRR-18: [+soc] [+loc] \rightarrow [L] [+loc]

Thus, we can have the following pair of sentences indicating an objective and comitative voice:

96.a. nakisakay si Cricket kay Daisy sa 'roller coaster'
ride with

'Cricket rode with Daisy on the roller coaster.'
96.b. pinakisakyan ni Cricket si Daisy sa 'roller coaster'

'It was Daisy with whom Cricket rode on the roller coaster.'

However, the comitative voice where it suffers ambiguity with a 'request' form is frequently avoided.

It may also be mentioned that the semantically derived set of 'simultaneous action' verbs, e.g. magtakbuhan 'run together at the same time', can also undergo SVDR-18 giving the corresponding form of the type makipagtakbuhan 'engage with s.o./others in running together; join s.o./others in running at the same time'. Likewise, these derived forms are ambiguous with certain social reciprocal forms, e.g., makipagsigawan meaning 'shout together with others' or 'engage in shouting at each other.'

### 4.3.3 Voice-marking Affixes of Secondary Verb Stem Classes

The following chart summarizes the derived secondary verb stem classes indicating their respective voice inflectional paradigm and corresponding voice-marking affixes.

<table>
<thead>
<tr>
<th>CF-SF-MVF Secondary Verb Stem Classes</th>
<th>Voice Inflectional Paradigm</th>
<th>and Corresponding Affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UM- : M- : -IN : I- : -AN : Ø</td>
<td></td>
</tr>
<tr>
<td>1. [-[+INS], [+OBJ]]</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>(a) [-aff1, +pot,-act]</td>
<td>:</td>
<td>: OBJ</td>
</tr>
<tr>
<td>(b) [-aff1, -pot,+act]</td>
<td>: OBJ</td>
<td>:</td>
</tr>
<tr>
<td>(c) [+recip,-pot,+act]</td>
<td>: OBJ</td>
<td>:</td>
</tr>
<tr>
<td>(d) [+recip, +per, -pot, +act]</td>
<td>: OBJ</td>
<td>:</td>
</tr>
<tr>
<td>CF-SF-MVF Secondary Verb Stem Classes</td>
<td>Voice Inflectional Paradigm and Corresponding Affixes</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>

2. \([+AGT], [-DAT], -loc, [+OBJ]\)
   - (a) \([+recip, -pot, +act]\)
     \([-af, +erg]\)
     \([-af, +erg]\)
   - (b) \([+caus, -af, +erg]\)

3. \([+AGT], [-DAT], +loc, [+OBJ]\)
   - (a) \([+dir, +erg]\)
     \([+dir, +erg]\)
   - (b) \([+caus, +erg]\)

4. \([+INS], [+OBJ]\)
   - (a) \([-cs, +erg]\)
     \([+cs, +erg]\)
   - (b) \([+cs, +erg]\)

5. \([-AGT], [+DAT], [+OBJ], +exp\)
   - (a) \([+erg]\)
     \([+erg]\)
   - (b) \([+pot, -act]\)

6. \([+AGT], [+DAT], +loc, [+OBJ], +caus\)
   - (a) \([+erg]\)
     \([+dat]\)
   - (b) \([+dat]\)

7. \([+AGT], [+DAT], -loc, [+OBJ], +caus\)
   - (a) \([+extn, -cs, +erg]\)
     \([+extn, +dat]\)
   - (b) \([+extn, +dat]\)

   - (c) \([+cs, -af, +erg]\)
     \([-af, +dat]\)
   - (d) \([+cs, -af, +dat]\)

