THE TAGALOG NASAL LIGATURE: A REINTERPRETATION

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O. SCOPE AND LIMITATIONS

Consider the sentences:

(1) tumakbó qaŋ taqo+ŋ mataŋkád
    The man who is tall ran
    tumakbó qaŋ mataŋkád na táqo
    The tall man ran

(2) tumakbó qaŋ táqo+ŋ násugátan
    The man who was wounded ran
    tumakbó qaŋ násugátan *na* táqo
    The wounded man ran

(3) sinábi ni Pédro *na* qáqalís daw si Hwán
    It was said by Pedro that Juan will reportedly leave

(4) gustó+ŋ mákíta ni Pédro qaŋ laráwan ᴧ
    gustó ni Pédro+ŋ mákíta qaŋ laráwan
    The picture is wanted by Pedro to be seen =
        Pedro wants to see the picture

(5) kayláŋa(h)+ŋ mákíta ni Pédro qaŋ laráwan ᴧ
    kayláŋan ni Pédro+ŋ mákíta qaŋ laráwan
    The picture is needed to be seen by Pedro =
        Pedro must see the picture

(6) mabilís (na) tumakbó qaŋ bátaq ᴧ
    tumakbó *naŋ* mabilís qaŋ bátaq ᴧ
    tumakbó+ŋ mabilís qaŋ bátaq
    The child ran fast

(7) magandá+ŋ magandá qaŋ báhay
    The house is very pretty

(8) kumáqin *naŋ* kumáqin qaŋ bátaq
    The child ate continuatively =
    The child kept on eating

The citation sentences (1)–(8) are given in broad phonetic transcription with the ligature (*na* ∿ *η* ∿ *naη* ∿ *φ*) italicized for emphasis. The occurrence of the ligature in different structures exemplified by the above sentences will be accounted for. However, the study will rescind from considering the other major ligature in Tagalog, the linker *ay*. Moreover, although homophonous, the occurrence of *na* ∿ + *η* and *naη* in the following sentences will be considered as arising from different grammatical processes which will not be considered in this study:

(9) dumatíη *na* qaη bátaq
The child has already arrived

(10) kumáqin ka *ná*
It is time for you to eat

(11) kumáqin *naη* maηgá qaη bátaq ∿ kumáqiη maηgá qaη bátaq
The child ate a mango

(12) *naη* dumatíη si Pédro, umalís na qaη táqo
When Pedro arrived, the man had already gone

In sentences (9) and (10), *na* is a particle added to the verb phrase and belongs to the subset of verb phrase particles quite numerous in Tagalog. In sentence (11), +*η* is a reduced form of the determiner for *naη*-marked noun phrases, and in sentence (12), *naη* is a sentential conjunction.

Most likely, at some earlier stage of the language, etymologically speaking, some common protoform could be cited for these forms. Synchronically, however, the forms of (9) to (12) will be considered functionally distinct from the homophonous forms exemplified by (1)–(8). It will be the thesis of this paper, however, that a common function may be concluded for the forms *na* ∿ + *η* ∿ *naη* ∿ *φ* in sentences (1)–(8). In American structuralist terms, the forms would be considered allomorphs of the same morpheme, a semantically vacuous but structurally significant morpheme—hence, an 'empty morph'.

1. PREVIOUS STUDIES

The grammatical discussion of the ligature in Tagalog, because of its common and frequent occurrence, is a necessary part of any grammar of Tagalog. It will be convenient to consider the treatment of the ligature under three headings, according to the orientation of the grammarian.

1.1. PHONOLOGICAL VIEW

The view in which the occurrence of the ligature is described strictly in phonological terms, as a purely transitional sound necessary for the 'arrangement and harmony of the sentence' is perhaps best represented by Lope K. Santos (1950 originally 1939) which will henceforth be referred to as the Balarila View, closely identified with the literature emanating from the Institute of National Language in Manila:

Ang kaní-kanyáng paraáng itó ng paggamit sa tatlóng anyo–*na*, *ng* at *g*–ay sápilitán, at dimaaaring iwasan o pagpalít-palitín kayâ, nang di masisirà ang mabuting ayos at himig ng pananalitâ (96).

Subali't ang mga kalayaang itó ay karaniwang dî nagpápakilala ng kalinisan ng pananalitâ; kayâ hanggá't mañiwasan ay di-dapat gamitin ng nagsásalitâ, sumusulat o tumutulâ, kundî kung totoó na lamang kailangan o siyáng nábabagay kayâ sa himig ng pagsasalitâ (97).

The Balarila View is carried to its logical conclusion by the successors of Santos at the Institute of National Language. For example, Villanueva, Panganiban and Mariano (1948:95) state with regard to the *pang-angkóp*:

> Sa paraáng itó'y nagagawáng lalong magaán at madulás ang pagbibigkás sa magkasunód na salitâ o pangungusap.

Here, instead of 'harmony', one now speaks of 'ease of articulation' and Zipf's (1965) 'principle of least effort'.

Such a view is quite vague (although the occurrence of the ligature is amply exemplified by Santos) and really gives no guide as to when to use the ligature and when not to use it—what is stated for 'ang mabuting ayos at himig ng pananalitâ' is too general to merit even descriptive adequacy (see Chomsky 1966). What one attains in the Balarila View is at most observational adequacy.

