10. The evolution of focus in Austronesian (1981)

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Abstract: The present paper attempts to account for the evolution of Western Austronesian focus constructions by showing that they evolved as a result of the reinterpretation of nominalized equational constructions by analogy with functionally equivalent verbal constructions, i.e., *-en, *ni-/-in-, *-ana, *iSi-, and possibly *mu-/-um- were all noun-deriving affixes in PAN that their verbal focus usages in the Formosan and Philippine languages represent a secondary development.

10.1 Introduction

10.1.1 The problem

In this paper,[1] we will attempt to reconstruct the features of Proto-Austronesian morphology and syntax which gave rise to the focus systems exhibited by modern Philippine languages. In order to approach this problem, it will be necessary to consider the following questions:

1) What is the grammatical structure of sentences showing 'verbal focus' in Philippine languages? And in particular, what is their synchronic and diachronic relation to nominalizations which show affixes cognate with the verbal focus affixes? We need to have a reasonably clear idea of the endpoint of an evolutionary sequence before we can reconstruct the stages that led up to it.

2) Do the focus systems of Philippine languages represent a retention from Proto-Austronesian or an innovation? What kind of case-marking system can we reconstruct for the proto-language which will allow us to provide plausible accounts of how a single original system could evolve into the Oceanic object-focus system in one

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[1] We would like to thank Bob [Robert] Blust, Teresa Chen, Vida [Videa] DeGuzman, Terry [Teresita] Ramos, David Stampe and Sheldon Harrison for helpful comments, criticisms, and information they provided at various stages in the preparation of this paper. All blame, however, accrues to us.

area and the Philippine subject-focus system in another?

An attempt to answer 2) will require consideration of such specific questions as:

3) What are the higher order subgroups within Austronesian? The position we take on this question of course will determine which combinations of languages will count as adequate witnesses for reconstructing a morphological or syntactic feature all the way back to the proto-language.

4) What is the current distribution of Philippine-style focus systems by geographic regions and within subgroups of Austronesian languages? In conjunction with our assumptions about subgrouping (point 3) above) and about the likelihood of parallel changes (point 5) below), this will determine how far back we can reconstruct this syntactic property.

5) How likely is it for two languages to have developed a Philippine-style focus system independently? To answer this question, we have to make assumptions about what kinds of syntactic changes are possible and likely. By rejecting excessively abstract syntactic representations and arbitrary analyses and formulating our solution within the narrow constraints of lexicase (Starosta 1979), we eliminate a large class of conceivable but ad hoc and unmotivated analyses, and come up with an account of the evolution of focus which requires no hypothetical stages having properties which cannot be directly observed in the 'surface structures' of modern human languages.

In the present paper, we will argue that *-en, *ni-/-in-, *-ana, *iSi-, and possibly *mu-/-um- were all noun-deriving affixes in PAN, as they still are to a large extent in the modern languages outside the Philippine area, and that they have in fact retained this function to a previously unrecognized extent even within the Philippine language group. We argue further that Austronesian nominalizations in *-en, *ni-/-in-, *-ana, *iSi-, and possibly *mu-/-um- did not develop from original passive constructions, as concluded by Dahl (1973), Wolff (1979), and Pawley & Reid (1979), but rather that the nominalizing function was the original one, and that the passive and verbal focus uses of these affixes in Philippine languages are a secondary development. That is, verbal focus in Proto-Austronesian was at most an incipient mechanism that was later elaborated and developed by the languages of the Philippines and some languages of Borneo and the Celebes.

In working on our reconstruction, we have profited from the work of Otto Christian Dahl (1973), John Wolff (1973), and William Foley (1976). Throughout the paper, we will attempt to justify assumptions and conclusions which differ from their results and from our own previously published conceptions (Pawley 1975). Our examples are drawn from published sources and from our own elicitation or field notes, with Oceanic examples provided by Pawley, Philippine and Indonesian examples mainly by Reid, and Formosan examples mainly by Starosta.

10.1.2 Subgrouping assumptions

In this paper, we will assume the correctness of Dahl's (1973) and Blust's (1977:2) recent hypothesis about the first-order subgroups of Austronesian. Blust and others have recognized three major Formosan groups, and it is possible (though not well established) that these are separate first-order subgroups of Austronesian, with the rest of the Austronesian languages constituting a single 'Malayo-Polynesian' subgroup. We prefer to take a neutral position on this question (see below). Reid (In press) argues further that the Northern Philippine languages constitute a primary subgroup of these extra-Formosan languages, but the correctness of this claim does not affect the validity of our arguments in this paper. Finally, we accept Blust's (1977) arguments for an Eastern Malayo- Polynesian subgroup comprising Oceanic plus the South Halmahera-North New Guinea group. These assumptions are illustrated in the following tree diagram:

Figure 10.1: The first-order subgroups of Austronesian
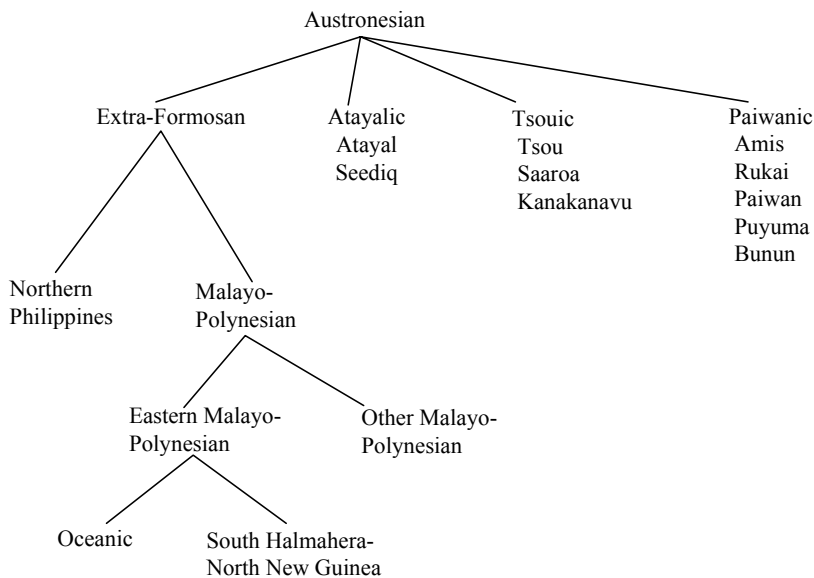
Whether the Formosan languages constitute three separate first-order PAN sub-groups or only one, it remains true that unless there is some compelling reason to assume independent development, a feature present in languages from one Formosan language group (especially Atayalic or Tsouic) and one non-Formosan language is a good candidate for reconstruction in Proto-Austronesian.

When Dahl (1973:117) said:

> What criteria should then be used for the construction of PAN grammar? It seems to me that we have to choose as our point of departure languages which are widely separated in space and time.

he presumably had in mind languages which not only belong to distinct first-order subgroups of Austronesian but also are far enough apart geographically to preclude borrowing as an explanation of any shared grammatical features. We accept this procedure as ideal. In general, a grammatical feature can be attributed to PAN if it is present not only in Formosan languages but also in members of the Malayo-Polynesian group, especially in languages remote from Taiwan. The more widely distributed the feature is across both the Formosan and the Malayo-Polynesian groups, the stronger the case for its reconstruction as PAN. On the other hand, a feature which is confined to the MP group—no matter how widely distributed—cannnot be attributed to any stage earlier than Proto-Malayo-Polynesian.

The real difficulty comes when we deal with features which are confined to Formosan (or to Formosan and Northern Philippines). There may be as many as three first-order divisions of Austronesian in the aboriginal languages of Taiwan: Atayalic, Tsouic, and Paiwanic (Blust 1977:2; see also Tsuchida 1976, Dyen 1965a, 1965b, 1971). If two or all three of these groups are in agreement, the feature concerned is a candidate for reconstruction at the PAN level, regardless of the testimony of non-Formosan witnesses. But our confidence in a reconstruction attested only by Formosan witnesses must be considerably less than in reconstructions having more widely distributed reflexes. Granted, the phonological evidence (patterns of sound correspondences) suggests not only that the Formosan languages have been separate from the rest of Austronesian for a very long time, but that there *may* have been an equally long division among the Formosan groups. However, this certainly does not preclude later contact and diffusion of grammatical features between Formosan groups.[2]

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[2] Mountainous terrain and anti-social customs such as head-hunting would have hindered diffusion to some extent, but similar conditions did not prevent the wide diffusion of syntactic features across even unrelated language families in New Guinea, and the same thing could easily have happened on the much smaller island of Taiwan, especially among the coastal dwellers. The early Austronesians must have been a very mobile people; the whole of New Zealand (103,000 square miles) for example probably spoke a single language 1000 years after the first settlement.

10.2 Proto-Austronesian: object focus, subject focus, or none of the above?

In order to say anything sensible about where 'focus' came from, we have to know 1) what focus is, and 2) whether words marked by 'focus' affixes in Philippine languages are nouns or verbs. In this paper, we will use the term focus to refer to a system of verbal affixes used to indicate the case relation of the subject of a sentence. We use the term 'subject' here in the sense used by, for example, McKaughan (1973) and DeGuzman (1978), to refer to what has also been called 'primary topic', a category marked in Philippine and Formosan languages by a particular pronoun paradigm and/or determiner set. We have thus not accepted Schachter's arguments (1976) about the inappropriateness of this term for Philippine languages. His arguments seem to depend on Keenan's (1976) assumption that English subjects are somehow the universal ideal, and that systems which differ are in some sense deviant. Dempwolff's rejection of the term 'subject' seems to be based on a similar Indo-European prejudice (*cf.* Dahl 1973:117), while Dahl rejects the term because, paradoxically, he finds that focused nominals are too consistent in marking the 'thematic philosophical subject of the clause' (ibid.).

In spite of these objections, we believe that it *is* possible to define the category of subject in a natural and universally valid way without giving English an undeserved favored status, and that when this is done, Philippine 'primary topics' satisfy the definition with no bending necessary (*cf.* McKaughan 1973).

Most modern linguists working on Philippine languages, from Bloomfield (1917) and Blake (1925) on up to recent studies by members of the Summer Institute of Linguistics and lexicase grammarians such as Harmon (1977) and DeGuzman (1978), have assumed almost without question that 'focused' words are verbs. The correctness of this conclusion is however not immediately obvious. Cecilio Lopez (1941) and Arthur Capell (1964) both consider all Philippine 'passive' verbs to be verbal nouns. Capell based his conclusion essentially on the fact that agents in these constructions appear in the Genitive case form (Constantino 1971:137).[3]

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[3] Constantino (1971:137) suggests that verbal focus constructions differ from possessed nouns in not being paraphrasable by absolute possessive pronouns.

Thus, in Tag. *Ákin itó*. [mine this] 'This is mine.' may be substituted for *Báhay ko itó*. [house my this] 'This is my house', but not for *Binilí ko itó*. [bought I this] 'I bought this'.

However, this seems more likely to reflect the fact that absolute possessive pronouns are lexically non-abstract, and so can't be used to refer to nominalizations. The same observation can be made for English, where 'mine' can refer to 'my office' or even 'my experience', but not to 'my seeing a ghost'.

Similar conclusions have been drawn for analogous reasons about passive verbs in Atayal (Egerod 1966:346) and Toba Batak (van der Tuuk 1971), and about one of two types of 'passive' construction in Rukai (Li 1973:202-211). Ferrell (1971:5-8) raises this possibility for Paiwan, without however citing any criteria or evidence, but rejects it for semantic and pedagogical reasons, although he concedes that his decision is based on a 'lingua-centric view'. McKaughan also rejects a nominal analysis (McKaughan 1962:49, note 8) because nouns should not be marked for tense, aspect, and voice. Similarly, Schachter and Otanes say that the distinction between equational and narrational sentences in Tagalog is somewhat arbitrary, and that all basic Tagalog sentences are essentially equational in nature (Schachter & Otanes 1972:62; *cf.* p.117; *cf.* also Dahl 1973:117-118). However, they treat basic sentences as verbal because 1) verbal predicates have aspect, 2) verbal predicates have focus, and 3) verbal predicates have more complex structures; thus they find a verbal treatment to be more 'convenient'.

We don't find the arguments in the preceding paragraph very persuasive. 'Convenience', pedagogical or otherwise, has no status as a scientific criterion, and the use of the presence of 'focus' to exclude a nominal interpretation is circular, since that is what we are trying to decide in the first place. As for aspect, Pawley & Reid (1979:109) note that focused and aspect-marked words are frequently used as common nouns and that some focused forms can *only* occur as nouns.

We will take the position here that, while many clauses in languages such as Tagalog, Amis, or Ilokano can be given neat and satisfying analyses as binary NP-NP cleft sentence structures, some can't, due to a full NP subject occasionally intervening between the lexical head of the predicate and the other actants of the sentence. With some forms, such as *ipaN-* 'instrumental focus' words in Tagalog, this never happens, and this can be explained if we consider *ipaN-* forms to be exclusively nouns. When this order shows up, however, as in the following Amis sentence:

(10.1)   Amis (Chen ms, §2.2.3.2.1)

    sa-pa-ahcid   *ko* *cilaq* *to* *tood.*
    used-make-salty   salt   things
                    $\begin{bmatrix} \text{Nom} \\ \text{INS} \end{bmatrix}$ $\begin{bmatrix} \text{Acc} \\ \text{PAT} \end{bmatrix}$
    'Salt is used for making things salty.'

only a verbal analysis is possible.

There are two prime candidates for the reconstruction of the proto-Austronesian case-marking system:

1) the Proto-Oceanic system, in which the verb carries a suffix (*-i or *-akin) to indicate the case relation of the direct object: *-i for Locus, *-akin for Instrument or Referent, and

2) a Philipine-style focus mechanism utilizing the verbal affixes *mu-/-um-, *ni-/-in-, *-en, *-ana, and *iSi- (not cognate with the Oceanic suffixes *-i and *-akin) to indicate the case relation of grammatical subject rather than the object, with the affixes *mu-/-um- marking verbs with Agent subjects, *ni-/-in-, *-en, *-ana, and *iSi- marking Patients, *-ana marking Locus, and *iSi- marking Instrument or Referent.

Each of these candidates has had its supporters. In his (1976) dissertation, William Foley claimed that the Proto-Austronesian case-marking must have been similar to that of 'classical' Oceanic languages such as Fijian. Dahl (1973) and Wolff (1973), however, both concluded that PAN should be reconstructed with at least the four morphological focus or voice constrasts marked by reflexes of *mu-/-um-, *ni-/-in-, *-en, *-ana, and *iSi- that are generally present in modern Philippine languages. Similarly, Pawley & Reid (1979) argue that Philippine-style focus systems are a retention from PAN, in their essentials, and that the Proto-Austronesian focus system has decayed, to a lesser or greater extent, in languages outside a region comprising the Philippines and certain contiguous regions of Indonesia and Formosa. Thus, the common possession of a focus system should not count as evidence for treating Philippine languages as a subgroup.

In reaching this conclusion, they begin with observations about the reflexes of the focus affixes in Oceanic languages (Pawley & Reid 1979:110-111):

> We find in Oceanic languages cognates of all the focus affixes of Philippine languages. In Oceanic these affixes are noun-deriving. *-an and *i- are quite widely reflected and still productive. *-en has traces only, and must have ceased to be productive by POC times. *-in- is fully or semi-productive in several subgroups and must have been productive in POC. *-um-, *maR-, and *maN- had probably ceased to be productive in POC (except for a specialized use of *paRi-, reflecting the earlier *paR-) though apparent traces remain. In Oceanic languages which retain the affixes, *-an derives nouns denoting the place of an action, an object which is characteristically the place or goal of a posture, movement, etc. (POC *nopo 'stay' *nopoan 'place of staying', PPN *nofoa 'seat'). In Nguna derived nouns with -ana combine with a copula verb to form passive-like constructions (Schütz 1969). *i- derives nouns denoting instrument, product of a verb of manufacture, in general, objects associated with the act named by the verb. *-in- derives abstract nouns and nouns of result in some of the languages which reflect it, a function which it also has in some Philippine languages.

Now, the use of verb stems plus non-Actor focus affixes as *nouns* is clearly PAN. The nominal uses are found throughout Philippine type subgroups as well as in Oceanic and Toba Batak of Sumatra, and their PAN status can hardly be questioned.

However, they also conclude that it is probably necessary to reconstruct PAN verbal passive constructions involving the same set of affixes (Pawley & Reid 1979:111):

What is asserted here, as a more debatable proposition, is that PAN used such forms as verbs and that, in fact, they were basically verbs… Second, and this may turn out to be the crucial criterion, there is the matter of subgrouping. The use of *-an, *i-, and *-in/-en as case-markers on passive verbs, and the use of *ni as agent marker, is not confined to pure Philippine-type languages. These uses are widespread in West Indonesian languages. For example, Toba Batak of Sumatra and Merina of Madagascar (originally no doubt a South Borneo language), exhibit passives with most of these features (Toba Batak lacks *i-). Toba Batak, if not Merina, probably subgroups with Malay and perhaps other West Indonesian languages such as Madurese, Sundanese and Javanese (Dyen 1965a); certainly there is no independent evidence for assigning it to a subgroup with Philippine-type languages. The proto-language common to Toba Batak and Philippine and Formosan languages must have been PAN itself or a stage very close to it. In this connection we may note arguments by Dyen (1965b) and Dahl (1973) that Formosan languages diverged very early from the rest of AN (even including the Philippine languages). If these scholars are right in isolating Formosan as a first order subgroup of AN, we can hardly avoid attributing a Philippine- type system of case and voice marking to PAN.

Their conclusion that the verbal usage preceded the use of the affixes as nominalizers was based on the following considerations (Pawley & Reid 1979:111):

Given the distribution of nominal uses, and given that Philippine passive constructions are suspiciously like nominalizations, differing only in that they lack a nominal article before the focused verb stem where the nominalization requires such, we might argue that the passives derive from nominalization and that constructions corresponding to, say, 'the sitting place of John' were ancestral to verbal constructions translating 'the place sat on by John'—there being of course no distinction between 'of' and 'by' in Philippine languages.

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In arguing the contrary case, we would suggest, first, that passive-to-nominal is the more natural direction of change. Passive verbs typically have a nounier syntax than active verbs (Ross 1973), presumably for semantic reasons. When nominalizations are used predicatively in passive constructions they are generally supported by a verb "to be", and while this is the case in, say, Nguna (and Latin), it is not so in Philippine- type languages. This is not to say that the agent marker (PAN *ni, at least before proper nouns) was not first a possessive marker later generalized to mark Agent of a full passive. This is a common sort of development but not necessarily connected with the other and more central parts of the passive, namely the use of a non-Actor nominal as subject and the marking of the verb to show this.

Pawley & Reid (1979) take up the question of 1) the origins of the Oceanic type of case-marking, and 2) the outcome in Oceanic languages of those morphological and syntactic features characteristic of Philippine-type focus constructions (and held to be characteristic of PAN also). They derive the Oceanic case-marking type from an intermediate stage of development similar to that persisting in Toba Batak. The Toba system combines features of both the Philippine and Oceanic systems of case-marking and focus, e.g. showing both subject-focus affixes on the verb in passive sentences (cognate with those of Philippine languages) and object-focus suffixes on the verb in active sentences (cognate with those found in Oceanic languages). Pawley & Reid (1979) tentatively suggest that PAN may have been like Toba Batak in these respects.

The sequence of innovations they reconstruct for the development of Oceanic then includes the following (Pawley & Reid 1979:115):

PAN non-actor focus ("passive") verbals persist only as nouns and the original *subject-focus* series of transitive constructions is lost; subject became equated with actor, and the original focus system continued as *direct object focus* in active transitive sentences; new passives based on these active constructions appeared (possibly independently) in certain Indonesian and Oceanic languages; POC merges the case markers for the two role clusters location and goal, using the location marker *-i for both. All these developments are interrelated.

There are no major innovations to reconstruct for Philippine languages, according to this view (Pawley & Reid 1979:117):

On the matter of change in Philippine-type languages we have little to say —largely because under our hypothesis there have been few major changes. In this we are in agreement with Dahl and Wolff. One change is the replacement of *aken by some other preposition. Similarly, the PAN reconstructions allow for little change in Toba Batak, which preserves the subject focus constructions fairly completely.

In the present paper, we would like to argue that PAN nominalizations in *-en, *ni-/-in-, *ana-, *iSi- and possibly *mu-/-um- did not develop from original passive constructions, as concluded by Dahl (1973), Wolff (1979), and Pawley & Reid (1979), but rather that nominalizing function was the original one, and that the passive and verbal focus uses of these affixes in Philippine languages are a secondary development. That is, *-en, *ni-/-in-, *ana-, *iSi-, and possibly *mu-/-um- were all noun-deriving affixes in PAN, as they still are to a large extent in the modern languages outside the Philippine area, and as they have in fact remained to a previously unrecognized extent even within the Philippine language group. Verbal focus in Proto-Austronesian, then, was at most an incipient mechanism that was later elaborated and developed by the languages of the Philippines and some languages of Borneo and the Celebes.

If this argument is correct, then the possession of a well-developed verbal focus system becomes potential evidence for subgrouping, depending on how likely it would be for focus to come into existence independently in separate subgroups.

Our arguments for this hypothesis include the following:

1) Throughout the Austronesian family, but especially in those languages which show verbal focus, the person marker forms for the agents of passive verbs are the same as the Genitive pronouns marking the possessors of underived nouns, and contrast with the other sets of person markers (Nominative, etc.)

2) The reflexes of the 'focus affixes' mentioned above outside the Philippines are very largely nominal derivational affixes, and even in languages such as Malagasy and Toba Batak, it now appears as if many constructions previously analyzed as verbal may turn out to be amenable to a nominal construal, just as their counterparts in Philippine languages have turned out to be. That is, the 'passive' constructions in which these affixes occur are generally amenable to an NP-NP analysis which so far promises to be significantly simpler than an alternative verbal approach, and it is only in the relatively infrequent examples where a binary IC analysis is impossible where we can say with certainty that we are dealing with real verbal focus. Such constructions do occur in Tagalog and Amis, but this question has not yet been investigated for extra-Philippine languages such as Malagasy and Toba Batak.

3) The odd patterns of focus affixation in verbs, with some case inflections being suffixed (*-en, *-ana), some prefixed (*iSi-, *mu-, *ni-), and some infixed (*-um-, *-in-) suggests that focus paradigms are the result of the welding together of originally disparate elements, the originals in most cases being most plausibly derived from nominalizing morphemes.

4) While deriving the nominal forms from passive constructions can only be done with ad hoc and unmotivated transformational rules, we have found a plausible way to derive verbal focus constructions from nominal ones which involves only a simple reinterpretation of isomorphic clauses and relabelling of several crucial nodes.

10.3 Proto-Austronesian syntax

At this point, it is convenient to give a brief sketch of PAN sentence structure as we reconstruct it. Supporting evidence for these assumptions will be given in the following sections.

Proto-Austronesian was probably a verb-initial mixed ergative language like Amis or Palauan, with ergative Agents and possessors both marked by the same Genitive case form, a common feature of ergative syntax. Tense, aspect, negation, and various adverbial notions such as Manner were carried by a small class of verbs which, like 'auxiliary' verbs generally, were the grammatical main verbs, the lexical heads of their sentences, with other verbs occurring in sentences embedded under the 'auxiliaries'.
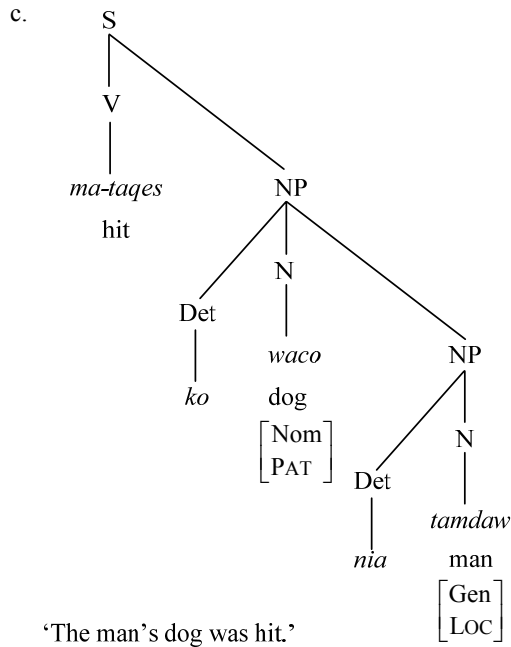
It is probable that PAN verbs could be inflected for perfective aspect. The perfective *ni-/-in- is present in all the primary subgroups, although some languages such as Tsou mark aspectual distinctions by obligatory auxiliaries rather than by verbal affixation. Reflexes of *ni-/-in- are, however, retained in the other languages of the Tsouic subgroup (*cf.* Tsuchida 1976:41, 70). Perfective aspect was presumably lost in Tsou because all 'main' verbs were neutral-aspect forms embedded under finite aspect-marking auxiliaries. Nominative and Genitive clitic pronouns were 'attracted to the syntactic heads of the main sentence, which were frequently auxiliaries.

The normal position for the Genitive Agent of an ergative clause was immediately following the head verb of its clause (possibly with one or more intervening clitic pronouns or adverbs), since otherwise it could be interpreted as a Genitive attribute of the noun preceding it. This is illustrated by the following Amis examples:

(10.2)   Amis (Chen ms)[4]

a.

```
                    S
          ┌─────────┼──────────────────────┐
          V         │                       │
          │        NP                      NP
      ma-taqes    ╱  │                    ╱  │
        hit    ╱     N                 ╱     N
            Det      │              Det      │
             │     tamdaw            │     waco
            nia      man            ko      dog
                  ⎡ Gen ⎤               ⎡ Nom ⎤
                  ⎣ AGT ⎦               ⎣ PAT ⎦
```

'The man hit the dog.'

b.

```
                    S
          ┌─────────┼──────────────────┐
          V         │                  │
          │        NP                  │
      ma-taqes    ╱  │                 │
        hit    ╱     N                NP
            Det      │             ╱   │
             │     waco         ╱      N
            ko      dog      Det       │
                  ⎡ Nom ⎤     │      tamdaw
                  ⎣ PAT ⎦    nia      man
                                   ⎡ Gen ⎤
'The man hit the dog.'            ⎣ AGT ⎦
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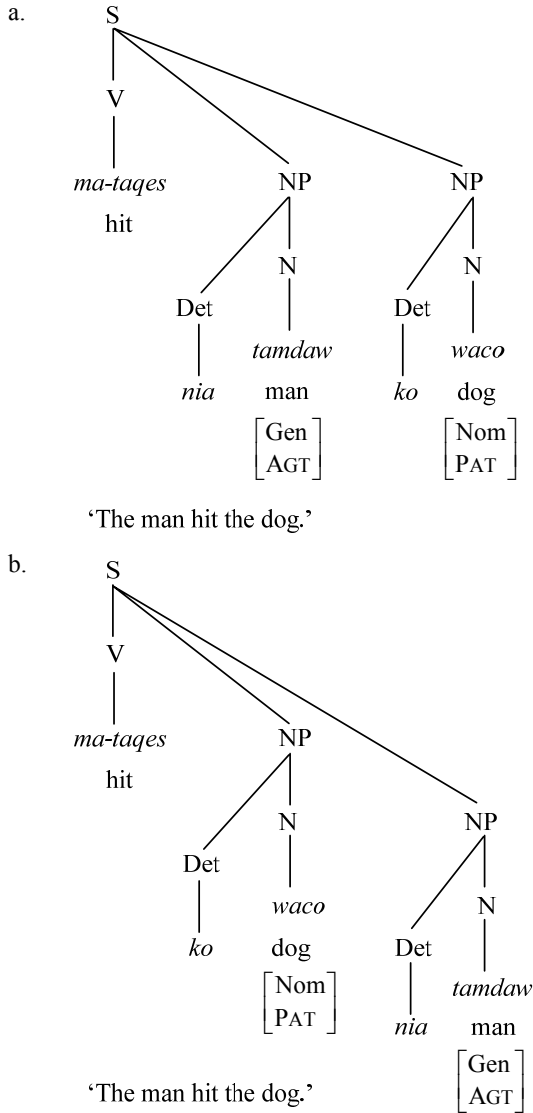
[4] Except as otherwise noted, all representations of the examples as well as any literal glosses matching the trees are derived from our own analyses rather than those of the original sources. Trees are drawn in accordance with the following conventions: the head of a construction is always drawn on a vertical line directly under the construction label. Attributes of the head are drawn on slanted lines to either side of the head and one line lower than the head. The two heads of an endocentric construction such as PP are both drawn on slanted lines, and are on the same level (Starosta 1979:63-64).

c.

```
                    S
                    |
          ┌─────────┴──────────┐
          V                    NP
          |           ┌────────┼──────────┐
       ma-taqes      Det       N          NP
         hit          |        |      ┌────┴────┐
                     ko      waco    Det        N
                             dog      |         |
                            ┌───┐    nia      tamdaw
                            │Nom│    man?       man
                            │PAT│              ┌───┐
                            └───┘              │Gen│
                                               │LOC│
                                               └───┘
```

'The man's dog was hit.'

Grammatical subjects were obligatorily definite, that is, assumed by the speaker to be identifiable by the hearer from the linguistic or extralinguistic context. All of these properties can be observed in modern languages such as Tagalog (McFarland 1978), Amis, and Tsou, and so can be reconstructed for PAN. An antipassive derivational process was probably available for reinterpreting definite actors as Patient and thus automatically marking them as subjects. 'Demoted' common noun ex-Patients may have been marked as Genitives in such constructions, although this is more likely to have been a later Philippine development, and 'demoted' personal nouns were reinterpreted as Locative-marked Locus actants. This system is attested throughout the Philippines and in at least one Formosan language, Amis (Chen p.c.).

PAN was a strongly noun-oriented language, with a high percentage of nominalization strategies.[5] The affixes *-en, *ni-/-in-, *-ana, *iSi-, *paN-, and possibly *mu-/-um- functioned to derive nouns from verbs, with only *-en possibly having begun to function to derive verbs as well as nouns.

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[5] Jeffers (1976:140-146) claims that there is a universal correlation between verb-initial clause structure and 'nouniness', especially the use of nominalized constructions where other languages use non-finite verbal forms, so that our claims that PAN was verb-initial and that it was 'nouny' mutually support each other. The examples Jeffers draws from Celtic, Ancient Egyptian, and Squamish have many direct counterparts in languages of the Austronesian family.

10.4 Auxiliaries as main verbs in PAN

PAN must have had an extensive set of auxiliary verbs, a set which almost certainly included not only words marking tense or aspect, as we might expect from looking at non-Austronesian languages, but also logical and existential negators and certain kinds of 'adverbs' denoting manner and instrumentality (*cf.* Starosta 1974:300-301, 315, 319, 333-334, 347-349 and Chen ms). On the basis of evidence from languages throughout the Austronesian family, we can conclude that these elements were in fact grammatically verbs, and that in spite of the implications of the term 'auxiliary', they were syntactically the grammatical heads of their constructions, with the so-called 'main verbs' being syntactically embedded under the 'auxiliaries' as sentential complements.[6] That is, instead of something like (i) or (ii) below, the appropriate analysis for auxiliary verbs in Austronesian languages is something like (iii):

(i)

$$S \rightarrow AUX \quad V_{main} \quad NP_1 \quad NP_2$$

(ii)

$$S \rightarrow AUX \quad VP \ (V_{main} \quad NP_1) \quad NP_2$$

(iii)

$$S \rightarrow V_{aux} \quad S \ (V_{main} \quad NP_1 \quad NP_2)$$
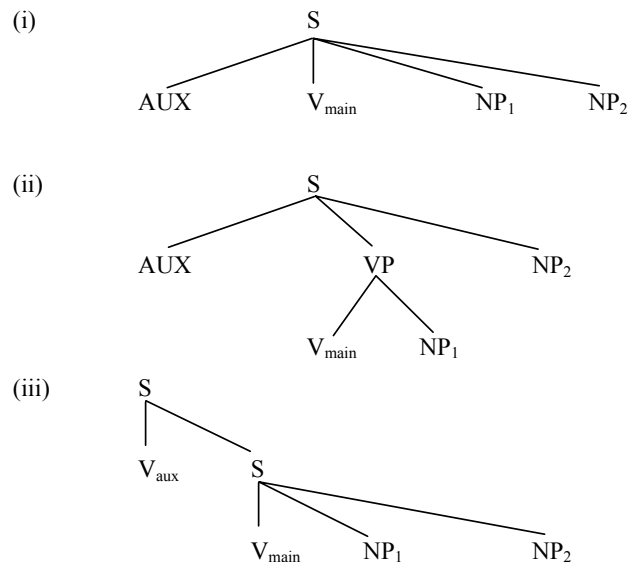
The generalizations that can be captured by this analysis include the following:

1) <u>Word order</u>. Instead of saying that the initial element in the sentence (assuming no topic is present) is a predicate nominative or a V unless an Aux is present, or claiming that there is always an Aux in every sentence even if you can't see it (Akmajian, Steele & Wasow 1979), we have a very simple statement: unless a topic is present, the initial

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[6] The arguments for this position are similar to the ones given for English by Ross (1969) and Starosta (1977), plus several specific to Austronesian, to be outlined below.

element in a clause (NP, PP, V, or 'Auxiliary') is the head of the predication, period. The following examples illustrate this point:

(10.3) Rukai [R54.6]

```
            S
          /   \
         V      S
         |     /  \
       kaɖua  V     NP
      not exist |   /  \
            asoala  Det   N
             first   |    |
                    kay  maroɖaŋ
                   this  old man
```
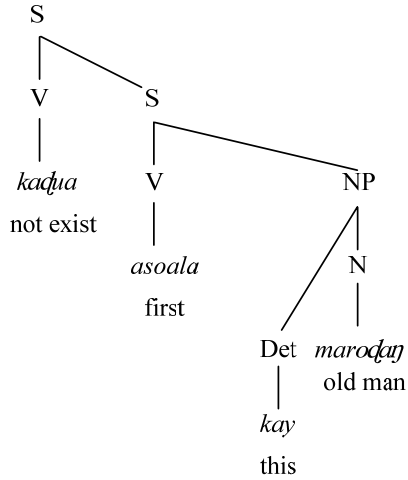
'This old man wasn't first.'

(10.4) Atayal (Egerod 1966:359)