   - (e) \([-af, +dat]\)
<table>
<thead>
<tr>
<th>CF-SF-MVF Secondary</th>
<th>Voice Inflectional Paradigm</th>
<th>and Corresponding Affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verb Stem Classes</td>
<td>UM-</td>
<td>M-</td>
</tr>
<tr>
<td>(e) [+cog, +erg]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) [-cog, +erg]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. [+AGT], [-DAT],</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+OBJ], [+COM], +soc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) [+loc, -pot, +act]</td>
<td></td>
<td>AGT</td>
</tr>
<tr>
<td>(b) [-loc, -pot, +act]</td>
<td></td>
<td>AGT</td>
</tr>
<tr>
<td>9. [+AGT], [+DAT],</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+OBJ], [+COM], +soc, -pot, +act</td>
<td></td>
<td>AGT</td>
</tr>
<tr>
<td>10. [+AGT], [+DAT], +loc,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+OBJ], [+COM], +soc, -pot, +act</td>
<td></td>
<td>AGT</td>
</tr>
<tr>
<td>11. [+AGT], -[DAT], -loc,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+OBJ], [+COM], +soc, -pot, +act</td>
<td></td>
<td>AGT</td>
</tr>
<tr>
<td>12. [+INS], [+OBJ],</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+COM], +soc, +recip, -pot, +act</td>
<td></td>
<td>OBJ</td>
</tr>
<tr>
<td>13. [+AGT], [+DAT],</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+OBJ], +soc, +recip, -pot, +act</td>
<td></td>
<td>DAT</td>
</tr>
<tr>
<td>14. [+INS], [+OBJ],</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+COM], +soc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) [+loc, -pot, +act]</td>
<td></td>
<td>OBJ</td>
</tr>
<tr>
<td>(b) [-loc, -pot, +act]</td>
<td></td>
<td>OBJ</td>
</tr>
</tbody>
</table>

Chart 8. Voice inflectional paradigm and corresponding affixes of secondary verb stem classes.
4.4 Conclusion

From the foregoing description of syntactic derivation rules, we have seen the capacity of DR's to account adequately for the syntactic, semantic and morphological-voice relations of separate but related lexical items. Given a set of items specified with syntactic, semantic and/or morphological-voice features, a DR is able to create a corresponding set of items with its own matrix of features. The DR supplies the derived stem with new features, allows some features carried over from the source item to be modified, if necessary, and keeps intact all other features from the source. With its accompanying morphophonemic rule, the morphological shape of the verb stem is modified. By employing DR's, especially the productive ones, the lexicon can be greatly simplified. For instance, each verbal entry need not be specified for those features that are assigned by its associated DR. It is enough to indicate what particular DR applies to the item so that one can be directed to look to the DR for the full specification of its syntactic and semantic features.

The DR's formulated here are able to account for the verb stems that derive from N's and Adj's. They assign to the stems characteristic features which, in turn, qualify the stems to belong to the major syntactic subcategories of verbs. Likewise, the other DR's account for various types of verb stems that originate from other verb stem classes. Some of these DR's show the relationship between basic and derived primary verb stems whose case relation features are identical but whose voice inflectional possibilities and morphological forms differ. Other
DR's show syntactic and at the same time semantic differences and similarities between pairs of corresponding classes of verb stems. Thus, we see the relationship between a basic primary stem and a basic secondary stem, e.g., [+erg] and [+caus, +erg]; [+erg] and [+recip, +pot, +act]. By means of DR's, many new stems are formed from one basic stem or root and as new stems are created, membership in the various syntactic, semantic and morphological-voice subcategories multiplies. Some of the major case frame subcategories increase in the semantic subclasses that manifest them. Likewise, the morphological subclasses include more and more semantic and corresponding case frame subcategories. For instance, the class of [+AGT], [-DAT], [-loc, +OBJ] can include not only basic primary stems such as inom 'drink s.t.,' punas 'wipe off s.t.,' tulong 'help s.o.,' and the primary stems derived from them, but also secondary stems such as bagsak 'drop s.t.,' tunaw 'melt s.t.,' pakulo? 'boil s.t.' created through transitivization and causativization. With a few DR's, the formation of a new stem class results in the creation of a new syntactic class. For example, the syntactic class which has been labelled 'causative ditransitive' results from SVDR-13 which creates classes of stems with the case frame [+AGT], [+DAT], [+LOC], [+OBJ] which is not a member of the major case frame subcategories. It will be observed, however, that the three classes of verb stems under this subcategory differ in their semantic and morphological features. One is a double causative form of a former simple transitive verb, another is a double causative of a former causative perception verb, and the other is a single causative of a former information verb. Only by means of a DR can all three classes be related syntactically, semantically and morphologically in a simple,
economical and elegant fashion.