1.2. TAXONOMIC VIEW

The scholarly literature on Tagalog, compared to the other Philippine languages, is quite extensive. Most of it follows a taxonomic model, an item-and-arrangement inventory or listing showing the different terms of ligation or linking. Perhaps the most extensive listing of ligature uses can be found in the old grammars exemplified by Totanes (1787) and incorporated into Serrano Laktaw's (1929) grammar. Blake (1908) compares instances of the Tagalog ligature with similar formatives in other languages; he likewise discusses uses of the ligature in his 1925 grammar. Bloomfield (1917) discusses the uses of the ligature under 'conjunctive attribution' while Lopez (1940) treats the ligature under syntax and refers to *na* and *-ŋ* as 'appositional particles' for enlarging subject and predicate by apposition.

More recently, Wolfenden (1961) describes linkers as 'subordinating particles' which 'link modifiers to head words or phrases in an attributive relation' (5). It is interesting to note that Rizal's outline of Tagalog grammar, reprinted in Wolfenden (38—44), unlike Wolfenden's, which is structuralist in model and formal in presentation, is semantically based. According to Rizal, the *ligazón* 'representa la unión entre dos ideas' and that the *ligazón* 'corresponde al *que* relativo castellano y la frase *kahoy na mabuti* hace el papel de un relativo como si dijéramos árbol que "es" bueno, arbor qui (est) bonus, etc.' (42–43). The discussion of the ligature in connection with relative clauses, it will be seen, is quite significant. As far as I am aware, it is the only instance in the literature where an explicit reference is made to relativization in connection with the ligature.

More recently, Bowen (1965) in the grammatical notes of his pedagogical manual gives formulae in which the linker is incorporated into the formula.

Perhaps the most highly formalized among the taxonomic grammars completed thus far is Llamzon's (1968). The use of the ligature, however, is noted by parenthetical remarks rather than actually treated in the formulae where the union of categories is characterized as one of solidarity marked by . and where the presence or nonpresence of the ligature is added as a supplementary note.

1.3. GENERATIVE VIEW

The only full-length published Tagalog grammar thus far which uses the generative model is Schacter and Otanes' (In press), where the use of the ligature is discussed in several sections (sections 3.11—3.20 under nominals and their expansions; adjective

complementation 4.17 and the verb complementation 5.26). The authors make a useful distinction between the linker in nominal compounds (section 3.8), with allomorphs -η and φ (*mésang-kaqinán, silíd-kaqinán*) and the linker in other instances. For the purposes of this study, it is only the latter type of linker which is under consideration.

Although Schacter and Otanes use a generative model (Chomsky 1965) in their analysis, there are strictly speaking no formal rules but word descriptions of linguistic phenomena and rules, since their grammar is intended for second-language learners of Tagalog with little or no interest in formal rules in themselves.

In Otanes (1970), however, in which the linker is discussed, it is clear from Otanes' work that the linker is meant to be introduced by means of rewrite phrase-structure rules for the base. It figures prominently in structures with a matrix and constituent sentence. What is important to note from the point of view of theoretical interest is that the linker is introduced not transformationally but in the phrase-structure rules; in other words, it is considered as part of the base-structure.

2. GRAMMATICAL CONVERGENCE IN SHALLOW STRUCTURE

The discussion of the ligature in this study will presuppose a generative model although no formal rules will be formulated. Moreover, it will take as its frame of reference Chafe's (1970) version of generative semantics. (For brevity's sake, I shall discuss only processes and rules in which the ligature figures. For a better understanding of the Philippine languages, however, to see how the ligature figures within a more complete grammar, the reader is referred to my study of Pampangan (1970) where similar rules on the ligature are found.)

The study will make the following hypotheses: (1) The ligature is not generated by the base rules (Chafe's semantic rules) but transformationally (Chafe's post-semantic rules). (2) The hypothesis will further be made that in many instances, the occurrence of the ligature in surface structure may be derived from entirely different structures in the base component. Along the derivation, prior to surface structure, in what the generative semanticists (Lakoff et al.) call 'shallow structure', there is a process which I shall describe as structural incorporation which generates the ligature, eventually symbolized as $na \curlyvee +\eta \curlyvee na\eta$. (3) It will further be claimed that in certain predictable environments, the ligature is deleted, thus explaining the absence of the ligature.

The treatment is novel insofar as it considers $na\eta$ as essentially a phonological variant (demanding certain grammatical prerequisites) of na and $+\eta$, a claim that has not been made before in the literature, where $na\eta$ is always treated separately from na and $+\eta$. There is thus a convergence in shallow structure whereby essentially different base structures show identical surface substructures, a type of functional unity or what the generative semanticists call 'conspiracy' not in phonology, however, but in syntax, a 'grammatical conspiracy', if the term may be coined.