```
          S
        /   \
       V      S
       |     /  \
  niux-nhaʔ  V    S
  be...-ing-they | /  \
            iniʔ  V     S
            not  hciazi |
               succeed  V
                        |
                      hmgup
                  practice witchcraft
```
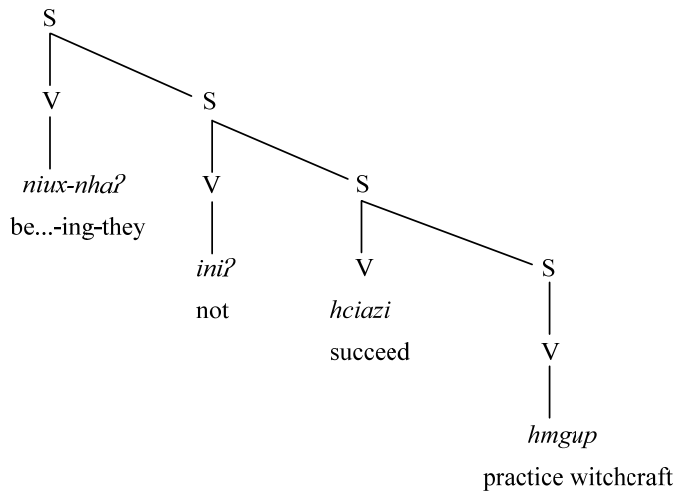
'They do not succeed in practicing witchcraft.'

Cases of full NPs appearing in post-auxiliary position can also be accounted for in a

natural way with this analysis; they are simply complements of the auxiliary verb. To cite an Amis example:

(10.5)   Amis [M41.3]
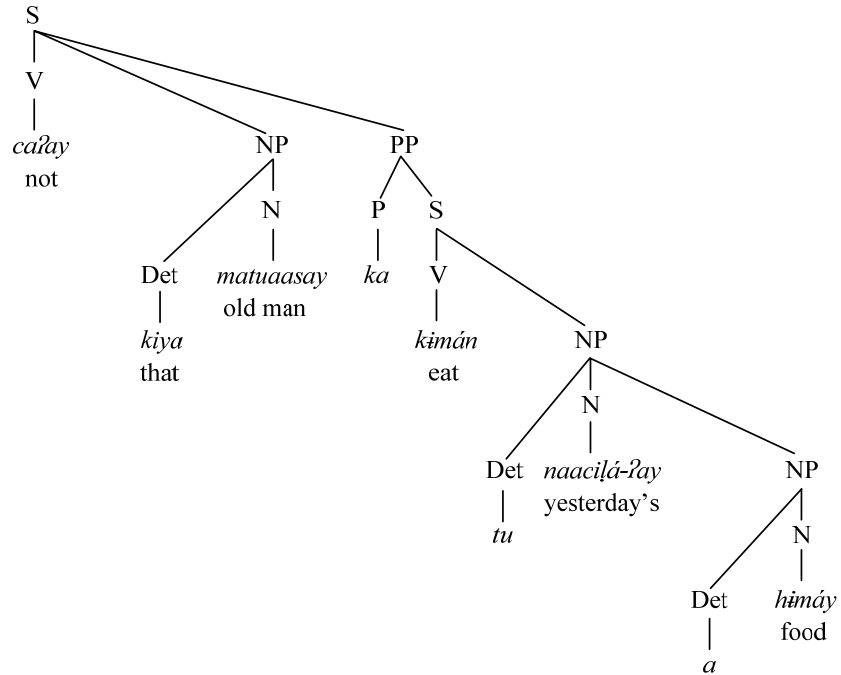
'That old man won't eat yesterday's food.'

2) <u>Clitic placement</u>. Instead of stating that clitic pronouns and clitic adverbs are attracted to the NP predicate or main verb unless one of a set of preverbal elements is present, in which case the clitic for some unknown reason precedes instead of follows the 'main' verb (see, for example, Schachter & Otanes' (1972) discussion of the various classes of elements that obligatorily or optionally precede clitics), or requiring two separate 'pronoun fronting' transformations, depending on case forms (Clark 1973:590), we can state simply that clitics are attracted to the lexical heads of their constructions, whether NP, PP, or S. Examples (10.3) above and:

(10.6) Tagalog

```
                    S
                    |  \
                    V      \
                    |        \
       hindi-mo-pa-nga-ba-ako    S
       not-you-yet-quest.true-me  |
                                  V
                                  |
                               nakita
                                 see
```
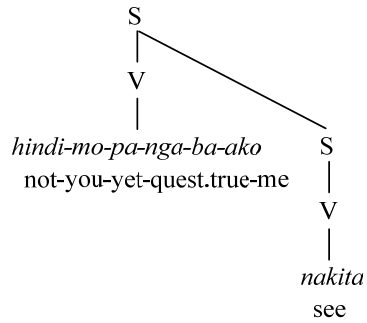
'Is it true that you haven't seen me yet?'

(10.7) Ilokano

```
              S
              |  \
              V      \
              |        \
        saán-nak-pay      PP
        not-you:me-yet   /  \
                        P      S
                        |      |
                        a      V
                               |
                            nakita
                              see
```
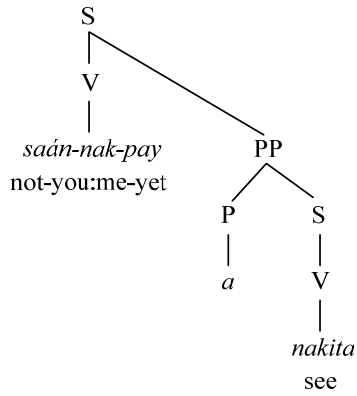
'You haven't seen me yet.'

(10.8) Rukai [54.7]

```
           S
           |  \
           V      \
           |        \
         ka-so        S
         not-you      |
                      V
                      |
                  wa-asoalá
                    first
```
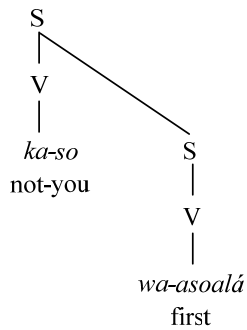
'You weren't first.'

(10.9)   Saisiyat [S32.6]

```
                        S
              ┌─────────┼─────────┐
              │         V         │
              │         │         │
             NP    inʋan-ɪla      PP
              │    when-already  ┌─┴─┐
              N                  P   S
              │                  │   │
            vakɪʔ                əm  V
           old man              will │
                                    r̃ɪmɜ́ʔ
                                     go
```
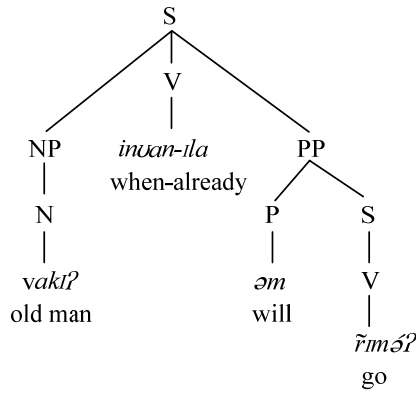
'When is the old man going to go (already)?'

(10.10) Tsou [C20]

```
        S
       ╱│
      V │
      │ │
    mi-ʔo
      I  S
         │╲
         V  ╲
         │   ╲
       suʔho  NP
       angry   │
               N
               │
              aʔo
               I
```
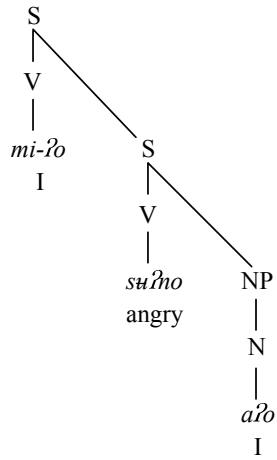
'I got angry.'

(10.11) Atayal (Egerod 1966:354)

```
                    S
                   / \
                  V    \
                  |     \
               iiat-suʔ   NP
               not-you   / \
                        N    \
                        |     \
                      taial    \
                      Atayal    \
                                NP
                                |
                                N
                                |
                              balai
                               true
```
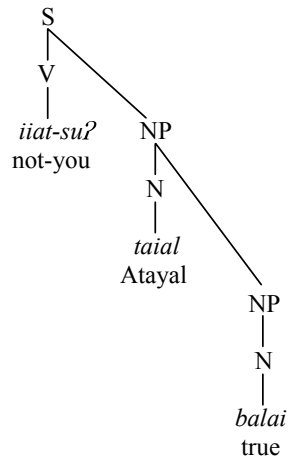
'You are no true Atayal.'

The kinds of elements which turn out to be syntactic verbs under this analysis include, as mentioned above, elements translated as adverbs, e.g.:

(10.12) Bunun (Jeng 1977:214)

```
              S
            / | \
           V  |   \
           |  |    \
        mastan NP    S
         very  |     |
               N     V
               |     |
            ʔaipaʔ matamasa ð
              he    strong
```
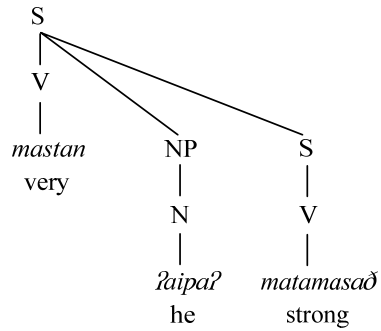
'He is very strong.'

(10.13)　Kagayanen (Harmon 1977:101)

```
              S
             /\
            |   \
            V    \
            |     \
        kangu-nu   S
        when-you  /\
                 |  \
                 V   \
                 |    \
             kamang-a  NP
             get-from  /\
                      |  \
                      |   N
                      |   |
                   Det  arey-nu
                    |  friend-your
                    ta
```
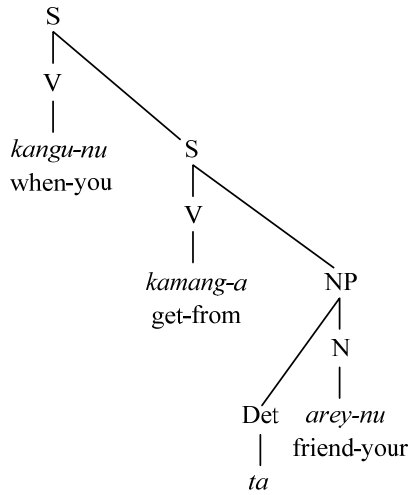
'When did you get it from your friend?'

And even when the 'adverbial' is not the highest verb in the clause, a verbal analysis for an adverbial is often indicated by the fact that it may be the only candidate for verbhood in the absence of a 'main' verb (for example, (10.3) above), it may be inflected for tense (*cf.* (10.8) above), or it may occur with the same complementizers that mark verbal complements:

(10.14) a. Amis [M118]

```
                S
               / \
              V   \
              |    \
         empitsuớn  PP
         with:pencil / \
                    P   S
                    |   |\
                    a   V  \
                        |   \
                    misuurit  NP
                      write  / \
                            / N  \
                           /  |   \
                         Det nuhoolam  NP
                          |  Chinese  / \
                          tu        Det  N
                                     |   |
                                    Det suurit
                                     | characters
                                     a
```
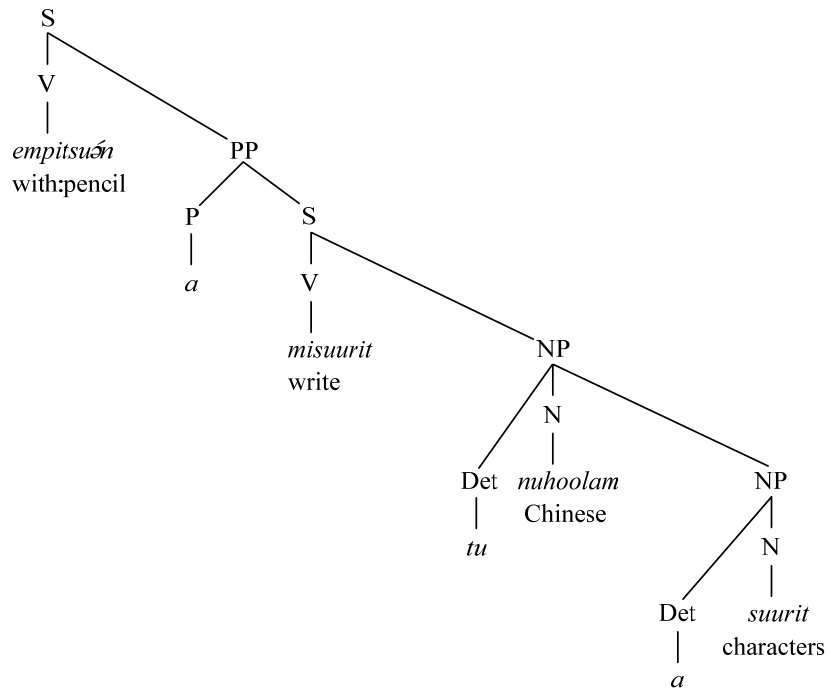
'He used a pencil to write Chinese characters (Ho-nan ones which are writing).'

Compare with:

  b. Amis [M111]

```
                 S
                /|\
               V | \
               | |  \
        maavaanáʔh |  \
          know   PP   NP
                / \   / \
               P   S Det  N
               |   | |    |
               a   V kina waawa
                   | this child
               miđaaŋuy
                 swim
```
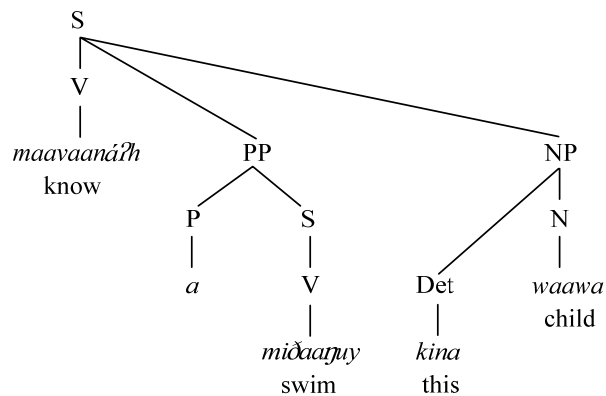
'The child knows how to swim.'

If the adverb is the head of the clause, of course, this pattern is completely regular.

3) <u>Dependent verb inflections</u>. Certain languages such as Kagayanen (Harmon 1977:100ff), Seediq (Asai 1953:28), Manobo (DuBois 1976, Elkins 1971, Morey 1964), Maranao (McKaughan 1958), Samareño (Wolff 1973:82, 86), and Atayal (Egerod 1966) have a set of verbal inflections that occur only in imperatives or when the verb is either embedded under another verb or follows certain elements of a set of auxiliary words marking aspect, negation, etc.

In Manobo languages, for example, *-i* is widely attested for what has been variously called locative, direction, or accessory focus, when occurring in 'irrealis' or 'involuntary mode' or 'unactualized tense' (DuBois 1976, Elkins 1971, Morey 1964). Generally speaking, whenever there is an auxiliary word which 'attracts' a clitic pronoun (if there is one), the dependent form occurs.

(10.15)   a.   Ata Manobo (Morey 1964:71)

            kuntoqon-ku-doq   *og-lampasu-i*   (*-i* = 'Directional focus')

            today-I-just   wash the floor

            'Today I will just wash the floor.'

But:

            b.   *og-lampasu-an-ku*   *kuntoqon*   (*-an* = 'Directional focus')

                   wash the floor-I   today

                   'I will wash the floor today.'

            c.   *mananoy*   *og-ka-pongo-i*   *ka*   *baoy*

                   slowly   finish   house

                   'The house will be finished slowly.'

                   (*mananoy* = 'incomplete', *ka-* = 'involuntary')

In Ata Manobo, most (but not all) time, manner, and location auxiliaries, as well as negatives attract clitic pronouns, and require dependent forms of the verb. As expected, Ata imperatives also use the dependent forms:

(10.16)   *qaad-i*   *nu*   *ka*   *igbuyaq*   *to*   *babuy*   *angkuan*

          fence-in   you   chief   pig   later on

          '(You) fence in the pig for the chief later on.'

Under the analysis we propose here, we need only state that verbs must appear in dependent inflected forms either in imperatives or when they are dependent, that is, when they are embedded under higher verbs. This aspect of our analysis becomes very important in accounting for the change from PAN to languages of the Oceanic type.

4) <u>Imperatives</u>. The treatment of auxiliaries as main verbs also helps to solve certain other problems involving anomalous case marking and ordering, but this gets too complicated for a paper such as this.

Incorporating syntactic slots for clitics and 'raised' NP complements, we can diagram the structure of a PAN ergative sentence containing an auxiliary verb as follows (CP = Clitic Pronoun):

(10.17)

$$S$$
$$V_{aux} - (CP_i)$$
$$S \qquad (Nom\text{-}PAT_j)$$
$$V_{main} \quad Gen\text{-}AGT_i \quad Nom\text{-}PAT_j$$
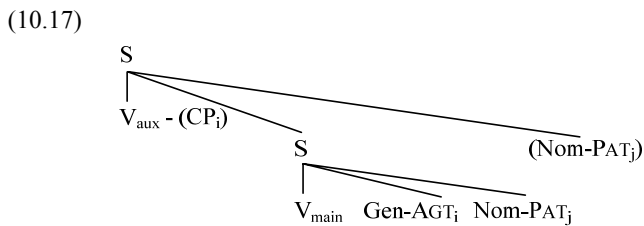
The subscript 'i' is intended to represent an important fact about these constructions: there is a requirement that the CP or subject Nom-PAT$_j$ of the higher auxiliary clause agree with one of the embedded 'main verb' clause NP complements, but the co-reference obtains not between the CP and the grammatical subject of the lower clause, but rather between the CP$_i$ and the lower verb's 'performer' or 'Actor', the case relation highest in the Fillmorean Subject Choice Hierarchy (*cf.* Clark 1973:594). Exactly, this system is attested for widely separated ergative languages such as Samoan, Mono Alu (Fagan 1979), Tsou, Tongan, and probably Mae and East Uvean (Clark 1973:590), and can be reconstructed for PAN, especially since this syntactic characterization is crucial in accounting for the evolution of Oceanic-type syntax from the proto-system we posit.

10.5 PAN non-verbal clauses

Proto-Austronesian non-verbal clauses were composed of an initial predicate noun phrase or prepositional phrase followed by a grammatical subject and optional outer circumstantial actants such as Time and Place. There was no copula in such sentences. To cite a Tagalog example:

(10.18)   Tagalog (Schachter & Otanes 1972:121)
  para   dito   sa   damit   ang   mga   bitones
  for   here   dress   plrl   button
  'The buttons are for here on the dress.' [our gloss]

Non-verbal clauses, like verbal ones, could be embedded under auxiliary verbs marking tense, aspect, and negation.

There is no strong evidence that we know of for positing an adjectival predicate distinct from the first three types of non-verbal predicate. Structures translating as predicate adjectives (e.g. 'The woman is very strong') were either non-referential predicate nominatives with nouns like 'strong (one)' as heads, or stative verbal predications. Stative verbs were distinguished from other verbs in their defective aspectual paradigms, their distinct derivational potential, and their ability to enter into comparative constructions. These could of course be called 'Adjectives' (or anything else), but by the constrained X-bar convention proposed in Starosta (1979), this would entail the creation of a new construction type, 'Adjective Phrase', thereby losing the generalizations one can otherwise make about the syntactic similarities existing between these constructions and regular verbal clauses.

Non-referential descriptive predicates such as 'strong (one)' which don't exhibit the morphological and syntactic properties of verbs are considered to be nouns. They take the same sorts of complements as concrete nouns do. Alternatively, we could have treated ordinary predicate nominatives as derived verbs, thereby accounting for the fact that unlike nouns occurring in other positions, they don't take Determiners. However, this would require positing a 100% productive Ø-derivation rule to produce a predicate verb/adjective for every noun. The analysis we have chosen, to treat all of these non-verbal predicators as nouns which reject Determiners in predicate position, is descriptively cheaper, especially when considered within the framework of a universal theory.

Predicate nominative sentences were either descriptive, with indefinite predicates (e.g. 'The child is a boy') or identificational, with definite predicates ('The murderer is you'; 'You are the murderer!'), e.g.:

(10.19)   Tagolog – Descriptive (Schachter & Otanes 1972)
           artista   ang   nagluto   ng   pagkain
           actress   cooked   food
           'The one who cooked the food is an actress.'

(10.20)   Ilokano – Identificational
           a.   *ti   babái   ti   abogádo*
                 the   woman   lawyer
                 'The woman is the lawyer.'

           b.   *sika   ti   mangpatay*
                 you   killer
                 'You are the killer.'

    c.   *ti   laláki   ti   mangpatay*
           man   killer
        'The man is the killer.'

    Descriptive predicate nominatives did not have their own referents. Rather, they added information about the subject of the clause. Except for having the basic internal structure of a Noun Phrase (see following sections), they were essentially identical in their syntactic properties to stative verbs, even to the point of allowing Nominative clitic pronouns to attach to the head predicate noun. Examples:

(10.21)   Atayal (Egerod 1966:354)

                S
                |
              NP
                |
               N
                |
        ʔtayal-sakuʔ
         Atayal-I
        'I am Atayal.'

(10.22)   Bontok
        a.

                 S
                 |
               NP
                 |
                N
                 |
        ʔuɲuŋʔá-kayu
        children-you
        'You are children.'

b.

```
            S
           /\
          /  \
          V    \
          |     \
      bakən-kayu  S
       not-you   |
                 NP
                 |
                 N
                 |
              ʔuɲuŋʔa
              children
```

'You are not children.'
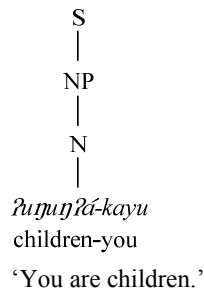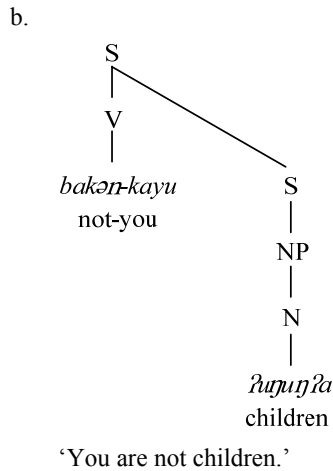
PP predicates also supported clitics, as in the following Tagalog examples:

(10.23)   Tagalog (Schachter & Otanes 1972)

    a.   *kay Juan   ko   ibinigay   ang   lapis*
         to   Juan   by me gave   pencil
         'I gave the pencil to Juan.'
         Lit.: 'The pencil was the thing given by me to Juan.'

    b.   *sa   Lunes   siya   mangingisda*
           Monday   he   go fishing
         'He will go fishing next Monday.'
         Lit.: 'He will be on Monday to go fishing.' (p.505)

As in the case of verbal clauses, the nominative clitic was obligatory in main clauses when the implied subject was first or second person. There was no overt third person singular Nominative clitic, as is the case for example in Bontok, Ilokano, and many other Philippine languages, and probably no overt third person plural either, judging from Formosan and some Philippine languages. Thus although the Nominative clitics agreed grammatically with the subjects of their sentences, the non-third-person subjects were redundant, and did not overtly appear except for emphasis. An analogous system can be seen in person-marking Indo-European languages such as Spanish, although of course these languages use copulae in equational sentences.

As a noun, a predicate nominative was eligible to take a Genitive attribute, including a Genitive clitic, and as a predicate, it could take a Nominative clitic. It is not clear whether a Genitive and Nominative clitic could co-occur in the same clause in PAN,

however. In Central Cordilleran languages and scattered languages elsewhere in the Philippines, for example, only an independent Nominative pronoun can co-occur with a Genitive clitic, e.g.:

(10.24) Bontok

    a. *ʔiníla-na*   *sakʔən*
       saw-he   I
          [Gen]   [Nom]
       'He saw me.'

    b. *ʔiníla-n* *nan* *laláki* *sakʔən*
       saw   man   I
          [Gen]   [Nom]
       'The man saw me.'

and our account of the evolution of an SVO pattern in Oceanic assumes that it was possible to have a genitive clitic of the higher clause and a Nominative one in the embedded one. However, in other Philippine and Formosan languages such as Ilokano and Atayal, Genitive and Nominative clitics do co-occur, so we tentatively reconstruct this possibility for the proto-language.

    When two clitics occurred, it might be expected that the Genitive, as the element expressing the more intimate relationship with the noun, would have preceded the Nominative. This situation is reflected in the following Ilokano examples:

(10.25) Ilokano

    a. *gayyem-na-ka*
       friend-his-you
       'You are his friend.'

    b. *nakíta-nak*   (*nak* = -*na*/Gen + -*ak*/Nom)
       saw-he/you:me
       'He (or you) saw me.'

    Similar examples can be found for example in Rukai and vestigially in Bunun. In Atayal, however, the opposite order sometimes appears:

(10.26)   Atayal (Egerod 1966:358)

       a.   *kialun-taʔ-niaʔ*   *itaʔ*
           speak-us-he   us
           'He speaks to us.'

       b.   *ktan-sakuʔ-niaʔ*
           see-I-he
           'He sees me.'

It is probable that the Nominative-Genitive order is an innovation in Atayal in that the reverse order (Genitive preceding Nominative) still appears to be reflected in the lexicalized double-function clitic *misu'* 'by me-you':

(10.27)   Atayal (Egerod 1966:355)
       biqun-misuʔ   *lukus*
       will give-I:you   clothes
       'I will give you clothes.'

PAN must also have had a second type of predicate clause, which we will refer to here as 'identificational', since it takes two definite NPs with independently registered referents and identifies them with each other, that is, asserts their co-referentiality. To cite an example from Atayal:

(10.28)   Atayal (Egerod 1966:357)

       'I am your mother.'
       Lit.: 'Your mother is me.'

This type too is widely attested in Philippine and Formosan languages, although it is probably far less frequent than the descriptive type. Probably all content 'WH-questions' were topicalized versions of this clause type, as they are in modern Austronesian

languages such as Yapese (John Jensen p.c.) and Tagalog.

The equational sentence type was almost certainly very frequent, as it continues to be in Paiwanic and Philippine languages, and as will be shown below, it had a crucial role to play in the evolution of verbal focus inflections from nominalizing derivational affixes.

10.6 PAN as a verb-initial mixed ergative language

We assume that Proto-Austronesian was verb-initial because this is the usual word order in Philippine and Formosan languages as well as in such languages as Toba Batak and Merina (*cf.* also Wolff 1979:164). Emphatic, contrastive, or presupposed NPs or adverbials could appear as preverbal topics, immediately followed by an intonation break. This is the present situation in Bontok, for example, although the Ilokano topic marker *ket* is sometimes borrowed to mark this construction. Preposed topics may optionally have been followed by an overt topic marker, although the wide variety of forms displaying this function in modern Austronesian languages (e.g. Tagalog *ay*, Amis *iri*, Rukai *ka*, Malagasy *nu*, Ivatan *am*, Ilokano *ket*, Atayal *ɣaʔ*, Seediq *oʔ*) do not allow the actual form of such a marker to be unambiguously reconstructed (*cf.* Dahl 1973:121).

The favored SVO order in such Formosan languages as Saisiyat and Thao (Li 1978:591, 600) as well as in classic Oceanic languages, Bahasa Indonesia, etc., presumably developed through the reanalysis of the topic-comment structure (see also §10.11), possibly as a result of the notable dearth of other grammatical devices for marking this function in PAN, although if this explanation has merit, it is strange that the equally impoverished Atayalic languages did not undergo an analogous development.

The claim that PAN was a mixed ergative language is based on the following considerations:

1) Within the lexicase framework, an ergative language is defined as one in which the grammatical subject is always in the Patient case relation. A mixed ergative language is one in which the unmarked subject choice is Patient, but which has one or more classes of derived verbs which choose their grammatical subjects according to Fillmore's (accusative) Subject Choice Hierarchy: Agent first, else Instrument or Correspondent, else Patient (using lexicase labels for the case relations).

2) A number of languages from different primary Austronesian subgroups, including Tongan, Samoan, Ilokano, Palauan, Chamorro, Toba Batak, Paiwan, Amis, and Tagalog (*cf.* DeGuzman 1978:199) are ergative or mixed ergative in the sense of 1) above.

3) In the mixed ergative languages, ergative verb stems are often less marked than accusative ones, and the completely unmarked 'root stems' (DeGuzman 1978:199) are

always ergative in languages such as Kagayanen (Harmon 1977:111, Table 6) and Toba Batak (van der Tuuk 1971:85, 98), where 'simple passives' consist of a bare stem, while 'active' transitive verbs are derived (*cf.* Mulder & Schwartz 1981:237 on Kapampangan). That is, Toba Batak 'simple passives' are grammatically ergative, since the unmarked subject is the Patient rather than the Agent.

The 'zero-affix' word bases which Dahl reconstructs for PAN (Dahl 1973:120) were also apparently ergative. Dahl (1973) and Egerod (1965:255) consider the unmarked imperative to have been AF rather than OF, but this is based on the unjustified theoretical assumption that 'intention' equals grammatical Agent. If we accept the well-motivated Patient Primacy hypothesis, Egerod's zero-affix Atayal imperatives, e.g.:

(10.29)　Atayal (Egerod 1965:274)

agal　qaiaʔ　suʔ
take　thing　your
$\begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$

'Take your things!'

and Dahl's examples of 'non-focused' verbs in Malagasy for example, are quite regular Patient-subject forms:

(10.30)　Malagasy (Dahl 1973:120)

tuŋga-ku　　ni　entana
brought-by me　the　goods
'The goods are brought by me'; 'The goods have come by me.'

Even in languages which have drifted off in an accusative direction, non-subject Agents tend to be marked by the same case form as possessors, a typically ergative characteristic, and derived but otherwise unmarked *pa- causative stems tend to retain their original ergative properties. Thus *pa- causatives in Kapampangan (Mirikitani 1972:79), Kagayanen (Harmon 1977:111), Tsou (Tung et al. 1964:225), Tagalog (DeGuzman 1978:339), Seediq, and to some extent in Atayal (Egerod 1965:267) and Bunun have Agents in their case frames but allow only Patients as grammatical subjects unless further derived.

4) Linguists such as Ceña (1977) and DeGuzman (1979) have pointed out Tagalog's tendency to 'Patient Primacy', the typically ergative inclination to give preference to Patients in subject choice, morphological marking, etc. This tendency is reflected for example in the fact that if a Tagalog sentence refers to a Patient and an Agent which are

both definite, only the Patient can be chosen as the grammatical subject. This same observation has been made for Melayu Betawi (Ikranagara 1975). We might also note here the tendency for grammatically passive sentences (that is, sentences with Patient subjects) to be elicited as translations for active sentences in languages such as Tsou (Tung et al. 1964:101) and Amis.

5) Finally, note that the Agents of imperatives in Austronesian languages are typically non-subjects. This is the case for example in languages such as Maori (Clark 1973:577), Hawaiian, Betawi (Ikranagara 1975:124), and Formosan languages such as Tsou (Tung et al. 1964:84), Bunun, and Amis. Mulder & Schwartz (1981:256) note that this contradicts Keenan's claim about subjects of imperatives (Keenan 1976), but in an ergative system, this is of course the only structure possible for transitive imperatives. The fact that imperatives in languages such as Seediq (Asai 1953:56), Amis, Bunun, and Saisiyat preserve reflexes of the original derivational suffixes *-i or *-a even when, as is the case in for example Amis, Rukai, Saisiyat, and Bunun, these have been lost elsewhere in the language, and that archaic forms of the verb root can occur in imperatives (e.g. Bunun *koni* 'eat', as compared with the regular form *maʔun*), provide additional support for our contention that Patient-subject imperatives were a feature of the ergative proto-language.

It is not difficult to see why Patient-subject imperatives survived so well in the descendants of Proto-Austronesian. The following considerations are relevant:

a) It is grammatically predictable that the agent of an imperative will always be second person, and it is convenient to have this redundant information expressible by a grammmatically optional case form. (Note that in accusative languages such as English, imperatives are the only exception to the generalization that subjects are obligatory in finite clauses. In an ergative language, no such anomaly results.)

b) If the PAN second person pronouns were divided into formal and informal variants (Blust 1977:8-9), the use of the passive imperatives with grammatically optional agents would have allowed speakers to avoid committing themselves with respect to status differences (*cf.* Ikranagara 1975:5).

c) If the speaker gives a command to the hearer regarding an action to be performed on some Patient, in most situations, the speaker will expect the hearer to know which Patient is meant: that is, the Patient actant will usually be definite. In the ergative proto-language, definite Patients were always subjects so again, an ergative (or passive) construction would have been a very appropriate vehicle for imperatives.

6) In at least one Austronesian language, Fijian (Shoji 1973:9) proper-noun Patients in transitive clauses are unmarked, while the corresponding Agents are marked with *ko*. Although Fijian is otherwise a straightforward accusative language, this can be seen as an ergative characteristic, since the absence of morphological marking typically correlates

with Nominative case inflection, the case of the grammatical subject, and a transitive clause with a Patient as the unmarked subject is by definition ergative.

7) Tsou is an accusative language, but the fact that clitic pronouns on an auxiliary verb control the actor in the lower clause rather than the subject can be seen as a reflection of an earlier ergative stage. In Tsou, pronouns always refer to the actor or performer of the action of a sentence when they follow an auxiliary verb, but to the Patient when they follow an embedded 'main verb'. This distribution can be easily explained based on our assumptions that a) PAN auxiliaries were main verbs (see §10.4 above), b) the NP argument of an intransitive auxiliary verb agreed with the actor in the lower clause ('actor' = highest CR in the subject choice hierarchy), and c) PAN was ergative:

(10.31)
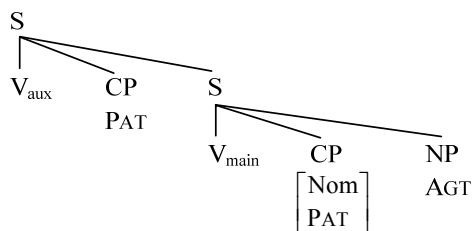
The post-auxiliary clitic pronouns refer to actors because, as in the proto-system, they must be co-referential to the actant in the lower clause which is highest in the subject choice hierarchy; and the clitic pronoun after the main verb refers to the Patient because a) in the proto-language, the independent pronouns were only Nominative and thus always Patient, and b) actor pronouns would appear with the auxiliary verb in the higher clause, and so would be redundant in the lower one.

8) Finally, the distribution of full-form pronouns in Atayal is immediately postverbal when the pronoun is the object of a transitive verb or the subject of an intransitive one but non-adjacent to the verb otherwise (Egerod 1966:358). In other words, Patient is adjacent to the verb. If PAN was ergative, it is easy to account for this as a direct retention from a VSO word order.

10.7 The structure of noun phrases

10.7.1 Heads and attributes

Proto-Autronesian noun phrases were composed of a head noun optionally followed by one or more NP attributes, or possibly by a verbal relative clause. Verbal relative

clauses of an unusual sort occur in several Formosan languages, either before or after the head noun of the NP. They are either marked by an intervening buffer element (*ci* in Tsou, *ki* in Rukai; Li 1973:61) or occur directly adjacent to the head of the phrase (Atayal). They have the internal structure of regular verbal clauses, including the presence of auxiliary verbs and attracted clitic pronouns, and since they occur in separate primary Austronesian subgroups, Paiwanic (Rukai), Atayalic, and Tsouic, it seems they should be reconstructed for the proto-language. (See however our cautionary statements about reconstructing features attested only in Formosan languages, §10.1.2). Their constituent structure and free order with respect to the head noun remain problematic, however, and they seem to have no exact counterparts in most other Paiwanic languages or in extra-Formosan languages, or in fact in any languages known to us. They may have been lost in the languages outside Formosa, where non-verbal 'ligature' type attributes predominated until verbal relative clauses were reintroduced in some Indonesian and Oceanic languages (*cf.* for example Kähler 1974, Sohn 1973).

NP attributes following noun heads were either Locative (as in English 'the woman in the pool') or Genitive (as in 'the name of the game'), or appositional (as in 'my son, the hunter'). The latter type will be discussed in connection with 'ligature' constructions in a subsequent paper. Examples of the first two types drawn from modern AN languages are given below:

Locative attributes:

(10.32)   Ilokano

'that stone over there'
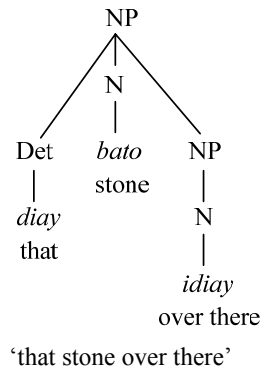
Genitive attributes:

(10.33) a. Seediq [Q186]   b. Atayal [A26]

```
            NP
            |
            N
            |
          buuŋa        NP
        sweet potato   |
                       N
                       |
                     taama        NP
                     father       |
                                  N
                                  |
                                niyaʔ
                                of him
```

```
            NP
            |
            N
            |
          pilaʔ        NP
          money        |
                       N
                       |
                     nikkɨis
                     old man
```
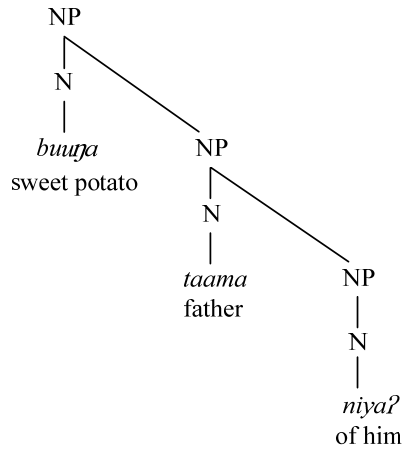
'his father's sweet potato';   'the old man's money'
Lit.: 'the sweet potato of the father of him'   Lit.: 'the money of the old man'

PAN genitive attributes were bare NPs following and subordinated to the preceding head noun of the construction (*cf.* Omar 1974). The meaning of these Genitive attributes was broadly 'possessive', including ownership, part-whole relationships, general correspondence or, in the case of nominalized transitive verbs as heads, agentive. Head nouns could be marked with first or second person Genitive 'short form' clitic pronouns agreeing with implied possessors, whereas third person possessors appeared as full NP attributes. (The third person 'Genitive' pronouns reconstructed for PAN by Blust, Dahl, and Dyen (*cf.* Blust 1977) derive from demonstrative pronouns in this attributive function.) Although there was a complementary distribution between non-third clitics and third non-clitic attributes, it was probably possible to get clitics and full attributes co-occurring, as in Atayal:

(10.34)   Atayal (Egerod 1966:365)

```
              NP
             /|\
            N | \
            |  \  \
        qianux-taʔ  NP   NP
        fate-our    |    |
                    N    N
                    |    |
                  taial  gaʔ
                  Atayal this
```
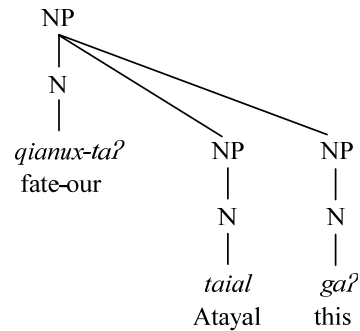
'the fate of us Atayal'
Lit.: 'our fate of the Atayals which is this'

Head nouns could also occur with Nominative clitics agreeing with subjects in predicate nominative clauses. This will be discussed and exemplified in connection with equational sentences.

   It is also possible to reconstruct for PAN what might be called 'inclusive attribute' constructions. These constructions differ from coordinate constructions and English-style 'with' attributes in that the referent of the head pronoun, rather than separate from it. To cite examples from Atayal, Ilokano, and Ilongot:

(10.35)   Atayal (Egerod 1965:254)

```
        NP                        NP
       / \                       / \
      N   NP                    N   PP
      |    \                    |   / \
    sami    NP                sami P   NP
    we     / \                we   |    |
          N   NP                   kiʔ  Batuʔ
          |    |              including Batu'
         kiʔ   NP
      including |
               N
               |
             Batuʔ
             Batu'
```
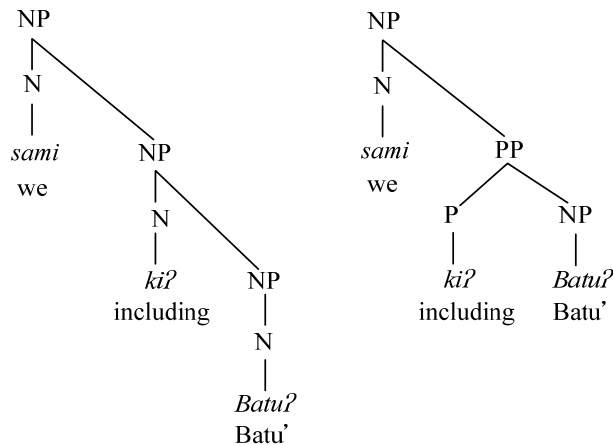
'Batu' and I'
Lit.: 'we including Batu''

(10.36)   Ilokano

```
              NP
             ╱|
            N  ╲
            |    ╲
        balay-da    NP
        house-their ╱|
                   ╱  N
                  ╱   |
               Det   Juan
                |    Juan
              kenni
             including
```
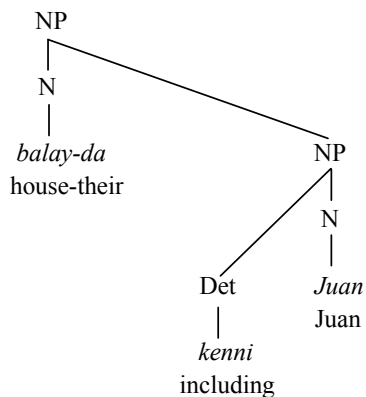
'their house, including Juan; Juan's and her house'

(10.37)   Ilongot (Michelle Rosaldo p.c.)

