PHRASE SYNTAX IN CONTEMPORARY INDONESIAN: NOUN PHRASES

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0 INTRODUCTION

0.1 Inventory

In the preliminary descriptive studies of this subseries, a number of forthcoming articles (listed in the "[PP]" section of the bibliography) will concern themselves with the syntax of a variety of types of phrases, according to topics named in [PP-1] through [PP-3]. The only type of phrases not covered by those articles is the type "noun phrase". The following are examples of various subtypes of noun phrases to be dealt with in the present paper: rumah bupati 'the house of the district administrator'; penuduhan luhar 'the accusation against the village headman'; penuduhan oleh luhar 'the accusation by the village headman'; penuduhan luhar 'the accuser of the village headman'; rencana Bapak dan Ibu 'Mr and Mrs [X]'s plan'; Suharto, Presiden Republik Indonesia 'Suharto, the President of the Republic of Indonesia'; buku itu 'the book'; buku ini 'this book'; kaca yang mana? 'which mirror?'; seribu pertanyaan 'a thousand questions'; seorang petani 'a farmer'; pengusaha kaya 'a wealthy businessman'; rumah yang akan mereka bongkar 'the house that they are going to tear down'; bunga di atas meja itu 'the flowers on the table'; gedung yang tinggi dan kuat 'a high and solid building'; buku tebal yang akan harus kita pelajari itu 'that thick book that we are going to have to study'; yang biru itu 'the blue one'; yang tidak dapat kita pahami itu 'that which we [incl.] cannot understand'.

These examples are meant merely to give a first impression of the variety of noun phrases found in this language. The following presents what is hopefully a fairly exhaustive inventory of the various types, most of them discrete, some of them overlapping.

[a] Noun-plus-noun phrases; to be subdivided as follows:

[i] Noun-plus-noun phrases according to semantic relations from attribute to head;
[ii] Action noun phrases;
[iii] Actor noun phrases;
[iv] Noun-plus-noun phrases with serial attributes;
[v] Noun-plus-noun phrases with multiple attributes;
[vi] Appositions;
[vii] Noun-plus-'copying' semiatributes;
[viii] Noun phrases with classifier "heads".

[b] Noun-plus-nonnoun phrases; to be subdivided as follows:

[i] Noun-plus-anaphoric;
[ii] Noun-plus-deictic;
[iii] Noun-plus-interrogative;
[iv] Noun-plus-quantifier;
[v] Noun-plus-adjective/verb;
[vi] Noun-plus-relative clause;
[vii] Noun-plus-'adverbial' attribute;
[viii] Noun-plus-nonnoun serial attribute;
[ix] Noun-plus-nonnoun multiple attribute;
[x] "Headless" yang phrases.
The types [a], [i] through [viii] will be treated in Sections 1 through 8; types [b] [i] through [x] are to be discussed in 10 through 19. Section 9 will introduce the [b] type more generally.

First, however, a few more general problems need to be discussed in this introductory section 0, mainly to get them out of the way, and to make it possible for treatment in Sections 1 through 19 to be as exhaustive as possible, without undue interruptions for considerations of a more general nature.

0.2 Noun-plus-noun phrases and noun-plus-nonnoun phrases

The major division in 0.1 [a] and [b], i.e. that between noun phrases with nouns for their attributes and noun phrases with nonnoun attributes, has been well established in recent research, as valid widely across languages, perhaps with language-universal relevance. The best work done in recent years is that by Foley (1976; 1980), and his work is especially of interest for the present paper in that Foley's data have been taken from a number of Austronesian languages (though not including Indonesian).

