ON MORPHOLOGICAL AND SYNTACTIC RELATIONS
IN A SOUTHEAST ASIAN LANGUAGE*

CESAR A. HIDALGO

0. INTRODUCTION

In Charles Fillmore's paper on the features of a universal base, he argues for a universal system of deep-structure cases, the explanatory value of which is of a syntactic nature. He says:

The various permitted arrays of distinct cases occurring in simple sentences express a notion of "sentence type" that may be expected to have universal validity independently of such superficial differences as subject selection. The array of cases defining the sentence types of a language have the effect of imposing a classification of the verbs in the language (according to the sentence type into which they may be inserted), and it is very likely that many aspects of this classification will be universally valid.¹

In our study of Ivatan,² using a tagmemic model, simple sentences (clauses) were typed according to clause expansion features or in Fillmorean terms, according to arrays of cases occurring in simple sentences. It was found out that the different sentence types correlate with various predicative types. Specifically, the different cases in the sentences are related to affixes in the predicative. It was also found out that not all affixes occur with all types of predicatives. The potential affixes in a predicative are restricted by stem type and other occurring affixes. This close relation between syntax (i.e. the array of cases occurring in a simple sentence) and the morphological structure of the predicative underscores the need for a closer scrutiny

---

*Research on Ivatan (one of the Philippine languages) has been supported in part by grants from the Social Science Research Council, University of the Philippines, the Linguistic Society of the Philippines, and the Rockefeller Foundation. Paper read at the 28 International Congress of Orientalists, Canberra, January, 1971.
of predicative morphology, for a better understanding of Ivatan syntax and, presumably, the syntax of the other Philippine languages. This study of predicative morphology (in consonance with syntax) is especially relevant when we take into consideration the fact that a number of cases or in tagmemic terms clause nuclear tagmemes in Ivatan do not obligatorily occur. Their implicit presence is signalled by a predicative affix. Consider:

1. Naparutung si ina su manuk.
   P         S       O
   caused-cook fm mother fm chicken
   'Mother caused (someone) to cook chicken.'

2. Ipanutung ya.
   P          T/A
   cook-with dem
   '(Someone) cooks with this.'

3. Umuyug u ranum.
   P          T/S
   flow fm water
   'Water flows.'

In 1, the indirect object (Y) does not occur overtly. It is known to occur implicitly between speaker and hearer and may occur explicitly because of the causative affix \( \{\text{pa}-\} \) in the predicative naparutung 'caused-cook'. In the case of 2 and 3 the surface structures appear to be similar (i.e. both sentences consist of two elements, a predicate and a topic), but the underlying structures of the two are quite different. In 2, the structure of the predicative signals that the topic manifested by ya 'this' is associative instrument \( \{\text{ip}-\} \). The predicative also signals the potential occurrence in the sentence of the subject and object functions. In 2, the speaker-hearer knows that these functions implicitly occur. In 3, the focus affix which is also an intransitiviser \( \{\text{um}-\} \) indicates plainly that no object function can potentially occur.

This paper attempts to present the relation between syntax and the morphological structure of the Ivatan predicative.

1. THE PREDICATIVE STEM

The predicative is a class of words that manifest features such as focus, tense, voice, or aspect (which are absent in the other form classes) and that fill the predicate slot of clauses other than the equational clause. It may, however, manifest non-predicate tagmemes on the
clause level generally manifested by nominals. Except for a few ad-
jectival predicatives, it consists of at least two morphemes - a stem
and an affix and may potentially consist of a stem and layers of affixes,
including the suprasegmental morpheme stress or length.

The predicative stem may be simple or derived. Ivatan has nine types
of simple stems (basically the verb stem, numeral stem, adjective stem,
and common noun stem) which are formally distinctive on the basis of af-
fixational potential. Affixes considered in categorising the simple
stems are those that have bearing on syntax. These include both focus
and voice affixes. Classifying, then, the simple stem types by their
syntactically relevant affixational potential, they are thus categorised
by the potential syntactic constructions into which they may participate.