```
              NP
             ╱|
            N  ╲
            |    ╲
        ʔabuŋ-da    NP
        house-their ╱|
                   ╱  N
                  ╱   |
               Det  badilyo    /ʔabuŋdin badilyo/
                |   Badilyo
               ni
            including
```
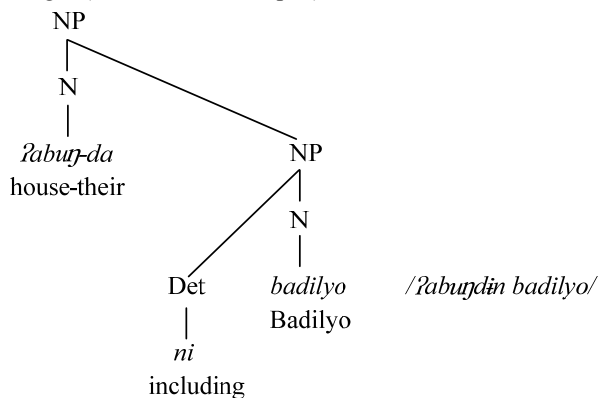
'their house, including Badilyo'

    These NPs were probably formed on analogy with similar verbal constructions, as illustrated by the following examples:

(10.38)   Ilokano

```
              S
             / \
            V   \
            |    \
       napan-kami \
        went-we    \
                    NP
                   / \
                  /   N
                 /    |
               Det  Maria
                |   Maria
              kenni
               with
```

'We went with Maria; Maria and I went.'

(10.39)   Bikol (Mintz 1971:15)
Inapód   taka
call   we:you
'I called you.'
Lit.: 'We called you by me.'

(10.40)   Ilongot (Michelle Rosaldo p.c.)
ʔiniɣap   taka
saw   we:you
'I saw you.'
Lit.: 'We saw you by me'

where *taka* = *ta* 'Genitive *we* inclusive' + *-ka* 'Nominative *you* singular'. We tentatively reconstruct this verbal 'inclusive plural' as well as the nominal one for Proto-Austronesian.

10.7.2 Adjectives and demonstratives as nouns

The X'-Convention as interpreted within the lexicase framework (Starosta 1979:60) requires that the lexical head of a Noun Phrase be a noun. However, it should be noted that the lexical items that must be classified as nouns according to syntactic criteria in Proto-Austronesian and in many of the descendants often correspond to adjectives or demonstrative determiners in English translations, and this correspondence has unfortunately influenced the synchronic analyses of many Austronesian languages, where it has

been assumed without question or justification that a determiner or adjective in English translation is necessary and sufficient grounds for postulating a determiner or adjective in the language being analyzed.[7] For PAN, the only determiners we reconstruct are the Genitive *i/ni (*cf.* Reid 1978:48-49) and a personal Nominative article *si, reflected in Tagalog *si* and *siya*, Betawi *si-* (Ikranagara 1975:147), Atayal *hiaʔ* and Saisiyat *siya'*. There were no adnominal adjectives and probably no class of adjectives as distinct from verbs and nouns at all. Instead, NPs translated as English noun phrases containing demonstrative determiners and numbers or descriptive adjectives were syntactically hierarchical arrangements of apposed nouns, e.g.:

(10.41)   Atayal (Egerod 1966:366)

```
                     S
          ┌──────────┼──────┬──────────┐
          │          │      │          │
          V          NP     NP         Adv
          │          │      │          │
        niux         N      N         uzi
      there is       │      │         also
                  qutux   qasa
                   one   over there
                    │
                    NP
                    │
                    N
                    │
                  qalaŋ
                  village
```

(Note: NP under first NP branches to N (*qutux* 'one') and NP (N *qalaŋ* 'village'))

'Over there is also a (one) village.'
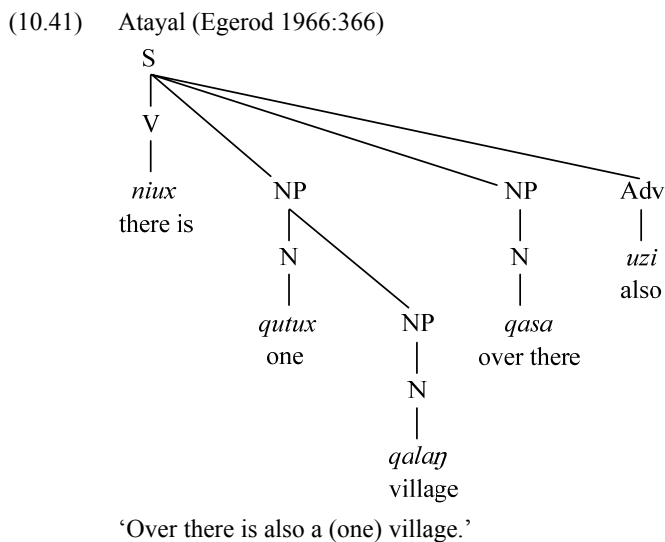
NPs containing demonstrative or descriptive nouns often included either the linking Determiner *a or the attributive demonstrative/relator noun *na which evolves into the nasal ligature in Philippine languages.

The linker attributive construction is still in fact the common one in modern

---

[7] William Foley (Foley 1976:13), for example, refers to two types of complex NP in Austronesian:
   (i)   Adjunct + Noun, with widespread use of a ligature element, and
   (ii) Noun + Noun, with no linker.
However, he fails to provide any justification for assuming that his 'adjunct' is not itself a noun. By any non-circular distributional or coding property that we can think of, it certainly is a noun, and only the fact that it may correspond to a Determiner or Adjective in the English translation seems to warrant making such a distinction. Essentially the same comments could be made with respect to the treatment of Tagalog nominal modification constructions in Schachter & Otanes' (1972) *Tagalog Reference Grammar*.

Philippine and Formosan languages, although it may include a Determiner which was not present in the proto-language. To cite some modern 'adjectival' examples:

(10.42) Bontok

a.

```
                        NP
                      /    \
             Det      N        \
              |       |          NP
             nan     ʔásu         |
             the     dog          N
                                  |
                        Det   dakdakəl
                         |       big
                        -ay
                     which is
```

'the big dog'; Lit.: 'the dog which-is-a big one'

b.

```
                        NP
                      /    \
             Det      N        \
              |       |          NP
             nan   dakdakəl       |
             the     big          N
                                  |
                        Det    ʔásu
                         |      dog
                        -ay
                     which is
```

'the big dog'; Lit.: 'the big one which-is-a dog'
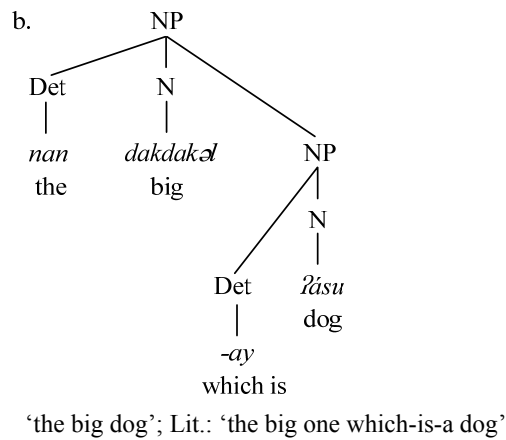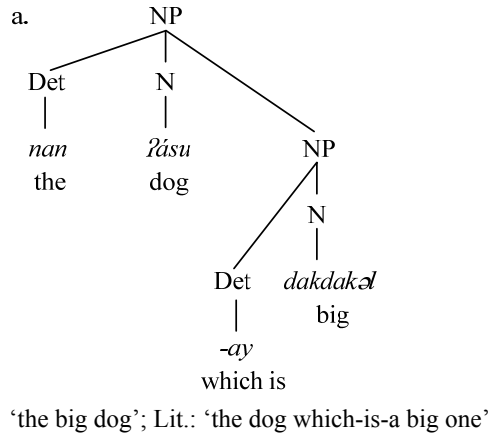
Our account of 'adjectives' as nouns which always occur in head-attribute NPs allows us to capture several generalizations. The first is of course the requirement of fixed order in NPs. If the 'adjective' appears before the 'head noun', the adjective itself is the head noun, as in:

(10.43)   Atayal (Egerod 1966:363)

```
            NP
           /  \
          N    \
          |     \
       iaqeh    NP
       serious  / \
               N   \
               |    \
              naʔ    NP
                     |
                     N
                     |
                    nbuʔ
                   illness
```

'serious illness'

(10.44)   Amis [M133]

```
            S
           /|\ \ _____
          V   \  \                \
          |    \   \               \
      pa-pitorkod  NP      NP        NP
      made-fight with /\   /\        /\
                     /  N /  N      /  N
                    /   |/   |     /   |
                  Det matoasay Det adidiʔay NP   Det tataʔaŋay
                   |  old man   |  small  |     |   big
                  ko          to         N    toya
                                         |
                                    Det maʔnayan
                                     |   cock
                                     a
```

'The old man made the small cock fight with the big one.'

    This is not just an arbitrary way of defining away awkward facts. Rather, it is a hypothesis which helps to explain facts which otherwise can only be accommodated by unmotivated and powerful transformational rules. In particular, it allows us to explain why 'adjectives' can appear as the sole non-Determiner constituent of a Noun Phrase:

(10.45)   Ilokano [I37.1]

a.

```
                    S
                   / \
                 NP   \
                /  \   \
              Det   N   NP
               |    |   / \
             diay nangína Det  N
             that expensive |   |
                          ti gatángem
                             buy:you
```

'You buy that expensive one.'

b.

```
         S
        / \
       V   \
       |    NP
   ginátang-ko  / \
   bought-I   Det  N
              |    |
            diay  nangína
            the   expensive
```

'I bought the more expensive one.'

It also allows us to explain why 'adjectives' appearing in head position can take genitive clitics, e.g.:

(10.46)   Tagalog (Ramos 1974:139)

```
                    S
                   / \
                  V   \
                  |    \
              idilat-mo  NP
              open-your  / \
                        N   \
                        |    \
                 Det  maganda-mo    NP
                  |   beautiful-your / \
                 ang               N
                                   |
                            Det   mata
                             |    eye
                            -ng
```

'Open your beautiful eyes!'

    Demonstratives were also syntactically nouns which could occur alone as the sole constituent of their NPs, or in attributive constructions with other NPs, either dominating them, subordinate to them, or both. See for example the Ilokano example, *cf.* (10.32), the Puyuma example, *cf.* (10.85), and the following:

(10.47)   Ilokano
      a.

```
                    NP
                   / \
                  N   \
                  |    \
              Det  bato  NP
               |   stone / \
              diay      N
              that      |
                   Det  daydiay
                    |   that
                   -a
```

'*that* stone'
Lit.: 'the stone which-is *that* one'

b.   [I3]

```
                            NP
                          /  |  \
                         /   N   \
                        /    |    \
                      Det  tugaw   NP
                       |   chair   |\
                      toy         N  \
                      this        |   \
                              Det daytoy
                               |   this
                              -a
```

'*this* chair'

Lit.: '*this* chair that-is this one'

(10.48)   Tagalog (Schachter & Otanes 1972:120)

     a.   Compare: b.

```
        NP                              S
        |\                             /|
        N \                           NP \
        |  \                          |   \
       ito  NP                        N    NP
       this  |\                       |    |
             N \                    damit  N
             |  \                   dress  |
           Det damit                      ito
            |  dress                      this
           -ng
```
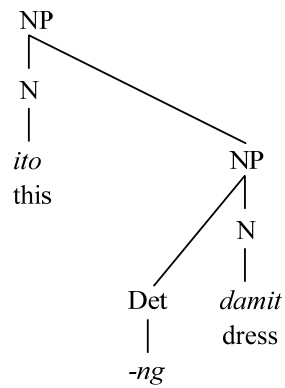
'*this* dress'   '*This* is a dress'

Lit.: 'this-thing which-is-a dress'

b.   Compare: c.

```
              NP                                    S
              /\                                   / \
             N                              NP
             |                              |
        Det  damit                          N                NP
        |    dress                          |               /\
       ang          NP                     ito             N
                    /\                     this            |
                   N                               Det    damit
                   |                               |      dress
             Det   ito                            ang
             |     this
            na
```
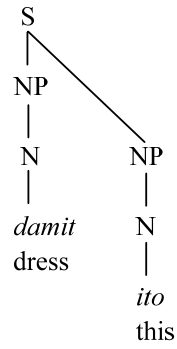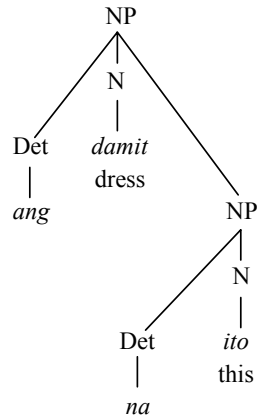
'*this* dress'   '*This* is the dress.'

Lit.: 'the dress which-is this one'   Lit.: 'the dress is this one'

    Possessive pronouns and demonstrative attributes could also co-occur, as in the following Seediq example:

(10.49)   Seediq [Q288]

```
            S
           /|
          V
          |
        báhow    NP
        wash     /|
                N
                |
           luukus-mu   NP
           clothes-my  |
                       N
                       |
                      niñi
                      these
```
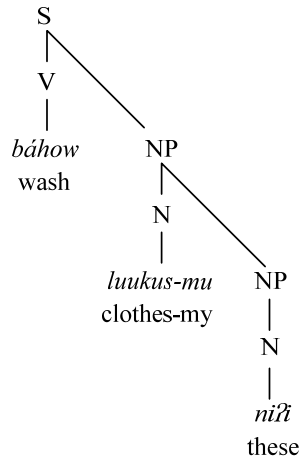
'Wash my clothes!'

Lit.: 'Wash these my-clothes!'

    It was probably common for PAN demonstrative nouns to occur both above and below the 'modified' noun for emphasis. Malagasy for example requires both pre- and post-N demonstratives:

(10.50)   Malagasy

```
              S
            ┌─┘└────────┐
            V           NP
            │         ┌─┘└──┐
          tsara       N      
          good      ┌─┘└──┐  
                   Det  boky  Det
                    │   book   │
                   ity        ity
                  this       this
```
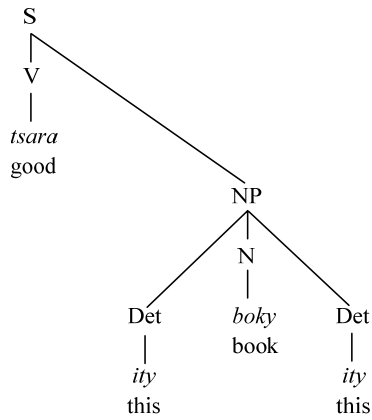
'This book is good.'

but: *tsara   ity   boky
        *tsara   boky   ity

This doubling of demonstratives is well attested in Formosan languages such as Saisiyat and in Philippine languages such as Samareño and Tagalog, in which doubling functions as a contrastive device, i.e. '*this*, not that'.

(10.51)   Samareño (Wolff 1979:161)

```
    NP
  ┌─┘└────────┐
  N           NP
  │         ┌─┘└──────┐
 itun       N         
 that     ┌─┘└──┐     
         Det  batu     NP
          │   stone  ┌─┘└──┐
        -nga        Det    N
                     │     │
                   Det   itun
                   -nga   that
```
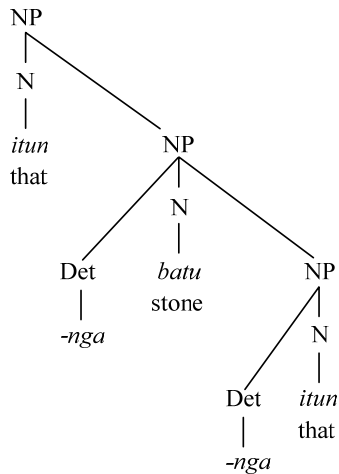
'*that* stone'
Lit.: 'that which is a stone which is that one'

(10.52)   Tagalog

```
NP
├── N
│   │
│   iyon
│   that
└── NP
    ├── N
    │   │
    │   batu
    │   stone
    ├── Det
    │   │
    │   -ng
    └── NP
        └── N
            ├── Det
            │   │
            │   -ng
            └── iyon
                that
```
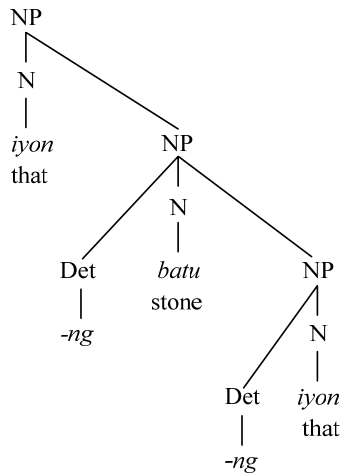
'*that* stone (rather than this one, or the other one there)'

Lit.: 'that thing which is a stone which is that one'

These 'fore' and aft' demonstratives are a likely source for the preposed and postposed determiners in Bunun, e.g.:

(10.53)   a.   Bunun [B38.1]

```
S
├── V
│   │
│   maɓoŋqa
│   broke
└── NP
    ├── Det
    │   │
    │   ka
    │   the
    ├── N
    │   │
    │   lukis
    │   wood
    └── Det
        │
        a
        the
```

'The wood broke (in two).'

b.   Bunun [B66.1]

'I scolded the old man.'
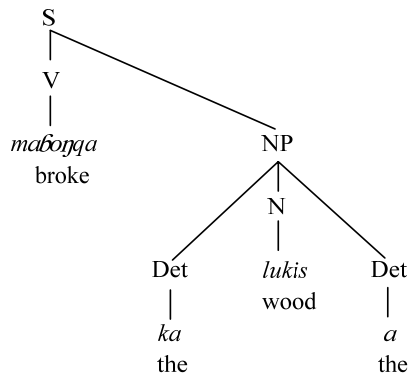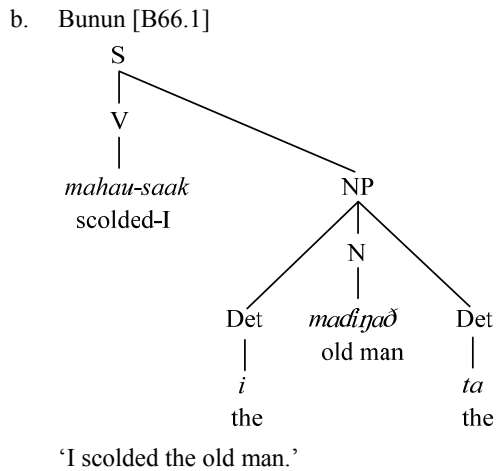
The analysis of demonstratives and 'adjectival' elements in noun phrases as nouns in PAN and its descendants provides a very straightforward explanation of another fact about these languages: all of these elements can occur as the sole constituent (plus or minus a determiner for many of the modern languages) of a Noun Phrase. For a syntactician who is a native speaker of English and who has a quiver full of transformations at his or her disposal, the temptation is practically always irresistible to derive phrases such as *ang bantog* 'the famous (one)' (*cf. ang bantog na doktor* 'the famous doctor') from an underlying *ang bantog na* Noun by the deletion of *na* Noun. In a lexicase grammar, this artifice is not available, so the framework of analysis forces the linguist to adopt an approach which is far simpler, neater, and well motivated in terms of the observable facts of the language and far less subject to ad hoc analyses motivated only by native language prejudices.

This is not to deny that semantically, NPs like *ang bantog* are similar to pronouns in being anaphoric elements which presuppose an identifiable antecedent (Videa DeGuzman p.c.). They are. However, this is due to the fact that they have very little semantic content of their own, and serve as icing on the discourse, not the whole cake. This does not, however, alter the fact that, like English 'one' in 'the famous one', which has a similar anaphoric function, such words occur in the syntactic environments characteristic of nouns.[8]

---

[8]   A grammar which groups words translating as English nouns, adjectives, and demonstrative determiners together and labels them [+N] must also have some means of accounting formally for their co-occurrence restrictions, so that the grammar does not, for example, allow two adjacent demonstrative pronouns. This can be handled in principle quite easily in terms of pairwise co-occurrence restrictions, e.g. demonstratives will be marked as [+N, +dmns, -[+dmns]];

10.7.3 NPs with deverbal nouns

One very significant feature of Proto-Austronesian NPs, and one which explains why we are spending so much time talking about noun phrases in a paper on verbal focus, is the fact that one common type of PAN NP must have been one in which the head noun was a deverbal noun. To cite examples from Bontok:

(10.54) a. Bontok

'this one who came'
Lit.: 'the this one who is the came one'

b. Bontok

'this one who came'
Lit.: 'the came one who is this one'
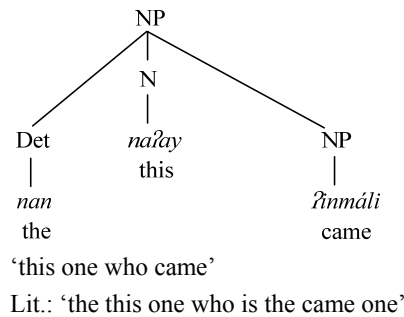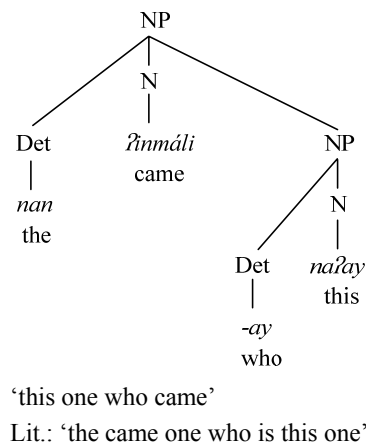
These constructions were structurally identical to NPs involving underived nouns, even to the point of co-occurring with superordinate or subordinate demonstrative pronouns, as shown by the Bontok examples above. One difference, or perhaps 'specialization', that should be mentioned, however, is the function of Genitive attributes

that is, a demonstrative may not co-occcur with an immediate attribute whose lexical head is [+dmns], that is, with another demonstrative. For a full-scale computer-tested implementation of this system of co-occurrence restrictions, see Starosta (1977).

to such nominalized verbs. Instead of representing a generalized correspondence between the head and the attribute, Genitive attributes associated with deverbal nouns are interpreted as the 'performer' of the action referred to by the verb, in accordance with the Fillmorean Subject Choice Hierarchy. That is, if the source verb is agentive, the Genitive attribute is interpreted as the Agent, otherwise as the Correspondent, otherwise as the Patient. This feature of course is common in the languages of the world, including English ('the hunter's shooting', 'the dog's panting', 'the glass's breaking'), and is the ultimate explanation for the identical marking of possessive attributes and passive Agents in many modern languages.

10.7.4 Relator nouns

Relator nouns (Thompson 1965:200-202) were used extensively in Proto-Austronesian to supplement the very small inventory of prepositions and to compensate for the lack of case inflections. This class of nouns is analogous to 'auxiliary verbs' in their syntactic function, and in fact they were referred to as 'noun auxiliaries' in Starosta (1967). They act as the syntactic heads of their constructions (in this case, NPs) to carry semantic features for the rest of the construction attached as a syntactic attribute.

In PAN, relator nouns were used to express spatial and possession relationships. That is, where English would use a preposition such as 'on', PAN probably used a relator noun which could be glossed as 'top, surface', sometimes preceded by the general locative preposition *i. To cite examples from Bunun and Ilokano:

(10.55)   Bunun [B79]
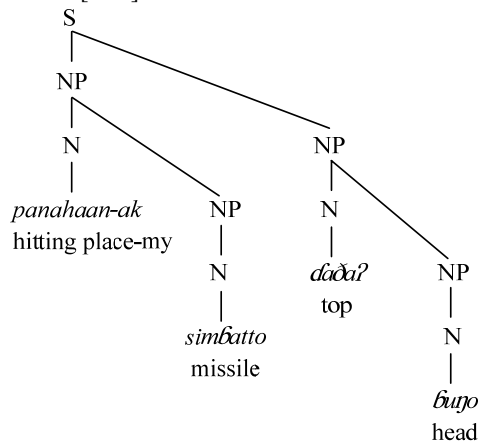
'I struck the top of the head with a missile.'
Lit.: 'My hitting place with a missile was the head's top.'

(10.56)   Ilokano [I7]
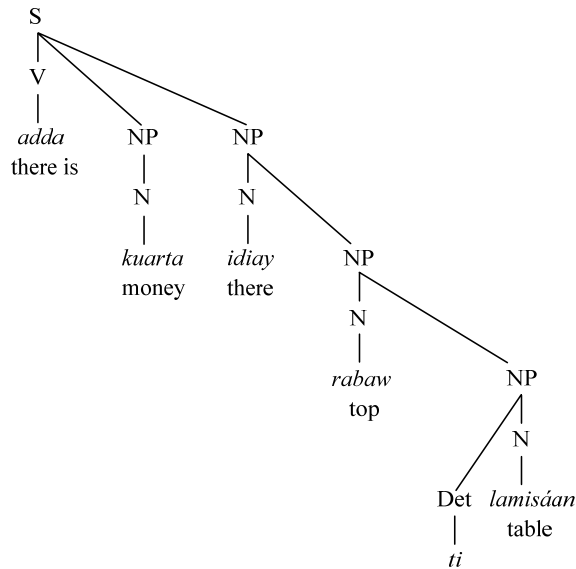
'There is money on the table.'

Lit.: 'There is money there which is the top of the table.'

10.7.5 Nominalization in equational clauses

As mentioned earlier, Proto-Austronesian was a strongly noun-oriented language, as are a large number of its descendants. Disregarding auxiliary verbs for the moment, it must have had a high ratio of nominal-predicate to verbal-predicate sentences, and a very productive system of verb nominalization, involving especially the derivational affixes *-en, *-an, *iSi-, and *ni-, and probably others such as *mu-. The nouns derived with these affixes had exactly the same distribution as underived nouns, occurring as the lexical heads of simple and complex NPs and as heads of NP attributes to other nouns.

Like underived 'picture nouns' in English, these derived nouns could co-occur with attributive NPs carrying situationally appropriate case relations, and marked with the same case markers as they would have if they were occurring as complements of verbs instead of nouns. To cite several illustrative English examples:

(10.57)   a.
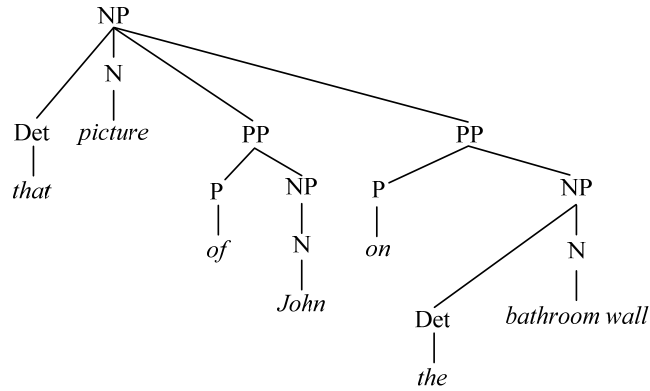
'that picture of John on the bathroom wall'

b.
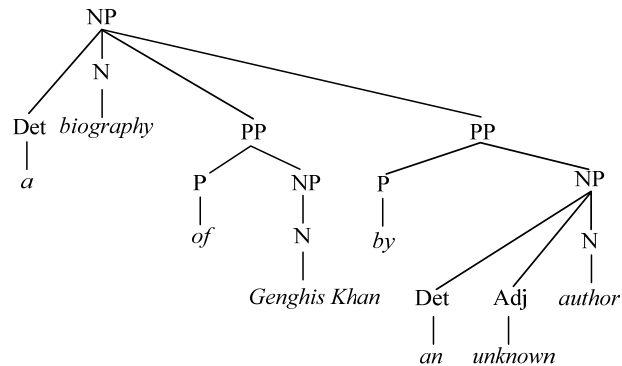
'a biography of Genghis Khan by an unknown author'

In addition, the Genitive attribute, as the basic NP adjunct, could be interpreted as the highest case relation on the Subject Choice Hierarchy for the source verb, as well as a Genitive-marked actant allowed by the verb. That is, the Genitive attribute of a nominalized verb commonly referred to the Agent of the source verb if it allowed one, otherwise (possibly) to its Correspondent if any, otherwise to its Patient (*cf.* Asai 1953:63 on Seediq, Chung 1973:651-652, 671 on Polynesian).

Below, we provide examples from modern languages in which deverbal nouns are heads or attributes of noun phrases with possessive or appositional attributes:

Appositional, nominalized attribute:

(10.58)   Seediq [Q73]
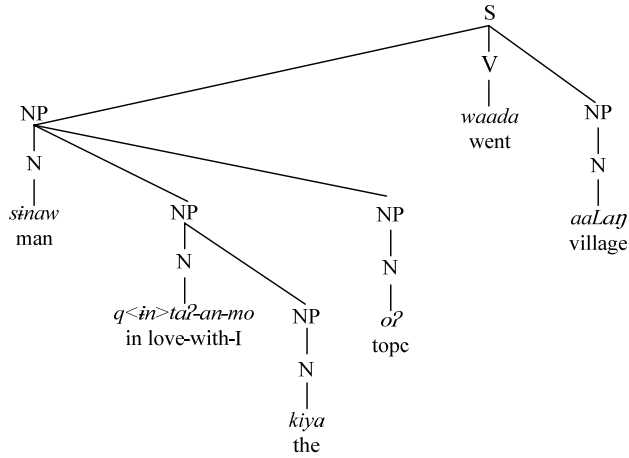
'The man that I am in love with went to the village.'

(<in>: 'affected nominalizer', -an: 'locus or surface-affect nominalizer', oʔ:
preposed topic marker)

(10.59)   a.   Puyuma (Sprenger 1972:136)
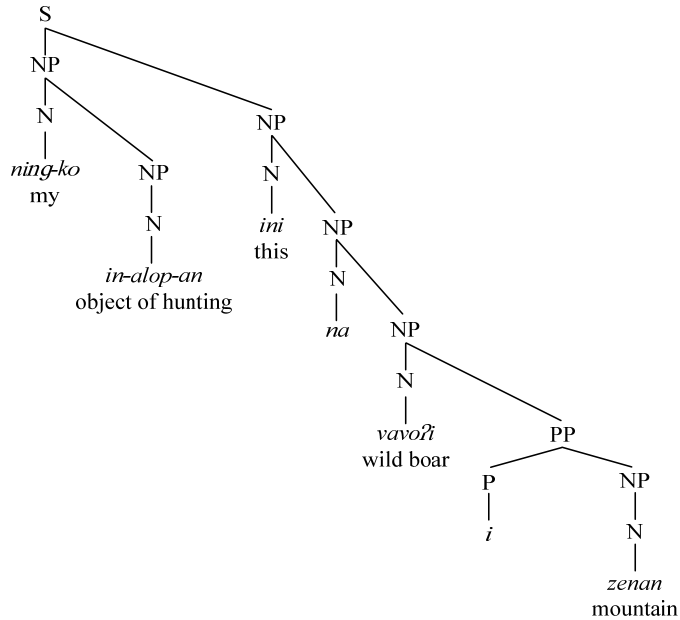
'This wild boar is what I hunted on the mountain.'

Lit.: 'My object-of-hunting is this wild boar on the mountain.'

b.   Ilokano

```
                    S
          ┌─────────┴──────────────────┐
         NP                            NP
       ┌──┴───┐                      ┌──┴──┐
       N      NP                    Det    N
       │    ┌──┴──┐                  │      │
     daytoy Det   N                  ti   aláe-k
      this   │  inted-mo                  get-my
           nga given-your
```
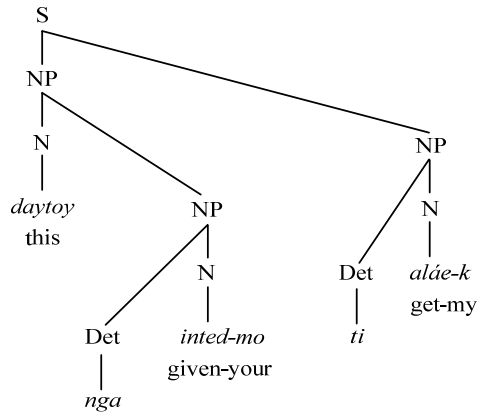
‘The one that I will get is that one that you gave’

Lit.: ‘The object-of-getting-of-mine is this one which is the given object of yours.’

The constructions described for the Indonesian languages Kambera, Manggarai, and Minangkabau by Kähler (1974:260, 265), in which place nouns take nominalized attributes, are probably of this type, as well as the ‘active participle’ and ‘passive participle’ adjuncts to nouns which Foley describes for Wolio (Foley 1976:44).

Appositional, nominalized head:

(10.60)   Ilokano [I2.4]