Noun-plus-noun phrases exhibit, across languages as well as within each particular language, a great variety of semantic relations obtaining from attribute to noun. A simple example given by Foley (1976:79-80) immediately establishes this fact, at least for English. Myron's statue may mean 'the statue made by Myron', or 'the statue exhibiting the likeness of Myron', or 'the statue owned by Myron'. In context, other semantic relations (not mentioned by Foley) would be possible. One could think of some context where Myron's statue would be a statue (made by anyone, owned by anyone, exhibiting the likeness of anyone) to which Myron would have a special relationship, e.g. because Myron has to sell, or ship, this statue (or do anything else with it), in contrast to what someone else would be supposed to do with some other statue. This extraordinary flexibility of the noun attribute's semantic relation to the head noun is widely characteristic of languages, and probably language-universal. There are, however, more "standard" relations of this kind, such as 'possessive' (Myron owns the statue), or 'agentive' (Myron made the statue), or 'objective' (the statue exhibits the likeness of Myron). As Foley notes, in John's present, one possible relation would be 'ablative' (the present comes from John).

Other examples are not hard to find. Especially the "action noun phrases" and "actor noun phrases" (see 0.1, [a], [ii] and [iii], above, and Sections 2 and 3, below) are of great interest here, because of the partially "verbal" nature of action and actor nouns, so that the attribute nouns function almost as "Arguments" to the head noun.

A subtype of special interest among the noun-plus-noun phrases is that of the "apposition" as an attribute (0.1, [a], [vi], above; see Section 6, below), and of the noun phrases which have a "copying" semiatribute (0.1, [a], [vii], above; see Section 7, below), which seem to be special for Indonesian (at least as compared to Indo-European languages); finally, some noun phrases have "heads" with a great deal of semantic attrition, so that the "semantic head" is really what syntactically would be the attribute; this is the case with phrases with classifier heads (0.1, [a], [viii], above; see Section 8, below), and with considerable cross-lingual relevance. All these subtypes must be descriptively distinguished.

In contrast, noun-plus-nonnoun phrases have nothing so variable or "opaque" about the semantic relation between attribute and head. On the other hand, noun-plus-nonnoun phrases have a wide variety of attributes according to the syntactic properties thereof. Those are the subtypes mentioned in 0.1, [b], [i] through [x] (see Sections 10 through 19, below). For the language typology of Indonesian, most of these subtypes are worthy of special treatment, because of the relevance for them of the "ligature" yang. Section 0.3, below, will set forth what is important about these constructions, for a language like Indonesian, and in comparison with other languages. Also, Section 9, below, will briefly deal with them
The subtypes of the noun-plus-nonnoun phrases will then be treated, one by one, in Sections 10 through 19, concluding the present paper.

Finally, a terminological note may be in order at this point. In the present paper, we distinguish between the expressions "noun phrase" and "NP". The expression "noun phrase" signifies such phrases according to the "internal" structure of such phrases, while the expression "NP" takes such phrases in their "external" relations to the rest of the clause in which they occur, or, as we might say, in their "valency" in regard to the rest of the clause, either as "Argument" to the verb or as an "extranuclear" constituent in the clause. The distinction has its merit for its own sake, but is also of some interest of the kind that may not immediately meet the eye. That is to say, according to the "internal" structure we distinguish between "noun phrases" (such as my brother) and "prepositional phrases" (see [PP-2]) (like to my brother); nevertheless, in many clause constructions, especially where (say) to my brother is an Argument, the prepositional phrase is considered according to its "valency" (in the clause), as an "NP", therefore, and not according to its "internal" structure, at least for the general purposes of this paper. Without this methodological consideration, it would be hard to treat noun phrases in a reasonably coherent fashion.

It is useful to add here that, in noun-plus-noun phrases, the ligature yang does not occur, except in two types of constructions; the first is the one discussed in Section 1.4; the second, in Section 6.1, [b].

0.3 The "bondedness" hierarchy in noun-plus-nonnoun phrases

This introductory section is not complete without a brief exposition of Foley's (1980) "bondedness hierarchy" approach to noun-plus-nonnoun phrases (Foley calls the nonnoun attribute, perhaps a bit confusingly, the "adjunct"), not only for its evident language-universal interest and its special interest for Austronesian languages, but also and most especially for Contemporary Indonesian, which, though it is not in Foley's data base, appears to adhere almost without exception to that hierarchy. What we are concerned with here is the "ligature" yang. Although yang-introduced attributes in Indonesian are not wholly confined to the noun-plus-nonnoun type, they are very rare in the noun-plus-noun type (see above, end of previous subsection 0.2). Yang attributes comprise all types from 0.1, [b], [ii] through [ix], and are therefore much more than just the "relativizing" attribute (0.1, [b], [vi]). Therefore, it is better to treat yang attributes more in general here first, so as to facilitate discussion in Sections 10 through 18, below, to none of which individually yang is unique.