1.1 THE SIMPLE STEM

The nine simple stem types may be labelled as follows: 1) verb stem 1
(vs1) which is generally an inherently transitive verb stem, i.e. it may
take the transitive voice affix {N-} without having to be affixed with
a derivational affix that will then allow the prefixation of {N-};
2) verb stem 2 (vs2) which is generally an inherently intransitive verb
stem; 3) noun stem 1 (ns1) which is a concrete noun such as amung
'fish'; 4) noun stem 2 (ns2) which is an abstract noun pertaining to an
emotion such as adaw 'love', amu 'fear'; 5) noun stem 3 (ns3) which is a
concrete noun pertaining specifically to meteorological conditions like
chimuy 'rain', chidat 'lightning'; 6) noun stem 4 (ns4) which is an
abstract noun pertaining to a quality such as avid 'beauty', pya 'good-
ness', karang 'tallness'; 7) noun stem 5 (ns5) which indicates the
period of the day and which may either be a bound form or a free form,
e.g. -kuyab 'afternoon' and ahep 'night'; 8) numeral stem (nums) such as
pitu 'seven', wahu 'eight'; and 9) adjectival stem (adjs) such as dekey
'small', aru 'many', rakuh 'big', vayu 'new'.

1.2 THE DERIVED STEM

The derived stem consists of a core manifested by either a ns1, ns3,
or ns4 root and a derivational affix or consists of a ns1 plus a plur-
alariser. The derivational affix is limited to a morphologically func-
tional affix which increases or decreases the focus or voice affixational
potential of the simple stem. Unlike the voice affixes which also in-
crease or decrease the focus affixational potential of the simple stem,
the predicative derivational affix is not syntactically relevant in
signalling potential slots in syntax as the voice affixes do. Consider:
4. adaw 'love' \( \text{madaw (Sf)} \) versus \( \text{-adadaw} \) \\
\( \text{ichadaw (Af)} \) \hspace{1cm} \( \text{mangadadaw (Sf)} \) \hspace{1cm} \( \text{adadawen (Of)} \) \\
\( \text{ipangadadaw (Af)} \) \hspace{1cm} \( \text{pangadadawan (Rf)} \)

This simple noun stem 2, adaw, is inflectble for only two non-predicate focuses: subject and associative and thus the syntactic construction into which adaw as a predicative stem enters are unexpandable beyond the subject and associative slots in terms of nuclear clause tagmemes. The derived stem\(^5\) -adadaw, however, may be inflected for subject, object, associative, and referent focuses so that the syntactic constructions into which -adadaw enters into are more complex in terms of potential clause expansion. For a case of a decrease, consider:

5. avid 'beauty' \( \text{makavid (Sf)} \) versus \( \text{-avyavid} \) \\
\( \text{kaviren (Of)} \) \hspace{1cm} \( \text{mayavyayavid (Sf)} \) \hspace{1cm} \( \text{ipayavyayavid (Af)} \) \\
\( \text{ipakavid (Af)} \) \hspace{1cm} \( \text{payavyayavid (Af)} \) \hspace{1cm} \( \text{pakaviran (Rf)} \) \hspace{1cm} \( \text{payavyaviran (Rf)} \)

In the case of avid, ns4, the derivational affix decreases the affixational potential of the stem. The simple stem avid may be affixed with the augmentative {ipa-2} or the possessive affix {ka-3} which makes it possible for the stem to be inflected for object focus and thus allows the predicative to enter into a transitive construction. If avid were affixed with a derivational affix, the resulting stem -avyavid cannot be affixed with {ipa-2} or {ka-3} and the predicative with this stem participates only in an intransitive construction. The augmentative affix {ipa-2} is an inner affix whereas the associative focus affix {ipa-1} is an outermost affix.

The predicative derivational affix is a reduplicative affix (usually the first or first two syllables of the root are reduplicated). Affixation of the derivational affix to the noun root generally results in a bound form, e.g. -sasalawsaw from salawsaw 'wind'. A case when the non-simple noun stem does not result in a bound form is when a semantic change attends the stem change as in the non-simple stem conveying the diminutive, e.g. vavahay 'playhouse'.