```
                    NP
          ┌─────────┴──────────────────┐
         N                             NP
       ┌──┴──────┐                   ┌──┴──┐
      Det      inted-mo             Det    N
       │       gave-you              │      │
     daytoy                         nga   sida
      this                          that  fish
```
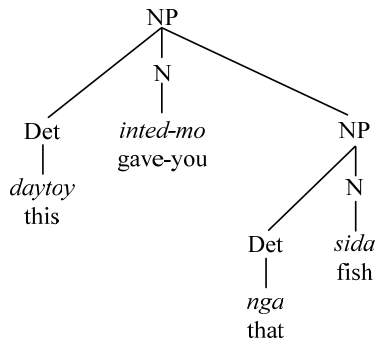
‘this fish that you gave’

Lit.: ‘this thing given by you which is a fish’

(10.61) a. Bunun [B59]
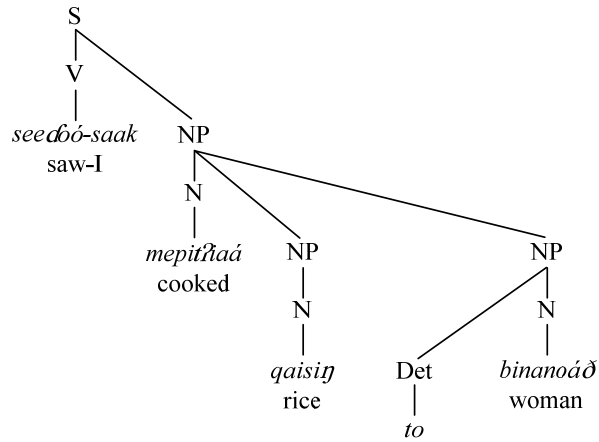
'I saw the woman who cooked the rice.'
Lit.: 'I saw the cooker of rice who is the woman.'

b. Bunun [B90]
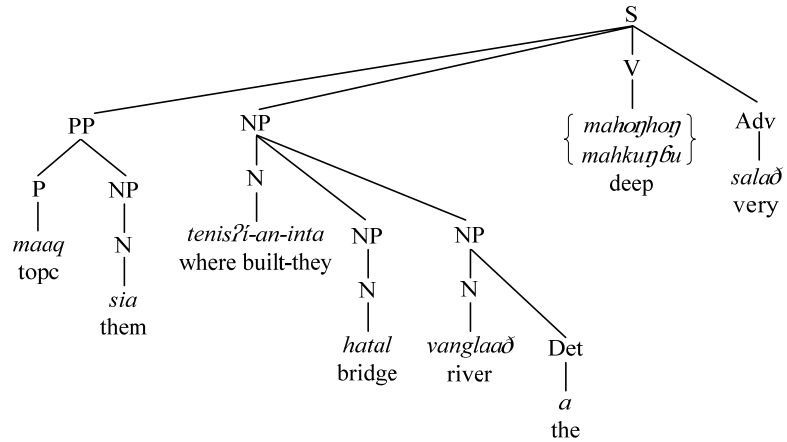
'The river is very deep where they built the bridge.'
Lit.: 'As for them, their place of making the bridge which is the river is very deep.'

Possessive, nominalized head:

(10.62)   Tagalog (Schachter & Otanes 1972:62)

```
                    S
        ┌───────────┴──────────────┐
       NP                         NP
        │              ┌───────────┼──────────────┐
        N             Det          N             NP
        │              │        nagluto      ┌────┴───┐
     artista          ang        cooker     Det       N
     actress                               nang    pagkain
                                                    food
```
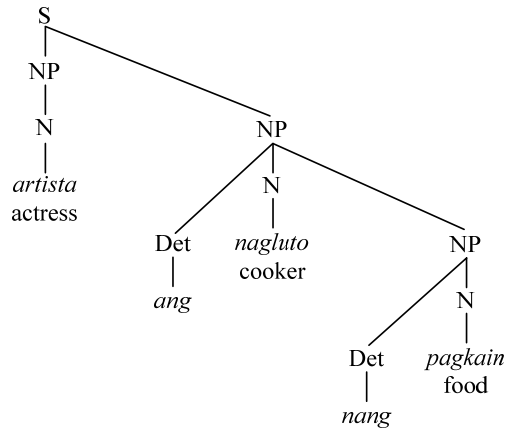
'The cooker of the food is an actress.'

Such deverbal nouns could occur as predicates of nominalized equationals with nominative clitic pronouns agreeing with actual or implied subjects, as in the following Seediq example:

(10.63)   Seediq [Q 126]

```
                 S
        ┌────────┴────────────────────┐
       NP                            NP
        │──────────┐          ┌───────┴────┐
        N         NP         Det           N
   m<in>ikan-ko    │          ka          yako
      ate-I        N                        I
                   │
                 buŋa
             sweet potato
```
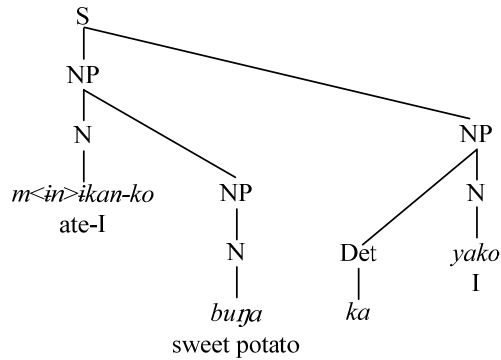
'I ate the sweet potato.'
Lit.: 'I, I am the eater of the sweet potato.'

(10.64) a. Atayal (Egerod 1966:358)

```
              S
             / \
           NP   \
            |    \
            N    NP
            |     |
    kialun-taʔ-niaʔ N
     speak-we-he    |
                  itaʔ
                   we
```
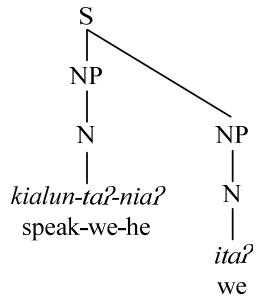
'He speaks of us.'
Lit.: 'We are his objects of speaking.'

b. Atayal (Egerod 1966:351)

```
            S
            |
           NP
           / \
          N   \
          |    \
    ktan-sakuʔ  NP
      see-I     / \
               N   \
               |    \
             naʔ    NP
             Gen     |
                     N
                     |
                  squliq
                   man
```
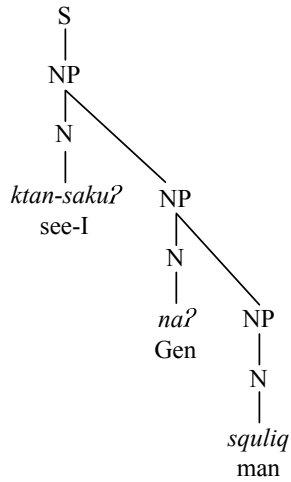
'The man sees me.'
Lit.: 'I am the man's object of seeing.'

c.   Atayal
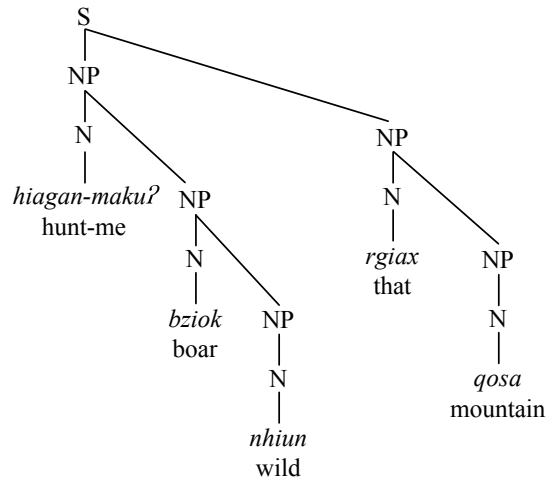
'I always hunt wild boar on that mountain.'

Lit.: 'That mountain is my place of hunting wild boar.'

(10.65)   a.   Seediq [Q118]
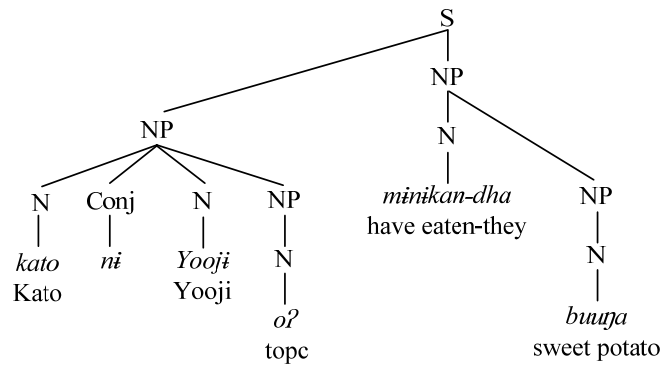
'Kato and Yooji have eaten sweet potato.'

Lit.: 'As for Kato and Yooji, they are former eaters of sweet potato.'

b. Seediq [Q314]

```
              S
              |
              NP
             /|
            N
            |
   q<əm><in>ita-ko    NP
        saw-I        /|
                    N
                    |
                  buusi      NP
                   hat       |
                             N
                             |
                           Yooji
                           Yooji
```
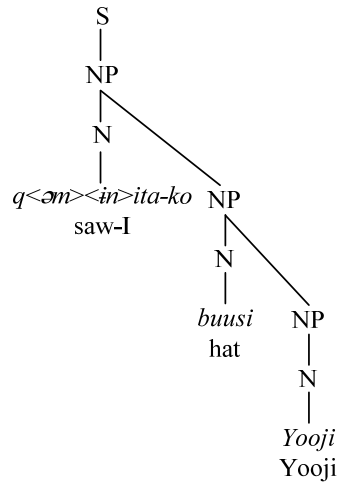
'I saw Yooji's hat.'
Lit.: 'I am the former see-er of Yooji's hat.'

c. Seediq [Q316]

```
              S
             /|
            NP
            |
            N
            |
   q<in>taʔ-an-mo        NP
        saw-I           /|\
                       N
                       |
                 Det  buusi  NP
                 |     hat    |
                 ka           N
                              |
                            Yooji
                            Yooji
```
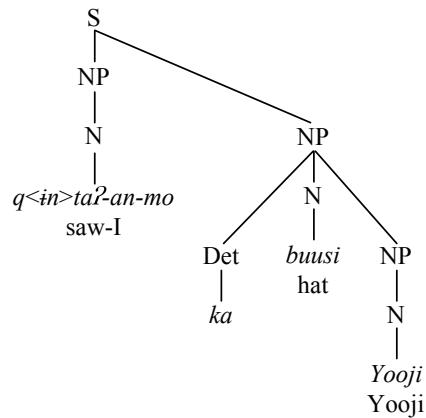
'I saw Yooji's hat.'
Lit.: 'Yooji's hat was my see-n thing.'

It may have been possible to have agreement between a Genitive clitic and a possessive attribute in these constructions, as it still is in, for example, Ivatan, Kapampangan, Bolinao, and also Ilokano, e.g.:

(10.66)

```
                    S
                   / \
                  V   \
                  |    \
            makita-na-ka   NP
            were seen-he-you /\
                            /  N
                           /   |
                         Det  Juan
                          |   Juan
                          ni
```
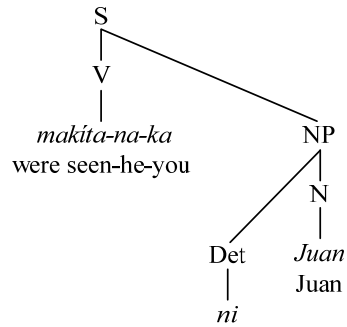
'You were seen by John.'

These Atayal and Seediq examples above illustrate what we will call a cleft sentence, a construction that we believe to have been very important in the development of verbal focus in Philippine and Formosan languages. 'Cleft sentences' in our terminology are equational sentences, descriptive or identificational, in which either the subject or the NP predicate is composed of a deverbal noun, frequently with one or more nominal attributes (*cf.* Asai 1953:62-63 on Seediq, Sprenger 1972:133 on Puyuma). They could be used to allow an alternative subject choice with the same verb root, as in the following pair from Seediq:

(10.67)   a.   Seediq [Q157]

```
                    S
                  / | \
                 V  |  \
                 |  |   \
           məʔaapa-ku   NP   Adv
           will carry-I  /\   |
             [Nom]      /  N  saman
                       /   |  tomorrow
                     Det  laaqi
                      |   child
                      ka  ⎡Acc ⎤
                      the ⎣PAT ⎦
```
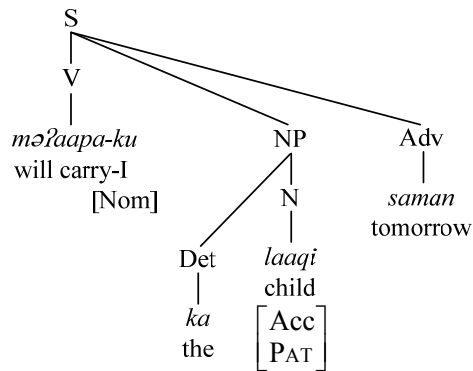
'I will carry the child tomorrow.'

b.   Seediq [Q156]

```
                    S
        ┌───────────┼──────────────┐
        NP                          NP
        │                          ╱ │
        N          Adv          Det   N
        │           │            │    │
   paʔan-un-mu    saaman        ka  laaqi
   carry-my      tomorrow       the  child
                                    ┌─────┐
                                    │ Nom │
                                    │ PAT │
                                    └─────┘
```
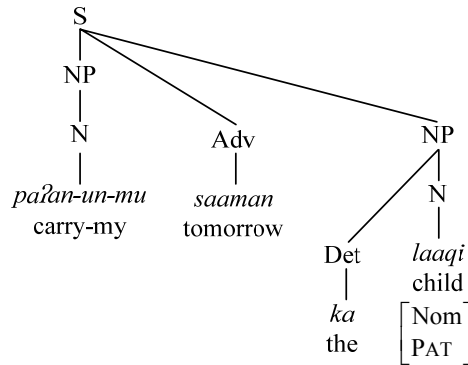
'The child will be carried by me tomorrow.'
Lit.: 'The child will be my carried one tomorrow.'

From the point of view of synchronic grammar, there is nothing especially noteworthy about such constructions: they follow the regular pattern for NP – NP clauses, a pattern which is indifferent to whether the head nouns of the NPs are basic or derived. Diachronically, however, they are very important, since we believe that it is these structures which have been reinterpreted as verbal 'focused' structures.

Examples of this construction type could be provided from many languages. One of the most common places to find these structures is in content questions (*cf.* Ferrell 1971:8 on Paiwan, Mintz 1973:§2.1.4.2 on Bikol) and ligature attributes. We will provide some examples of the former from Tagalog (Schachter & Otanes 1972:505-515):

Nominalized subject (content interrogatives):

(10.68)   a.   Tagalog

```
                S
        ┌───────┼────────┐
        NP               NP
        │               ╱ │
        N            Det   N
        │             │    │
       ano           ang  b<in>ili-mo
       what          the  purchase-your
```
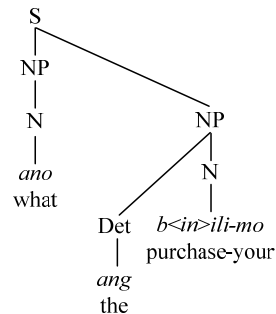
'Which one did you buy?'
Lit.: 'The your purchase was what?'

b. Tagalog

```
                S
          ╱──────────────╲
        NP                 NP
        │               ╱────╲
        N             Det     N
        │              │
     sino-ba          ang  t<in>anong-niya
       who                  asked-his
```
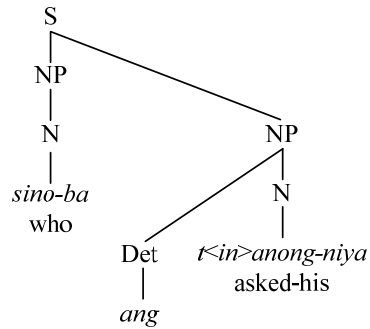
'Whom did he ask?'
Lit.: 'The his asked one was who?'

c. Tagalog

```
                S
          ╱──────────────╲
        NP                 NP
        │            ╱─────┼─────╲
        N          Det     N      NP
        │           │              │
     sino-ba       ang  g<um>awa   N
       who               do(er)    │
                                  noon
                                  that
```
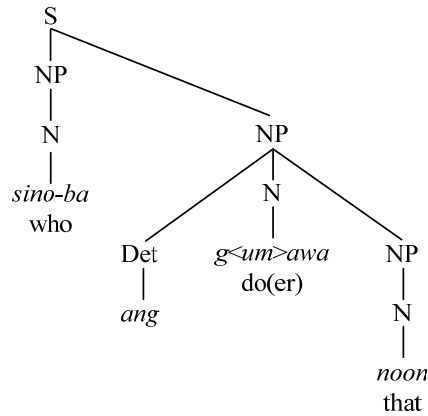
'Who did that?'
Lit.: 'The doer of that was who?'

The fact that clitics occur on the interrogative pronouns in these examples shows that they, rather than the deverbal nouns, are the syntactic predicates.

(10.69)   Tagalog

a.

```
                    S
           ┌────────┴────────────┐
          NP                     NP
           │              ┌───────┴────────┐
           N              N                NP
           │          ┌───┴────┐      ┌─────┴─────┐
          sino       Det   g<um>awa   N          NP
          who         │      do(er)   │     ┌─────┴─────┐
                     ang          ┌───┴──┐ Det sapatos-na NP
                                  Det  sapatos-na shoes-his  │
                                   │   shoes-his            N
                                  nang                       │
                                                            iyon
                                                            that
```
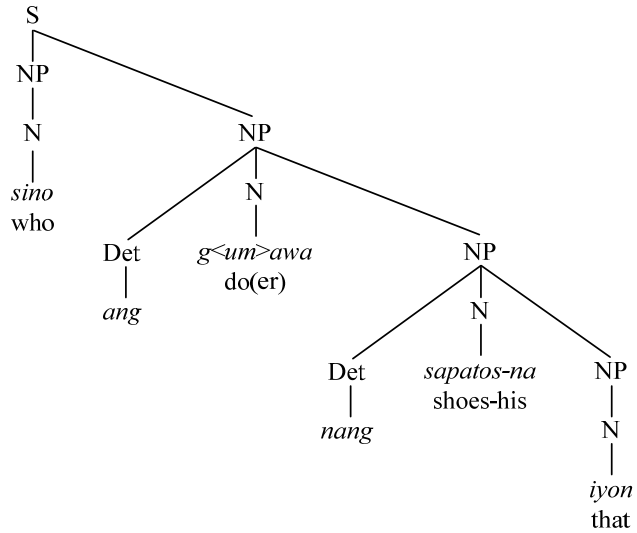
'Who made those shoes of his?'

Lit.: 'The maker of the his shoes which are those is who?'

b.

```
                S
         ┌──────┴────────────────┐
        NP                       NP
         │                  ┌─────┴─────┐
         N                 Det          N
      sino-ng           ┌───┴───┐      magsasalita
        who            NP      ang   speaker-to-be
                        │
                        N
                     propesor
                     professor
```
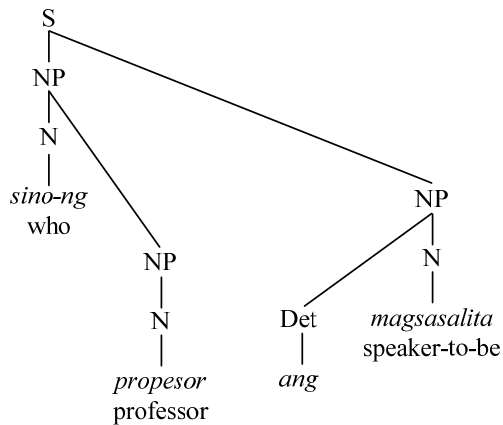
'Which professor will speak?'

Lit.: 'The speaker-to-be is which professor?'

Nominalized predicates:

(10.70)   Seediq (Asai 1953:62-63)

    a.   *sa-an-mu   tsumebu*
       hunt-my   going place
       'I go hunting.'
       Lit.: 'Hunting is my going-place.'

    b.   *gubil-an   ubal*
       pull-object of   hair
       'The hairs were pulled out.'
       Lit.: 'The hair was the object of pulling out.'

    c.   *bjakk-un-nami   tsamat*
       cut-object of-our   beast
       'The beast was cut by us.'
       Lit.: 'The beast is our object of cutting.'

Interestingly enough, nominalized predicates are possible in Tagalog, but only when the subject of the equational is also nominalized. Thus the following examples are unacceptable:

(10.71)   Tagalog (DeGuzman p.c.)
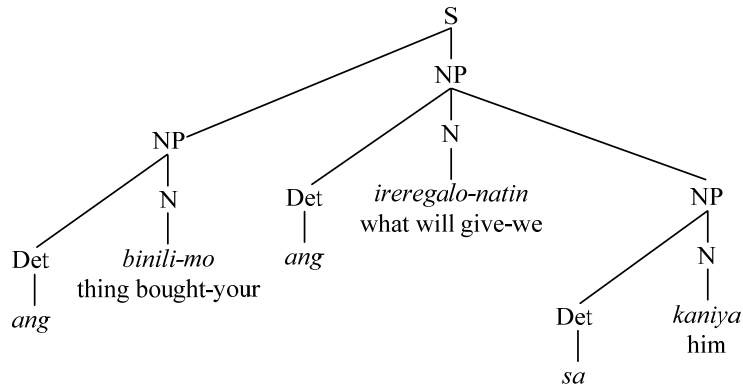
'The thing you bought is what we will give (as a gift) to him.'

(The tree is drawn in accordance with DeGuzman's claim (p.c.) that in identificational equationals, the second NP is the predicate rather than the first, and the gloss also reflects this analysis.)

(10.72) Tagalog
   *ang binili mo ang nakakita k*o
       bought your   see   I
   'What I saw is what you bought'

However, the following examples containing one non-nominalized immediate constituent are unacceptable with the glosses given, and could only be used as topicalized sentences with a pause after the first NP:

(10.73) Tagalog
   a. * *ang binili mo ang regalo*
        bought your   gift
     'The gift was what you bought.'

   b. * *ang tinanong niya ang maestro*
        ask   he   teacher
     'The teacher was the one he asked.'

   c. * *ang gumawa noon si Ben*
        do(er)   that   Ben
     'Ben was the one who did that.'

   d. * *ang gumawa ng sapatos na iyon ang lalaki*
        do(er)   shoes   that   man
     'The boy was the one who made those shoes.'

   e. * *ang magsasalita ang isang propesor*
        speak(er to be)   one   professor
     'A professor is the one who will speak.'

The only exception to this pattern is a construction in which two agents are being contrasted, e.g.:

(10.74) *ang binili mo ang regalo, hindi ang binili ni   David*
      bought your   the   gift   not   bought Gen David
   'The gift was YOUR purchase, not David's.'

In languages such as Tagalog, reflexes of PAN nominalizing affixes may function synchronically to derive verbs from nouns as well as nouns from verbs. If we assume that they originally were able to form derived nouns from other nouns as well as verbs, then the modern verbalization function can be explained in terms of back-formation. To cite a Tagalog example, *benda* is a noun meaning 'bandage', and *bendahan* is an Object Focus

verb (DeGuzman 1978:278):

(10.75)   *binendahan   ng   manlalaroʔ   ang   kaniyang   tuhod*
          bandaged   player   his   knee
          'The player bandaged his knee.'

If we assume a noun *bendahan* 'bandaged place' derived directly from the Spanish loan noun 'bandage', then it is easy to see how *bendahan*, a denominal *-an* noun, got reinterpreted as a verb at the same time as the deverbal *-an* nouns were being reinterpreted as verbs, and how this came to be a synchronic rule of derivation that operates in the opposite direction from the original one still retained in modern languages.

10.8 Verbal derivation with *-i and *-aken

One verbal derivational process which is very widely distributed among Austronesian languages is *pa-* causativization (*cf.* Stevens 1974). This process involved the addition of an Agent to the case frame of a verb, to derive a new transitive ergative stem with the simultaneous reinterpretation of the original Agent, if any, as some other case relation (*cf.* Starosta 1974, 1978, DeGuzman 1978). While this process can certainly be reconstructed in some form for PAN (Dahl 1973:119), it is not yet clear whether it originally derived verbs or nouns. It must have been able to apply to nouns, as in:

(10.76)   a.   Tsou (Tung et al. 1964:192-193)
              poaabʔu   'hunt'   <   *poa-*   +   *abʔu*   'dog'
          b.   Seediq (Asai 1953:24)
              pəhuliŋ   'hunt'   <   *pə-*   +   *huliŋ*   'dog'

If this originally derived nouns of the form *pa*-V meaning 'the thing caused to be in the state or undergo the action V', it would be easier to understand how the process interacted with the one-per-Sent constraint (*cf.* Starosta 1978). In fact, the *pa-* + V → N process is common in Tagalog, as shown by the following examples:

(10.77)   Tagalog (Schachter & Otanes 1972:105)
          a.   *paabot*   'something caused to be handed over'
          b.   *padala*   'something caused to be brought'
          c.   *pagawa*   'something caused to be made'
          d.   *paluto*   'something caused to be cooked'
          e.   *patago*   'something caused to be kept'

Schachter & Otanes (1972) note that these are connected with 'indirect action' (causative) verbs, but do not say how. As indicated by the passive glosses, these are associated with the ergative form of the verb, and as indicated by the stripped-down morphology, this ergative form must be basic. If we assume that these are Ø-derived from the verbs rather than vice versa, we can explain why the complements can appear along with these verbs:

(10.78)   Tagalog (Schachter & Otanes 1972:105)
   a. *paluto ni Pedro sa nanay ang bibingka*
     'The bibingka is what Pedro asked Mother to cook.'
   b. *iyon ba ang pagawa mo sa sapatero?*
     'Is that what you're having the shoemaker make?'

It is very probable that other verbal derivation processes involving the prefixes *ma-, *paki-, *paka-, and *maka- can also be reconstructed for PAN, but at this point our data are not adequate to say anything more about these forms.

In addition to an inventory of unmarked and *pa- causative ergative verb stems, Proto-Austronesian also had derived verb stems suffixed by *-i and *-a, and perhaps other elements such as *-aken or *-neni. These suffixes were homophonous with synchronically coexisting prepositions *i, *a, *aken, and possibly others, and were diachronically derived by a process of preposition capture of the sort that operates in German (*ausreissen* 'tear out' vs. *reissen* 'tear'), Latin (*extrahō* 'draw out, extract' vs. *trahō* 'draw, drag'), or Mandarin Chinese (*jigei* 'send to' vs. *ji* 'send'; Hou 1979:79). *-i and *-aken had two functions: recentralization and definite marking.

In a lexicase grammar, the Patient case is the fundamental case relation. Every verb, with the occasional exception of ambient or meteorological verbs such as (in some languages) '(it) is hot' or '(it) is snowing' has at least a Patient in its case frame, and this Patient is viewed as the central element in the action or situation designated by the verb. Many languages, however, have a mechanism for varying the 'perspective' (Fillmore 1977:72-79) of a given verb stem, and in lexicase, this means treating some other actant associated with the verb root as the Patient, and either reinterpreting the original Patient as some other case relation or excluding it altogether from the case frame. To take several examples from English:

(10.79) a. *John climbed over the mountain*

$$\begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix} \qquad \begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix}$$

b. *John climbed the mountain.*

$$\begin{bmatrix} \text{Nom} \\ \text{AGT} \end{bmatrix} \qquad \begin{bmatrix} \text{Acc} \\ \text{PAT} \end{bmatrix}$$

c. *Joe Bloggs fought with the champion.*

$$\begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix} \qquad \begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix}$$

d. *Joe Bloggs fought the champion.*

$$\begin{bmatrix} \text{Nom} \\ \text{AGT} \end{bmatrix} \qquad \begin{bmatrix} \text{Acc} \\ \text{PAT} \end{bmatrix}$$

In these examples, actants marked by an oblique case form preposition are reinterpreted as direct objects (Accusative Patients) in the process of lexical transitivization, and in many languages, this derivation process also involves the retention of the original preposition as an independent adverb or as a fused affix of the verb itself. This is the situation with German, for example, where 'separable prefix' and 'inseparable prefix' verbs are derived verbs with an associated deprepositional adverb which was in many cases originally alienated from a Prepositional Phrase in the process of derivation, and later fused with the verb stem in subordinate clauses only or in all syntactic environments respectively.

The derivational process which reinterprets a different case relation as Patient can be referred to as 'recentralization', since in effect it places a new situational role in the perceptual center of the stage. In PAN, this process was quite productive, and the derived verb stems were marked by affixes derived from prepositions originally captured from the oblique actants that were 'centralized'. One difference between German and Proto-Austronesian, of course, was that German subordinate clauses are verb-final, whereas PAN was a verb-initial language, so that the PAN P's followed the verbs and were suffixed, instead of being prefixed as in German. The other relevant difference is that PAN was ergative, and an ergative language is one in which the Patient is always the grammatical subject. This means that when a Locus actant, say, was reinterpreted as Patient and lost its *i Preposition to the verb, it became the grammatical subject of the new verb, and the new *-i suffix on the verb became a marker indicating that the subject of the sentence was situationally locational. This is depicted in the following schematic example:

(10.80) a.
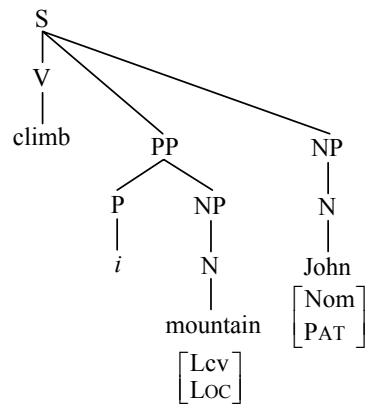
b.
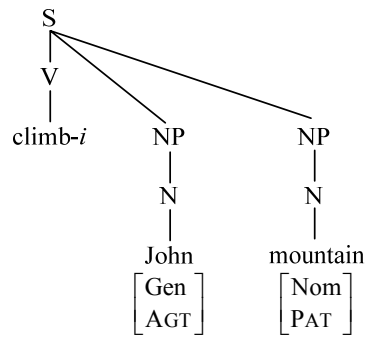
To cite examples from Tongan:

(10.81)   Tongan (Hopper & Thompson 1980:263)

a.

```
              S
             /|
            V  \
            |   \
          na'e   S
                /|_____
               V  \               \
               |   \               \
              kai   PP              PP
              ate  / \             /  \
                  P   NP          P    NP
                  |   |           |    |
                 'a   N          'i    N
                     / \         of   / \
                   Det  tamasi'i    Det  ika
                    |   boy          |   fish
                    e  [Nom]        he  [Lcv]
                       [PAT]        the [LOC]
```
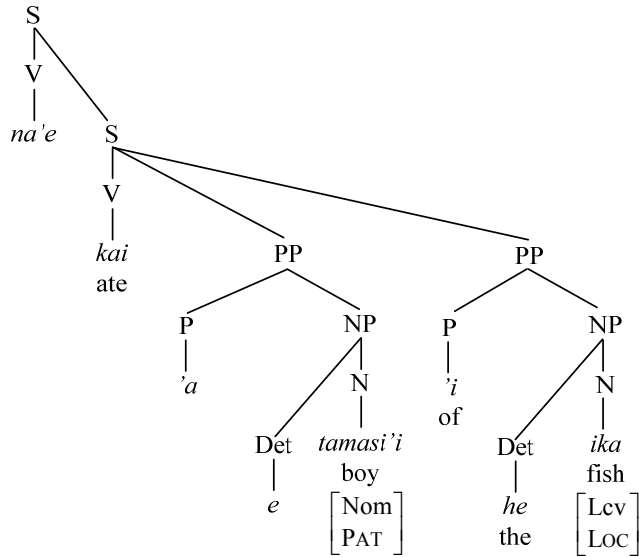
'The boy ate some of the fish.'

b.