Foley's exposition and the application of the "bondedness hierarchy" to Indonesian may be found in Verhaar 1983a. A summary of what may be found there follows here (with a few minor improvements on that paper).

What all uses of yang have in common (excepting, for the moment, constructions with "headless" yang; see Section 19), is that this "ligature" yang "welds" together a "head" and an attribute. This "welding" function has for some time been known to be characteristic of certain "particles" (which Foley (1976; 1980) calls "ligatures") in a number of Austronesian languages. The principal thesis Foley advances concerning this welding function is that of what he calls the "bondedness hierarchy" controlling the prohibited, optional, and obligatory use (in that order, from high to low in the hierarchy) of such "ligatures". Foley's sample comprises Tagalog, Palauan, Ilocano, Toba Batak, Tolai, Wolio, and Malagasy. Extensive data are found in Foley (1976; 1980), and a few examples from Tagalog may be enough here for our purposes (Foley 1980:180-1):

(1) mataba-ng maruno-ng tao
    fat    LG wise    LG man
     '(a) fat, wise man'
(2) marani-ng bata
   many LG child
   'many children'

(3) kulay ni-iyon
    color LG that
    'that color'

(4) a-ng babae-ng nag-bahasa na-ng diyaryo
    T LG woman LG AP read P LG newspaper
    'the woman reading a newspaper'

The ligature here connects a noun with one or more adjectives, or with a quantifier, a deictic, or a relative clause. (The form varies: -ng, ni-, and there are others.) Foley distinguishes seven different constructions where the "welding" of attribute and head noun takes place, listed as in (5), below:

(5) weaker
    bondedness

                   ↓ 1. noun + relative clause
                   ↓ 2. noun + participle
                   ↓ 3. noun + adjective
                   ↓ 4. noun + quantifier
                   ↓ 5. noun + interrogative
                   ↓ 6. noun + deictic
                   ↓ 7. noun + article

The hierarchy is from level 7 (highest) to 1 (lowest); the lower one goes down the hierarchy the more a ligature will be needed to hold attribute and head noun together. Going down the hierarchy, at just which of the levels the ligature becomes necessary depends on each individual language and is therefore a language-specific matter. What is valid all across the languages of the sample is that, if a ligature is obligatory at level Z (such that Z, in the language, is the highest level at which the ligature is used obligatorily), then the ligature is necessary also at each and all levels below level Z. (As we shall see in Indonesian data, optional ligatures are above level A, and prohibition of the ligature is above the highest level at which the ligature is optional.) According to Foley's hypothesis, no language will have a "gap", level-wise, between prohibited, optional, and obligatory use of the ligature. Tagalog is a language at which the ligature is level 7, the highest level; therefore, all lower levels require it. (Of course, if any level as appearing in (1) happens to be absent in the language -- thus, Tagalog does not have level 2, since its verbal system has no participle -- then there is not really a "gap", in that language.)

For our purposes it is highly instructive to present Foley's conclusion, for the languages of his sample, reproduced here in (6) (Foley 1980:179).

      7. article      +        +        +        +        +
      6. deictic      +        +        +
      5. interrogative  +        +        +        +
      4. quantifier    +        +        +        +        +
      3. adjective     +        +        +        +
      2. participle    #        #        #        #        #
      1. relative      +        +        +        +        +        +

The "gaps" at level 2 (symbolized by the "#" symbol) are only apparent: except for Palauan, these languages have no participle in attributive position. Finally, Malagasy is unique, in this sample, in that the only ligature is that at level 1, that of the relative clause (izay), but it seems to be optional even there.