In predicativising a stem, the affixation of the derivational affix to the noun root results in a meaning different from the predicative the stem of which is simple, e.g. maybaka 'raise cattle' versus maybabaka 'crawl on all fours'. This change in meaning is also evident when a plural noun is predicativised. When kusikusina 'kitchens' is predicativised forming maykusikusina 'do the things related to the kitchen', kusikusina 'kitchens' becomes singular and the notion of plurality is attached to the activities connected with the kitchen. Or
consider mayvahay 'play housekeeping' with the stem vavahay 'playhouse' and mayvahavahay 'do the activities connected with the house' with the stem vahavahay 'houses'. The simple noun stems that may be affixed with a derivational affix are ns1, ns2, ns3, and ns4. The derived noun stems (dns), then, are dns1, dns2, dns3, and dns4. dns1 is further subclassified into d1ns1 and d2ns1 (the former exhibiting a reduplication of only the first syllable of the simple stem and the latter exhibiting a reduplication of the first two syllables of the simple stem accompanied by meaning difference, e.g. maylalamit 'play with cloth remnant' versus maylamilamit 'work with clothes'. A difference in the location of the primary stress plus meaning difference occur in d1ns1, hence d1ns1 and d1bns1, e.g. -lalamit from lamit 'cloth' and lalamit 'cloth remnant'.

2. THE PREDICATIVE AFFIXES

The predicative affixes are categorised in terms of form into: non-reduplicative affixes, reduplicative affixes, and suprafixed. In terms of function, the predicative affixes may be generally classified into two: the morphologically functional and the syntactically and/or semantically functional affixes.

The morphologically functional affixes do not give any semantic modification to the predicative stem nor are they directly relevant to syntactic structures. They function either to allow or restrict focus and/or voice affixes that may be affixed to the stem or to make distinct morphological distributions thereby making distinct semantic features of homophonous affixes.

The syntactically and/or semantically functional affixes may be subdivided into aspect and non-aspect affixes. The aspect affixes may be subcategorised into action aspect affixes (e.g. augmentative, distributive, ablative or accidental, frequentative, repetitive) and time aspect affixes (e.g. habitual, punctiliar, durative, inceptive, continuative). Aspect affixes semantically modify the predicative stem but are not syntactically relevant in terms of clause expansion. The distributive aspect, however, indicates a plural subject or object, depending on the predicative focus. The action aspect affixes are inner affixes while the time aspect affixes occur in outermost position. The durative aspect suffix (-an1), however, occurs in an inner position if the focus affix is a suffix as in paychamahpanan 'is done all night'. The non-aspect affixes are syntactically relevant in terms of clause expansion. They are subcategorised into focus affixes and voice affixes. The focus affixes occur in outermost position and the voice affixes in inner position. A detailed discussion of the various affixes is not possible in
this paper. Consider, then, the general scheme of Ivatan predicative affixes in terms of function as shown in the configuration as a summary of the Ivatan affixes (on next page).^6

2.1 THE STEM AND FOCUS AFFIXES

Focus refers to a relationship between the predicate and a non-predicate clause level tagmeme, the topic, where the basic function (case use) of the topic is signalled formally by an affix (the focus affix) in the predicative manifesting the predicate. The topic^7 can be any of the clause level tagmemes: subject, object, associative, referent, indirect object, object/referent, or object/associative. Each of these tagmemes or functions (considered here as deep structure cases) are marked by certain particles, the function markers. When any of them functions at the same time as topic, the function marker signalling its base function is replaced by a topic marker (e.g. u before common nouns) and the basic function of the topic is signalled by the predicate. Such tagmeme functioning as topic is then said to be focussed. Inflecting, then, the predicative for focus is a device for identifying which of the clause constituents has been singled out as topic. The focus affix indicates the logical function (the deep structure function) of the noun phrase serving as topic. For instance, the focus affix -en in ahapen 'get' indicates that the logical function of the topic u vahayang 'the knife' in the sentence

6. Ahapen mu u vahayang.
   get you fm knife
   'Get the knife.'

is object of.