```
              S
             /|
            V  \
            |   \
          na'e   S
                /|_____
               V  \               \
               |   \               \
             kai-i  PP              PP
              ate  / \             /  \
                  P   NP          P    NP
                  |   |           |    |
                 'a   N          'e    N
                     / \         of   / \
                   Det  ika         Det  tamasi'i
                    |   fish         |   boy
                    e  [Nom]        he  [Erg]
                       [PAT]        the [AGT]
```
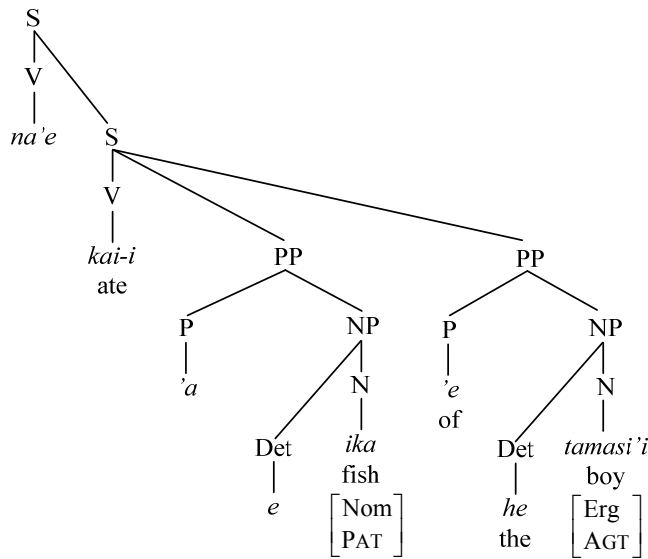
'The boy ate the fish.'

Note that the lexicase approach to this phenomenon involves a fundamental change

in case relation, thereby providing an explanation for the difference in semantic inter-pretation. For example, *milẹnga* in the Palauan example below (Hopper & Thompson 1980:275) derives from an earlier derived **m/-in/aN-* form in which the thing eaten was Locus, as in the Tongan example cited above. *kill-ii*, however, involved reinterpretation of the Locus as Patient, as in the second Palauan example, so that the idea of complete effect noted by Hopper and Thompson in connection with the second example derives from the reinterpretation of the thing eaten as the Patient of a transitive verb rather than the Goal of an intransitive:

(10.82) a. *a ngalẹk a milẹnga a ngikẹl*
             'The child was eating the fish.' Lit.: 'the eater of the fish was the child.'

         b. *a ngalẹk a kill-ii a ngikẹl*
             'The child ate up the fish.' Lit.: 'the total eater of the fish was the child.'

Compare the verbal counterparts of these sentences:

(10.83) a. *ng milẹnga a ngikẹl a ngalẹk*
             'The child was eating (on) the fish.'

         b. *ng kill-ii a ngikẹl a ngalẹk*
             'The child ate up the fish.'

On the other hand, a Relational Grammar account of these data for example would involve only a difference in 'grammatical relation', a category whose semantic implications are unclear.

As mentioned at the beginning of this section, recentralization was only one of the functions of the **-i/*-aken* verbal derivation process. The other was definitivization. As mentioned previously, PAN grammatical subjects were obligatorily definite. Thus a simple way to mark an actant as definite was to recentralize it, that is, to reinterpret it as a Patient, thereby making it the grammatical subject and thus grammatically definite.

Clearly, what we have reconstructed here is something very much like what is called 'focus' in Philippine linguistics: a system of verbal affixation which allows different actants to be placed in subject position, thereby marking them as definite, and which signals the presence of a particular situational role associated with the subject. That is, we are very close to the position taken earlier by Wolff, Dahl, and Pawley and Reid. The difference, of course, is that we do not think the 'focus' system of PAN was marked by the usual Philippine-style **-en*, **-i-*, **-an*, or **-in-/ni-* affixes. Rather, at the beginning at least, it was implemented by the elements ancestral to the Oceanic transitive markers, a view which in this respect at least is closer to Foley's position (Foley 1976:214ff).

The system we have reconstructed here is in no way an implausible one. Verbal derivation mechanisms which are quite analogous can be found for example in other ergative languages such as Dyirbal (Dixon 1972) and Yup'ik Eskimo (Reed et al. 1977).

The Proto-Austronesian *i/*aken verbal derivation system has its most striking reflection in Oceanic, but it is by no means limited to this subgroup, and the actual affixes we reconstruct are reflected not only in Oceanic, but in fact in Chamorro (Topping 1973), Toba Batak, Bahasa Indonesia, Bisayan languages, Inibaloi, Marinduque Tagalog, and in all three Formosan subgroups, Atayalic (Atayal, Seediq), Tsouic (Tsou), and Paiwanic (Amis). In other languages such as Tsou (Tung et al. 1964:224-225), the suffixes have different effects depending on the stem to which they are attached, but in all of these languages, the function of the *i and *aken reflexes is similar: marking the Patient as a derived one associated with some other non-Patient grammatical role implied by the source verb stem.

At this stage of our work, one question remains open: the relation between *a and *aken. There is an asymmetry in our reconstruction, because the suffixes involved in the recentralizing derivational process just discussed, especially as reflected in the languages outside of the Philippines and Formosa, are *i and *aken, whereas the affixes reflected in the dependent verb forms in Formosa and the Philippines are *i and *a. The *i in these languages behaves quite regularly, but while the dependent verb suffix -*a* in Atayal corresponds grammatically to *aken, marking the centralization of peripheral 'accessory' case roles (Egerod 1966:353), the -*a* in Tsou and in dependent and imperative verbs in Philippine languages corresponds to the OF *-en, not the Referential *iSi- as it should if it corresponded grammatically to *aken. (Tsou does have a suffix -*(n)eni* which corresponds in function to *aken, but there seems to be no way to link these two forms historically.) To cite contrasting examples from Western Bukidnon Manobo (Elkins 1971):

(10.84) a. *'ewa'-a-nu*   'Take it away!' Lit.: 'May it be gone away by you'
         b. *'ewa'-i-nu*   'Get away from it!'
                            Lit.: 'May it be gone away from by you'

Thus the -*a* in Formosan and Philippine languages usually marks 'Object Focus' rather than 'Referential' or 'Accessory' focus. Based on the examples such as the Manobo sentences above, it seems that both suffixes indicated transitivization, but that the *-a functioned to derive transitive verbs from intransitives by adding an Agent to the case frame, whereas the *-i indicated that a transitive verb had been derived by 'centralizing' the original Locus (reinterpreting it as Patient), thus requiring the original Patient to assume the Agent role.

10.8.1 Reconstruction of the preposition *i

The reconstruction of *i is amply justified by its widespread reflexes throughout Austronesian (*cf.* Dahl 1973:119). This preposition, which was the source of the *-i suffix, was a general non-terminus Locative Preposition which marked Locus and Correspondent. In Philippine languages such as Tagalog, and in the Formosan language Amis, it is possible to have situational objects appear as non-subjects in certain constructions, but the case form in which they appear depends on the class of noun: common nouns are Genitive in Tagalog or Accusative in Amis, but personal nouns are marked as Locative, which in Amis involves the preposition *i*. If this feature is reconstructible for PAN (which seems rather doubtful at the moment in the absence of evidence from the other Formosan languages), this Locative *i could conceivably be the source of the -*i* which marks transitive verbs in general in Oceanic. Otherwise, the Oceanic transitivizing suffix -*i* might have to derive from the PAN Genitive article *ni/*i (Reid 1979:49), although in this event it is not clear why Genitives should mark definite Patients, and why only the *i variant was preserved.

10.8.1.1 Formosan evidence

*i appears as a prefix on non-subject personal pronouns in Amis, and is still present as a locative preposition in that language (Chen ms)

*i functions to mark a kind of 'Referential Focus' (indicating that the Patients were recentralized Locus, Correspondent, or Reference actants) in dependent clauses in Tsou (Tung et al. 1964:225), Atayal (Egerod 1966:347), Paiwan (Dahl 1973:119), and Seediq (Asai 1953:28-29), e.g.:

(10.85) Seediq [Q317]
iini-mo   qɨtaʔa-y   ka   buusi-so   kiyani   nɨyooji
haven't-I   see   hat-your   but   Yooji:Gen
ka   qɨntaʔan-mo
     saw-I
'I haven't see your hat, but I saw Yooji's.'

and it retains this function in imperatives in Seediq (Asai 1953:28-29) and Amis, e.g.:

(10.86) Seediq [Q162]
paan-i   haaya   ka   laaqiʔ   kato
carry   him   child   Kato
'Carry Kato's child for him!'

(10.87)   Amis (Chen p.c.)

  a.   *pabeli-i kia wawa tia codad*

$$\begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix} \quad \begin{bmatrix} \text{Acc} \\ \text{COR} \end{bmatrix}$$

    'Give the child the book.'

  b.   *pabeli-en kia codad itia wawaan*

$$\begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix} \quad \begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix}$$

    'Give the book to the child.'

10.8.1.2 Western Malayo-Polynesian and Northern Philippines evidence

*i is reflected as a prefix on non-subject personal pronouns in some languages of this group.

The *i-* prefix on place names in northern Philippine languages, such as Ivatan, reflects the *i locative Preposition.

i is still present as a locative preposition in some languages, and is fused with demonstratives to form locative demonstrative pronouns and determiners in languages such as Ilokano.

-i functions to mark Referential Focus, and marks imperatives in a number of languages such as Merina Malagasy, where it is one of the imperative suffixes of the non-actor-focused voices, and in the Antaisaka dialect of Malagasy, where it replaces the suffix *-a* derived from *-an (Dahl 1973:119).

It may seem odd at first that the *-i suffix should be retained in both dependent forms and in imperatives in a number of these languages, however, it is probable that imperatives also originated in dependent clauses, the evidence for which is presented in §10.11. They would therefore have had a feature in common in PAN: the absence of clitic pronouns intervening between the verb and the *i preposition of the following PP. The clitic was absent after dependent verbs (including imperatives) because such clitics would appear attached to the predicator in the higher clause.

The hypothesis that the juxtaposition resulting from the omission of redundant clitics may have promoted the capture of *i is supported by the following Ata Manobo examples, where the form suffixed with *-i* appears where a contextually predictable first person clitic has been omitted:

(10.88)   Ata Manobo (Morey 1964:81)

kagi   ku   koq   ka-d   songo   og-taad-an   ko
said   I   you   surely   be given   when

og-nga-ngaap   a-d   bogay-i   kunsay
get-viand   I   was given   Kunsay

'I said: "You will surely be given some when I get viand." Kunsay was given some.'
(i.e. I gave some to Kunsay)

Inibaloi (Ballard 1963) uses *-i* "dependent forms primarily with imperatives and continuative aspect." As expected, these verbs do not allow clitic pronouns to follow them. The clitics precede the verb, but have lost whatever Aux they were originally attached to (see also §10.11). Now they are supported by a clitic *-ka*, a form which appears as a prefix to the verb if there is no clitic pronoun to attach to, or if an adverb intervenes between the clitic and the verb, e.g.:

(10.89)   Inibaloi

yet   to-ka   pidiw-i   ira   ni   kanen   cha
and   he   would snatch-from   them   food   their

'And he would snatch their food from them.'

10.8.1.3 Oceanic evidence

The Oceanic transitive markers derived from *i and *akin have been widely discussed in the literature; see especially Pawley & Reid (1979:103-130).

10.8.2 Reconstruction of the preposition *aken

*akin is reconstructible both as a suffix and a preposition for Proto-Oceanic (Pawley & Reid 1979). It has cognates, for example, in Wolio (Anceaux 1952) and Bahasa Indonesia. This element marked a general terminus Locative case form, and when captured in a recentralizing derivation, it added a terminus component of meaning to the derived verb, as shown by the following Samoan examples:

(10.90)   Samoan (Hopper & Thompson 1980:267)

a.   *sā manatu   le   tama   i   le   teine*
        thought   the   boy   about   the   girl

$$\begin{bmatrix} \text{Nom} \\ \text{P\textsc{at}} \end{bmatrix} \qquad \begin{bmatrix} \text{Lcv} \\ \text{-trmn} \\ \text{LOC} \end{bmatrix}$$

'The boy thought about the girl.'

b. *sā manatu-a   le   teine e   le   tama*
    thought-about   the   girl   the   boy
    [+trmn]
    'The boy remembered the girl.'

As a preposition, *aken probably marked Agent/Instrument as well as (comitative) Locus case relations. Thus we find -*a* as a marker of 'Agent Focus' in subordinate clauses in Atayal:

(10.91)   Atayal (Egerod 1966:353)

               S
               |
               V
               |
          gal-a-kuʔ
       choose-let-me *(cf. agal, m-)*
               [Nom]

       'Let me choose!'

and -*kan* as a causative affix in Indonesian (Macdonald & Dardjowidjojo 1967:90). In both cases, the suffix represents an oblique preposition captured from a non-subject Agent actant in an ergative clause in the process of recentralization, as in the following schematic diagram:

(10.92)

               S
              /|\
             V | \
             | \ \
           build PP NP
                /\ |
               P NP N
               | | |
            *aken N house
             [Abl] | ⎡Nom ⎤
               woman ⎣PAT⎦
               [AGT]

       'The woman built the house.'
       Lit.: 'The house built by a/the woman.'

                   ⇓

```
                    S
                   /|\
                  V | \___
                  |  \    \___
             build-aken  NP     NP
                         |       |
                         N       N
                         |       |
                       house   woman
                      ⎡Gen⎤   ⎡Nom⎤
                      ⎣Loc⎦   ⎣Pat⎦
```
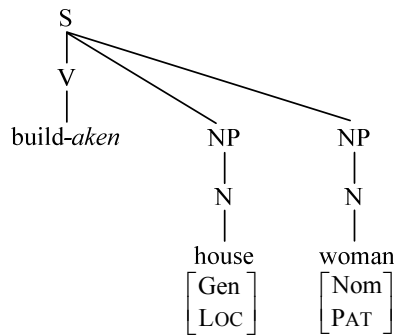
'The woman built a house.'

Lit.: 'The woman built of a house'

As mentioned above, however, it is not yet clear whether this form can be reconstructed in its verb-deriving function all the way back to PAN. The verb-deriving process itself is certainly reconstructible, however, but the most common exponent of it in Philippine and Formosan languages is a reflex of *a rather than of *aken, as in the Bunun imperative *qanup-a* 'Hunt!'. Possibly *aken is a later form derived from an earlier *a plus a Locative (relator noun?) *ka(n) plus the Genitive Determiner *ni (*cf.* Tharp 1974:80), and reconstructible only as far back as Proto-Formosan-Outliers.

10.9 The origin of Philippine verbal focus

10.9.1 The reinterpretation of PAN cleft sentences as verbal

The cleft sentence constructions are interesting for our purposes because they provided an alternative strategy for 'recentralization', that is, of recasting some actant in a non-subject case relation as the Patient, the perceptual center of the action or situation and the presupposed element in the predication. This is accomplished by taking one non-subject non-Patient actant and making it the subject of a descriptive equational predication. Since it is the subject, it must be definite, and since equational predicators are one-place predicators and thus have only one case relation slot available, that slot must be filled by a Patient, since Patient is obligatory for every (finite) clause. Thus the subject of an equational sentence is a definite nominative Patient. To cite the example given earlier:

(10.93)

```
              S
       ┌──────┼──────────────┐
       V      │              │
       │      PP            NP
     climb   ┌─┴──┐          │
             P    NP         N
             │    │          │
            *i    N         John
                  │        ⎡ Nom ⎤
               mountain    ⎣ PAT ⎦
              ⎡ Lcv ⎤
              ⎣ Loc ⎦
```
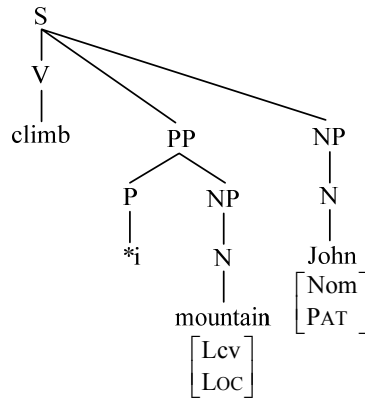
'John climbed on/over the mountain.'

One way to focus on 'mountain' in this structure, of course, is the method discussed in the preceding section: make it the subject of an ergative verb suffixed with *-i:

(10.94)

```
             S
       ┌─────┼───────────┐
       V     │           │
       │    NP          NP
    climb-i  │           │
             N           N
             │           │
           John       mountain
         ⎡ Gen ⎤      ⎡ Nom ⎤
         ⎣ AGT ⎦      ⎣ PAT ⎦
```
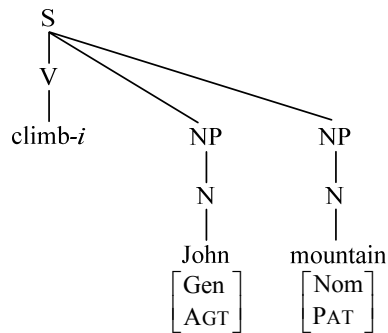
Instead of this, however, we could make it the subject of a nominalized verb, using the deverbal nominalizing suffix *-ana 'place where', e.g.:

(10.95)

```
                        S
                        |
              NP_____
              |                 \
         ___N___                 NP
        |       \                |
    climb-ana    NP              N
                 |               |
                 N            mountain
                 |            ⎡ Nom ⎤
                John          ⎣ PAT ⎦
                ⎡ Gen ⎤
                ⎣ PAT ⎦
```
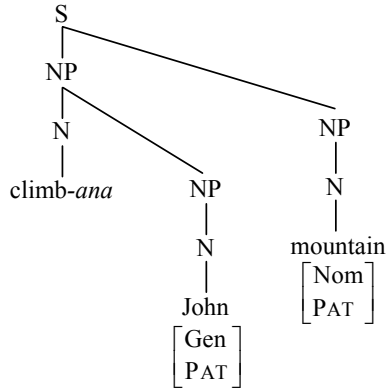
(Note that the 'One per Sent' constraint is not violated by the two Patients in this structure, since they are not sisterhoods of the same head word.) The end effect of the *-ana nominalization and the *-i verb derivation are then in effect the same: the Locus actant 'mountain' is converted to a Patient and made the definite subject of the clause; that is, to use Philippinist terminology, it is 'focused', with the suffix -i on the verb and the suffix -ana on the nominalized noun both serving to mark the Patient subject as associated with a situational location.

What we have in PAN, then, is two alternate and competing strategies for focusing non-subject actants:

(10.96)

```
            S                              S
            |                              |
      V_____               NP_____
      |      \      \              |                 \
  climb-i    NP     NP         ___N___                NP
             |      |         |       \               |
             N      N     climb-ana    NP             N
             |      |                  |           mountain
            John  mountain             N           ⎡ Nom ⎤
           ⎡ Gen⎤ ⎡ Nom ⎤             |           ⎣ PAT ⎦
           ⎣ AGT⎦ ⎣ PAT ⎦            John
                                     ⎡ Gen ⎤
                                     ⎣ AGT ⎦
```
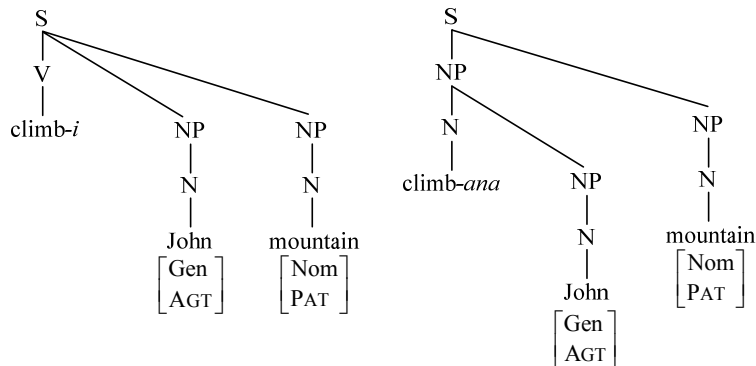
When we notice that these two structures match up word by word and case form by case form, it is easy to see how the next stage of the development of Philippine-style verbal focus came about: some (though certainly not all) of the nominal structures were

reinterpreted as verbal ones. The simplest way to visualize this is to say that the sequence *climb-i* in the verbal structure was replaced by the phonological sequence *climb-ana* without changing the lexical matrix in any other way. The result was a derived ergative structure which is superficially identical to a Philippine-style focus, and differs only in that the subject is still Patient:

(10.97)

```
              S
             /|\
            V │  \
            │  \   \
        climb-ana  NP    NP
                   │      │
                   N      N
                   │      │
                  John  mountain
                 ┌─────┐ ┌─────┐
                 │ Gen │ │ Nom │
                 │ AGT │ │ PAT │
                 └─────┘ └─────┘
```
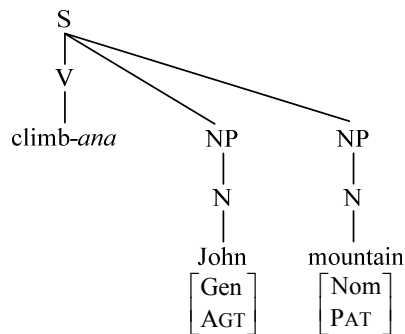
Note that this derivation-by-reinterpretation did not alter the source noun entry *climb-ana* in any way, so that both *climb-ana* entries co-existed in the lexicon. This situation continues in Tagalog, for example, where a PAN-style deverbal local noun co-exists with a homophonous Locative Focus verb, and sometimes with secondary deverbal nouns as well (DeGuzman p.c.):

(10.98)   Tagalog
           a.

```
              S
             /|\
           NP   \
           │     \
           N      NP
           │      │
        lutuʔ-an   N
     cooking-container │
                      ito
                      this
```

           'This is a cooking container.'
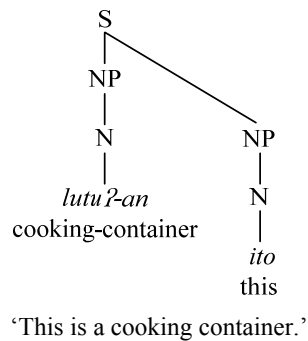
b.
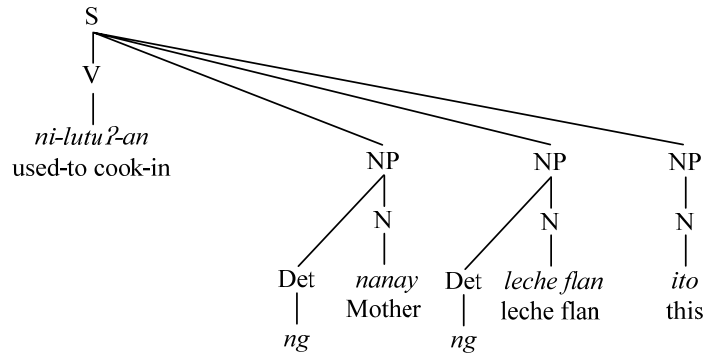
'Mother used this to cook leche flan in.'

c.
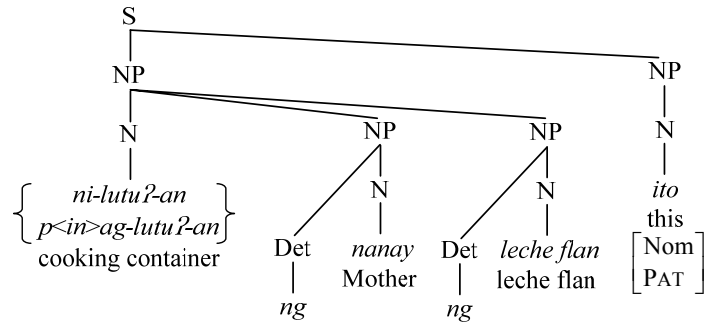
'This is Mother's cooking container of leche flan.'

10.9.2 Cleft sentence with nominal predicates

In order for the derivation of verbal focus to have worked as we hypothesize, there must have been a range of nominalization affixes matching the case roles to be focused. The ones primarily involved were (*cf.* Dahl 1973:119):

*mu-/-um-	'Actor focus'
*-en	'Goal focus'
*-ana	'Referential focus' (Dahl (1973) reconstructs *-an)
*iSi-	'Instrument focus' (Dahl (1973) reconstructs *Si-)
*ni-/-in-	'Perfective'

Deverbal nouns derived from verbs using these affixes occurred in descriptive equational predicates of the sort illustrated by the following schematic examples:

a) *-*ana* 'place of V-ing'

(10.99)

```
                    S
          ┌─────────┴─────────┐
         NP                   NP
      ┌───┴───┐            ┌───┴───┐
      N      PP            N       
   sweep-an-my  ┌──┴──┐  that    NP
              P      NP       ┌───┴───┐
            with     N        N       
                palm frond    na      NP
                                      │
                                      N
                                      │
                                    place
```
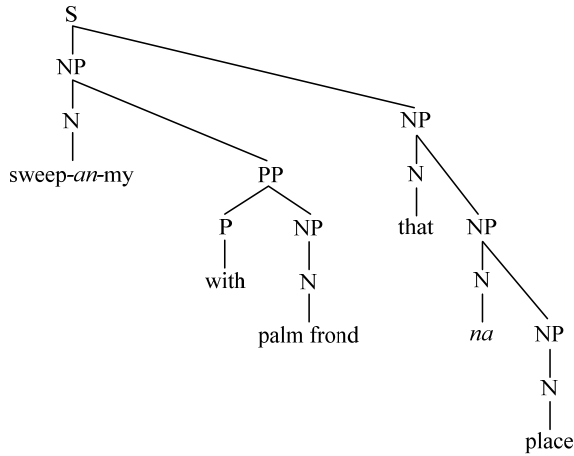
'That place is my sweeping-place with palm fronds.'

(10.100)

```
                    S
          ┌─────────┴───────────────────────────────┐
         NP                                          NP
   ┌──────┼──────────────────────┐                  │
   N     PP                      PP                  N
dance-an ┌─┴──┐               ┌───┴───┐            beach
        P    NP               P      NP
        of    N              for      N
          beautiful  NP            suitors
                   ┌──┴──┐
                   N
                   na    NP
                         │
                         N
                         │
                      maidens
```
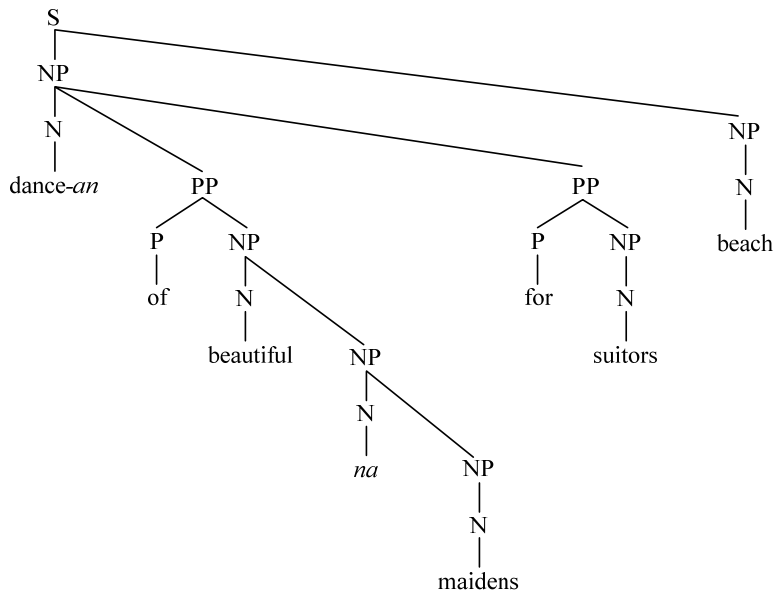
'The beach is the dancing-place of beautiful maidens for their suitors.'

*-ana could also derive locational nouns from other nouns, producing structures such as the following:

(10.101)

```
              NP
             /  \
            N     \
            |      PP
        betel-an  /  \
                 P    NP
                 |    |
                 of   N
                      |
                   old man
```

'the old man's betel stash'

b) *-en 'the N to be V-ed'

(10.102)   a.

```
                 NP
                /| _____
               N |             \
               | |              \
            beat-en  PP          PP
                    /  \        /  \
                   P    NP     P    NP
                   |    |      |    |
                   of   N     with  N
                        |           |
                      enemy    canoe paddles
```

'the one who is to be beaten by the enemy with canoe paddles'

b.

```
              NP
             /  \
            N    \
            |     PP
        paddle-en /  \
                 P    NP
                 |    |
                 of   N
                      |
                    enemy
```

'the one who is to be paddled by the enemy'
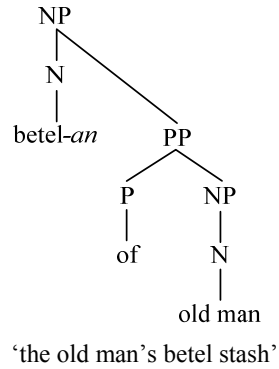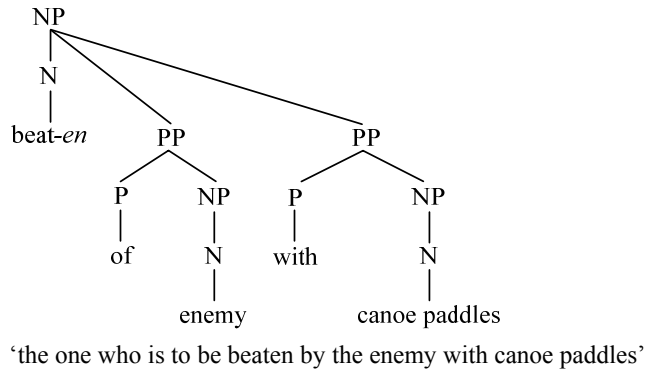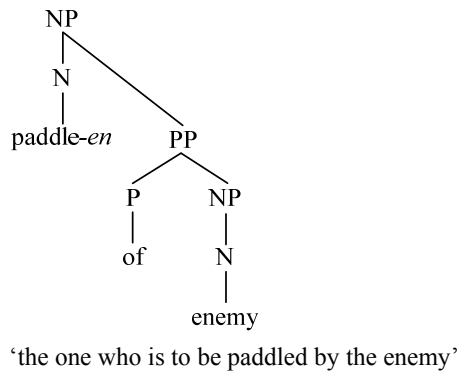
c) *ni-/-in- 'the N affected by V-ing'

(10.103) a.

```
              NP
         ╱╱│╲╲──────────────────────
        N          PP          PP          PP
        │        ╱    ╲      ╱    ╲      ╱    ╲
     ni-burn   P      NP    P     NP    P     NP
              │       │     │     │     │     │
              of      N     on    N     at    N
                      │           │           │
                   vandals      chief      midnight
```

'the thing to be burned up on the chief by the vandals at midnight'

b.

```
          NP
        ╱│╲────────────
       N       PP          PP
       │     ╱    ╲      ╱    ╲
    ni-ant  P     NP    P     NP
           │      │     │     │
           of     N     at    N
                  │           │
              wife-your     feast
```

'your wife's object (e.g. a cake) which was infested with ants at the feast'
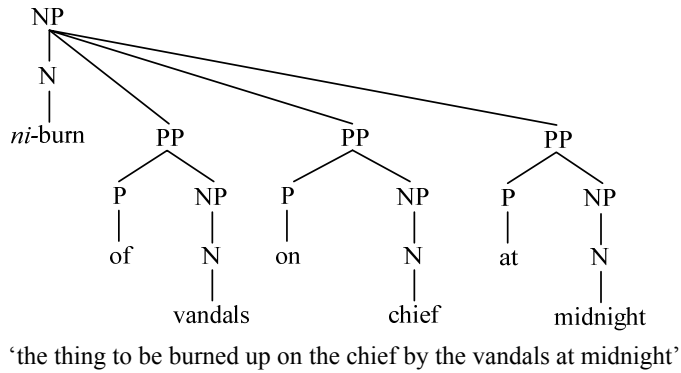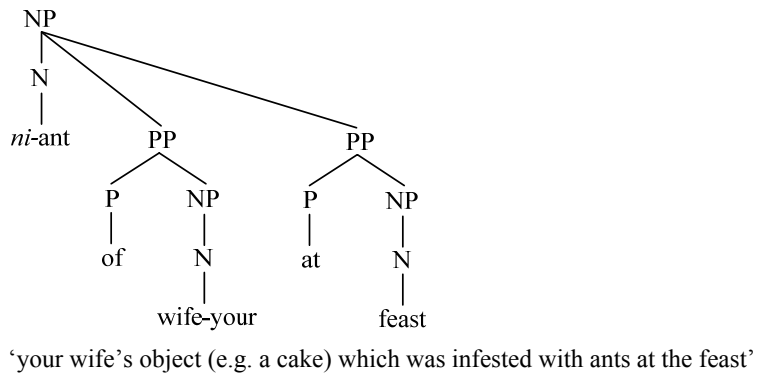
d) *iSi- 'thing for V-ing or for N'

(10.104) a.

```
           NP
        ╱│╲────────────
       N       PP          PP
       │     ╱    ╲      ╱    ╲
    iSi-beat P    NP    P     NP
           │      │     │     │
           to     N     in    N
                  │           │
                dogs        valley
```

'the thing for beating the dogs in the valley'

b.

```
                    NP
                   /  \
                  /    \
                 N      \
                 |       \
            iSi-throw   PP      PP
                       /  \    /  \
                      P   NP  P   NP
                      |   |   |   |
                      of  N   at  N
                          |       |
                       children strangers
```

'the children's missiles for throwing at strangers'

c.

```
                    NP
                   /  \
                  /    \
                 N      \
                 |       \
          iSi-furniture  PP        PP
                        /  \      /  \
                       P   NP    P   NP
                       |   |     |   |
                       of  N     of  N
                           |         |
                         rattan   neighbors
```

'the neighbors' rattan furniture'

e) *mu-/-um- 'one who V's'

(10.105)   a.

```
                    NP
                   /  \
                  /    \
                 N      \
                 |       \
             mu-build   PP        PP
                       /  \      /  \
                      P   NP    P   NP
                      |   |     |    |
                      of  N     from N
                          |          |
                       canoes    tree trunks
```

'the builder of canoes from tree trunks'
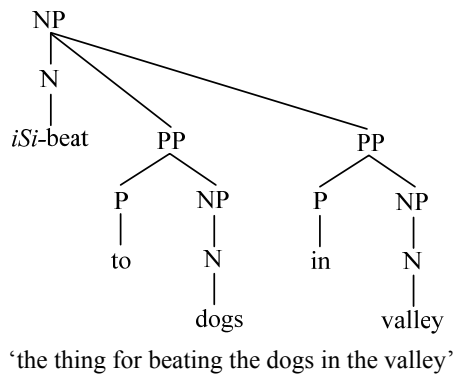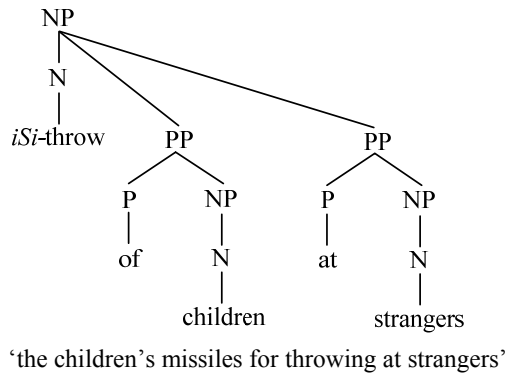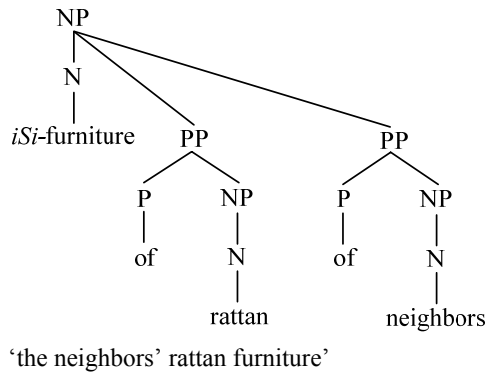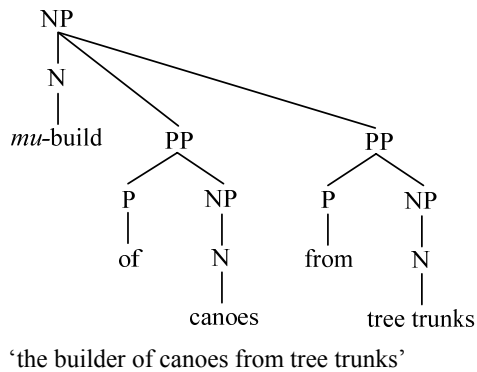
During the transition period, isomorphous structures were internally represented by

some speakers as nominals and by other speakers as verbal. The nominal constructions of course were always subject-final (allowing for following final outer Time and Place actants), since the grammatical subject of an equational sentence is one of the two immediate constituents in the sentence, and so cannot be in the middle of the other immediate constituent.

Nominal construction:

(10.106)　　a.
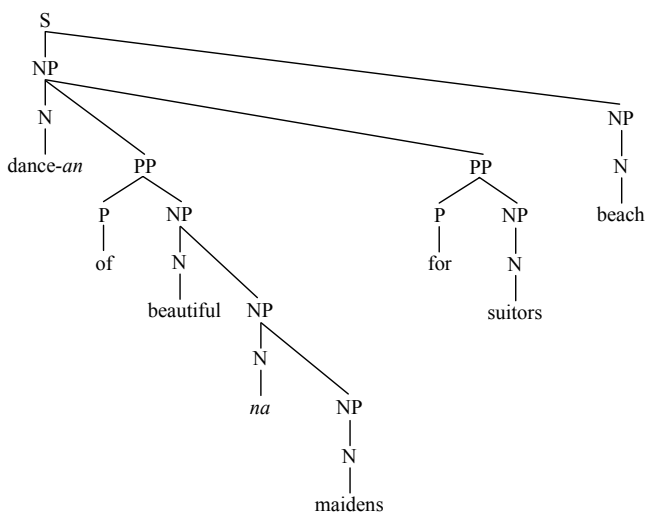
b.
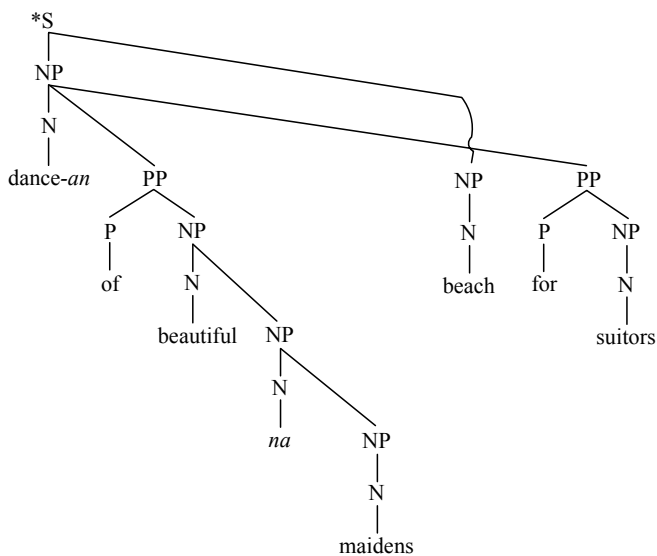
For those speakers with corresponding isomorphous verbal constructions, though, this constraint on constituent order would not have to be absolute, since the verbal structures were not limited to binary branching constructions.

Verbal constructions:

(10.107) a.
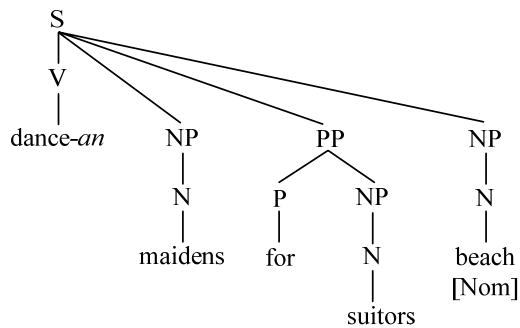
b.
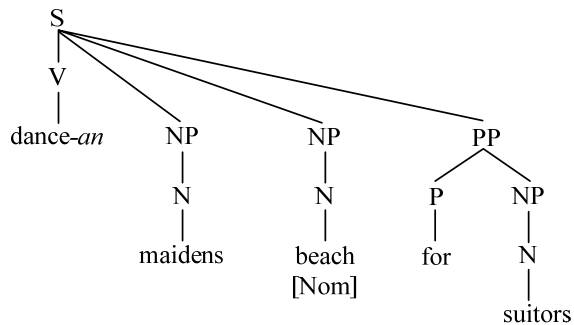
This means that as soon as the verbal speakers shifted the subject into a non-final position, the nominalization speakers were placed on notice that something was different, and were given the crucial clue they needed to reinterpret at least some of their cleft constructions as verbal. In the following Chamorro sentences, for example (Huxel 1969:2), the first two could be assigned either nominal or verbal structures, but the third could only be verbal:

(10.108)   Chamorro
a. *i*   *pan*   *linihi?*   *ni*   *i*   *tœotao*
        bread   was seen   by   man
    [Nom]   [V]   [Gen]

b. *linihiʔ   ni   i   tæotao   i   pan*
   was seen   by   man   bread
   [V]   [Gen]   [Nom]

c. *linihiʔ   i   pan   ni   i   tæotao*
   was seen   bread by   man
   [V]   [Nom]   [Gen]
   'The bread was seen by the man.'

This would help to explain why it is that in Philippine and Formosan languages, and in many Indonesian languages as well, relative clauses are exclusively nominal constructions. Since the grammatical subject of the relative clause was co-referential with the head N of the NP and thus omitted ('deleted') for both verbal and nominal speakers, it could never appear in the middle of the other constituents, and so the nominal speakers would never be tipped off that these constructions too were to be reinterpreted as verbal. In fact, one way to establish unequivocally that a given form in a Philippine or Formosan language is a noun (at least in some of its occurrrences) is to find it used as a ligature attribute after another Noun. Thus *ibinigay-mo* is a noun in the following sentence (DeGuzman 1978:276, ex. (8)), since it follows a sequence of noun (*halaman*) plus ligature (*-ng*):

(10.109)   Tagalog
            lumaki   na   ang   halamang   ibinigay   mo   sa   akin
            has grown   plant   gave   your   me
            'The plant which you gave me has grown.'

The remainder of this section will be devoted to a discussion of the reconstruction of the original functions of the individual 'focus' affixes and their development as verbal focus markers.

10.9.2.1 *-en

We reconstruct *-en as the ancestor of the 'Object Focus' or 'Goal Focus' suffix in Philippine languages. As with *ni-/-in-, we assume that the primary function of *-en in Proto-Austronesian was to derive nouns from verbs and other nouns. For both deverbal and denominal nouns, and semantic effect of *-en derivation was 'future effect'. It is possible that both *ni- and *-en had begun to function as markers of verbal aspect in PAN, but if so, they had not become complementary allomorphs of 'Object Focus' in the way that their descendants now have in languages such as Tagalog.

Clear reflexes of this affix have not been identified in Oceanic, although PP_N *kakano 'flesh, meat, pith' has been offered as a possible derivative of *kan 'eat' plus *-en. Reflexes of *-en in its nominalizing function are however common in western Austronesian languages of the Extra-Formosan group as well as in the Formosan languages.

10.9.2.1.1 Extra-Formosan Western Austronesian evidence

(10.110)   Ilokano [I2.4]