2.1. PHONOLOGICAL RULE

Stated formally as a rule purely on the expression side of language, the rule for the ligature is statable as:

PHONOLOGICAL RULE I

$$\phi \longrightarrow \left\{ \begin{array}{l} +\eta \\[1em] \left\{ \begin{array}{l} n \\ q \end{array} \right. \\[1em] na \end{array} \right. \quad \left. \begin{array}{l} \left[\begin{array}{l} \text{VOWEL} + \underline{\hspace{2em}} \\[1em] \underline{\hspace{3em}} \\[1em] \underline{\hspace{3em}} \end{array} \right. \end{array} \right\}$$
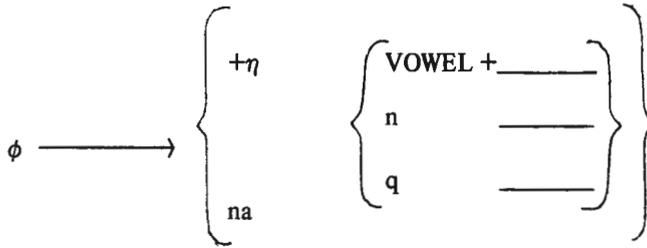
If the brackets are considered a notation for exclusive disjunction and if exclusive disjunction entails rule ordering (see Chomsky and Halle 1968), then the above rule would be paraphrasable as:

> In lexical items that end in a vowel, η is added to the phonological sequence. If this does not obtain, the next rule obtains: if the lexical item ends in the coronal nasal, η is added. If this does not obtain, the next rule applies: if the lexical item ends in a glottal stop, η is added. Otherwise, *na* is added as an enclitic.

Note that a supplementary rule would have to be added

PHONOLOGICAL RULE II

$$\left\{ \begin{array}{l} q \\ n \end{array} \right\} \longrightarrow \phi \quad / \quad \underline{\hspace{4em}} + \eta$$
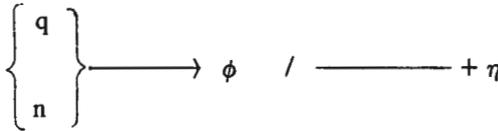
in effect deleting n and q (the glottal stop). This supplementary rule need not concern us at this point, however.

My claim will be:

SYMBOLIZATION RULE

$$\text{LINKER} \rightarrow \left\{ \begin{array}{l} \cdot na\eta \\[1em] \left\{ \begin{array}{l} \eta \\[1em] \left[\begin{array}{ll} \text{VOWEL} + & \underline{\hspace{2em}} \\[0.5em] n \quad + & \underline{\hspace{2em}} \\[0.5em] q \quad + & \underline{\hspace{2em}} \end{array} \right. \end{array} \right. \\[1em] na \end{array} \right\} \quad \begin{array}{l} \text{grammatical} \\ \text{prerequisites} \end{array}$$
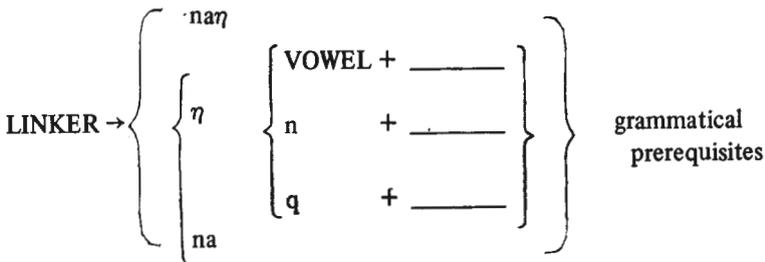
paraphrasable as

> The LINKER is symbolized as *na* or η or as *naη* according to certain statable grammatical prerequisites, themselves the outputs of previous grammatical processes.

It is these grammatical prerequisites and previous grammatical processes which I would like to discuss.

2.2. GRAMMATICAL PREREQUISITES

The ligature in Tagalog arises in three types of structures, structures broadly label-able as instances of relativization, complementation, and adverbialization. In Chafe's (1970) model, adjectives are considered as state verbs (V); adverbs are considered as state verbs further specifying another V. If one accepts this hypothesis, then it seems that whenever a subordinate V in a constituent sentence is post-semantically (= transforma-tionally) incorporated into the matrix sentence as the structure draws near to surface structure in the derivation, the ligature occurs. What seems to happen may be diagrammed thus:
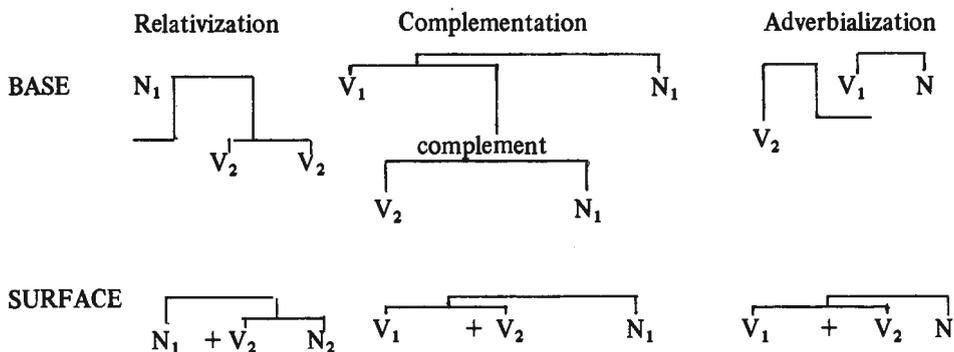

where + is an ad hoc indicator for the ligature. What began in the base structure as a subordinate relationship wherein V_2 is dominated by either a V_1 or an N in the matrix sentence becomes on the surface a kind of co-equal relationship once the structure has been linearized (in Chafe's model, semantic or base structure is postulated as non-linear, to be linearized as a post-semantic or transformational process as the structure draws near to surface structure).