Different stems may inflect differently in terms of focus. The number and types of focus affixes to which a stem may be inflected signals the number and types of potential nuclear clause tagmemes which may constitute constructions into which the stem may enter. For instance, if a stem is inflectable for subject, object, referent, and associative focuses, the stem may enter into syntactic constructions where subject, object, referent, and associative tagmemes are among the constituents and if a stem is not inflectable for a particular focus type, e.g. object focus, it does not enter into a syntactic construction where an object tagmeme occur unless a non-focus affix that allows such focus inflection occurs with the stem (e.g. the derivational reduplicative affix in -adadaw) or unless a non-focus affix signals the occurrence of the object (e.g. the causative affix {pa-} in mapawyg 'cause x to flow').
| TABLE 1 |
| SUMMARY OF AFFIXES |
| IVATAN AFFIXES |

**SYNTACTICALLY AND/OR SEMANTICALLY FUNCTIONAL AFFIXES**

**Non-Aspect Affixes**

**Focus/Tense Affixes**

1. -(ma-1) - SF
2. -(um-2) - SF/interv
3. -(ma-2) - Of/abliti-
    ve, accidental asp
4. -(-En1) - Of
5. -(l-1) - Af (in-
    strumental, benefactive, 
    causal)
6. -(icha-1) - Af 
    (causal, comitative)
7. -(l-2) - Of/Af
8. -(ka-1) - Pf
9. -(an-1) - Of/Rf 
    degree
10. -(an-2) - Rf (loc-
    ative, non-locative)
11. -(ja-) - Pf/exclam-
    atory
12. -(in-) - past tense
13. Counting reduplicat-
    ive

**Voice Affixes**

1. -(ka-1) - pos-
    sessive
2. -(pa-1) - cau-
    sative
3. -(ya-) - simili-
    tude
4. -(chi-1) - im-
    pression
5. -(chi-2) - partici-
    pative
6. -(Red) - redup-
    licative com-
    parative
7. -(Stress) - super-
    lative
8. -(Stress) - sup-
    erlative degree
9. Degree super-
    fix

**Action Affixes**

1. -(N-) - direc-
    tional affix 
    (one way)
2. -(y-) - direc-
    tional (re-
    flexive, re-
    ciprocal) intvar
3. -(ki-) - freque-
    ntive making a 
    cardinal an 
    ordinal number
4. -(Stress) - incept-
    ive superfix
5. -(Reduplicative) - 
    repetitive aspect

**Aspect Affixes**

1. -(ipa-1) - aug-
    mentative
2. -(icha-2) - distri-
    butive
3. -(ka-2) - abili-
    tive, accidental
4. -(pi-) - freque-
    ntive making a 
    cardinal an 
    ordinal number
5. -(Length) - contin-
    uative superfix

**Non-Directional**

1. -(En1) - habitual 
2. -(En2) - punctiliar 
3. -(En3) - durative 
4. -(Stress) - inceptive 
5. -(Length) - continu-
    ative superfix

**Directional**

1. Reduplicative enabling 
   root to be affixed 
   with certain affixes 
   conditioning the affixa-
   tional potential of the 
   stem
2. -(pa-1) - makes distinct 
   distribution and func-
   tion of homophonous 
   affixes

---

The subject focus may also convey the verbal notion 'becoming' which -(ma-) does not, e.g. umhutab 'become bubbly', mahutab 'bubbly', umidak 'become white', maydak 'white', umasin 'become salt', masin 'salty'.
This does not mean, however, that all n tagmemes can always occur in one single syntactic construction when the stem is inflectable for all n tagmemes. The type of focus of the construction may impose constraints on the type of tagmemes that may occur in a particular construction. That focus is a function of the predicative stem, consider the comparison between verb stem 1, verb stem 2 and noun stem 2 in terms of focus inflections when they are unaffixed with optional voice affixes (Table 2 where x = presence).