```
                        NP
                        |
                        N
                        |
       Det         inted-mo           NP
        |          gave-you
      deydi                        N
       the                         |
                        Det       sida
                         |        fish
                        nga
                        that
```

'the fish that you gave (long ago)'
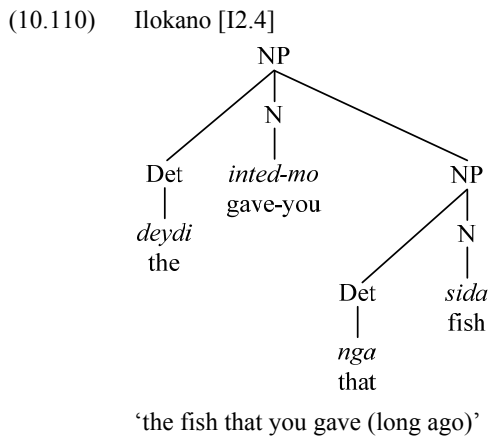
The following examples from Ilokano show a neat contrast between reflexes of *-en and *ni-/-in- in approximately the same derivational functions we reconstruct for PA_N:

(10.111)   a.   *dengdeng-en*   'ingredients to be used for making a vegetable dish'
                                   Lit.: 'that which is to become a vegetable dish'
            b.   *d-in-engdeng*   'the completed vegetable dish'
                                   Lit.: 'that which has become a vegetable dish'

Javanese (Wolff 1973:76)

Reflexes of *-en and *ni- occur, but without tense meaning.

Kagayanen (Harmon 1977:96)

In Kagayanen, *-en* derives nouns referring to objects which will receive the action of the source verb.

Malagasy

(10.112)   Malagasy (Dahl 1973:121)
    a.   *inuna nu resah-ina*
          'What is being talked about?'
    b.   *ni fambulena nu resahina*
          'The planting is being talked about.'

(No futurity indicated by the glosses).

Tagalog

(10.113)   Tagalog (Schachter & Otanes 1972:99; corresponding verb forms from
            Ramos 1971 and English 1965):
    a.   *alaga-in*   'something to take care of'
                          cf. mag-alaga, *alaga-an* 'care for, raise'
    b.   *aral-in*   'something to study'
                          cf. mag-aral 'study'
    c.   *awit-in*   'song'
                          cf. um-awit 'sing'
    d.   *bilih-in*   'something to buy'
                          cf. bumili 'buy'
    e.   *burdah-in*   'something to embroider'
                          cf. magburda 'embroider'

As illustrated by these examples, the *-in* form is sometimes independent of the
corresponding verbal paradigm, showing a unique and independent nominalizing function
for *-in* . This supports our claim that these nominalizations have not developed from
passives, since for many examples such as those above, there is no homophonous passive
verb. The fact that speakers vary in their pronunciations of these words (Schachter &
Otanes 1972:100) again supports the hypothesis that these words were independently
derived at various times and have their own independent histories.

Tagalog words having the same form as *-in* suffixed verbs also occur in unques-
tionably nominal environments, and must be analyzed as nouns in such occurrences, e.g.:

(10.114)   Tagalog (Schachter & Otanes 1972:516)

magkanong   bigas   ang   bibilhin   ko
how much   rice   will spend   I
'How much shall I spend on rice?'
Lit.: 'The my future purchase is how much (worth of) rice?'

(10.115)   Tagalog (DeGuzman 1978:179)

ipinarinig   ni   Jo   sa   kanila   ang   tugtugin   ni   Angel
make…hear   Jo   them   composition   Gen   Angel
'Jo made/let them hear Angel's composition'
Cf. tugtug- 'play music'

Toba Batak

(10.116)   Toba Batak (Wolff 1973:83, footnote 7)
buwat   'do'   *buwaton*   'thing to be done'

10.9.2.1.2 Formosan evidence

Atayal

(10.117)   Atayal (Egerod 1966)

a.   *biqun   misuʔ   lukus*
     will give   I:you   clothes
     'I will give you clothes.' Lit.: 'You will be my givee of clothes' (p.355)
     (*misuʔ* = 'I' Gen + 'you' Nom)

b.   *biqun   sakuʔ   lukus   naʔ   squliq*
     will give   I   clothes   Gen   man
     'You will give me the man's clothes.'
     Lit.: 'I will be the givee of the man's clothes' (p.364)

Seediq

In Seediq (Asai 1953:30-31), the suffix *-uun* (*-un*, *-on*) derives object nominals referring to the object (to be) affected. Such nouns sometimes occur in apparently free variation with nouns derived by *-ana* suffixation, e.g.:

(10.118)   Seediq (Asai 1953)
           taan, taun   'object of seeing'
           puusaan, puusaun   'object of putting in'

If these forms ever differed in futurity, as we would expect, that difference has been lost. However, the 'future effect' meaning we reconstruct is reflected in Asai's (1953) example:

(10.119)   Seediq (Asai 1953:31)
           bɯligun   'thing to be bartered'
           cf. *buligan*   'place of bartering'

and in the following example:

(10.120)   Seediq [Q156]
           paʔan-un-mu   *saaman*   *ka*   *laaqi*
           carried-will-my   tomorrow   child
           'The child will be carried by me tomorrow.'
           Lit.: 'The child is my future carried one tomorrow'

Forms derived by *-un* suffixation in Seediq can be rederived (ibid., p.38), which supports our reconstruction of a derivational rather than an inflectional function for this affix in PAN.

10.9.2.1.3 Reflexes of *-en as a verbalizer

Reflexes of *-en, like those of *ni-/-in-, often show up in Philippine languages as verbalizers, as in Tagalog:

(10.121)   Tagalog (Schachter & Otanes 1972:25)
           tawad   'forgiveness'   *patawarin*   'forgive'
           lubid   'rope'   *lubirin*   'be made into rope'
           tupad   'fulfillment'   *tuparin, tupdin*   'be fulfilled'

(10.122)   Tagalog (DeGuzman 1978:267)
           adobo   'braised dish'   *adobohin*   'braise'

Sometimes the semantic effect is adversative, e.g.:

(10.123)   Tagalog (DeGuzman 1978:167, 265)

anay	'termite'	*anayin*	'be infested with termites'
lagnat	'fever'	*lagnatin*	'be afflicted with fever'
ulan	'rain'	*ulanin*	'be overtaken by rain'

This verbalizing function of *-en came about in the same way that *ni-/-in- became a verbalizer (see §10.9.1):

Stage I		Stage II		Stage III
V + *-en*	→	N	→	V
N + *-en*	→	N	→	V

The forms left behind by these diachronic processes again allow the construction of new analogical synchronic derivational processes:

DR-1:	V + *-en*	→	N
DR-2:	V + *-en*	→	V
DR-3:	N + *-en*	→	V

Again, the 'future effect' meaning of the original nominalization rules carries over into the verbal forms. Once this has happened, the time is ripe for the formation of verbal aspectual paradigms via the association of aspectually derived forms of the same root. The result is probably true inflection, although this is not yet completely clear, with sets of related items such as the following:

(10.124)   Bunun

isɓaliv	AF	'will sell'
paɓaliv	AF	'will be sold'
ɓalivun	OF	'will buy'

It is very common to find reflexes of *-en deriving transitive verbs from intransitives in Philippine languages, e.g.:

(10.125)   Tagalog (DeGuzman 1978:298-300)

maalaman	'know'	*alamin*	'find out'
matakot	'be afraid of something'	*takutin*	'scare someone'
lanta	'wilted'	*lantahin*	'cause something to wilt'

Possibly the adversative connotation mentioned above prevented the used of *-in*-verbalization with verbs referring to desirable states, e.g.:

(10.126)   Tagalog (DeGuzman 1978:330)
            hinog   'ripe'   **hinugin*   'cause/allow to ripen'
                                           pahinugin

    This transitivization came about automatically when nominalized equationals were reinterpreted as verbal sentences. This will be illustrated in the next section.

    Since *-en was derivational rather than inflectional, the forms it derives can differ from their sources in unpredictable ways. Thus the forms and meanings of the following five Amis verbs can be partly accounted for in terms of a derivational chain such as the one shown below:

(10.127)   Amis (*cf.* Starosta 1974:311 – example (M27) p.208 in this volume)
            mimɨlaw   'see, observe, look at'
            mimɨlaw   'look after'
            mɨlawən   'be looked after'
            papimɨlaw   'show, make someone succeed in seeing'
            papimɨlawən   'take care of; cause to be looked after'

            Active   Active   Passive
            mimɨlaw   →   *mimɨlaw*   →   *mɨlawən*
                ⇓   ⇓
            papimɨlaw   *papimɨlawən*

    That is, we can't explain exactly why the passive form of *mimɨlaw* means 'look after', but our treatment of *-en as derivational shows how such a change could happen, and how it could carry over in the derivation of *papimɨlawən*.

10.9.2.2 *ni-/-in-

    The affix *ni-/-in- functioned in Proto-Austronesian to derive nouns from verbs and other nouns, although it may have also begun to have the function of marking perfective aspect in verbs, a function which is now its primary one in Philippine languages. Based on evidence from Philippine and Formosan languages, both the prefix *ni- and the infix *-in- must be reconstructed for the earliest stage, with *-in- infixed after all initial consonants except *l and possibly *r. The development of *-in- as an infix seems to have preceded the development of infix *-um- from *mu-, judging from the reconstructible order *-umin- (despite Wolff's *-inum-; Pawley & Reid 1979:107). This order is reflected for example in the Seediq verbal affixes *mun-/-mun-* (active verbs, past tense; Asai 1953:31-32), e.g.:

(10.128)   Seediq [Q314]

q<əm><ɨn>ita   ko   (ka)   buusi   yooji

saw   I   hat   Yooji

'I saw Yooji's hat.'

and result nominalizations in *-mun-* (Asai 1953:32-33). This is also the order in Ivatan and other Philippine languages, e.g.:

(10.129)   Ivatan (Reid 1964:85)

m<in>odi   si   Juan

went home   John

'John went home.'

It may be that the *-in- infix provided the model for the development of *-um-.

Reflexes of *ni- as a nominalizer can be seen in Formosan, Western Austronesian, and Oceanic languages. Examples from each of these groups is provided below:

10.9.2.2.1 Formosan evidence

(10.130)   Amis [M59]

iya   matuaasay   aḷuman   ku   ni-patay   tu   taaywan

the   old man   many   killed   Taiwanese

'The old man killed many Taiwanese.'

Lit.: 'As for the old man, the killed-ones which were Taiwanese were many.'
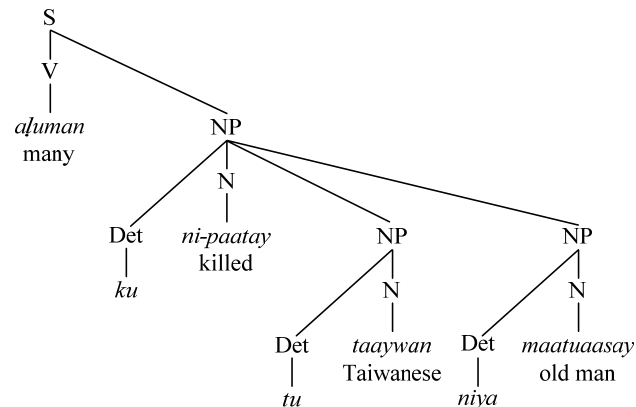
'The old man killed many Taiwanese.'

Lit.: 'The killed-ones by the old man which were Taiwanese were many'

(10.132)   Bunun [B32]

  a   m<in>anaq   e   tumað   a
       former shooter   bear
  'the former shooter of the bear'

 In this example, the *-in-* nominalizes and adds a perfective meaning, but the usual 'focus' on the effectee is absent.

(10.133)   Rukai (Li 1973:202-206)
  a.   *kuani kaaŋ ka   k<in>ani-an-ŋa*
       that   fish   was eaten-already
       'That fish was eaten already.'

  b.   *kuani lamaniman   b<in>aay-an   mitaa*
       that   things   were given   to us
       'Those things were given to us.'

  c.   *kuani   kaaŋ   ka   ni-kani-an*
       that   fish   was eaten
       'That fish was partially eaten.'

  d.   *ni-kani-an   kuaḑa   aðaðam*
       was eaten   that   bird
       'That bird was eaten.'

(10.134)   Saisiyat
  karat   'write'
  k<in>arat   'book, paper'
  kakarat   'pencil'

(10.135)   a.   Seediq [Q294]
       t<in>ɨlaqi   'one born'
       from **t-laqi*   'bear a child' ? *Cf. laqi* 'child'

       b.   Seediq [Q73]
       sɨnaw   q<in>taʔan   mo   (kiya)   oʔ   waada   aaḷaŋ
       man   loved one   my   (that)   topc went   village
       'The man that I am in love with went to the village.'
       Lit.: 'As for the (that) man who is my loved one, he went to the village'

10.9.2.2.2 Extra-Formosan Western Austronesian evidence

In Philippine languages, *ni-/-in-* a nominalizer has the meaning of 'the one affected by the action of the verb', e.g.:

Kagayanen (Harmon 1977:96):

The affixes *-in-…-an* identify deverbal nouns referring to the thing created as a result of the verbal action.

Tagalog

There are a number of common nouns in Tagalog which are related to perfective verb forms, e.g.:

(10.136) Tagalog (DeGuzman p.c.)
  s<in>igang   'lemon soup'
                        cf. sigang 'to stew'
  d<in>uguʔan   'dish with blood ingredient'
                        cf. dugo 'blood'
  b<in>atak   'sugar candy sticks'
                        cf. batak 'stretch, pull'

A large percentage of the 'perfective' verb forms appear in nominal constructions, as shown by the following examples:

(10.137) Tagalog (Schachter & Otanes 1972)
  a. *sino   ba   ang   t<in>anong   niya*
      who(m)   was asked   his
      'Who(m) did he ask?'; Lit.: 'Who was his asked-one?'   (p.511)

  b. *g<in>awa   nino   ang   sapatos   na   iyon*
      made   whose   shoes   that
      'Who made those shoes?'
      Lit.: 'The shoes which are those were whose made-ones?'   (p.512)

  c. *paano   mo   ba(ng)   s<in>asabi   iyon   sa   Ingles*
      how   your   said   that   English
      'How do you say that in English?'
      Lit.: 'That saying in English is how by you?'   (p.515)

d. *gaanong   tela   ang   b\<in\>ili   niya*
   how much   cloth   bought   he
   'How much cloth did he buy?'
   Lit.: 'The his-purchase was how much which was cloth?'   (p.515)

e. *mga   pinggan   ang   h\<in\>ugasan   ni   Rosa*
   plrl   dish   washed   Rosa
   'What Rosa washed is some dishes.'
   Lit.: 'The washed ones of Rosa are some dishes'   (p.154)

f. *masarap   ang   niluto   mong   pagkain*
   delicious   cooked   your   food
   'The food you cooked is delicious.'
   Lit.: 'Your cooked-stuff which is food is delicious'   (p.124)

g. *masarap   ang   pagkaing   niluto   mo*
   delicious   food   cooked   your
   'The food you cooked is delicious'
   Lit.: 'The food which is your cooked stuff is delicious'

h. *binili   kong   damit   na   seda*
   bought   I   dress   silk
   'the silk dress I bought'
   Lit.: 'My purchase which is a dress which is a silk one'   (p.130)

i. *regalong   manggang   pinitas   niya   kahapon*
   gift   mangoes   picked   he   yesterday
   'gift of mangoes he picked yesterday'
   Lit.: 'gift which was mangoes which were his picked-ones'   (p.130)

j. *damit   na   nilabhan   ko   kahapong   lana*
   dress   washed   I   yesterday   wool
   'wool dress which I washed yesterday'
   'dress which is my washed-one yesterday which is a wool one'   (p.130)

k. *ano   ba   ang   nasunog*
   what   burned thing
   'What was the thing that got burned?'
   Lit.: 'The burned thing was what?'   (p.507)
   (*nasunog* = *m\<in\>asunog*)

l. *gaano   ang   natitirang   adobo*
    how much   leftover   adobo
    'How much adobo is left?'
    Lit.: 'The leftover which is adobo is how much?'   (p.515)

m. DeGuzman (1978:276)
    lumaki na ang halamang ibinigay mo   sa   akin
    grown   plant   gave   your to   me
    'The plant you gave me has grown.'
    Lit.: 'The plant which is your gift to me has grown already'

Javanese (Wolff 1973:76):

Reflexes of *-ən and *-in occur in Javanese, but without tense meaning; *-in-* is petrified in the modern language, though productive in Old Javanese.

10.9.2.2.3 Oceanic evidence

Productive reflexes of a prefix *in- and an infix *-in- are found in a broad scatter of languages in Western Melanesia. Further east this affix mostly survives in non-productive usages.

In all cases, productive reflexes are noun-deriving, and there are clear indications that the element was prefixed to verb stems beginning with a vowel, and infixed after the initial consonant with verb stems beginning with a consonant. In a few languages *-in- has become a general noun-derivative, but more often it specifically derives nouns denoting the entity which is the characteristic object of an action verb (result, product, etc.), and nouns corresponding to stative verbs. Compare:

(10.138)   Roviana

tavete	'to work'	*tinavete*	'work'
vagila	'to show'	*vinagila*	'a sign'
varipera	'to fight'	*vinaripera*	'war, fighting'
garumu	'to send'	*ginaruma*	'commission'
avoso	'to hear'	*inavoso*	'hearing, news'
ene	'to walk'	*inene*	'a journey'
uma	'to make a garden'	*inuma*	'plantation'
zama	'say'	*zinama*	'saying, word'
bule	'calm'	*binule*	'peace'
bugoro	'angry'	*binugoro*	'anger'

toa	'alive'	*tinoa*	'life'
via	'clean'	*vinia*	'purify'
salaŋa	'heal'	*sinalaŋa*	'remedy, cure'
koha	'to lie'	*kinohakoha*	'a lie, falsehood'

Kuanua

Kuanua is among those languages which reflects *-in- as a general noun-deriving affix:

(10.139)   Kuanua

abute	'to stamp, ram down'	*inabut*	'heel'
mate	'to die'	*minat*	'death, corpse'
matuka	'mature'	*minatuka*	'maturity, ripeness'
matoto	'to know, understand'	*minatoto*	'knowledge, wisdom'
maur	'satisfied (after eating)'	*minaur*	'satisfaction'
tata	'to speak, talk'	*tinata*	'word, talk, language'
tama	'prepare food for a journey'	*tinatama*	'food for a journey'
tibe	'divide s.t.'	*tinibe*	'division, share'
tangi	'cry'	*tinangi*	'crying'
tabar	'give s.t. as a present'	*tinabar*	'a present'
tavua	'flourish'	*tinavua*	'growth, increase, success'

Nakanai

In Nakanai also, the reflex of *-in- is a general nominalizer. It is in complementary distribution with the reflex of *-an(a): Nakanai *-il-* (and variants *-ul-*, *-ir-*, etc.) and occurs with disyllabic stems, while *-la-* occurs with polysyllabic stems.) As in Kuanua and Roviana, *-in- is infixed after the first consonant in consonant-initial stems, and prefixed to vowel-initial stems.

(10.140)   Nakanai

taga	'afraid'	*tilaga*	'fear'
pou	'sit'	*pulou*	'residence in a place'
vago	'to pole a canoe'	*vilago*	'pole for poling a canoe'
peho	'to die'	*pileho*	'death'
sapa	'to sweep'	*silapa*	'broom, sweeping'
sau	'to grasp'	*silalau*	'handle'

au	'to steer'	*ilau*	'steering'
ubi	'to shoot'	*ulubi*	'injection'
tuga	'to walk, depart, travel'	*tuluga*	'trip'
veru	'to distribute food'	*vireru*	'ceremonial feast'

10.9.2.2.4 Denominal function of *ni-/-in-

*ni-/-in- also functioned to derive nouns directly from nouns. The meaning was something like 'that which has become N'. This process is illustrated by the following examples:

(10.141) Tagalog (DeGuzman p.c.)
t<in>apay   'bread'
cf. tapay   'fermented dough'

(10.142) Ilokano
d<in>engdeng   'vegetable dish'; 'that which has become a vegetable dish'
cf. dengdeng-en 'that which is to be made into a vegetable dish'

10.9.2.2.5 Reflexes of *ni-/-in- as a verbalizer

Reflexes of *ni-/-in- often show up in Philippine languages as verbalizers, as in Tagalog:

(10.143) Tagalog (DeGuzman 1978:273-276)

langam	'ant'	*linangam*	'be infested with ants'
ulan	'rain'	*inulan*	'be rained on'
sipon	'cold'	*sinipon*	'to suffer from cold'
kabag	'gas pain'	*kinabagan*	'to suffer gas pain'
adobo	'braised dish'	*inadobo*	'to make into adobo'
unan	'pillow'	*inunan*	'to use as a pillow'
araro	'plow'	*inararo*	'to plow'

As in the case of *-en, the verbalizing function of *-in- can be explained in terms of the following historical stages:

Stage I		Stage II		Stage III
ni- + V	→	N	→	V
ni- + N	→	N	→	V

The forms left behind by these diachronic processes again allow the construction of new analogical derivational processes:

DR-1:   *ni-* + V   →   N
DR-2:   *ni-* + V   →   V
DR-3:   *ni-* + N   →   V

and again, as in the case of *-en, it is very common to find reflexes of *ni-/-in- deriving transitive verbs from intransitives in Philippine languages, e.g.:

(10.144)   Tagalog (Schachter & Otanes 1972)

    a. *nagmamahal sa dalaga*   *ang* *binata*
       loves   young woman   young man

$$\begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix} \qquad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

      'The young man loves a young woman.'

    b. *m<in>amahal* *ng binata*   *ang* *dalaga*
       loves   young man   young woman

$$\begin{bmatrix} \text{Gen} \\ \text{AGT} \end{bmatrix} \qquad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

      'The young man loves the young woman.'

(10.145)   Tagalog (Precy Espiritu p.c.)
    pumasok *sa*   *sapatos* *niya* *ang* *tubig*
    entered   into   shoes   his   water
    'The water entered into his shoes'

(10.146)   Tagalog (DeGuzman 1978:335)
    pinasok   *ng* *tubig* *ang* *sapatos* *niya*
    were drenched   water   shoe   his
    'His shoes were drenched with water.'
    cf. pasok 'enter'

(10.147)   Ilokano (Clausen p.c.)

    a. *k<um>agat* *ti* *áso*   *iti* *púsa*
       bites   dog   cat

$$\begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix} \qquad \begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix}$$

      'The dog bites a cat.'

b. *k<in>agat   ti   áso   ti   púsa*
    bit   dog   cat

$$\begin{bmatrix} \text{Gen} \\ \text{AGT} \end{bmatrix} \quad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

'The dog bit the cat.'

(Note the close correspondence of the first examples with Polynesian 'active' sentences, as for example in Maori, where the so-called 'direct objects' also have an indefinite or partitive reading.)

This transitivization came about automatically when nominalized equationals were reinterpreted as verbal sentences. This can be illustrated by means of the Ilokano examples above, *cf.* (10.148b):

(10.148)   Ilokano

a.

b.

⇓

c.