2.1.1. Relativization. Only one example need be considered:

(1) tumakbó qaŋ tá qo+ŋ mataŋkád
     The man who is tall ran

Semantically, this may be represented thus:
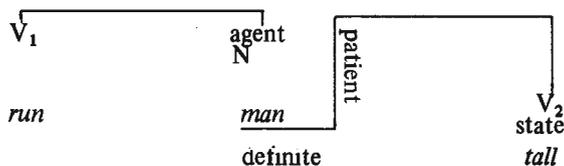
The matrix sentence may be considered

           tumakbó qaŋ táqo
           The man ran

an action V which demands an agent N. However, clearly not on a coequal basis with the first V is the state V 'tall' which traditionally 'modifies' the Noun Agent, a state V how-ever that demands in its turn a patient N, which is also *man*. The diagram is admittedly an

ad hoc and imperfect way of showing this nonequal relationship. In some ways, the V state 'tall' further specifies the already semantically specified *man*—it may be comparable to an inflection of *man* in the same way that the inflectional specification definite, subject, singular (-plural), specifies *man* further.

Postsemantically, there is a linearization process (among other linearization processes) which eventually results in surface or shallow structure as:

$$V_1 \quad\quad N \quad + \quad V_2$$
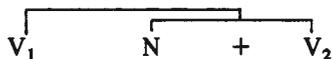
where the ligature becomes obligatory and signals surface coequality with N.

I need not at this point deal with different types of relative clauses, restrictive, nonrestrictive, and other relative clauses in which the second V is not a state V but a nonstate V (action, process, process-action) which may demand other accompanying N's.

Moreover, there is an optional transposing process in Tagalog whereby after N has been linearized further into a Determiner (D) and a Noun (N), the V_2 may be interposed between D and N, so that we can have:

$$V_1 \quad\quad D \quad V_2 \quad + \quad N$$

tumakbó   qaŋ   mataŋkád   na   táqo
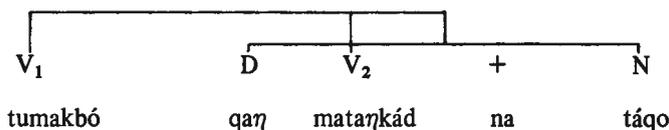
which is again predictable, since the union of V with N does call for such a ligature. The preceding explanation would account for examples (1) and (2).

2.1.2. Complementation. Again, only one example need be considered:

(4) gustó+ŋ mákĭta ni Pédro qaŋ laráwan

The picture is wanted by Pedro to be seen =

Pedro wants to see the picture

which may be analyzed thus:

V_1		complement			experiencer
state					N_1
experiential	V_2		complement	experiencer	
completable	process		N_2	N_1	
	experiential				
	completable				
want	*see*		*picture*	*Pedro*	*Pedro*
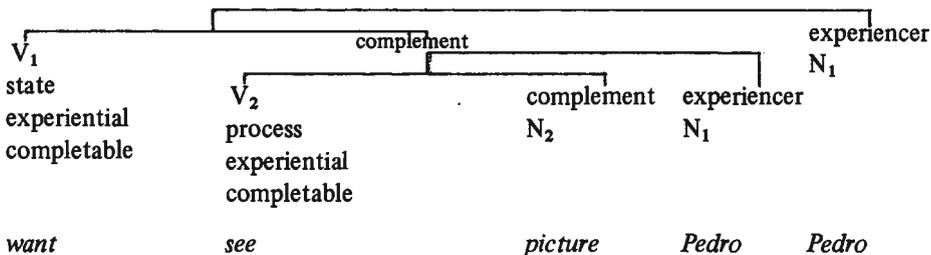
where the experiential state V *gustó* (from Spanish *gusto*) 'want' is further specified as a completable state V demanding as its complement as embedded V̄ N structure. As an experiential state V, it demands an experiencer N, *Pedro*, the subject of the experience of wanting. The complement is an embedded structure, an experiential process V, *mákĭta* 'to see', which demands an experiencer N, *Pedro*, which happens to be identical with the experiencer N of the matrix sentence.

Postsemantically, N_1 of the embedded complement is deleted because of its identity with N_1 of the matrix sentence. A choice of subject is made, 'picture', which in turn demands the extraposing (to the right) of this subject and the interposing of N_1 adjacent to the V_1, a positional rule common in Tagalog. V_2 is incorporated into the V_1 branch, generating the ligature. Hence, we end up with the structure

V_1 D N_1 + V_2 D N_2

D: unique / definite / -SUBJECT / -OBLIQUE

D: definite / SUBJECT

gustó   ni   Pédro+η mákĭta   qaη laráwan

Again, there is an optional interposing possible in Tagalog whereby D N_1 may be extraposed to the right of V_2 to yield:

V_1 + V_1 D N_1 D N_2

gustó+η mákĭta   ni   Pédro   qaη laráwan

There is a small subset of verbs in Tagalog which take a $\overline{V_2 \qquad N}$ complement and which obligatorily delete the ligature. This is exemplified by *dapat*:

V_1 + V_2 D   N

dápat ϕ qumalĭs   si   Pédro

The same type of analysis may be carried out for sentences (3) and (5), except that for sentence (5), where the matrix V_1 is a verb of speaking, there is an added rule that blocks the subjectivization process and that obligatorily extraposes the complement constituent structure, so that we end up in surface structure with:

V_1 D   N   + V_2 reportative   D   N

sinábi   ni   Pédro na   qaqalĭs   daw   si   Hwán

Moreover, there is an optional deletion rule that allows *na* to be deleted to yield:

(5') sinábi ni Pedro qáqalĭs daw si Hwán

In existential state V's, 'there is', one has the patient N incorporated into the V:

(9) máyroqó (n)+η táqo sa báhay

There is a man in the house.