<table>
<thead>
<tr>
<th>Non-Predicate Focus Affixes</th>
<th>Vs1</th>
<th>Vs2</th>
<th>Ns2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Subject</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. a) Object</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Obj/Ref</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Obj/As</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Associative</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4. Referent</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sample stem</td>
<td>-rutung</td>
<td>-uyug</td>
<td>adaw</td>
</tr>
<tr>
<td>'aok'</td>
<td>'flow'</td>
<td>'love'</td>
<td></td>
</tr>
</tbody>
</table>

If the predicative stem is unaffixed with optional voice affixes, -uyug 'flow' does not enter into a syntactic construction where an object is present and adaw 'love' does not enter into a syntactic construction where an object or a referent occurs.

2.2 THE STEM AND VOICE AFFIXES

Voice is a feature of the predicative realised by affixes which signal the relationship of the participants to the action which that the potential occurrence or non-occurrence of a clause level tagmeme is indicated. The voice affix is syntactically relevant in terms of clause expansion. For instance, the causative \(pa_{-1}\) occurring with a particular type of verb stem signals the potential occurrence of the indirect object (Y) tagmeme making the construction ditransitive and indicating the sub- as agent rather than actor in the situation, e.g.

7. Naparutung si ina ji Marya su manuk.

P S (agent) Y (actor) O

'Mother caused Mary to cook chicken.'

or occurring with another type of verb stem, it signals the potential
occurrence of an object tagmeme, thereby transitivising an otherwise intransitive predicative, e.g.

8. Napawyg si Marya su ranum.
   P    S    O
   'Mary caused the water to flow.'

Other voice affixes are directional in nature. They indicate whether an action is of one direction, which, when occurring with a particular type of predicative stem, carries over to a recipient indicating the potential occurrence of the object slot (a transitive action) as in:

9. mangarek 'kiss someone'
10. manwaswe 'turn something or someone'
or whether an action is of a reflexive direction or reciprocal direction indicating the absence of an object in syntax, e.g.

11. mayarek 'kiss each other'
12. maywaswe 'turn oneself'

Voice affixes are either obligatory or optional to certain stem types. Different simple stems vary also according to the voice affixes they may take. For instance, the causative affix (pa-1) may be affixes to the simple stem -rutung 'cook' which belong to the category verb stem 1 as in maparutung 'cause or make x cook' but the causative affix cannot be affixed to the simple stem adaw 'love' which belongs to the category noun stem 2, unless some other affix occurs to allow the affixation of the causative affix, i.e. a derivational affix, e.g. mapadadaw 'allow x to show affection' with the derivational affix in -adadaw. The implication of this in syntax is that the nuclear grammatical slot, the indirect object slot, which is signalled by the causative affix may occur with a vsl predicative but not with a ns2 predicative. Consider the comparison between vsl, vs2, ns2 and dns2 in term of voice affixes and focus affixes in Table 3 where + = obligatory, - = absence, x = presence, and ± = optional.

(Table 3 overleaf.)
The presence of a directional voice affix N- in the predicative signals the object slot in syntax. Consider:

   P  S  O
   cooked I fm chicken
   'I cooked chicken.'

   P  S  A
   was-in-love I fm child
   'I was in love (because of) a child.'

15. Nangadawaku su metdeh.
   P  S  O
   (showed) love I fm child
   'I showed love to the child.'

In 14, nu metdeh 'function marker child' is not the object of nadaw 'was in love' but the cause of an emotional state of an affectant, thus the function marker nu (the associative function marker) instead of su (the function marker indicating the function object of).
The occurrence of the causative voice affix \( \text{pa-} \) signals the indirect object when the predicative stem is vs1 and the direct object when the predicative stem is vs2.

16. *Naparutung aku ji Marya su manuk.*
   \[ \text{P S Y O} \]
   \[ \text{caused-cook I fm Mary fm chicken} \]
   'I caused Mary to cook chicken.'

17. *Napawug aku su ranum.*
   \[ \text{P S O} \]
   \[ \text{caused-flow I fm water} \]
   'I caused the water to flow.'