```
                    S
                   /|\
                  V | \
                  |  \  \
            k<in>agat  NP   NP
                       /|   /|
                      / N  / N
                     /  |  / |
                  Det áso Det púsa
                   |  ⎡Gen⎤ | ⎡Nom⎤
                   ti ⎣AGT⎦ ti ⎣PAT⎦
```
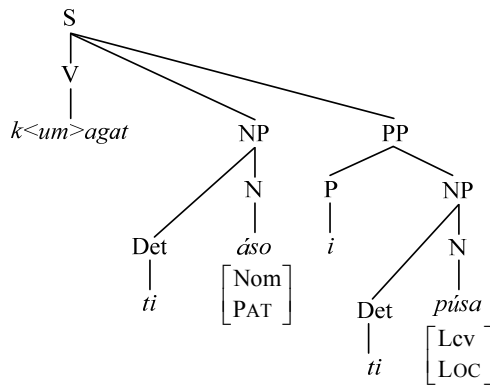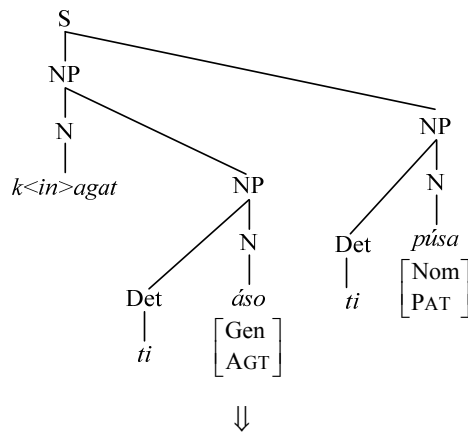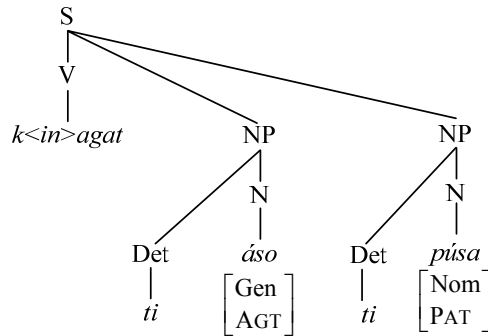
Schachter & Otanes (1972:70) distinguish transitive *-in-* verbs from each other according to whether they correspond to transitive or intransitive AF verbs. Thus in the following sentence pairs, the example with *sinalpok* is LF sentence with a Location subject, but the example with *binili* is OF:

(10.149)   Tagalog (Schachter & Otanes 1972:70)

    a. *bumili ng bangka ang   mangingingisda*   (AF)
        buy   boat   fisherman
        'The fisherman bought the boat.'

    a'. *binili   ng mangingingisda ang bangka*   (OF)
        bought   fisherman   boat
        'The fisherman bought the boat.'

    b. *sumalpok sa bangka ang alon*   (AF)
        strike   boat   wave
        'The wave struck the boat.'

    b'. *sinalpok ng alon   ang bangka*   (LF)
        struck   wave   boat
        'The wave struck the boat.'

Similarly, *sinagot* in the following examples is analyzed as 'Directional Focus' because of its relationship to *sumagot*, even though the surface structure and morphological properties of its clause are identical to those of the sentences with *sinalpok* and *binili* above:

(10.150)   Tagalog (Schachter & Otanes 1972:79)

    a.   *sumagot   sa   propesor   ang   istudyante*
        answer   professor   student
        'The student answered the professor.'

    b.   *sinagot   ng   istudyante   ang   propesor*
        answered   student   professor
        'The student answered the professor.'

However, this seems to be an artifact of their transformational framework and anglocentric bias. From the lexicase point of view, these *-in-* transitives are syntactically identical regardless of whether the derivational sources of their main verbs are transitive, intransitive, or even nominal. Thus we would analyze the examples as follows:

(10.151)   Tagalog

    a.   *bumili ng bangka ang mangingingisda*

$$\begin{bmatrix} \text{Gen} \\ \text{LOC} \end{bmatrix} \qquad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

        'The fisherman bought the boat.'

    a'. *binili ng mangingingisda ang bangka*

$$\begin{bmatrix} \text{Gen} \\ \text{AGT} \end{bmatrix} \qquad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

        'The fisherman bought the boat.'

    b.   *sumalpok sa bangka ang alon*

$$\begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix} \qquad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

        'The wave struck the boat.' (Actor)

    b'. *sinalpok ng alon ang bangka*

$$\begin{bmatrix} \text{Gen} \\ \text{AGT} \end{bmatrix} \quad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

        'The wave struck the boat.' (Location)

    c.   *sumagot sa propesor ang istudyante*

$$\begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix} \qquad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

        'The student answered the professor.'

c'. *sinagot ng istudyante ang propesor*

$$\begin{bmatrix} \text{Gen} \\ \text{AGT} \end{bmatrix} \qquad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

'The student answered the professor.'

According to Videa DeGuzman (p.c.), the example above with *sumalpok* is very marginal; if it can be said at all, it would have to have an accidental meaning and be glossed as 'strike against'. This observation of course is consistent with our distinctive derivational analysis of these examples, but not with Schachter and Otanes' transformational approach.

Finally, the perfective meaning associated with *ni-/-in-* affixed verbs in modern languages can then be traced back to the 'affected by' and 'result' meanings introduced by the original nominalization rules. Examples:

(10.152)   Seediq
             pɨkɨhkán   'made (them) quarrel' [Q205.1]
             p<ɨn>ɨkɨhkə́n   'was made to quarrel' [Q203]

10.9.2.3 *-ana

10.9.2.3.1 Reconstruction

The widespread *-an* and *-ana* suffixes marking locative nouns and verbs in Austronesian languages are reconstructed here as *-ana rather than *-an, primarily based on evidence from Oceanic languages and on the *-ana* suffixes found in Malagasy (Dahl 1973:118) and Tsou (Tung et al. 1964:174-175). In the Central Pacific subgroup *-ana is replaced by *-anga* (sometimes *-nga*). The substitution of the velar nasal for *n is irregular but as this substitution has evidently occurred in several morphemes, it is very probable that the Central Pacific suffix is cognate with POC *-ana. A similar correspondence is exhibited in certain languages of the eastern Solomons, which show *-anga* for expected *-ana*.

The original *-ana was bimorphemic, probably consisting of a ligature *-a plus an attributive NP composed of a demonstrative pronoun *na. Several modern languages retain *-ana in this function, including Bilaan. Compare Kagayanen *-an* < *-ana, Ivatan *-ay* < *-a + ya*, and Isinai *-ad* < *-a + di*. The latter are still demonstrative pronouns or definite articles, and illustrate the kind of process involved.

The combination of a linker plus a noun in PAN, as in modern languages, could only be attached to nouns, and this is reflected in the widespread appearance of reflexes of *-ana as nominalizing suffixes on verbal stems. Note that this implies that the bases for

this affixation must have already been (Ø-derived) noun when *-a + *na fused with them as suffixes. As we have noted elsewhere in this paper, this nominal status is the original and most widespread function of *-an*, with true verbal focus present only in a limited number of constructions with 'focus' affixes in Philippine languages.

10.9.2.3.2 Locative noun derivation with *-ana: N + *-ana → N [+locn]

As one might expect from its original syntactic function as a postposed attribute to nouns, a fairly common reflex of *-ana is as a suffix on noun stems. The basic interpretation of these *-an(a)* nominals is normally locative.[9] This fact must be connected somehow with the demonstrative properties of the original *na, but the exact mechanism by which *-ana specialized in this function is not yet clear. The following Tagalog examples illustrate this kind of derivation.

> (10.153) Tagalog (Schachter & Otanes 1972:25, 65, 98)
> | | | | |
> |---|---|---|---|
> | *palad* | 'palm' | *kapalaran* | 'fate' |
> | *gulay* | 'vegetables' | *gulayan* | 'vegetable garden' |
> | *aklat* | 'book' | *aklatan* | 'library' |
> | *halaman* | 'plant' | *halamanan* | 'garden' |
> | *lansones* | 'kind of fruit' | *lansonesan* | 'place for growing lansones' |
> | *tarangka* | 'lock' | *tarankahan* | 'gate' |

In Tsou (Wolff 1973:83, Tung et al. 1964:174-175), *-ana* combined with the name of a place refers to the people of that place, e.g.

> (10.180) *luhtu* (village name) + *-ana* = *luhtuana* 'the people of Luhtu'

10.9.2.3.3 Pronominal derivation with *-ana: Pronoun + *-ana → Oblique pronoun

One of the early functions of the *-ana suffix was as a locative marker on personal pronouns and sometimes personal nouns. There is a grammatical requirement in many Austronesian languages that definite non-subject 'Patients' be in the Locative case form, and thus all non-subject personal pronouns, being lexically definite, could only appear in a Locative form, frequently a form involving *i-* prefixation and/or *-an* suffixation. This

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[9] Miscellaneous functions of modern reflexes of *-ana as a noun suffix include 'imitation of N' in Tagalog (Schachter & Otanes 1972:100) and Betawi (Ikranagara 1975:133-134), 'banknote' in Betawi (Ikranagara 1975:131-132), and a number of other functions in conjunction with various derivational prefixes.

function is still reflected in Formosan languages such as Amis, Rukai, and Atayal, e.g.,

(10.154)   Amis (Chen ms)
           cira   'he, she'
           iciraan   'him, her'

(Personal 'direct objects' in Amis and in many Philippine languages must appear in the Locative case form).

(10.155)   Rukai (Li 1973:76); Accusative *-a* < *-ana

		Nominative	Accusative
1sg		*kunaku*	*nakua*
2sg		*kusu*	*musua*
3sg		*kuani*	*inia*
		kuaḍa	*iḍaa*
1pl	incl	*kuta*	*mitaa*
	excl	*kunai*	*naia*
2pl		*kunumi*	*numia*
3pl		*kuliḍa*	*liḍaa*

(10.156)   Atayal (Egerod 1966:356)

		Nominative	Accusative
1sg		*sakuʔ, kuʔ*	*knan*
2sg		*suʔ*	(*i*)*sunan*
3sg		*hiaʔ*	*hian*
1pl	incl	*taʔ*	*ʔtan, itan*
	excl	*sami*	*sminan*
2pl		*simu*	*smunan*
3pl		*hgaʔ*	*hgan*

10.9.2.3.4 Deverbal function of *-ana

(V + *-ana   →   N [+locn])
(V + *-ana   →   N 'object')
(V + *-ana   →   N [+grnd])

10.9.2.3.4.1 Oceanic evidence

The occurrence of reflexes of *-ana in many Oceanic languages is typical of the nominal uses throughout the Austronesian family. The morphemes are suffixed to verb

stems denoting a posture or position, or an activity associated with a place or point of reference, and the resulting noun denotes the place where the action takes place. Examples:

(10.157)   Roviana (Central Solomons)
sigoto	'to anchor'	*sigotoana*	'anchorage'
huvehuve	'to bathe'	*huvehuveana*	'bathing place'
habotu	'to sit'	*habohabotuana*	'sitting place'
karovo	'to cross over'	*karovana*	'bridge'
veko	'to put down'	*vekovekoana*	'shelf, place for putting things on'

(10.158)   Nakanai (New Britain)
go-ilo	'to go in, enter'	*goilola*	'entrance, entering'

(10.159)   Paamese (C. New Hebrides)
too	'to live'	*tooene*	'living area, village'

(10.160)   Maori
moe	'to sleep'	*moenga*	'bed, sleeping place'
tuu	'to stand'	*tuuranga*	'site, position'
noho	'to sit, stay'	*nohoanga*	'seat'
tau	'to anchor, come to rest'	*tauranga, taunga*	'resting, anchorage, fishing ground'

(10.161) Rotuman
favi	'to anchor'	*faviga*	'anchorage'
mose	'to sleep'	*mosega*	'bed'
fū	'to stand'	*fūaga*	'platform, status, rank'
'ojo	'to die (of chiefs)'	*'ojoga*	'death bed of a chief'

In a few Oceanic languages (e.g. Roviana), *-ana is restricted to deriving locative nominalizations, but generally it has broader uses, forming nouns from a variety of semantic classes of verbs (V + *-ana → N 'object'). In many New Hebrides languages, *-ana forms nouns denoting an action either in a particular instantiation or as a general class, e.g.:

(10.162)   Paamese
sau	'to sing'	*saune*	'singing, song'
tuunu	'to tell stories'	*tuunuene*	'story-telling, story'
mesai	'sick'	*mesaiene*	'being sick, disease'
hilu	'to cough'	*hiluene*	'coughing, a cough'

(10.163) Nguna

    a. *e   pei   tea   mari-ana*
        it   was   one   doing
        'It was done.' Lit.: 'it was one doing'

    b. *kuga wo   pei   tea   varati-ana*
        you   will   be   one   beating
        'You shall be beaten.' Lit.: 'you will be one beating'

    c. *e   pei   tea   atae-mataki-sua-ana*
        it   is   one   knowing-ready-already
        'I am already known.' Lit.: 'it is one ready knowing already'

Within Oceanic, *-ana is widely reflected in derived nouns denoting concrete objects produced by or affected by the action of the verb stem:

(10.164) Tigak (New Ireland)

sang	'to come, arrive'	*sangsangan*	'arrival'
pasal	'to buy'	*paspasalan*	'payment'

(10.165) Nakanai

mutele	'generous'	*mutelela*	'generosity'
ragatavu	'to jump towards'	*liragatavula*	'jumping'
vikue	'to fight'	*vikuela*	'a fight'
vigilemuli	'to tell a story'	*vigilemulimulila*	'story'
sagege	'happy'	*sagegela*	'happiness'
iloburuko	'worried'	*iloburukola*	'worry (N)'
visae	'to load, cause to embark'	*visaela*	'loading, embarkation'
tuhatoro	'to take refreshments'	*tuhatorola*	'refreshments'

(10.166) Kwaio (Malaita)

leka	'to go'	*lekanga*	'trip'
oso	'to eat'	*osonga*	'meal'
masa	'to play'	*masanga*	'game'
kwa'i-a	'to strike'	*kwa'inga*	'blow'
usi-a	'to barter'	*usinga*	'market'
kwae-a	'to repay'	*kwaenga*	'repayment'

(10.167)   Maori

    a.   *toona*   *haere-nga*   *mai*
        his   proceeding   hither
        'on his arrival' Lit.: 'on his proceeding hither'

    b.   *te*   *koorero-tanga*
        the   speaking
        'the speaking'

    c.   *te*   *reka-nga*   *o*   *te*   *kei*
        the   sweetness   of   the   food
        'the food is sweet' Lit.: 'the sweetness of the food'

(10.168)   Rotuman

    a.   *tē sapo-ga*   'handle; thing holding'
    b.   *tē ha'u-ga*   'parcel, bundle'
    c.   *'a-mauri*   'save; cause to live'
    d.   *'amauri-ga*   'saviour'

The gerundive use of *-ana is found in Polynesian languages and in certain languages of western Melanesia, though not so characteristically as in the New Hebrides.

Probably not all of these functions of *-ana are original. Reconstructing the respective uses of these elements is made more difficult by the fact that no single contemporary Oceanic language possesses more than two of the three as a productive morpheme; it is likely that the overlap in functions exhibited by the reflexes of *-ana and *-in- in different witnesses is not an original feature of Proto-Oceanic so much as the outcome of the loss of one member of the pair, with the surviving member expanding its role to fill the functional gap left by the loss. Thus, it is noteworthy that the New Hebrides and Central Pacific languages which use *-ana as an all-round noun-derivative lack a productive reflex of *-in-, while Kuanua, which has *-in- as the general noun derivative, lacks *-ana. The question is, what was the situation in Proto-Oceanic?

Three lines of evidence may be brought to bear on this question. First, the testimony of non-Oceanic witnesses. Second, the evidence from those few Oceanic languages which do continue to oppose reflexes of *-ana and *-in- as productive affixes. Third, the clues provided by such fossilized reflexes as survive in those languages which lack productive reflexes of a given affix.

These three lines all indicate that *-in- had, in POc, approximately the range of functions which it continues to serve in Roviana, i.e. in deriving nouns denoting an entity that is the characteristic object of an action verb. *-ana on the other hand, probably had a

wider range of functions than it now has in Roviana. Besides deriving nouns of place from verbs of positional relation it probably formed, from certain other transitive verbs, nouns denoting result, product or other entity typically associated with the grammatical object. *-ana of the gerundive derivation function, the external evidence presented elsewhere in this paper gives quite firm support to these hypotheses.

10.9.2.3.4.2 Western Austronesian evidence

Precisely the same kinds of derivation are also found in Western Austronesian languages, including Formosan, e.g.:

(10.169)   Javanese (Wolff 1973:83)
           turɔn   'place to sleep'   *cf. tutu*   'sleep'

(10.170)   Malagasy (Dahl 1973:106)
           tetez-ana   'bridge'   *cf. mi-teti*   'pass from one to another'

(10.180)   Malay (Dahl 1973:106)
           titi-an   'bridge'   *cf.* Javanese *t(ə)liti* 'descent'

(10.181)   Betawi (Ikranagara 1975:126)
           macul   'to hoe'   *paculan*   'hoeing, area hoed'

In Betawi, *k-* + V + *-an* derives nouns of abstract result, a function that may be related to the Kagayanen use of *-an* for result nominals (see below) and to the Oceanic 'direct affect' derivatives. Since this function is also reconstructible for Proto-Oceanic, it must have been present at least as far back as Proto-Malayo-Polynesian.

Kagayanen

In Kagayanen, (Harmon 1977:96), *-an* derives nouns of two types:

a. a nominalization with a verb stem plus the suffix *-an* alone, glossed as 'place where V occurs', e.g.:

(10.182)   Kagayanen (Harmon 1977:96)
           tagu   'to put away, hide'   *tagu-an*   'hiding place'
           ginawa   'to breathe'   *ginawa-an*   'lungs'
           asud   'to pound'   *asur-an*   'mortar'

b. a verb stem suffixed with *-an*, and with an *-in-* infix, referring to the thing created as a result of the action of the verb, e.g.:

(10.183) Kagayanen
palit	'to buy'	*p\<in\>alit-an*	'purchases'
kawil	'to fish with a hook and line'	*k\<in\>awil-an*	'fish caught on hook and line'
kanta	'to sing'	*k\<in\>anta-an*	'money earned by singing'

(10.184) Bontok
tíkid	'to climb'	*tikídan*	'ascending trail'
ʔəsəg	'descend'	*ʔəʔəsgan*	'descending trail'
patuŋ	'to sit, perch'	*papatuŋan*	'seat, stool'

Tagalog

In Tagalog, *-an* nominals can be non-directional or directional, depending on the inherent source or goal features of the base verb, e.g.:

a. Non-directional:

(10.185) Tagalog (Schachter & Otanes 1972:98)
giik	'to thresh'	*giikan*	'threshing place'
hiram	'to borrow'	*hiraman*	'place for borrowing'
kumpisal	'to confess'	*kumpisalan*	'confessional'
tago	'to hide'	*taguan*	'hiding place'

b. Directional:

(10.186) Tagalog (Schachter & Otanes 1972:71)

a. *b\<in\>alik-an   niya   ang   Maynila*
returning-place   his   Manila
'He returned to Manila.'
Lit.: 'Manila was his returning-to-place'

b. *t\<in\>akas-an   niya   ang   bilangguan*
escaping from-place   his   prison
'He escaped from prison.'
Lit.: 'the prison was his escaping-from place'

(10.187)   Amis [M33.1]
     kavutiʔ   i   kakavutiʔan
     go sleep   on   bed
     'Go sleep on the bed!'

(10.188)   Seediq (Asai 1953:19, 27-30)

sai	'to go'	*saan*	'place of going'
mutaqqi	'to sleep'	*taqqijan*	'sleeping house'
kumpaħ	'to cultivate'	*kumpaxxan*	'plantation'
rumeppaħ	'to grind'	*reppahan*	'grindstone'
maŋal	'to take'	*ŋalan*	'thing taken'
mita	'to see'	*taan*	'thing seen'
muʈukkui	'to sow'	*tukujan*	'seeds sown'
meðaħ	'to come'	*ðahhan*	'menses'

Bunun

   In Bunun (Jeng 1969:146), *-an* has two nominalizing functions:

   1) V + *-an* = 'place having the property of V', and
   2) V + *-an* = 'thing having the property of V'.

   Thus the Bunun word *madiklaʔan* can mean 'bad place' or 'bad thing'.

The examples for Formosan do not have the clear 'result of the action' reading associated with the extra-Formosan examples above, so it remains an open question whether the result nominalization function of *-ana can be reconstructed for PAN.

10.9.2.3.5 'Object focus' with *-an*

   Reflexes of *-ana sometimes appear in what have been analyzed in various Formosan and Philippine languages as Object Focus constructions, e.g.:

(10.189)   Tagalog (Schachter & Otanes 1972:154)
     hinugas-an ni   Rosa ang mga pinggan
     washed-on   Gen   Rosa   dishes
     'What Rosa washed is some dishes.'
     Lit.: 'the dishes were Rosa's washed-on things'

This 'Object Focus' function of -*an* with some verbs appears to be a secondary development from the locative -*an* used in a partitive sense. The development of 'Object Focus' forms with *-ana took place via ordinary locative nominalizations. The object of a verb such as 'see' (*cf.* Atayal *kt-an*; Egerod 1966:351) can be interpreted as the place toward which one's view is directed, and the dishes being washed can be viewed as the Locus at which an intransitively conceptualized action of washing is carried out.

Such sentences have been viewed by Philippinists as 'Object Focus' primarily for semantic reasons, based for example on their translatability as English transitive sentences. The difference in form has been associated with a semantic distinction, the contrast between total effect and partial or superficial effect. Thus, washing dishes has only a superficial effect on the dishes, and being seen has little or no concrete effect on the see-ee, and being needed may not even be noticed by an animate object of the needing. However, it is an open question whether or not there is any grammatical justification in most cases for grouping these -*an* OF's together with the usual Object Focus verbs in -*en*, rather than with Locative Focus verbs in -*an*.

If we put aside the mental set resulting from the way such sentences are translated into European languages, it is perfectly possible to view almost all of them as cleft equational Locative Focus constructions directly reflecting the original locative nominalizing function of *-ana in PAN, and we do in fact analyze most of them in this way. Still, some of them are strongly resistant to such an analysis when they have too many non-subject actants, e.g.:

(10.190)   Tagalog (DeGuzman 1978:194)

nakitaʔan   *ng*   *doktor*   *ang*   *pasyente*   *ng*   *isang*   *malaking*   *tumor*
was seen   doctor   patient   a   big   tumor
'The patient was seen by the doctor as having a big tumor.'

10.9.2.3.6 *-ana as derivational rather than inflectional

The fact that -*an* nouns are derived rather than inflected is attested to by (1) the relative independence and antiquity of, for example, the Malagasy examples given above; (2) the fact that -*an* forms can sometimes be rederived, as for example in Seediq:

(10.191)   Seediq (Asai 1953:37-38)

mutaan   'of a place or an object seen'
kutaan   'an object of sight'
kunutaan   'an object seen'
mutaan   'an object seen'
cf. mita 'to see', *taan* 'an object seen'

(3) the existence of lexicalized unpredictable forms contrasting semantically with formally identical *-an* nouns with regular meanings, such as *laru'-an* 'toy' versus *laru'-an* 'place for playing', both derived from *laro'* 'play' (DeGuman p.c.); and by (4) the existence of isolated *-an* forms which are lexicalized and unrelated to any of the inflectional forms in the verbal paradigm. An example of this is Tagalog *balutan* 'bundle, package' (Ramos 1971:33), a noun derived from a verb stem *balot* 'wrap' which has no *-an* forms in its voice paradigm.

10.9.2.3.7 *-ana nouns in NPs

Deverbal *-an* nouns can take possessive picture-noun complement objects or agents corresponding to the actants of corresponding AF verbs, e.g.:

(10.192)   Tagalog (Schachter & Otanes 1972:98)
   a.   *giikan ng palay*   'place for threshing rice'
           cf. maggiik ng palay   'thresh rice'
   b.   *hiraman ng pera*   'place for borrowing money'
           cf. humiram ng pera   'borrow money'

However, we think the relationship with AF verb clauses is indirect, and that the *-an* nouns are derived directly from the verbal stems.

-an nouns derived from verbs can serve as the heads of the nominalized N attributes that serve the function of relative clauses in many Western Austronesian languages. Thus a noun phrase translated as 'the bank where we borrowed money' in Tagalog would literally be 'the bank which is our borrowing place of money.'

(10.193)
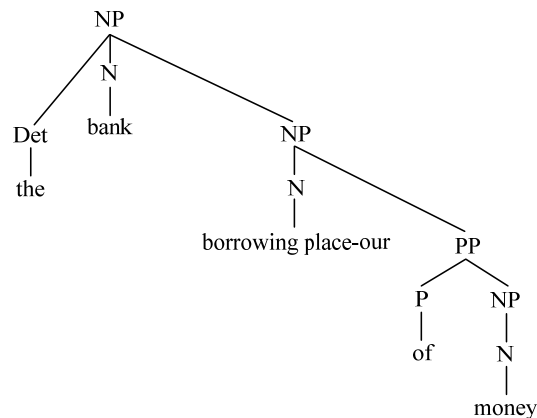
In some Indonesian languages such as Kambera and Manggarai (Kähler 1974:259-260), a single bare noun meaning 'place', sometimes under (or over?) a 'linker' (Kähler 1974:265-266), serves as the head of such constructions, e.g.:

(10.194)

```
                        NP
                        |
                        N
              ┌─────────┼─────────┐
            Det       bank        NP
             |                     |
            the                    N
                          ┌────────┼────────┐
                        Det      place      NP
                         |                   |
                        link                 N
                                    ┌────────┴────────┐
                          borrowing place-our         PP
                                               ┌──────┴──────┐
                                               P            NP
                                               |             |
                                               of            N
                                                             |
                                                           money
```
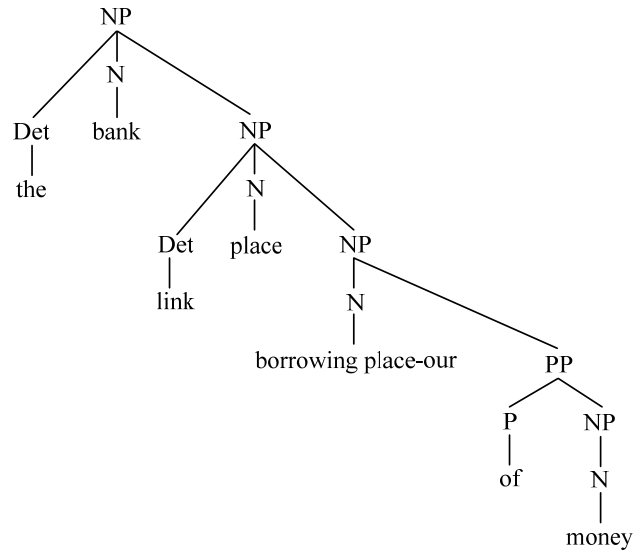
In Bunun, the conventional head noun in this construction is itself an *-an* nominalization, *dediŋiʔan* 'happening place'. This pattern of locative nominalizations acting as attributes is paralleled by instrumental nominalizations, and it is quite possible that this construction is the bridge from the original nominalized modifiers to the familiar Indonesian constructions with a relative noun such as *yang* dominating a sentential modifier, e.g.:

(10.195)

```
                    NP
                   /|\
                  / N \
                 /  |   \
              Det  bank  NP
               |        /|
              the      N  \
                       |   \
                     yang   S
                           /|\
                          / V \
                         /  |   \
                       NP borrow NP      PP
                        |         |     /  \
                        N         N    P    NP
                        |         |    |     |
                       we       money from   N
                                              |
                                             it
```
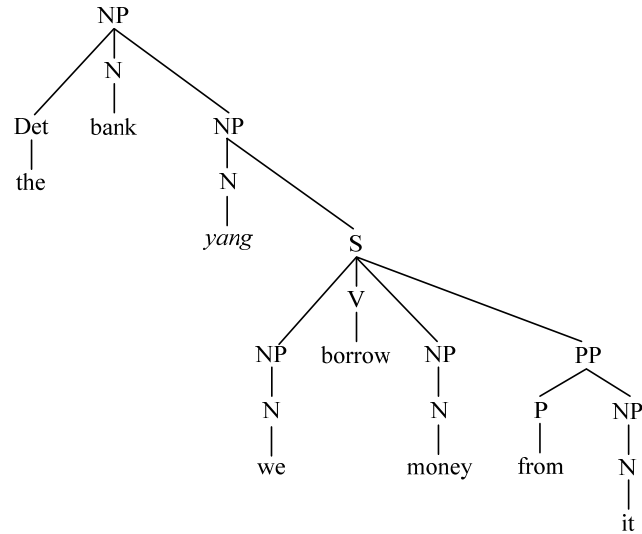
10.9.2.3.8 Denominal derivation with *-ana: N +*-ana → V

One function of -*an* in Tagalog is to derive verbs from nouns. For example:

(10.196)   Tagalog (Schachter & Otanes 1972:25)
        tukur-an   'be used as a cane'   *cf. tukod*   'cane'
        masd-an   'observe'   *cf. masid*   'observation'

Both of these are probably old, judging from the phonological reductions and alterations they have undergone. The first seems to be analogous to the Amis -*en* suffix used to derive instrumental verbs such as *lakaw-en* 'do with a pole' from *lakaw* 'pole'.

However, Amis -*en* reflects *-en, not *-ana, so it is not clear whether these can be related. Other examples of -*an* verbalization include the following:

(10.197)   Tagalog (DeGuzman 1978)
        kabag-an   'suffer gas pain'   *cf. kabag* 'gas, pain'   (p.274)
        bendah-an   'to bandage'   *cf. benda* 'bandage'   (p.278)
        kamay-an   'shake hands with'   *cf. kamay* 'hand'

A similar verbalizing function that does not seem to have any Formosan counterparts is the one that produces verbs from adjectives, e.g.:

(10.198)   Tagalog (Schachter & Otanes 1972:25)
            sund-an   'be followed'   *cf. sunod* 'next, following'

In Philippine languages such as Tagalog, *-an* functions sometimes to derive intransitive verb classes such as reciprocals from transitive verbs stems, e.g.:

(10.199)   Tagalog (Schachter & Otanes 1972:99)
            a.   *away-an*   'fighting (one another)'
                 um-away   'fight'
            b.   *bigy-an*   'giving (one another)'
                 mag-bigay   'give'

This could posssibly be a secondary derivation, with *-an* first forming a nominal form in *-an*, a process which stripped off one or more verbal actants, as in:

(10.200)   a.   *bigyan ng regalo*   'giving gifts'
            b.   *sulutan ng liham*   'writing letters'

followed by a meaning shift, via a habitual meaning, to a mutual one, followed by a reverbalization via the usual reinterpretation process for cleft sentences, with only the actants available to the source noun carried over to the new verb. It is also possible that the reciprocal meaning came in with the aid of an etymologically false analogy to word sets such as:

N
ka + N   'person or thing reciprocally associated with N'
ka + N + *an*   'class or group of N's'

The derivational status of this class is established by the existence of such re-derived nouns as *ka-totoh-an-an* 'truth' < *totoo* 'true'.

Examples in which transitive verbs appear to be derived from locative intransitives can be given as examples of such an analysis. For example:

(10.201)   Tagalog (Schachter & Otanes 1972:78)
            a.   *t<um>ulong   sa   babae   ang   bata*   (intransitive)
                 help   woman   child
                 'The child helped the woman.'

b.　*t\<in>ulong-an*　*ng*　*bata*　*ang*　*babae*　　　(transitive)
　　helped　　　　　child　　　woman
　　'The child helped the woman.'

In this case, however, we are dealing historically and probably synchronically with nominalization rather than transitivization. Thus the structures of the two examples above are quite different, as shown in the following tree diagrams:

(10.202)　Tagalog

a.

```
                    S
          ╱─────────┼──────────────╲
          V        NP              NP
          │       ╱  ╲            ╱  ╲
    t<um>ulong  Det  N         Det   N
                 │   │          │    │
                 sa babae      ang  bata
                    ┌─────┐         ┌─────┐
                    │ Lcv │         │ Nom │
                    │ LOC │         │ PAT │
                    └─────┘         └─────┘
```
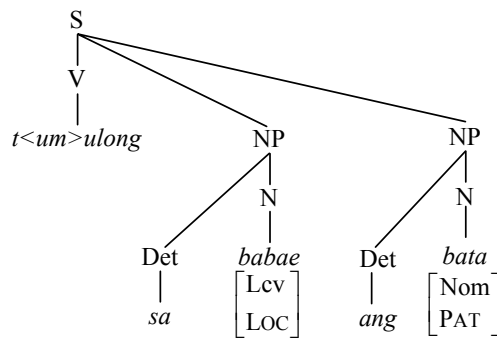
Lit.: 'The child helped to the woman.'

b.