Normally, a $\begin{bmatrix} \text{-definite} \\ \text{-OBLIQUE} \end{bmatrix}$ noun phrase takes the determiner *naŋ*, as in

(10) kumáqin naŋ maŋgá qaŋ bátaq

The child ate a mango

In existential state V's as in (9), not only does the sentence have no subject (*ang/si* NP) but even the determiner of *táqo* is φ. N is incorporated into V:

V	D	N ———→	V	+	N
máyroqón	φ	táqo	máyróq(n)ŋ		táqo
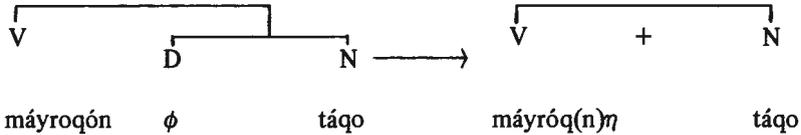
In turn, there is an optional rule deleting the last two syllables of *máyroqón* to yield:

(9) máy táqo   sa báhay

2.1.3. Adverbialization. In the same way that an N may be further specified by an embedded V̄   N structure in relativization, a specification in some ways analogous to inflectional specification, a V may be further specified not only for aspect, subjunctive, etc. but likewise by some modification of manner. This modification, traditional adverbialization, is evident for example in a sentence such as:

(6) mabilís *na* tumakbó qaŋ bátaq

The boy ran fast

(In the above sentence, *na* seems to be optionally deletable. In fact, in my idiolect and in the idiolect of associates I consulted, *na* is preferred to be deleted although its occurrence would not make the sentence ungrammatical. That *na* is there at some prior stage seems to be evident, however, since a permutation clearly makes a ligature necessary:

(6') tumakbó naŋ mabilís qaŋ bátaq

where the ligature reappears as *naŋ*. It seems there is likewise an optional phonological rule deleting *na-*, a form of haplology, which yields

(6") tumakbó+ŋ mabilís qaŋ bátaq

Semantically, the structure may be represented thus:

|	V_1	agent
	action	N
	run	*child*
V_2		
state		
fast		
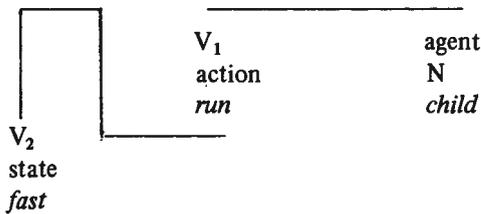
Adverbs of manner are typically state V's modifying nonstate V's. The diagram attempts to represent the subordinate role of V_2. Postsemantically, there is a linearization process which yields

V_2	+	V_1	D	N
mabilís	na	tumakbó	qaŋ	bátaq
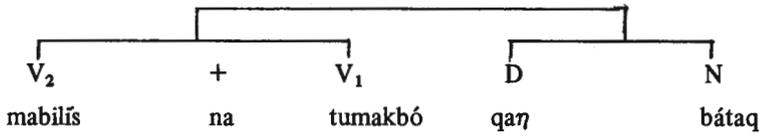
There is likewise an optional permutation process which permutes V_2 with V_1 and yields the following linear reordering

V_2	+	V_2	D	N
tumakbó	naŋ	mabilís	qaŋ	bátaq
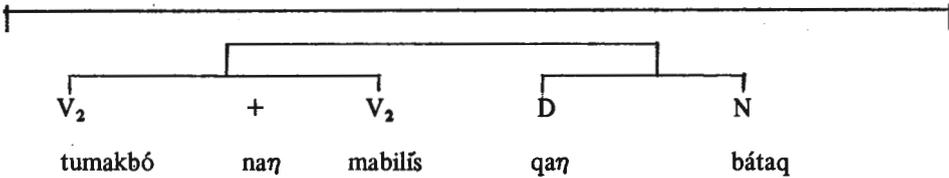
Sentences (7) and (8) exemplify a special type of adverbialization, symbolized by reduplication expressive of two semantic units. State V's when reduplicated in Tagalog add the specification of intensity. On the other hand, when nonstate V's are reduplicated in Tagalog, one does not have intensity but the added specification of continuativeness, paraphrasable as 'to keep _____ing'. The semantic structure of (7) may be represented thus:

V_2 patient
state   N
beautiful   *house*

V_1
state
intensive
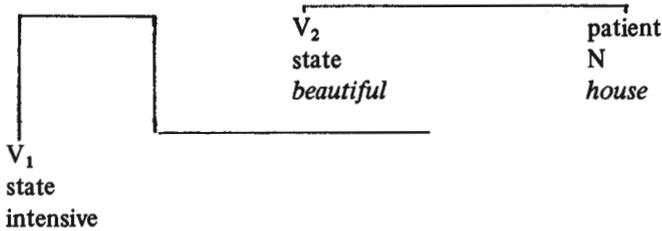
while the semantic structure of (8) may be represented thus:

V_2 agent
action   N
eat   *child*

V_1
state
continuative
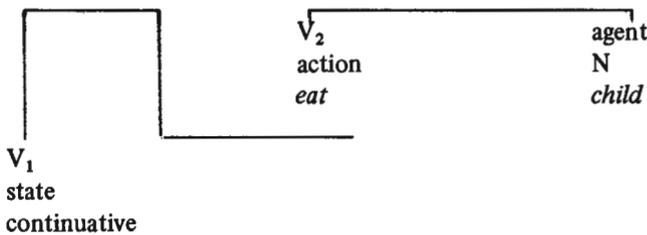
In both sentences, V_1 is not lexically specified but the lexical entry of V_2 is copied into V_1. Essentially, however, the same linking necessitates the ligature which in the case of nonstate V's is symbolized not by *na* ∿ +ŋ but by *naŋ*. There is no phonological motivation for this just as there was no phonological motivation for *naŋ* instead of *na* ∿ +ŋ for the permuted version of sentence (6). It is an arbitrary symbolization dependent upon prior grammatical considerations.

2.3. STRUCTURAL INCORPORATION

In effect, the ligature arises as a result of incorporating two major categories which are subordinate one to the other in base structure, a subordinate V vis-a-vis either another

V or an N. It is precisely when this subordinate or dominated or embedded V is incorporated in surface structure into a higher branch, a V or an N of the matrix sentence, that the ligature becomes necessary. In effect, we structurally incorporate two separate and unequal branches in the phrase marker into one main branch of surface equality.

It should likewise be noted that this rule in a total grammar using deep-surface distinctions would pertain to shallow structure, prior to but only a few steps removed from surface structure or even immediately leading to surface structure, in effect bringing about a surface similarity among essentially different structures.

3. RESIDUAL PROBLEMS

In Dyen (1970:5), the subject marker or determiner $qa\eta$ is analyzed as consisting of a determinative connected by the conjunctive particle, so that $qa\eta$ *báhay* is postulated with the following cuts (Dyen's transcription):

$$qa\text{———}\eta \qquad ba.hay \qquad \text{'the house'}$$

As far as I know, this is the first time in the literature wherein the subject determiner $qa\eta$ has been analyzed as containing the ligature. All previous analyses consider $qa\eta$ as a unitary symbolization of the subject determiner without further possibility of segmentation—it is a minimal significant unit or morpheme consisting of a sequence of phonemes. The fact that when the subject determiner is for a proper noun, one has no η seems to confirm the nonoccurrence of the ligature. Otherwise, one would have:

$$*\text{si-}\eta \qquad Ped.ro \qquad \text{'Pedro'}$$

instead of

$$si \quad Pedro$$

However, a problem arises with regard to the demonstratives, for in the demonstratives, the ligature occurs:

$$qitó\text{+}\eta \qquad bátaq$$
$$qiré\text{+}\eta$$
$$qiyá(n)\text{+}\eta$$
$$qiyaqó(n)\text{+}\eta$$

Chafe (1970) and transformationalists analyze demonstratives as special kinds of determiners and because determiners are usually in exclusive distribution with ordinary determiners, one does not normally have determiner and demonstrative in the same NP. However, in Tagalog, if demonstratives were a special kind of determiner, one should not have the ligature, since normally there is no ligature in

$$\overline{}$$
$$D \qquad\qquad N$$

substructures. That there is a ligature would seem to argue for a different analysis of demonstratives. Moreover, to confirm the necessity for this different analysis, the co-occurrence of demonstrative with determiner must be cited. We can have

$$qa\eta \qquad\qquad báta\text{+}\eta \ itó$$

If we analyze the above phrase as a transform of a constituent sentence paraphrasable as

qitó qaŋ báta

The boy is this [one]

then we can analyze the above NP as

N
child
definite   V

state
predicate noun
demonstrative
this
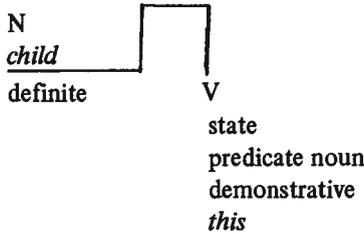
If one accepts this analysis, then the occurrence of the ligature in surface structure becomes regular

D   N   +   V

qaŋ   bátaq   ŋ   qitó
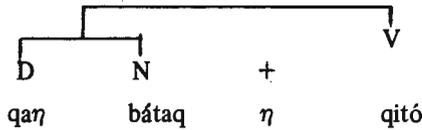
V may then be interposed, copied and interposed between D and N to yield (after obligatory deletion of D):

V   +   N   +   V
predicate noun   predicate noun

qito   ŋ   báta   ŋ   qitó
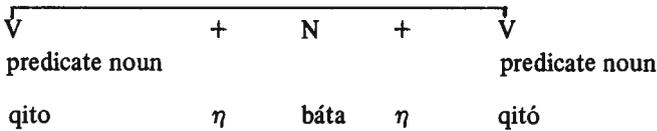
or without the copying transformation but only with the interposing transformation:

V   +   N
predicate noun   bátaq
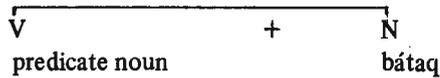
The same analysis would seem to obtain for numbered NP, for example:

qaŋ báta+ŋ dalawá

The children who are two [in number]

is traceable to

Dalawá qaŋ bátaq

The children are two [in number]

which is analyzable in the base as

N

child

plural   V
definite
                 state
                 quantitative
                 numerical
                 two
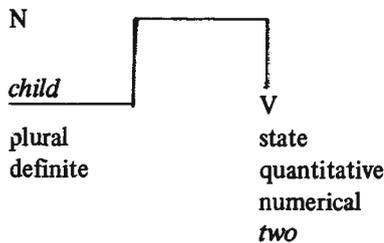
4. SUMMARY AND CONCLUSIONS

Adding the grammatical repreprequisites to the earlier rule statement on the symbo- as follows (in broad phonetic transciption):

Surface and Shallow Structure

Linker *symbolization*
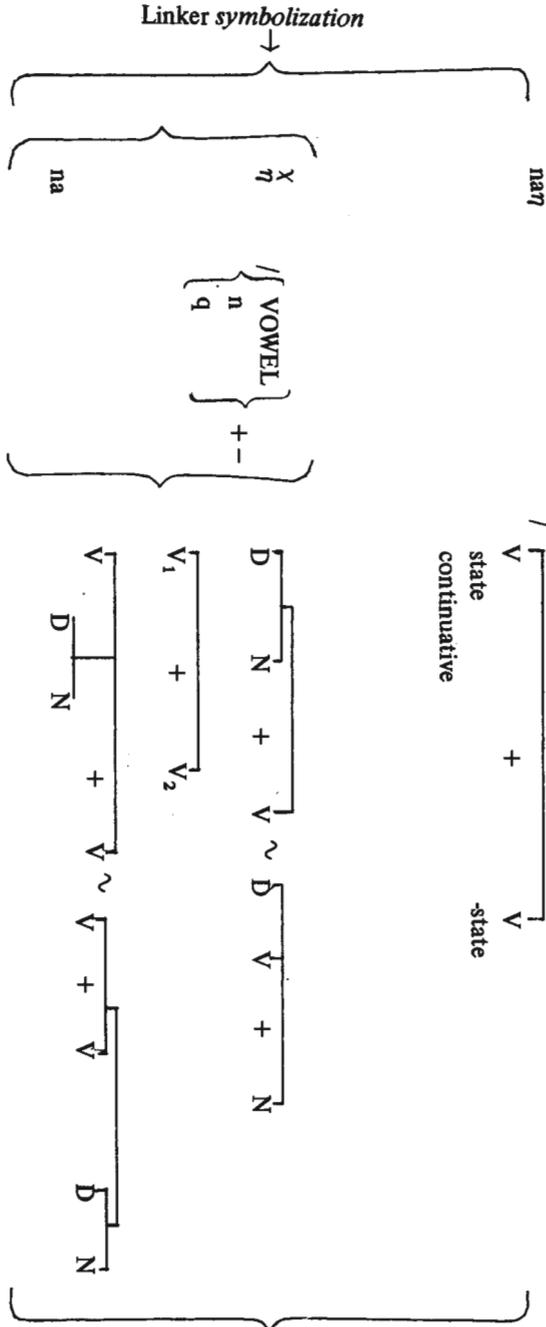
The verbal nature (state V) of demonstratives and numerals is hypothetical and subject to debate. Unlike Dyen, I do not postulate the occurrence of the ligature in *qaŋ*, but I do postulate its occurrence in numbers and demonstratives and attempt to account for the occurrence of the ligature in the same way as I did for its other occurrences by postulating an underlying demonstrative predicate noun or numerical quantitative state verb in the base structure. Undoubtedly, to treat demonstratives and numbers as verbs rather than developments within N (N ———→ D   N) is unusual. The hypothesis however provides a neat and regular way for the occurrence of the ligature in

> qaŋ báta+η qitó ∿ qitó+η bátaq
>
> qaŋ b-ata
>
> qaŋ báta+η dalawá ∿ qaŋ dalawá+η bátaq

and not in

> si Pédro
>
> qaŋ bátaq

The rule may be paraphrased thus:

1) In linking one continuative state V with another nonstate V (adverbialization), symbolize linking by *naη*

2) If (1) does not apply, move to the second part of the rule: The ligature is symbolized as +η after a vowel, a coronal nasal, and a glottal stop; otherwise, it is symbolized as *na*. This rule applies in the following cases:

> The linking of a V to an N
>
> The interposing of a V between a Determiner and an N
>
> The linking of a Noun Phrase between two Verbs
>
> The linking of one V with another V

A supplementary rule would have to be formulated for permuted state V and -state V structures whereby instead of *na*, *naη* is selected as the symbolization of the ligature. Moreover, optional deletion rules are not formulated.