It is important to note here that all the ligatures in these languages
have no word class membership (except, ad hoc, by definition, only for them). More particularly, at level 1, that of the relative clause, they are not "relative pronouns": i.e. they are not pronouns. Genuine relative pronouns (such as who, which, or that in English) are also "ligatures", albeit pronominal ones. That is to say, they, too, serve the "welding" function the nonpronominal ligatures serve; and the bondedness hierarchy applies to them as well, as appears from the English examples (7) and (8) (Foley 1980:176):

(7) the book (which was) given to me
(8) the book over there near John *(which was) given to me

In (7), which (was) is optional, since without this relative clause form of the attribute given to me the bondedness with the head the book would be solid enough; in contrast, in (8), the part that makes the attribute into a relative clause, i.e. which was, is obligatory, since without it the attribute given to me would be too detached from its rather remote head the book. Example (7) belongs at level 2 (that of the participle), and the ligature which is there optional; example (8), however, has the attribute at level 1 (that of the relative clause), and a ligature is obligatory. Data from other languages, including those which have ligatures of a pronominal rather than of a nonpronominal nature, will confirm the solidness of Foley's bondedness hierarchy hypothesis.

Foley's "bondedness hierarchy" is well verified for Contemporary Indonesian, for the ligature yang. At level 7 (on one particular interpretation of the level) it is prohibited; at levels 6 through 2, it is optional; at level 1, it is obligatory. The following data substantiate this.

(9) meja *(yang) itu [level 7]
   Table LG the
   'the (aforementioned) table'

(10) meja (yang) itu/ini [level 6]
    table LG that/this
    'that table (over there/right here)'

(11) alat (yang) mana? [level 5]
    instrument LG which?
    'which instrument?'

(12) anak (yang) banyak [level 4]
    child LG many
    'many children'

(13) rumah (yang) indah [level 3]
    house LG beautiful
    'beautiful house'

(14) orang (yang) tak dikenal [level 2]
    person LG not known
    'persons unknown'

(15) orang *(yang) datang terlambat [level 1]
    person LG come (too) late
    'people who are late'

Note that (9) has itu as "endophorically" deictic (see [PP-4]), i.e. it is anaphoric (and atonic), and may, for all practical purposes of the verification of the bondedness hierarchy for Contemporary Indonesian, be considered as an "article"; at this level 1, then, yang is prohibited. In contrast, in (10), itu is "ectophorically" deictic (see [PP-5]), it points to an extralingual place, and yang is optional: this level 6, then, is Foley's "deictic" level. Examples (11) through (13) are self-explanatory, and we note that yang is optional in all of them. Level 2, that of the "participle", is represented by (14); though purely morphemically this
language has no participle form in its verbal system, the function of an attribute like *tak dikenal in (14) is the same as that of a participle within the hierarchy. Finally, level 1 has *yang obligatorily, as illustrated by (15), and by any *yang clause in this language.

1 NOUN-PLUS-NOUN PHRASES: SEMANTIC RELATIONS

1.0 Introduction

As explained above (0.2), in noun-plus-noun phrases, semantic relations of the attribute to the head noun are varied, and more often than not opaque. Foley (1976:79-81) identifies the most important one as "agentive", "objective", and "possessive". The other ones may be considered as the (more) "opaque" ones.

In this Section 1, all this will be treated in the following order:

[a] possessive relations;
[b] agentive relations;
[c] objective relations;
[d] "inalienable" possessive relations;
[e] relations other than all these.

These are now to be treated in 1.1 through 1.5, below. The best examples of agentive and objective relations on the part of attributes to head nouns are, of course, the special constructions known as "action noun phrases". Those two types, however, are more conveniently treated, not in the present Section 1, but in Section 2.

1.1 Possessive attributes

In Contemporary Indonesian, possessive noun phrases are of what we may call the "standard" type, exemplified by the following phrases:

(16) rumah saya  
    house of 
    'my house'

(17) halaman sekolah  
    grounds of school 
    'the school grounds'

These constructions present no surprises, and express "possession" along a range from "possession" in the strict sense of "ownership" to any kind of "appurtenance" in the widest sense.