```
            S
          ╱─┼──────────────╲
         NP               NP
        ╱ ╲              ╱ ╲
       N  NP           Det  N
       │  ╱ ╲           │  babae
t<in>ulong-an          ang ┌─────┐
         Det  N            │ Nom │
          │   │            │ PAT │
          ng baba          └─────┘
             ┌─────┐
             │ Gen │
             │ AGT │
             └─────┘
```
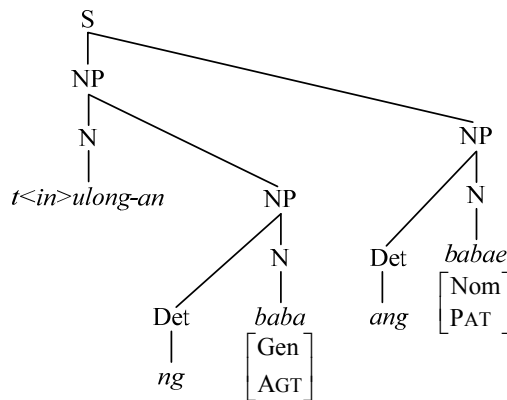
Lit.: 'The woman was the helped-on one by the child.'

The fact that these classes are derivationally independent is supported by the existence of the class of 'pseudo-intransitive verbs', which includes most of the intransitive *-an* verbs, e.g.:

(10.203)   Tagalog (Schachter & Otanes 1972:284-285)

ayus-an   'arrange'

bagal-an   'make slow'

haya-an   'let'

tanda-an   'remember'

which occur in the second pattern above but not the first. By our analysis, these are nouns for which no corresponding verbs have as yet been derived. Such gaps are of course the rule rather than the exception in lexical derivation, but are difficult to account for if the two classes above are analyzed as inflectional alternants.

There are other apparently analogous cases in Tagalog which cannot be accounted for by this analysis, however. For example, the *-an* suffixed members of the following pairs look like transitive sentences with adversative meanings:

(10.204)   Tagalog (Ramos 1974:174)

a.   *nabali ang binti*   'The leg broke.'

b.   *nabali-an siya ng binti*   'He broke his leg.'

(10.205)   Tagalog (DeGuzman p.c.)

a.   *nawala ang pera niya*   'His money got lost.'

b.   *nawal-an siya ng pera*   'He lost some money.'

Historically, the *-an* examples were probably nominal sentences, which could be glossed (rather awkwardly) as 'He is the one-broken-on of the leg' and 'He is the one-lost-on of the money'. Synchronically, however, this analysis is no longer possible for all such cases, due to examples such as the following in which a non-pronominal subject intervenes between the predicate in *-an* and the Genitive attribute:

(10.206)   Tagalog (DeGuzman 1978:331-333)

a.   *s<in>akit-an   si   Bobby   ng   ulo*

suffered   Bobby   headache

'Bobby suffered a headache.'

Cf.   b.   *s<um>akit   ang   ulo   ni   Bobby*

suffer   headache   Bobby

'Bobby's head ached.'

Pairs such as:

(10.207)   Tagalog (DeGuzman 1978:329)
      a. *lakih-an* 'enlarge s.t.'   *laki* 'size'
      b. *payat-an* 'make s.t. thin'   *payat* 'thinness'

can be accounted for in a similar way.

It can be seen that there is a fair amount of agreement across the Oceanic group as to the general functions of *-ana: as a derivative of local nouns with what we might call verbs of positional relation, of action nominals from action verbs, and (less regularly) nouns denoting mental disposition (from verbs of mental state) or denoting the object produced, consumed, or directly affected by the action of the verb. It is possible that these agreements are partly the result of convergent development, in which an originally more specialized suffix broadened its range of functions in several different subgroups of Oceanic. On present evidence, however, it is reasonable to attribute certain widespread functions to Proto-Oceanic, and when the evidence from Western Austronesian and Formosan languages is considered, most if not all of the functions of *-ana as a nominalizing affix at least can be carried all the way back to Proto-Austronesian.

10.9.2.4 *mu-/-um-

10.9.2.4.1 Reconstruction

The 'Agentive Focus' marker in Philippine languages is normally the infix *-um-*, a form which also occurs in some Malagasy AF verbs (Dahl 1973:118). We reconstruct the progenitor of this marker as *mu-/-um-, based on data from Formosan languages which allows us to reconstruct both the infixed and prefixed forms for Proto-Austronesian. Dahl (1973:119), for example, cites the following Formosan etymologies involving the infixed form:

(10.208)   Atayal

*kit$_1$a	>	*k-um-it$_1$a	>	*m-ita*	'see'
*kaen + -iq	>	*q-(u)m-an-iq	>	*maniq, qaniq*	'eat'
*bəɣai	>	*b-(u)m-iq	>	*miq*	'give'
				RF *biq-an*	

(10.209)   Bunun

      *p-um-an$_1$ aq > *manah* 'shoot'
      (*manaq* and *panaq* in Starosta's field notes)

(10.210)   Pazeh

      *t$_2$-um-aŋit' > *maŋit* 'weep'

(10.211)   Paiwan
           k<əm>an   'eat'

(10.212)   Seediq
           *kit₁a   >   *k-um-it₁a   >   *k-m-ita*   'see'

Compare also the following:

(10.213)   Seediq (Asai 1953:27)
           tuminun   'to weave'   *tinun*   'loom'
           kamappi   'to trap'   *kappi*   'a trap'
           kəmuðuɦ   'to rain'   *kuðuɦ*   'rain'
           kmuti   'to evacuate'   *kuti*   'faeces'

Compare also the following Amis active verbs:

(10.214)   Amis
           mi-mɨlaw   'to watch'
           pa-pi-mɨlaw   'to show'

           mi-nanoaŋ   'shake' (intr)
           pa-pi-nanoaŋ   'cause to shake'

Dahl (ibid.) considers the Amis active verb prefix *mi-* to derive from the same etymon occurring as a PAN prefix *mu-, and provides other Formosan examples of the prefixed form:

(10.215)   Pazeh
           mu-kitá   'to see'

(10.216)   Saisiyat
           mo-bay   'to give'   <   PAN   *bəɣai

(10.217)   Rukai
           mo-ʔarór   'flow'   <   PAN   *aluɣ 'watery'

Similar examples are found in Atayal, e.g.:

(10.218) Atayal (Egerod 1965:255)

ciriq	*mciriq*	*triqan*	'to fight'
cisal	*mcisal*	*sala*	'to play'
hiliʔ	*mhiliʔ*	*hlian*	'to accuse'
qila	*mqila*	*qlaan*	'not feel like'
sinaʔ	*msinaʔ*	*snan*	'to demand'

Compare also Seediq *muup-* (< *mu-pa-) on causative active verbs (Asai 1953:33), and the common alternation in Tsou between active forms in *m-* or *b-* (//m-p-//) and the passive forms without the prefix (Tung et al. 1964:183-185).

Dahl points out the interesting parallel between this *mu-/-um- alternation and the *ni-/-in- alternation in the 'Objective Focus' affix. It seems likely that the infixation of one of these original prefixes influenced the parallel development of the other. It is not clear which of the two led the way, but the reconstructible sequence *-umin- (*cf.* Seediq *mun-/-mun-* active, past tense, Asai 1953:31-32, and *-əmɨn-*, Starosta (Q314)) shows *-in-* infixation preceding *-um-* infixation when both applied to a given form, suggesting that *-in- forms entered the lexicon before *-um- forms did.

The *mu-/-um- form also seems to be the source of the *m-* prefix which accounts for the Tagalog active versus non-active alternation between initial *m-* and *p-*, as in *pag-* versus *mag-* (//m-pag-//) and *pang-* versus *mang-* (//m-pang-//) (DeGuzman 1978: 149-150) as well as the analogous Amis alternation between *pi* and *mi* (//m-pi-//; Chen ms). The Tagalog derivational prefixes can be reconstructed in their *m-* and non-*m* forms as *paN-, *maN-, *paR-, and *maR-, with the corresponding perfective forms *p-in-aN-, *(mi)naN-, *p-in-aR-, and *(mi)naR- respectively. Although the properties of these affixes are very interesting, and should be amenable to an analysis analogous to the approach we have taken here in accounting for the origin and properties of *ni-/-in-, *-en, *-ana, *mu-/-um-, and *iSi-, we will have nothing more to say about them in this paper.

One use of *mu-/-um- which is widespread in Philippine languages is the derivation of active verbs in *m-* or *-um-* from non-active un-prefixed 'passives'. To cite Tagalog examples:

(10.219) Tagalog (Schachter & Otanes 1972:78-79)

a. *t<in>ulung-an*   *ng*   *bata*   *ang*   *babae*
    helped   child   woman
    'The child helped the woman.'

a'. *t<um>ulong*   *sa*   *babae*   *ang*   *bata*
    help   woman   child
    'The child helped the woman.'

b. *s<in>agot*   *ng*   *istudyante*   *ang*   *propesor*
    answered   student   professor
    'The student answered the professor.'

b'. *s<um>agot* *sa*   *propesor*   *ang*   *istudyante*
    answer   professor   student
    'The student answered the professor.'

The first example of each pair is a typical ergative construction, except for the *-an* suffix on *t<in>ulung-an*: Nominative Patient (*ang babae*, *ang propesor*) and Genitive Agent (*ng bata*, *ng istudyante*). The second example in each pair is exactly what we might expect in an antipassive construction: the Patient 'demoted' to an oblique case form (Locative *sa*) and the Agent 'promoted' into the Nominative case form. In a lexicase framework, such examples would be analyzed as follows:

(10.220) a. *t<in>ulung-an ng bata ang babae*

$$\begin{bmatrix} \text{Gen} \\ \text{AGT} \end{bmatrix} \quad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

     'The child helped the woman.'

a'. *t<um>ulong sa babae ang bata*

$$\begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix} \quad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

     'The child helped the woman.'

b. *s<in>agot ng istudyante ang propesor*

$$\begin{bmatrix} \text{Gen} \\ \text{AGT} \end{bmatrix} \quad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

     'The student answered the professor.'

b'. *s<um>agot sa propesor ang istudyante*

$$\begin{bmatrix} \text{Lcv} \\ \text{LOC} \end{bmatrix} \quad \begin{bmatrix} \text{Nom} \\ \text{PAT} \end{bmatrix}$$

     'The student answered the professor.'

Since Austronesian languages generally require Subjects to be definite, and ergative languages such as Proto-Austronesian and many of its descendants require Patients to be subjects, this derivational process could serve as a way to mark notional actors as definite without requiring notional objects to be interpreted as indefinite, as would be the case in the 'indefinite object' construction (DeGuzman 1978:76).

It remains to be determined whether or not these constructions are synchronically antipassives, as has been suggested recently within the framework of relational grammar, but whether they are or not, it is certainly possible that they did have this function at some earlier stage.

10.9.2.4.2 *mu-/-um- as a nominalizer

The original function of *mu-/-um- in Proto-Austronesian was probably that of deriving agentive nominalizations from nouns or verbs, a function very similar to that of -*er* in English, e.g.:

(10.221)
mouse	*mouser*
hat	*hatter*
court	*courtier*
(*poultry*)	*poulterer*
(*grocery*)	*grocer*
(*cottage*)	*cotter*
--	*barber*
--	*plumber*
--	*haberdasher*
mix	*mixer*
chase	*chaser*

The fact that *m-* and -*m-* forms in Atayal refer to animates (or atmospheric phenomena) supports this idea, since the agentive -*er* forms in English of course have the same implication. The nouns formed by this derivational process in PAN were later reanalyzed as verbs by the process described elsewhere in this paper.

The use of this process in deriving verbs from nouns can be illustrated by sets of English words such as :

rent   'income from property'
⇓
renter   'one who pays rent'
⇓
to rent   'to temporarily hold or grant under an agreement to pay rent'

Following are some examples of this process in Formosan languages:

(10.222)   Saisiyat

apɪs	'trap'	[+N]
um-apɪs	'trap'	[+V] active transitive
(*cf. apɪs-ɪn*	'trap'	[+V] ergative transitive)

lalíw	'earthquake' [+N]	(S43)
l<um>alíw	'earthquake' [+V]	

Asai (1953:22) cites a process in Seediq for deriving verbs from nouns by prefixing *m-*/*mu-*. He relates this *mu-* to the proto-prefix *ma-, which also derives adjectives. He also describes a process which derives active verbs by infixing *-m-*, e.g.:

(10.223)   Seediq (Asai 1953:26-27)

ledaħ	'light'	[+N]
l<um>edaħ	'light'	[+V]

However, it seems to be more likely that both of these affixes the original *mu-/-um- prefix in its common verbalizing function, with the choice between prefix and infix conditioned phonologically: prefix before vowels and *h*, infix otherwise.

The original function of *mu-/-um- in deriving nouns from verbs is also reflected in Philippine languages, such as Ilokano, where *-in-* derives verbs, but *-imm-* (< *-in-um-?) is only nominal, e.g.:

(10.224)   Ilokano [I36]

daytay	*nalukmeg*	*ti*	*immay*
	fat		came

'The one who came is the fat one.'

Compare also:

(10.225)   Chamorro

li'e	'see'
l<um>i'e	'the one who sees'
(*cf. l<in>i'e*	'the thing seen')

(10.226)   Bunun [B32]

a	*m<in>anaq*	*e*	*tumað*	*a*
	former shooter		bear	

'the former shooter of the bear'

Note, however, that there is at least one doubly infixed Seediq form which suggests a verbal analysis:

(10.227)   Seediq [Q314]
         q<əm><ɨn>ita   ko   (ka)   buusi   yooji
         saw   I   hat   Yooji
         'I saw Yooji's hat.'

*mu-/-um- as a nominalizer is, for example, very common in the nominalized equationals used in content questions and nominalized attributes in languages such as Tagalog, e.g.:

(10.228)   Tagalog (Schachter & Otanes 1972:512)
    a.   *sino   ba   ang   g<um>awa   noon*
        who   do(er)   that
        'Who did that?'; Lit.: 'The doer of that is who?'

    b.   *sino   ang   g<um>awa   ng   sapatos   na   iyon*
        who   make   shoes   that
        'Who made those shoes?' Lit.: 'The maker of those shoes is who?'

Our claim that these forms are nouns is reinforced by the existence of -*um*- words in Tagalog such as *t<um>akot*, which can only occur in these two construction types, never in ordinary verbal sentences (Mulder & Schwartz 1981:254).

10.9.2.4.3 Verbalization

By the reanalysis process described below and in §10.9.2.1.3, reflexes of *mu-/-um- frequently derive transitive verbs in modern languages. That is, nominal structures such as 'John is the shooter of the bear' are reinterpreted as 'John shot the bear', and even originally intransitive verbs can become transitive via this route. This transitivizing function is seen in for example Seediq (Asai 1953:33), where -*um*- infixed to an abstract nominalization with *k*- (Asai 1953:24-25) produces transitive verbs. Further Formosan examples:

(10.229)   Saisiyat [S43, 44, 123.2]
        lalɨŋus   'move' intransitive
        l<ɨn>alɨŋɨs   'move' transitive or unintentional intransitive
        lælɨŋɨsɨn   'be moved by'

kakalas	'fight with teeth' intransitive	
k<um>aras	'bite' transitive (of animals, mosquitoes)	

In Tsou, the *mu-/-um- prefix played a major role in deriving the active-passive distinction, and every Tsou sentence appears in one of these two modes, marked by *m*-prefixed auxiliaries and often *m*-verbs for active sentences, and *m*- less auxiliaries and verbs in passive structures (Tung et al. 1964:88).

10.9.2.4.4 Paradigmatic alternation between *pa- and *mu-/-um-

Reflexes of *mu-/-um- frequently appear in paradigmatic alternation with *pa-, suggesting that they may have similar functions in Proto-Austronesian, with *mu- meaning 'doer' and *pa- meaning 'causer'. Examples:

(10.230)   Atayal (Egerod 1966:351)

usaʔ, mosaʔ, ʔsan	'go'
pson, posaʔ	'send'
abiʔ, mʔabiʔ, ʔbian	'sleep'
pbiun, pʔabiʔ	'cause to sleep together'

(10.231)   Saisiyat [S123]

l<um>alɨŋɨs	'cause to move by itself'
palalɨŋɨs	'cause to move'

(10.232)   Amis

marɨbaahuy	'fly' [M121]
parɨßaahuyən	'release to fly' [M120]
maavanaq	'know'
paavanaq	'inform'
masatɨrɨß	'stop' (intrans; M30)
pasatɨrɨß	'stop' (transitive; M30.2)

(10.233)   Seediq (Asai 1953:23)

mekkan	'eat'	*pukkan*	'cause to eat'
maaŋal, aaŋal	'take' (Q85, Q87)	*ʔaaŋal*	'cause to take'

(10.234)   Bunun

maʔun	'eat'	*pakaunan*	'invite to eat'

(10.235)　Rukai
muadaan　‘enter the house’　　　*ʔuadaan*　‘put into the house’
maʔsay　‘die’　　　　　　　　*papasay*　‘will die’

(10.236)　Tsou
mcoi　‘die’　　　　　　　　　*opcoi, opcoza, opopcoza* ‘kill’

(10.237)　Tagalog
matay　‘die’　　　　　　　　　*patay-in*　‘kill’

The latter three forms derive from *matai and *patai respectively, where *pa- and *ma- are prefixes on the original wordbase *[q]atai (Dahl 1973:120).

There is some evidence for assuming that *mu-/-um- functioned as a dependent verbal affix, and Wolff has reconstructed this function for PAN. He states (1973:83) that Tagalog *-um-/m-* verbs that occur with past time expressions are remains of dependent forms, e.g.:

(10.238)　Tagalog
nang makakita siya nang báhay
‘when she *saw* the house’

In Samar-Leyte, such dependent forms occur after non-future preverbs, and Wolff relates this to the occurrence of *m-* forms with preverbs in Atayal.

Moreover, in Saisiyat, there is a strong tendency for /*um*/ verbs to appear in complements, e.g.:

(10.239)　Saisiyat
ʔam um-apɪs　　‘will trap’ [S26.10]
Cf.　*æʔæpɪs*　　‘the thing to be trapped’

However, the opposite pattern can be seen in Seediq, where a non-*m* irrealis form alternates with an *m*-prefixed realis:

(10.240)　Seediq
kanaʔ usa　　‘shouldn’t go’
na musa　　‘should go’

Cf.

(10.241)   Amis (Teresa Chen p.c.)

a.   *a   mimelaw   to   kako   anini*
    look at   I   right now
'I want to look at it right now.'

b.   *aka   henay   pimelaw   haw*
   don't   look   yet
'Don't look yet!'

The transition from *mu-/-um- as a nominalizer to *mu-/-um- as a verbalizer is analogous to the development of the other verbal foci, that is it involved the reanalysis of a nominalized equational as illustrated by the following schematic example:

(10.242)   a.

'My grandmother is a builder of canoes from tree-trunks.'

b.

'My grandmother builds of canoes from tree-trunks.'

The *-a verb suffix was one of the mechanisms used in Proto-Austronesian to derive verbs which 'focused' on oblique actants from normal unmarked ergative verbs. It is directly reflected in the dependent ('subjunctive') OF suffix *-a* in Atayal (Egerod 1966:347) and in Tsou (Tung et al. 1964:186). Dahl (1973:120) notes the use of *-a* in Malagasy as an imperative-operative AF affix, notes that *-a* is found in many languages with optative or subjective meaning, and also reconstructs it for PAN.

As in the case of the other foci, then, the verbalization of *mu-* involves the substitution of the *mu-* form for the *-a* form in main clauses in all the daughter languages, and later on in subordinate clauses as well in many subgroups. The signal to the younger generation that the older generation had made the transition would be the occurrence of sentences with non-final subjects, constructions that are possible with a multi-branching verbal structure but not with a binary equational nominal one. Thus the first Tagalog sentence below is ambiguously either nomimal or verbal, but the second can only be verbal:

(10.243) Tagalog (Schachter & Otanes 1972:81)

    a. *bumuli ng bigas ang babae*
         buy   rice   woman
         'The woman bought some rice.'

    b. *bumuli ang babae ng bigas*
         buy   woman   rice
         'The woman bought some rice.'

Finally, two uses of reflexes of *mu-/-um-* are also widespread, but are not readily relatable to the agentive use of the prefix:

1) Meteorological verbalizations such as the following examples from Tagalog:

(10.244) Tagalog (DeGuzman 1978:272)
    ulan [+N]   'rain'   *um-ulan* [+V] 'to rain'
    bahaʔ [+N]   'flood'   *bumahaʔ* [+V] 'to flood'

2) Inchoative derivations such as the following Tagalog examples:

(10.245) Tagalog (DeGuzman 1978:276)
    payat [+Adj] 'thin'   *pumayat* [+V] 'become thin'
    ganda [+N]   'beauty'   *gumanda* [+V] 'become beautiful'

The meteorological examples are an exception to the association of *mu-/-um-* with animateness, as noted above, and while the use of *mu-/-um-* for meteorological verbs at

least must be very old, since it is attested in both Tagalog and Atayal, it seems that these two uses must constitute some kind of separate and independent development.

10.9.2.5 *iSi- Accessory focus

The prefix *ʔi-* is a marker of Instrument, Benefactive, or Comitative Focus, and of Object Focus for 'transported objects' for a broad range of Philippine languages. We use the term 'Accessory Focus' as a convenient label for this cluster of roles, though we retain the common abbreviation 'IF' ('Instrumental Focus') to avoid confusion with AF 'Agent Focus'.

10.9.2.5.1 Reconstruction

Based on evidence from Formosan languages, Dahl (1973:119) reconstructs this form as *Si- for PAN, in spite of the fact that this would be expected to produce *hi-* in Tagalog rather than the *ʔi-* that is actually attested.

The Formosan evidence for this reconstruction does not seem to be particularly clear and convincing. Dahl cites Amis IF *sa-* as one justification for the initial *S, but it turns out that Amis *sa-* is not a regular IF marker in Amis (Chen ms). Instead, Amis *sa-* derives instrumental nominalizations which only rarely occur in a construction which could be analyzed as having an Instrumental subject. The implement-deriving *sa-* in Rukai (Li 1973:274) would probably be a more tenable example. In Bunun, there is a similar form, but it is *is-* rather than *si-*, and marks future AF as well as IF. Assuming that the final vowel of this prefix in PAN was *i, rather than *a, the reconstruction *iSi provides a better explanation for the reflexes in Bunun and Philippine languages than does *Si. Bunun *is-* can be accounted for as the result of vowel loss rather than metathesis, whereas Philippine *ʔi-* can be assumed to have developed by reduction of the Philippine reflex *ihi to *ʔi. Northern Philippine languages, which reflect PAN *S as glottal stop (or zero) woud have reduced *iʔi to *ʔi. A few Philippine languages in fact still show *hi-* rather than *ʔi-* as the IF prefix. Zorc (1977:134) cites Samar-Leyte, Waray and Northern Samar *hi-* as forming part of the IF potential affix forms (*nahi-*, *mahi-*, etc.), and Tausug *hipag-* as the IF dependent, durative form.

10.9.2.5.2 The nominalizing function of *iSi-

We believe that the original function of *iSi- in Proto-Austronesian was, as in the case of the other reconstructed 'focus' affixes, nominalization. In modern Philippine languages, it seems to be these Accessory Focus constructions that preserve the character of nominalized equationals even more so than other focus construction.

At least one of the functions of *iSi- was to derive 'purpose' nouns from verbs and other nouns. Thus from a noun 'fish' for example, it was possible to derive another noun *iSi-fish 'a thing for fish', i.e. 'a fishing pole'. This function is common in Tagalog, where it overlaps with *paN-* nominalizations, and could be the source for both the instrumental and beneficiary functions of *iSi-.

ʔi- prefixed forms also occur in Philippine languages as 'Objective Focus' affixes with verbs denoting transportation of the Patient. This function too could stem from an original 'purpose' nominalizing function, if we imagine a word such as *?i-throw 'thing for throwing' serving as the source of a later verbal reinterpretation. Alternatively, it could be an independent development from an original auxiliary verb *i 'go', reflected both in Tsou and in Bontok as an auxiliary *i* 'go'. The forms in the Philippine languages prefixed by *ʔi-* can occur either as nouns or verbs. The verbal forms have traditionally been given the most attention, with the corresponding nominals assumed to be secondary. However, we assume the nominalizations to be prior. To cite a Tagalog example:

(10.246)   Tagalog (DeGuzman 1978:276)
            lumaki na ang halamang ibinigay mo sa akin
            grow   the plant   gave   your to I
            'The plant you gave me has grown.'
            Lit.: 'The plant which is your gift to me has grown.'

Forms which occur initially in such linker attributes can always occur as heads of NPs. *ʔi-* forms in Tagalog also occur in clearly verbal constructions, as in:

(10.247)   Tagalog (Ramos 1974:44)
            ibigay mo ang lapis sa kanya
            give   you   pencil   him
            'Give the pencil to him.'

Since the subject *ang lapis* occurs in the middle of the sentence, there is no way to assign a binary equational structure to such a construction. To cite a Bunun example in which the *iSi- form is the head of a NP:

(10.248)   Bunun [B118]
            mupuŋhav naak isɓaliv tulukuk tu sui
            lost   by me buyer   chicken   money
            'I lost the money for buying chickens.'
            Lit.: 'The buyer of chickens which is money was lost by me.'

In Bunun (Jeng 1969:144-145), *is-* is also used to derive gerundives, e.g.:

(10.249)   Bunun
            isqaqanup   'hunting'
            isluklas   'crying'
            isampuk   'assembling'

However, judging from one such example that appears in Starosta's field notes, these might turn out to be better analyzed as abstract instrumental nominals such as the Amis *sa-* forms.

10.9.2.5.3 The transitivizing function of *iSi-

*iSi-, like some of the other 'focus affixes', appears to have had a transitivizing function in PAN. thus we can find examples such as the following:

(10.250)   Tagalog (DeGuzman 1978:326-327)
            bumukas   'open' intransitive
            ibukas   'open' transitive

            pumasok   'enter' intransitive
            ipasok   'take something in' transitive

The direction of derivation seems to have been intransitive to transitive, since there are some *-um-* verbs without corresponding *i-* verbs, but not vice versa. To cite additional examples from Atayal:

(10.251)   Atayal (Egerod 1966:353)
            ŋuŋuʔ, mŋuŋuʔ, kŋŋuan   'to fear'
            sŋuŋuʔ, sŋŋuan   'to frighten'
        Cf. *sʔurux, srxan, srxau*   'to make stand' (p.355)

The transition from nominalized equational to instrumental focus verbal would have proceeded in the same way as the development of the other foci, e.g.:

(10.252)   a.
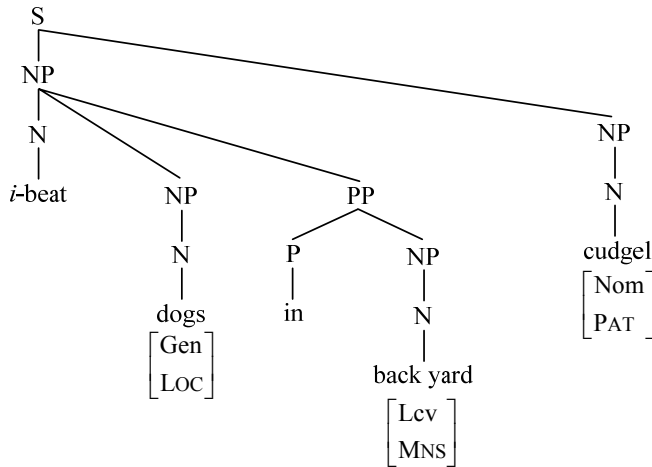
'The cudgel is the beater of dogs in the back yard.'

b.
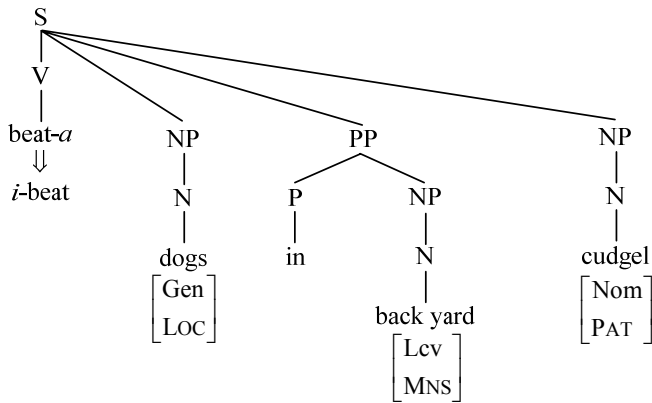
'The cudgel beats of dogs in the back yard.'

## 10.9.2.5.4 The development of Benefactive Focus

The evolution of Benefactive Focus is similar to that of the other focus affixes, although it is unclear why some benefactive forms in Tagalog and other Central Philippine languages are marked by *ʔi-* and others are marked by *-an*, whereas in Cordilleran languages of the northern Philippines Benefactive focus is invariably marked by the affix combination *ʔi-…-an*.

The same *iSi- nominalizing prefix produced nouns meaning 'for V/N', but judging

from modern languages such as Samar-Leyte in which the original verbal affix is still preserved in dependent clauses (Wolff 1973:73), the verb form replaced by the *iSi-nominal was the locative *i-* suffixed one, not the *-a* verb, and this plus a difference in the animateness of the equational subjects and in the directionality of the 'for' reading produced a split in the derived constructions. The noun-to-verb shift was parallel to the other reinterpretations described above, and can be illustrated by means of the following schematic examples:

(10.253)   a.
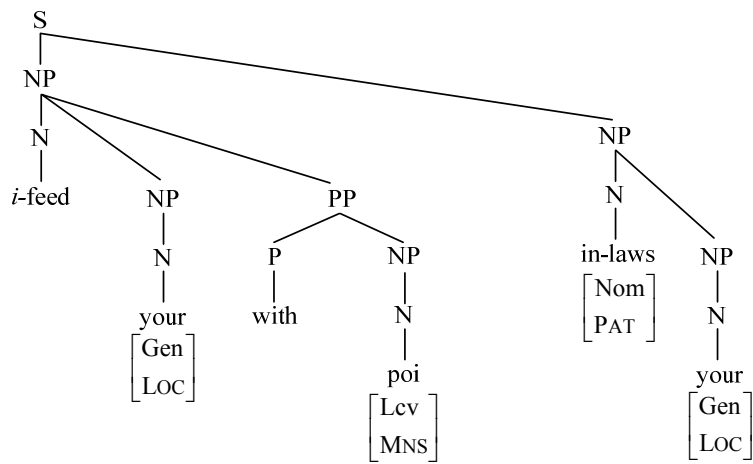
'Your in-laws are your ones for feeding with poi.'

b.
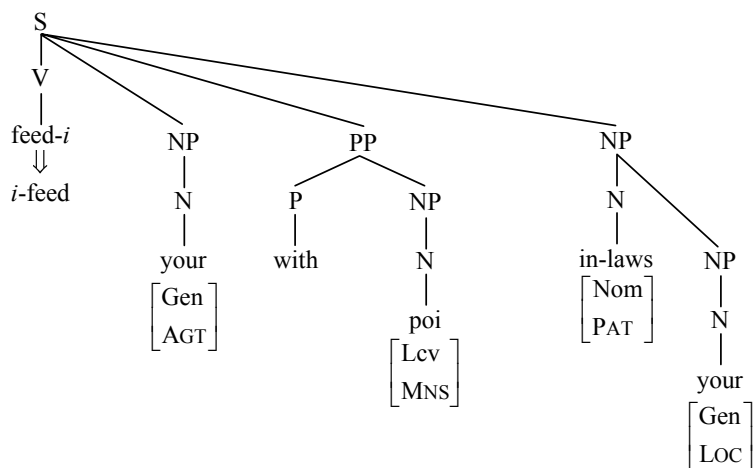
'Your in-laws feed on poi by you.'

10.9.3 Paradigm formation

The new denominal verbs formed by the reinterpretation of cleft sentence structures formed themselves into paradigms according to syntactic and semantic complementarity. One of the dimensions chosen in this regrouping was main clauses versus subordinate clauses. Thus in languages ancestral to languages such as Atayal (Egerod 1966) and Samareño (Wolff 1973), the new verbs were specialized to main-clause use, and the original *-i and *-a counterparts were confined to embedded environments. In Toba Batak (van der Tuuk 1971), the *-i/-aken* reflexes were used in active sentences and the *ni-/-en/-ana/-aken* types are confined to passives:

	Active	Passive
OF	Ø	*ni-/-in-*
LF	*-i*	*-an*
IF	*-hon*	*-hon*

If subsequent investigation should reveal that the Toba Batak 'passives' are better analyzed as nominalizations, and if the unmarked OF is really ergative, the Toba Batak system would be a quite close approximation to the one we have posited for the proto-language.

In most Northern and Central Philippine languages, the *-i and *-a forms were replaced completely by reflexes of the original deverbal nominalizers, and the paradigms were composed according to aspect, with reflexes of the perfective *ni- infixed as *-in- to the Agentive, Locative, and Instrumental focus forms in *m-/-um-, *-an, and *ʔi- respectively to produce perfective focus forms. For the Object Focus forms, *ni-/-in- and *-en derivatives were already OF and in complementary distribution with respect to aspect, so *ni- verbs assumed the perfective slot in the paradigm, with *-en forms filling the corresponding complementary non-perfective slots. This accounts for the unusual complementarity within the Tagalog OF paradigm between *-in-* infixed perfective forms and *-(h)in* (< *-en) suffixed non-perfectives, without any necessity for an unmotivated morphological deletion transformation. A similar complementation process produced a different result in Kapampangan (Mirikitani 1972, cited in Mulder & Schwartz 1981: 252), where the *ʔi-* prefixed OF form took over the future slot, the *-in-* form the perfective, and a reduplicated form the present progressive, resulting in the following paradigm:

(10.254)	*i-sulat*	'will write'
	su-sulat	'are writing'
	s<in>ulat	'wrote'

10.10 The development of verbal focus as a criterion for subgrouping

Austronesian languages can be characterized by whether or not their ancestors carried out this reinterpretation, and if so, how far they carried it. Tsou, for example, has no trace of a verbal focus system using originally nominalizing affixes, though the nominal affixes are there in their original function. The complete absence of reflexes of *-en, *iSi-, *ni-, and *-ana as verbal inflections can then be linked to the requirement that every non-stative Tsou sentence includes an auxiliary verb as head of the highest clause. Since the auxiliaries themselves were not marked for 'focus' (though they do exhibit an *m*-/non-*m* active-passive contrast; *cf.* Tung et al. 1964:88-89), and since dependent clauses contained only dependent inflected verbs, only reflexes of 'focus' affixes *-i and *-a are retained in Tsou. The fact that reflexes of *mu-/-um- in PAN *are* retained in Tsou verbs simply supports the hypothesis that the status of *mu-/-um- was different from that of the other verb formatives, and that it probably was a dependent verb formative at least in some of its uses in Proto-Austronesian.

Languages such as Atayal and Samareño descend from systems in which the original verbal affixed forms were specialized to subordinate clauses, with the new verbs taking over main-clause focusing functions. Languages like Amis descend from languages which kept the *-i form only in the imperative and replaced all the others, and standard Tagalog replaced all the *-i type verbal forms by originally nominal affixes, while at the same time keeping tremendous amount of structurally homonymous constructions that continue to confound linguists to this very day.

The reinterpretation and replacement process was certainly a post-PAN innovation, but unfortunately the occurrence of this process by itself is unlikely to be very useful for subgrouping purposes, simply because once the stage was set, it became highly probable that the change would happen, and it could easily have happened independently in different languages. In the case of Amis, for example, it has only just begun to operate in a very limited set of environments, while in related Paiwanic languages, it seems to be well along. Similarly, the replacement of all *-i type forms was total in Standard Tagalog, but some of the original forms are still retained in Marinduque Tagalog, and this could hardly be taken as evidence that these different dialects belong to different higher-order subgroups. However, though the occurrence of the reinterpretation has very dubious subgrouping implications, it is still quite possible that specific idiosyncratic details may prove useful in this respect.

10.11 Auxiliary axing: the evolution of Oceanic object focus

We are mainly interested in this paper in accounting for the evolution of Philippine-style focus constructions, and have reconstructed various features of the Proto-

Austronesian syntactic system with this in mind. However, we are aware that our reconstruction can't be completely convincing if we don't have any way of accounting for how the quite different grammatical patterns of the well-known Oceanic languages could have evolved from exactly the same proto-system. We think that there is a plausible account of how this happened, and will sketch it here.

Stage 1

As stated in §10.4, we are assuming that PAN had auxiliary verbs which were the syntactic heads of main clauses, and thus occurred in sentence-initial position, attracted clitics, triggered inflection on following verbs (although this particular feature could have appeared later independently in descendents), and that clitics in the higher auxiliary verb clauses were necessarily co-referential with the actant in the following embedded clause which carried the most 'salient' NP in the embedded clause, rather than the grammatical subject (which was always the Patient). That is, they agreed with the Case Relation which was highest in the Accusative Subject Choice Hierarchy: Agent if any, otherwise Correspondent, otherwise Patient.
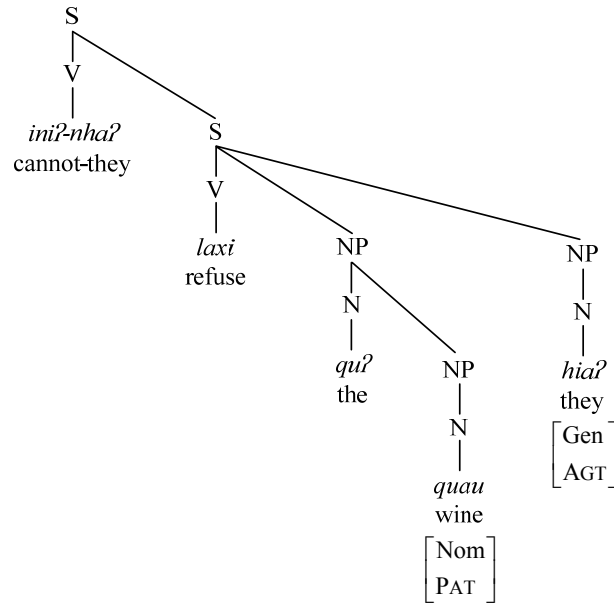
For transitive verbal clauses under an auxiliary verb, the following pattern would be present:

Transitive pattern

$_S[V_{aux} (CP_i) \,_S[V (CP_j) (Nom\text{-}PAT_j) (Gen\text{-}AGT_i)]_S (Nom\text{-}PAT_i)]_S$

To cite an example from Atayal on this pattern with both CP_i and the lower Agent overtly present:

(10.255)   Atayal (Egerod 1966:358)

```
                      S
                     / \
                    V   \
                    |    \
                 iniʔ-nhaʔ  S
                cannot-they /|\
                           / | \
                          V  |  \
                          |  |   \
                        laxi NP   NP
                       refuse |    |
                              N    N
                              |    |
                            quʔ   hiaʔ
                            the   they
                             \   ┌─────┐
                              NP │ Gen │
                              |  │ AGT │
                              N  └─────┘
                              |
                            quau
                            wine
                           ┌─────┐
                           │ Nom │
                           │ PAT │
                           └─────┘
```

For embedded intransitive clauses, of course, no Agent (or Correspondent or Instrument) would be present, so CP_i would agree with the Patient in the lower clause, and CP_j would thus not appear: it seems that we don't find two co-referential clitic pronouns in the same simple sentence. The intransitive pattern then reduces to the following:

Intransitive pattern

$_S[V_{aux} (CP_i) \,_S[V \text{ Nom-PAT}_i]_S (\text{Nom-PAT}_i)]_S$

The V_{aux}'s could be syntactically impersonal, as they can be in for example Ilokano and Amis, so that they took their Transitive pattern CP_i from the [-Nom] (non-Nominative, i.e. Genitive or Accusative) set, whereas the CP_j would necessarily be from the original [+Nom] (Nominative) set, since it agreed with the subject of its own clause.

Stage 2

Through phonological weakening of some sort, the initial auxiliaries were lost, either totally or through contraction with the following clitic pronouns. The clitic pronouns themselves remained in the preverb positions. (Exactly this process has been posited to have happened in Salish; see Thompson 1979:68).

At this point, the transitive and intransitive sentences would have the following structures:

Transitive pattern

$_S[(CP_i) \, _S[V \, (CP_j) \, Gen\text{-}A_{GT_i} \, Nom\text{-}P_{AT_j}]_S \, (Nom\text{-}P_{AT_i})]_S$

and the intransitive counterparts would appear as follows:

Intransitive pattern

$_S[(CP_i) \, _S[V \, Nom\text{-}P_{AT_i}]_S \, (Nom\text{-}P_{AT_i})]_S$

Actually, of course, this stage would have to be very short-lived, since by lexicase conventions, a sentence has to have a lexical head and a clitic has to have a host. Thus to restabilize after the loss of the initial auxiliary verb, the inner brackets would have to be removed, making the 'main' verb also the head of the auxiliary clause, with the old enclitic CP_i now attached as a proclitic to the following verb, as in the following Fijian example:

(10.256)　*au　sa　cakava　ko　iau*
　　　　　I　　　did　　　　I
　　　　　[Nom]　　　　　$\begin{bmatrix} \text{Nom} \\ \text{P}_{AT} \end{bmatrix}$

　　　　　'It is I who did it.'

This stage of evolution is nicely reflected in Chamorro (Huxel 1968), where independent *m-* verbs with following Nominative pronouns alternate with constructions containing a preposed clitic followed by a non-*m* verb, e.g.:

(10.257)　Chamorro
　　　　　malagu haw　'you run'
　　　　　un falago　'you run'

The second structure can easily be accounted for as the reflex of an auxiliary structure dominating a dependent verb form, exactly the situation we reconstruct for PAN:

(10.258)

```
        S                    cf.              S
       / \                                   / \
  V_aux-un   S                              V   \
             |                              |    \
             V                           malagu   NP
             |                           [-dpnd]   |
          falago                                   N
          [+dpnd]                                  |
                                                  haw
```
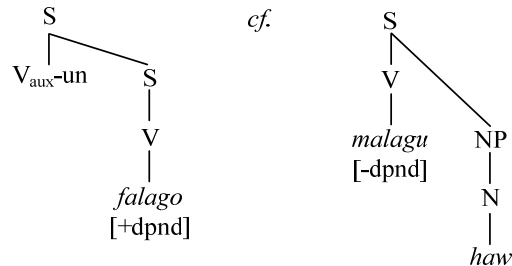
When the auxiliary is lost, the clitic-initial structure results.

The situation described by Ferrell for Paiwan non-AF sentences can be seen as the result of this same sort of evolution: clause-initial clitic pronouns precede the non-AF main verb and refer to the Agent rather than to the grammatical subject of the clause (Ferrell 1971:111).

In the Northern Philippine languages, Inibaloi has 'axed' the auxiliary verb which once signalled continuative aspect, leaving the CP dangling or attached to -ka. Some of the other Central Cordilleran languages still use an auxiliary (*da* in Balangao, *duwa* in some dialects of Bontok) for continuative.

A common auxiliary in Northern Philippine languages is *ʔin* or *ʔən* or *ʔi* meaning 'go', e.g.:

(10.259)   Bontok
ʔən-taku   ʔinʔəməs
go-we   take a bath
'Let us go take a bath!'

(10.260)   Ilokano
ʔin-tayu   ʔagdígus
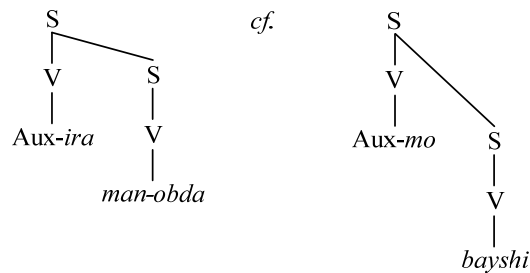go-we   take a bath
'Let us go take a bath!'

The loss of this auxiliary verb quite probably accounts for the strange double pronoun structure with motion verbs in Inibaloi:

(10.261)   Inibaloi (Ballard 1963)
a. *onbowas   ira   ira   man-obda*
    go early   they   they   work
    'They go early to work.'

b. *daw   ka   mo   bayshi*
go   you   you   pay
'(You) go pay it.'

The second half of these sentences derive by aux axing from the following structures:

(10.262)

The loss of a 'go' auxiliary probably also accounts for the Tagalog exhortative construction:

(10.263)   *tayo   na   maligo*
(go) we   now   take a bath
'Let us go take a bath (now)!'

The second person pronoun hanging out in front in Ivatan imperatives may have an analogous source, e.g.:

(10.264)   Ivatan (Hidalgo & Hidalgo 1971:214)

a. *ka   manutung,   mu   Marya*
you   cook   you   Mary
'You cook, (you) Mary!'

b. *Marya,   mu   rutungan   u   manuk*
Mary   you   cook   chicken
'Mary, you cook the chicken.'

It is interesting that these kinds of sentences often translate as 'You (go and)...' e.g.:

(10.265) Ivatan (Hidalgo & Hidalgo 1971:238-239)
ka   manguyas   mu   Kwana,   ka   Nimu   mu   Marya
you   wash   you Jean   and you   you Mary
'You (go and) wash (the dishes), Jean and you, you Mary!'

This is probably why imperatives take dependent verb forms; they were dominated by a 'go' auxiliary in the proto-language. The auxiliary attracted the clitic and required a dependent inflection on the following verb.

Essentially the same analysis may apply in the case of Indonesian *di*-passives: they are retentions from a transitive clause pattern such as the one envisioned for stage 2, with CP_i obligatorily present and with Nom-PAT_i lost along with its verb. The derivation of the *di*-passives from postclitics could then help to explain limitations on their length: only 'light' pronouns were cliticized after auxiliaries, and later, before, 'main' verbs. In Bahasa Indonesia, as in other Austronesian languages such as Saisiyat, the normal position for the subject then became sentence-initial, probably via topicalization, and the CP_j agreement clitic was lost, so that the pattern for Indonesian passives became:[10]

$_S$[Nom-PAT_j CP_i V (Gen-AGT_i)]$_S$

Finally, the third person pronominal clitic *di-* was generalized in main clauses as a passive marker for all passives, and the modern construction resulted.

In Oceanic, however, unlike the Bahasa Indonesia passive situation, the initial clitic becomes reinterpreted as a subject marker of an accusative clause: subject because it is present in transitive *and* intransitive clauses and is thus grammatically unmarked and least dispensable (Bruce Biggs p.c.), and accusative because, as it will be recalled, the NP referred to by this CP is the highest one in the Accusative Subject Choice Hierarchy. The old Patient then becomes the Direct Object of transitive sentences, though it remains the grammatical subject of intransitive ones, and its Nominative marking is reinterpreted as Accusative. The old Genitive, on the other hand, becomes reinterpreted as the Nominative of the new system. The old CP_j was originally co-referential with the grammatical subject (the Patient) of the old ergative clause, and when the old Nom-PAT is reinterpreted as Acc-PAT, the CP_j now refers to the Direct Object (Acc-PAT), and so is interpreted as an Object Marker instead of a subject marker:

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[10] This pattern for direct passives is the one attested in the languages of Western Indonesia, and in Javanese, at least, it is a recent development, since there are no traces of it in Old Javanese (Wolff 1973:83, footnote 7).

Transitive

   SM_i V OM_j Nom-AGT_i Acc-PAT_j

Intransitive

   SM_i V Nom-PAT_i

   At the conclusion of stage 2, then, we have an object focusing system operating within an accusative rather than an ergative language type. In fact, this mechanism, with verb derivation markers existing contemporaneously with the Prepositions from which the markers are derived, has come to resemble even more closely the Preposition-incorporating verbal derivation systems of such Indo-European languages as Latin and German.

Stage 3

   The topicalization fronting process of PAN would allow the grammatical subject to occur initially, and for some languages, the initial position could become the preferred one for subjects, as it has for example in Saisiyat. This tendency could well be reinforced by the tendency for a grammatical subject to occur close to a Subject Marker, and the even stronger universal tendency for a Direct Object to be in very close association with its verb, and of course close to the Object Marker.
   We believe that this scenario also helps to account for several otherwise unexplained facts about Oceanic languages, for example:
   1) it shows why Oceanic Nominative SM's are etymologically derived from Genitives and why the OM's are associated historically with Nominatives;
   2) it explains why the Direct Objects (Acc-PAT) following suffixed verbs or verbs followed by OM's are necessarily interpreted as definite: they are reflexes of PAN grammatical subjects, and PAN grammatical subjects were obligatorily definite. Those 'objects' which occur after the verb in Oceanic languages but do not follow a transitive suffix or OM (cf. Sugita 1973) and then a presumably derived from a 'demoted' Patient, probably an oblique Genitive-marked actant which does not correspond to an original Patient in the PAN system and, like non-focused Genitive-marked objects in Tagalog, is interpreted as indefinite;
   3) it accounts for the fact that in Oceanic languages, it is the Object more so than the Subject that tends to float Quantifiers as simply a retention from the original ergative stage when a Patient was a grammatical subject;

4) it makes it seem less strange that possessive pronouns on deverbal nouns in Kusaiean denote the Objects of source transitive verb and the Subject of a source intransitive verb (Lee 1975:104-105). Looked at from a lexicase point of view, this means that these pronouns agree with the Patient, and if possessive pronouns are historically Nominative, then Patients were always Nominative, that is, the language was ergative.

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南島語中焦點系統的演變

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摘要

　　本篇文章試圖解釋西部南島語言焦點的演變歷程，作者認為其演變源自於名詞化同等結構的重新詮釋透過類推作用成為功能上同等的動詞結構，也就是說詞綴 *-en、*ni-/-in-、*-ana、*iSi-，以及可能 *mu-/-um- 原來皆為名物化詞綴，在台灣南島語和菲律賓語當作動詞焦點的用法為後來才發展出來的現象。

關鍵詞：古南島語，構擬，焦點，名物化，重新分析，類推作用