Finally, without the use of DR's as formulated in this study, any account for the occurrence of such complex verb stems as pakipagpabigay and how it is related syntactically, semantically and morphologically to other existing stems such as pagpabigay, pabigay and bigay and how it may be related, although distantly, to other stems such as pagbigay, pambigay and kabigay can only render either a description of the differences in affixes, which is no explanation, or an ad hoc elaborate explanation which may still be short of being an adequate description of Tagalog verb formation.
Footnotes to Chapter IV

1 Otanes analyzes the two verbs magbili 'sell' and bumili 'buy' as sharing the base bili 'transaction', and attributes the difference in their meanings to the difference in their affixes, mag- and -um-, respectively (1966:57). It may be mentioned, however, that the base bili when used as a nominal always expresses 'buying', e.g., mahal ang bili ko nito (Lit. 'My buying of this is expensive'). This may suggest that the basic form is the verb stem bili 'buy' and that magbili (pagbili) with its semantic modification is derived from the former.

2 This and the two following forms are causative stem forms.

3 The notational conventions used here follow Starosta's (1973) formulation.

4 Most of the classes identified by Otanes (1966: 156ff.) as 'modified verbs' are recognized here as semantically derived from verb stems. Most of the terms identifying the semantic classes are adopted from Otanes.

5 For the purposes of this dissertation, other lexical categories which can be sources of derived verb stems have not been included. Even the N and Adj categories treated here are limited to noun roots, excluding the class of pronouns, and to adjective roots and ma-adjec-
tives. (See Blake, 1911).

6 The succeeding VDR's without accompanying VDMR's mean that the derived stem does not acquire an affix.

7 This feature is interpreted as an optionally cooccurring coreferential OBJ of the subject OBJ.

8 It will be noted that the class of subjectless verbs is not included in the major case frame subcategorization in which the subject is considered an obligatory cooccurring feature of every verb stem. They have been included in this section to illustrate their 'creation'.

9 This observation was made by Richard McGinn in his paper "Tagalog Words and Verbs: A Probe into the Nature of Derivational Processes," for Linguistics 651, University of Hawaii, 1970.

10 See Ramos (1974: 92) for this class which she marks [+transient].
A similar distinction between intentional and non-intentional actions exists. In general, non-psych verbs are characteristically [+ntn] whereas psych verbs are [-ntn]. Thus, what are considered in the subcategorization in Chapter III are these characteristic forms of non-psych and psych verbs. Moreover, since the [+ntn] counterpart of non-psych verbs are semantically derived from the unmarked intentional primary verbs, they lie outside the scope of this study. The [+ntn] forms of psych verbs are accounted for since they derive directly from the Adj source just like the [-ntn] forms. Thus, primary verbs marked with [+ [+AGT]] or - [+INS]] are redundantly [+ntn] whereas the psych verbs are marked as either [-ntn] or [+ntn].


The derived reciprocal verb may also be shown to have derived indirectly from the source verb via a noun derivation. That is, a reciprocal noun referring to an 'exchange of action' e.g., balita'an 'an exchange of news-telling,' tanungan 'exchange of asking questions,' hiraman 'borrowing from each other,' palitan 'trading of s.t. with each other,' etc., derived from the non-reciprocal source verb, marked by the derivational affix -an (given in SVIMR-4, as the first affixation) serves as the source of the derived reciprocal verb marked by the prefix pag-. However, this alternative account is not followed here because such would not reveal the relationship in the case frames of the two types of verbs.

The class of reciprocal verbs include what Schachter and Utanes label 'referential-focus' verbs (1972:317). In the present study, the 'referential-focus' verbs are the objective voice forms of underived reciprocal verbs. Note that these are also marked by the voice affix -an, e.g., pag?usapan, whose corresponding agentive voice is mag?usap 'speak with each other.' The underived reciprocal verbs in this study fall under the subcategory of information verbs, but they have not been included only because there are very few of them to warrant a subdivision of the information subclass.

There is another kind of transitivization rule which applies to the same input in SVDR-7 whose resulting forms have the same syntactic features but whose semantic and morphological features differ from the forms derived through SVDR-7. This rule is labelled 'causative transitive verbs', SVDR-ll.

Two derived homophonous stems manifesting the case frames of a psych [+exp] verb and a calamity verb can also be distinguished by their derivational potential. Whereas the derived calamity verb can correspond to an accidental, semantically derived, form the derived psych [+exp] cannot. Compare the meaning difference, too, between 64.b and 65.b following.
This possibility as designated by a broken arrow is shown here to illustrate the further capacity of SVDR-12 to accommodate a [+ins] stem instead of only a [+root] or a [-pot, +act] input. What the rule is prohibited from taking as input are [-ins] stems. However, this possibility has not been specified in the rules as formulated.