Table 3 further shows that the occurrence of an optional voice affix in the predicative not only signals the occurrence of tagmemes which cannot occur when this voice affix is absent but also limits the occurrence of focus affixes, thereby restricting the presence of certain tagmemes (the array of cases) in syntax. The associative does not occur in syntax when the causative voice affix is present in the predicative. The referent may occur, however, but the sentence is strained when the indirect object also occurs.

3. PROPOSAL

It is proposed, therefore, that syntactic studies should analyse morphology in consonance with syntax and that morphology and syntax should not be studied independently of each other. Our Ivatan studies support the relevance of this point of view in the case of the close correlation between sentence (clause) types and simple stem types. It lends empirical evidence to Fillmore's theorising quoted above, in so far as the array of cases defining the sentence types of a language have the effect of imposing a classification of verbs in the language. As to whether the aspects of the verb classification in this study are universally valid, we can only speculate.

The predicative classification in this study considered structural features such as stem type and affixation and semantic features such as transitive sensitivity, concreteness, abstractness (emotion and quality), meteorological condition, time, and quantity. While it is postulated that the simple stems exhibit inherent semantic features, this aspect of this paper needs further study.
NOTES


3. This stem class is the largest of the stem classes. Further investigation indicates that a subclassification of this class is desirable, but this is not done in this paper.

4. The Postal-Lakoff doctrine considers adjectives as a subset of verbs. See Fillmore, op. cit., p. 27.

5. A dichotomy of inflectional affixes and derivational affixes is not presented in this study as a clear-cut distinction between the two is not possible: a derivational affix may also be an inflectional affix simultaneously. For instance, the noun stem avid 'beauty' may become a predicative by prefixing {ma-} to form mavid 'beautiful'. The prefix {ma-} may then be classified as a derivational affix in that it governs the form class of the word, but at the same time it may be classified as an inflectional affix, i.e. as a focus/tense affix.

7. Howard McKaughan and other linguists use the terms subject and actor, respectively for the terms topic and subject in this paper. To use the term actor could be misleading for the grammatical unit to which this term refers could be actor, agent, etc. all marked formally in the same manner in Ivatan. The term subject is thus deemed preferable leaving the term topic for the tagmeme focused by the predicate, i.e. the surface structure function.

The process of marking as topic a clause tagmeme is labelled focusing, not topicalisation. Focusing in this study is called by Fillmore (1968) as primary topicalization and by McKaughan as subjectivalization. McKaughan calls topicalisation Fillmore's secondary topicalization which in Ivatan is the process of permuting a non-predicate clause tagmeme (E) to clause initial position and connecting E to the rest of the clause by a particle which results in giving the notion of underscoring or emphasising the identification of E. This process is called in our study identification-emphasis and topicalisation is used to refer to the process of permuting a non-predicate tagmeme to clause initial position and connecting this tagmeme to the rest of the clause with a conjunctive particle which results in a topic-comment character for the clause, a stylistic transformation having no overtone of emphasising an identification.

8. See note at bottom of Table I (page 31).

9. Not all clause level nuclear tagmemes are correlated with a voice affix, but clause level nuclear tagmemes, whether they are correlated with a voice affix or not, are associated with a focus affix.

10. See Hidalgo and Hidalgo, "Ivatan Morphology: the Predicatives", for other voice affixes, op. cit.
REFERENCES

BACH, Emmon and Robert T. Harms (eds)

CHOMSKY, Noam

COOK, Walter A.

ELSON, Benjamin and Velma Pickett
1965 An Introduction to Morphology and Syntax. Summer Institute of Linguistics, Santa Ana, California.

HIDALGO, Araceli C.

HIDALGO, Cesar A.

HIDALGO, Cesar A. and Jurgen Heye

HIDALGO, Cesar A. and Araceli C. Hidalgo
1970 The Structure of Ivatan: Phonological, Lexical, and Grammatical
Components. Social Science Research Council, University of the Philippines and the Linguistic Society of the Philippines, Quezon City. Mimeographed.


LONGACRE, Robert E.

LOPEZ, Cecilio
1965 "Contributions to a Comparative Philippine Syntax", Lingua 15: 3-16.

MACDONALD, Ross R. and Soenjono Dardjowidjojo

REID, Lawrence A.