There are, however, a few alternants to the form of such constructions, which deserve special notice:

[a] The attribute is introduced by the preposition dari (sometimes expanded to daripada), which means both 'of' (in the very wide sense just indicated) and 'from'; in the latter meaning we are dealing not with possessive phrases but with the noun-plus-"adverbial" attribute subtype of the noun-plus-noun phrases, to be discussed in Section 16, below. (The daripada form is usually context-sensitive to personal pronouns, but is rare in possessive constructions in this form.)

Consider:

(18) milik (dari(pada)) Pak Sujito  
    property of Mr S. 
    'Mr Sujito's property'
(19) atap (dari(pada)) gedung yang tinggi itu
roof of building LG high that
'the roof of that high building'

Note that dari(pada) is optional. This preposition is used mainly to introduce an "afterthought"; that is to say, when the speaker has already said the possessee noun, and needs a moment to think of whom to mention as the possessor, he may fill the "gap" by beginning the possessee with dari(pada) (see Verhaar 1983c:296; [PP-7]). The dari(pada) "stopgap" seems to be out after the head noun of "copying" semiatribute constructions (Section 1, below).

However, dari is prohibited with pronominal possessors (as in (16)), although it is allowable with the possessor mereka '3p', especially when mereka is relativized (rumah (dari) mereka yang [.....] 'the house owned by those who [.....]').

(b) The possessive attribute may be introduced by the "proleptic" possessive enclitic -nya, attached to the possessee noun. Consider:

(20) anak(-nya) guru kami
child 3s teacher 1p [excl.]
'our teacher's child'

(21) anak(-nya) mereka
child 3p 3p
'their child'

(22) ibu *(nya) Saparjo
mother 3s 5.
'Saparjo's mother'

The -nya suffix is called "proleptic" because it "anticipates", so to speak, the possessor, which must be third person. A few notes on this "proleptic" -nya will be informative:

(i) The "third-person-only constraint" is to be taken purely formally. For it is possible to have "deictic reversal" here, i.e. "third-for-first person" (Ini bukan anak-nya Ibu Amah 'This is not my child' [the woman refers to herself as Ibu Amah 'Mrs Amah']) or "third-for-second" (Ini mobil-nya Bapak? ['Is this your car (Sir)?'; the (e.g.) policeman refers to the addressee as Bapak 'Mister', third person]). On "deictic reversal", see [PP-6].

(ii) However, "proleptic" -ku and -mu are out: anak(*-ku) saya 'my son'; anak (*-mu) kalian 'your [p] son'.

(iii) In (22), -nya is obligatory, because Ibu Saparjo would mean 'Mrs Saparjo'. In that case, however, Ibu (which could also take the shortened form of Bu, while it could not in (22)), is atonic, which it could not easily be in (22). I have never heard a construction like (22) (i.e. where ibu means 'mother' rather than 'Mrs') without "proleptic" -nya, but others claim they have: it might be possible with special stress/intonation features. In view of (iv) (below), it is relevant to note that (22) (with -nya) is definitely not substandard.

(iv) Apart from the special construction exemplified in (22), "proleptic" -nya (as in (20) and (21)) is optional. Its use, however, is considered "substandard" by many careful speakers. Nevertheless, it is frequent in Colloquial Indonesian, probably because many first languages (including Javanese) have the proleptic possessor cognate obligatorily (e.g. Javanese anak*(-é) Pak Tarjo 'Mr Tarjo's child'). "Proleptic" -nya does occur in older Malay, but extremely rarely.

(v) The "proleptic" possessor is extremely common in Austronesian languages more generally, also outside Indonesia, in most of them obliga-
torily. Though the expression "proleptic possessor" is defensible in the sense that it "anticipates" a possessor, it is in fact not clear whether it would not be more appropriate to consider Indonesian -nya as not itself possessive, but rather as a "ligature" (in possessive noun phrases), despite Foley (1976 and 1980), who claims that "ligatures" do not appear in noun-plus-noun (but only in noun-plus-noun) phrases. This problem badly needs more research, which may well shed more light on Indonesian "proleptic" -nya as well.