The rule thus makes evident the necessity of grammatical prerequisites to any kind of rule on the expression side of language. Moreover, our considerations show how essentially different structures may on the surface show convergence and that this convergence is essentially one of uniting an embedded V to either a V or an N in the matrix sentence by a rule in essence consisting of incorporating this V into a higher branch, a type of structural incorporation, so that such semantically divergent structures as the following may be accounted for from the point of view of the ligature by a single rule of incorporation:

> mabilís *na* mabilís qaŋ kótse
>
> lumálákad *naη* lumálákad si Pédro
>
> kayláηa(n)+η tumakbó si Pédro
>
> dápat φ tumakbó si Pédro   (by a still later deletion rule)
>
> malakí qaŋ báta+η nakatayóq

malakǐ qaŋ báta+ŋ lumálákad

sinábi ni Pédro *na* qáqalǐs daw si Hwán

alám ni Pédro *na* qáqalǐs si Hwán

The hypotheses presented here would have to be tested against further data of the language in other structures. In general, there is no real disagreement between the treatment of the ligature here and the phonological treatment of the Balarila View or the taxonomic interpretations of the ligature, merely an effort to go beyond the rather shallow statement of the Balarila View and to attempt an explanatorily more adequate treatment compared to that of the taxonomists.

The study differs from the rest of the literature in including *naŋ* as an allomorph or allosymbol of the linker (togehter with +ŋ and *na*). It differs from that of Otanes, which is likewise generative in orientation, by positing the linker as arising transformationally and by postulating a common rule which applies to variegated structures along the derivation of a sentence towards surface structure.

Llamzon treats the ligature in such structures as

bákod na búhoq   'a fence that is made of bamboo'

kumáqin naŋ mabúti qaŋ bátaq   'The child ate well'

as having nothing in common. In the first citation, he posits a noun phrase in the *na*-case (distinct from the usual three surface cases of Tagalog NP's: *qaŋ/si, naŋ/ni, sa/kay*). In the second citation, he posits an adjective phrase in the *na*-case. I disagree with the first analysis (as Rizal would) since it misses the relativization implicit in 'a fence that is made of bamboo', and I disagree with the second analysis since I consider case to be an intrinsic property of N's and not of adjectives, although in surface structure, features of N may be incorporated into the adjective (as in Latin *ad puellam bonam*). Moreover, the essentially ligative function of *na* and *naŋ* in the above examples is missed; likewise, the commonality of this ligative function with the other occurrences of ligation already reviewed would be unaccounted for.

REFERENCES

BLAKE, FRANK. 1908. The Tagalog ligature and analogies in other languages. Journal of the American Oriental Society, 29.22–31.

_____. 1925. A grammar of the Tagalog language. New Haven: American Oriental Society, Vol. 10, No. 4, October–December.

BLOOMFIELD, LEONARD. 1917. Tagalog texts with grammatical analysis. University of Illinois Studies in language and literature, 3, 2. Urbana.

BOWEN, J. DONALD (ed.). 1965. Beginning Tagalog. Los Angeles: University of California Press.

CHAFE, WALLACE L. 1970. Meaning and the structure of language. Chicago: University of Chicago Press.

CHOMSKY, NOAM. 1965. Aspects of the theory of syntax. Cambridge, Massachusetts: The M.I.T. Press, 1965.

_____. 1966. Current issues in linguistic theory. The Hague: Mouton.

CHOMSKY, NOAM and HALLE, MORRIS. 1968. Sound pattern of English. New York: Harper and Row.

DYEN, ISIDORE. 1970. Qualitative confirmation of a subgrouping hypothesis. Philippine Journal of Linguistics, 1.1–4.

GONZALEZ, ANDREW, F.S.C. 1970. Outline of a generative semantic description of Pampangan. Unpublished doctoral dissertation, University of California, Berkeley.

LAKTAW, PEDRO SERRANO. 1929. Estudios gramaticales sobre la lengua Tagálog. Manila: Imprenta de Juan Fajardo.

LLAMZON, TEODORO, S.J. 1968. Modern Tagalog. A functional-structural description. Manila: Ateneo Language Center (mimeographed).

LOPEZ, CECILIO. 1940. A manual of the Philippine national language. Manila: Bureau of Printing.

OTANES, FE T. 1970. Some transformational rules for noun derivation in Tagalog. Philippine Journal of Linguistics, 1.33–73.

RIZAL, JOSE. 1961. Nueva ortografía del lenguaje tagalog. In Wolfenden, Appendix, 38–44.

SANTOS, LOPE K. 1950. Balarilà ng wikang pambansá. Ika-apat na pagkápalimbág. Maynila: Káwanihan ng Pálimbagan.

SCHACTER, PAUL, and OTANES, FE. In press, Tagalog reference grammar. Los Angeles: Univeraity of California Press.
University of California Press.

TOTANES, SEBASTIAN DE. 1787. Arte de la lengua Tagala y manual Tagalog.

VILLANUEVA, ANTONIA F., PANGANIBAN, JOSE VILLA, and MARIANO, ANTONIO, D.G. 1948. Balarilang pinagaán. Manila: Committee on the National Language Textbook Preparation.

WOLFENDEN, ELMER. 1961. A re-statement of Tagalog grammar. Manila: Summer Institute of Linguistics and Institute of Natina
Institute of Linguistics and Institute of National Language.

ZIPF, GEORGE. 1965. The psycho-biology of language. Cambridge, Massachusetts: The M.I.T. Press.