It is significant to point out that lexicase makes a prediction that no new actants can be added while transformational grammar has no way of explaining why the process stops here.

Like the feature [+ntn] (see footnote 11), the primary agentive verb stems are generally non-reciprocal, thus, both features [+ntn] and [-recip] can be introduced by a redundancy rule such as:

\[
\begin{align*}
[+V] & \quad [+AGT] \quad [+ntn] \\
[-DAT] & \quad [-recip]
\end{align*}
\]

The reciprocal verbs are the marked forms and the non-reciprocal are the unmarked ones.

This affix should be distinguished from the homophonous paki- which means 'to request that s.t. be done'. Stems with the request affix paki- can be related to causative verbs and they are considered here as being formed by semantic derivation rules since there is no modification in the syntactic features of the source stem in the process of derivation.

In Otanes (1966:173), social verbs can occur only in actor-focus (with an agentive actant as subject). Compare her account of this type of verbs as being developed or generated by the base rule: "Asp maki-S". At one point, she states that the complementation of social verbs is "fully determined by the embedded sentence, or, more precisely, by the embedded verb." Deriving social verbs directly from agentive verbs, as is done in the present study, does not necessitate "embedding;" it is simply a morphological formation.

Note that the request type of the paki- verb includes locative voice, but the social type does not.

An irregular verb such as this one can also indicate an objective voice, as in: pinakipag-usapan ng estudyante sa guro ang (tungkol sa) eksamen. This instance is viewed as an irregularity since the expected objective voice form, ipinakipag-usap also occurs.

The parentheses mean that with certain verbs of the class identified, the specified voice is marked as such or that the voice form rarely occurs.
CHAPTER V
CONCLUSION

In addition to the works based on the lexicase framework that are cited here, this study has shown the workability of lexicase in one more language. Of particular significance in this study is the capability of lexicase to account formally for lexical relations through derivation rules. It is able to show that DR's can best capture syntactic, semantic and morphological relations between two lexical items or two lexical classes. This study demonstrates three types of syntactic relations expressed by VDR's, PVDR's and SVDR's.

The first type of rules accounts for verb stems originating from other lexical categories, namely N's and Adj's. The second type accounts for verb stems derived from other verb stems whose case relation and semantic features are identical but whose morphological features are different. The last type accounts for verb stems derived from other verb stem classes whose case relation features, primarily, differ from each other. By these sets of derivation rules, a systematic overview of the various types of verb stems each being marked correspondingly by a simple set of voice and aspect inflectional affixes can be observed.

In the attempt to distinguish clearly between Tagalog verb inflection and derivation, we have come to the following conclusions which have never been arrived at in a similar fashion in previous studies. These are the major contributions of this study to Philippine linguistics in general and to Tagalog grammar in particular.

(a) The two inflectional categories of verbs are voice and aspect. A verb stem expresses at least one or no more than four of the following
voices: objective, agentive, dative, locative, instrumental, benefactive, reason or comitative. Aspect inflection does not include the recent [+rec] category proposed in some studies.

(b) The verbal affixes marking voice inflection are the active affix um- or m-, the passive affixes -in, -an and i- and Ø. The two affixes that are introduced for the first time are m- and Ø.

(c) The verbal affixes marking the completed and, partially, the non-completed aspects are um-, n- or in-. Reduplication of the first consonant and vowel of the verb stem, in general, marks the begun and, partially, the non-completed aspects, except the m- and Ø-classes of stems.

(d) All affixes on the verb stem other than the inflectional affixes stated in b and c are derivational affixes, e.g., pag-, pang-, ka-, ma-, maka-, pa-, pag- an, pagsa-, paki-, etc.

(e) Verb stems manifesting a complex of derivational affixes indicate a process of lexical rederivation which explains the hierarchical layering of derivational affixes. This is clearly illustrated particularly by the causativization, activization and socialization rules.

(f) Only a verb stem, never a root, classification reveals the simple and invariant set of voice and aspect affixes which can be distinguished from derivational affixes.

(g) The selection of the voice inflectional affixes manifesting the verb stem's voice paradigm is based not only on the syntactic and semantic features of the verb but also on its morphological features. The last type of feature is necessary because there are stems that differ only in this specification and, correspondingly, they are marked by different affixes to indicate their voice paradigm.
(h) The aspect inflectional affixes are dependent on the verb stem's voice affix which is the manifestation of the verb's complex of distinctive features as stated in g.

In addition, there are related accounts in this study which lend clarification to some syntactic problems that are not satisfactorily explained or adequately accounted for in past studies. These are the concomitant contributions of this investigation summarized as follows:

(a) Strict adherence to the lexicase grammar's use of the construction labels NP and PP as manifesting actants or verbal complements has led to the clarification of the categories Det and P which mark the case form of the cooccurring actants. This distinction has always been obscured by the practice of classifying such expressions as para sa, dahil sa, and even sa pamamagitan ng as complex 'complement or case markers' falling together with the simple markers ang, nang and sa.

(b) The analysis of case relations as one of the relevant features of verbs has led to the conclusion that positing one CR, labelled LOC, to represent both the actant identified in other works as DAT or Dir of 'give-verbs' and the LOC or Dir of 'put-verbs' achieves greater generality and simplicity of description.

(c) The analysis of [+goal] and [-goal] types of directional verbs has brought out the possibility of an optional cooccurrence of a second locative actant which complements the noun phrase [+LOC] expressing the destination or origin of the [+OBJ] of the respective verb stem. The complementary locative actant, however, must occur as a prepositional phrase specified on the preposition with a directional feature opposite that of the verb's.

(d) There are constraints on the cooccurrence of more than two
[+AC]'s or [+L]'s realizing various kinds of case relations. These constraints can be expressed as redundancy rules.

Toward defining certain universal features of verbs, this study has shown the viability of positing the following characteristics:

(a) Contextual or case frame features of verbs describe the basic sentence types of verbal sentences.

(b) Verb forms identify which cooccurring case relation must be realized as the subject of the sentence.

(c) The semantic features which subcategorize the various case frame subcategories may be true for most languages but their corresponding syntactic and/or morphological consequences are language specific.

(d) A verb derivation rule states either a syntactic and/or a semantic relation between two separate but corresponding lexical items or classes.

Finally, this study has raised questions that have not been considered before as relevant to grammatical analysis. Clarifying these questions and hinting at some possible directions for their investigation are also a contribution to further linguistic inquiry.
APPENDIX A

SEMANTIC AND CASE FEATURES OF TAGALOG

DET’S (DETERMINERS) AND PRO’S (PRONOUNS)

I. Subcategorization and Redundancy Rules for Det’s

SR-1: [+Det] → [+com]

SR-2: [-com] → [+sg]

SR-3: [-NM] → [+AC]

RR-1: [-AC] → [+L]

RR-2: [+Det] → [-[+N

II. Subcategorization and Redundancy Rules for Pro’s

SR-1: [+Pro] → [+pers]

SR-2: [+pers] → [+sg]

SR-3: [-lp] → [+2p]

RR-1: [-2p] → [+3p]

SR-4: +lp → [+incl]

SR-5: [-pers] → [+near spkr]

SR-6: [-near spkr] → [+near hearer]
The first entry is the regular form. Of these two variants, only the longer form, i.e., ako and ikaw, can occur in sentence initial position or as independent word responses.
tayo kami natin namin kayo ninyo sila nila
sa 'atin sa 'amin sa 'inyo sa kanila
APPENDIX B

VERB INFLECTION RULES

I. Voice Redundancy and Subcategorization Rules

\[ \text{VRR-1: } [+V] \rightarrow [+NM] \]
\[ \text{VRR-2: } [+V] \rightarrow [-NM] [+NM] \]

\[ \text{VSR-1: } [+V] [+NM] \rightarrow [-\text{OBJ}] \]
\[ \text{VSR-2: } [-\text{OBJ}] \rightarrow [-\text{DAT}] \]
\[ \text{VSR-3: } [+NM] \rightarrow [-\text{LOC}] \]
\[ \text{VSR-4: } [-\text{LOC}] \rightarrow [-\text{AGT}] \]
\[ \text{VSR-5: } [-\text{AGT}] \rightarrow [-\text{BEN}] \]
\[ \text{VSR-6: } [+NM] \rightarrow [-\text{INS}] \]
\[ \text{VSR-7: } [-\text{INS}] \rightarrow [-\text{RSN}] \]
\[ \text{VRR-3: } [-\text{RSN}] \rightarrow [-\text{COM}] \]

II. Aspect Subcategorization Rules

\[ \text{ASR-1: } [+V] \rightarrow [+\text{fin}] \]
\[ \text{ASR-2: } [+\text{fin}] \rightarrow [+\text{beg}] \]
\[ \text{ASR-3: } [+\text{beg}] \rightarrow [+\text{comp}] \]

III. Voice-Aspect Morphophonemic Rules

\[ \text{VAMR-1: } V(C_1)V_1 \rightarrow V(C_1)V_1(C_1)V_1 / \begin{cases} \text{UM-} \\ \text{IN-} \\ \text{AN-} \\ \text{I-} \\ \text{-beg} \\ \text{-comp} \end{cases} \]
VAMR-2: \( y[(C_1) \rightarrow y[(C_1)_{\text{um}} / \{\text{UM-class}\} \{+\text{beg}\} \{\text{-fin}\} \{\text{-beg}\}] \)

VAMR-3: \( y[(C_1) \rightarrow y[(C_1)_{\text{in}} / \{\text{IN-class}\} \{\text{-fin}\} \{\text{-beg}\}] \{\text{class}\}] \)

VAMR-4: \( i[y \rightarrow i[y]_{\text{in}} / \{\text{IN-class}\} \{\text{-fin}\} \{\text{-beg}\}] \)

VAMR-5: \( y \rightarrow a[y]_{\text{in}} / \{\text{AN-class}\} \)

VAMR-6: (a) \( y[i[\text{in}V_1] \rightarrow y[i[\text{in}V_1] / \{\text{I-class}\} \{+\text{beg}\}] \)

(b) \( y[i[\rightarrow y[i[ / \{\text{I-class}\} \)

VAMR-7: (a) \( y[V_1{(C_1)_{\text{ng}}}V_2] \rightarrow y[V_1{(C_1)_{\text{ng}}}V_2] / \{\text{M-class}\} \{\text{-beg}\} \{\text{-comp}\}] \)

(b) \( y[V_1(C_1)_{\text{C}}V_2] \rightarrow y[V_1(C_1)_{\text{C}}V_2] / \{\text{\emptyset-class}\} \{\text{-beg}\} \{\text{-comp}\}] \)

VAMR-8: (a) \( y[l[ \rightarrow y[l[m] / \{\text{M-class}\} \)

(b) \( y[m{\text{mp}}] \rightarrow y[m] \)

VAMR-9: (a) \( y[l[ \rightarrow y[l[n] / \{\text{\emptyset-class}\} \{+\text{beg}\}] \)

(b) \( y[m{\text{nm}}] \rightarrow y[m{n}] \)
APPENDIX C

VERB STEM SUBCATEGORIZATION AND REDUNDANCY RULES

1. Case Frame SR's and RR's

| CFRR-1:  | [+V] → [+OBJ] |
| CFSR-1:  | [+OBJ] → ±[+AGT] ±[+DAT] |
| CFSR-2:  | [-[+DAT]] → ±loc |
| CFSR-3:  | [+loc] → ±strict |
| CFRR-2:  | [+strict] → [+LOC] |
| CFRR-3:  | [-strict] → [+(+LOC)] |
| CFSR-4:  | [-[+AGT]] -loc → ±[+INS] |
| CFRR-4:  | [-[+AGT]] +[INS] → -[+RSN] |
| CFSR-5:  | [+AGT] +[+DAT] → [+INS] |
| CFRR-6:  | [+AGT] → [+(+BEN)] |
| CFRR-7:  | [+V] → [+[+INS]] |
| CFRR-8:  | [-[+AGT]] → [-[+BEN]] |
| CFRR-9:  | [-[+AGT]] +[INS] +[OBJ] → [-AC] |
| CFRR-10: | [+extn] [+NM] → [-L] |
| CFSR-5:  | [-extn] [+NM] → [+AC] |
| CFRR-11: | [-extn] aAC +[OBJ] → [+OBJ] |
CFRR-12: 
\[-\text{extn}\]
\[+\text{-AC}\]
\[+\text{+OBJ}\]  $\rightarrow$  
\[-\text{-L}\]
\[-\text{+OBJ}\]

CFRR-13:  
\[-\text{cog}\]  $\rightarrow$  
\[-\text{strict}\]
\[-\text{dir}\]

CFRR-14: 
\[-\text{per}\]
\[+\text{+NM}\]
\[-\text{-+OBJ}\]  $\rightarrow$  
\[-\text{-L}\]
\[-\text{+OBJ}\]

CFRR-15: 
\[+\text{assm}\]  $\rightarrow$  
\[-\text{+NM}\]
\[-\text{-DAT}\]

CFRR-16: 
\[\text{agoal}\]  $\rightarrow$  
\[+\text{P}\]
\[\text{agoal}\]
\[-\text{+LOC}\]

CFRR-17: 
\[+\text{caus}\]
\[+\text{erg}\]
\[+\text{+AGT}\]
\[+\text{+DAT}\]
\[-\text{-+NM}\]
\[-\text{-+DAT}\]  $\rightarrow$  
\[-\text{-L}\]
\[-\text{+DAT}\]

CFRR-18: 
\[+\text{soc}\]
\[+\text{loc}\]  $\rightarrow$  
\[-\text{-+LOC}\]

II. Semantic SR's and RR's

SFSR-1:  
\[+\text{loc}\]  $\rightarrow$  
\[\pm\text{dir}\]

SFSR-2:  
\[+\text{dir}\]  $\rightarrow$  
\[+\text{goal}\]

SFSR-3':  
\[+\text{+AGT}\]
\[-\text{dir}\]
\[-\text{-extn}\]  $\rightarrow$  
\[\pm\text{af}\]

SFSR-4':  
\[+\text{af}\]
\[+\text{affl}\]  $\rightarrow$  
\[\pm\text{cs}\]

SFSR-5: 
\[+\text{+AGT}\]
\[-\text{+DAT}\]
\[-\text{-+DAT}\]  $\rightarrow$  
\[\pm\text{extn}\]

SFSR-6: 
\[-\text{-+INS}\]
\[+\text{+OBJ}\]  $\rightarrow$  
\[\pm\text{inch}\]
III. Morphological and Voice-Related SR's and RR's

**SFSR-7:** [+inch] \(\rightarrow\) [+term]

**SFSR-8:** [-inch] \(\rightarrow\) [+aff1]

**SFSR-9:**
\[
[- [+AGT]]
\ [+[DAT]]
\ [+[OBJ]] \(\rightarrow\) [+per]
\]

**SFSR-10:** [+per] \(\rightarrow\) [+cog]

**SFSR-11:** [-per] \(\rightarrow\) [+emo]

**SFSR-12:** [-emo] \(\rightarrow\) [+assm]

**SFSR-13:** [-assm] \(\rightarrow\) [+attd]

**MVRSR-1:** [+V] \(\rightarrow\) [+root]

**MVRRR-1:** [+root] \(\rightarrow\)
\[
[-AC]
\ [+INS]
\ [-R]
\ [+RSN]
\ [+C]
\ [+COM]
\]

**MVRSR-2:** [+root] \(\rightarrow\) [+erg]

**MVRRR-2:** [+erg] \(\rightarrow\)
\[
[- +NM]
\ [+AGT]
\ [+NM]
\ [+INS]
\]

**MVRRR-3:**
\[
[+ [+AGT]]
\ [+NM]
\ [- +AGT] \(\rightarrow\)
\ [- +NM]
\ [- +BEN]
\]

**MVRSR-3:** [-root] \(\rightarrow\)
\[
[-pot]
\ [+act]
\]

**MVRSR-4:** [-pot]
\[-act] \(\rightarrow\) [+ins]

**MVRRR-4:**
\[
[[+pot]]
\ [-pot]
\ [+act] \(\rightarrow\)
\ [- +INS]
\ [+NM]
\ [- +RSN]
\]

**MVRRR-5:** [+pot]
\ [+act] \(\rightarrow\)
\ [- +NM]
\ [+OBJ]
MVRRR-6: [+ins] \rightarrow [-INS] [+NM]
MVRRR-7: [+AGT] [-ins] \rightarrow [-RSN] [+NM]
MVRRR-8: [-AGT] [-ins] \rightarrow [+DAT] [+NM]
MVRRR-9: [+caus] [+dat] \rightarrow [-AGT] [+NM]
\quad \rightarrow [-INS] [+NM]
\quad \rightarrow [-RSN] [+NM]
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