1.2 Agentive attributes

The agentive relation from attribute to head noun is well illustrated by examples like:

(23) novel sastrawan ini
    novel man-of-letters this
    'the novel of this man-of-letters'

(24) rencana arsitek kami
    plan architect Ip
    'our architect's plan'

(25) terbitan Balai Pustaka
    publication [name publishing house]
    'a publication of Balai Pustaka'

(26) surat adik- mu
    letter (younger) brother/sister 2s
    'a letter from your (younger) brother/sister'

The man of letters in (23) is the author of the novel; the architect of (24) is the designer of the plan; Balai Pustaka is the house producing the publication; and the younger brother/sister is the writer of the letter. Note that the attributes all denote "actors", yet these phrases are not "actor noun phrases", as comparison with the data of Section 3, below, will immediately show.

The opaqueness of the semantic relations in noun-plus-noun phrases makes other interpretations of (23) through (26) readily possible, especially possessive interpretations; thus, the novel of (23) could, in context, easily be a novel the literary person did not author, yet possesses. Or the younger brother/sister of (26) could be in an "ablative" relation to the letter: he/she was the one who sent the letter. On that reading, (26) could be paraphrased as surat dari(pada) adikmu.

In context, however, the semantic interpretation of this type of phrases rarely poses any problems.

1.3 Objective attributes

Consider the following phrases:

(27) patung pahlawan
    statue hero
    'a statue of the hero'

(28) lukisan pemandangan itu
    painting view that
    'a painting of that view'
(29) angkutan barang
transportation baggage
'the transportation of the baggage'

In (27), one obvious interpretation would be that the statue represents the hero, so that pahlawan would be in an "objective" semantic relation to patung. In (28), the only semantic reading of pemandangan itu is the "objective" one; and the same is true of barang in regard to angkutan in (29). For (27), however, a possesive reading would, in context, be readily possible: a statue owned by the hero, but not representing the hero.

Perhaps the examples of head nouns (of this type) with -an (on which see Verhaar 1984a) are somewhat marginal to this (1.3) type, because such -an nouns are only weakly "agentive" (the strong "agentives" are the pe(N)- -an action nouns, discussed in Section 2, below).

1.4 Attributes/predicates with deadjectival nouns of "inalienable possession"

There is, in Contemporary Indonesian, one particular noun phrase consisting of a deadjectival noun like panjang-nya 'length', berat-nya 'weight', etc. as head noun, modified by a preceding measurement or weight modifier, which in turn consists of a numeral plus measure/weight unit. Such a phrase, however, can only be used, attributively or (mostly) predicatively, in a construction where the deadjectival head noun is "inalienably" possessed by the attributee or predicatee. Consider the following examples:

(30) Papan ini (*)(/ /) tiga meter panjang-nya.
board this three meter long NOM
'This board is three meters long.'

(31) Bungkus ini (*)(/ /) empat kilo berat-nya.
parcel this four kilo heavy NOM
'This parcel weighs four kilos.'

(32) Saya memberi-nya se - buah papan yang tiga meter
I give 3s one CL board LG three meter
panjang-nya.
long NOM
'I gave him/her a board three meters long.'

(33) Dengan bungkus yang empat kilo berat-nya ia
with parcel LG four kilo heavy NOM 3s
berangkat.
leave
'With a parcel weighing four kilos he left.'

and compare with (30) and (31):

(35) Papan ini (*)(/ /) tiga meter panjang-nya.
board this three meter long NOM
'As for this board, it is three meters long.'

(36) Bungkus ini (*)(/ /) empat kilo berat-nya.
parcel this four kilo heavy NOM
'As for this parcel, it weighs four kilos.'

In (30) and (31), we have one-clause sentences; in (35) and (36), two-clause sentences. (Of the two clauses, the first is a "truncated" clause, i.e. without Subject-Predicate structure, announcing only a topic, but a clause nevertheless for a variety of reasons, phonemic among them:
the pause; the second is a "full clause", i.e. with Subject and Predi-
cate.) In (35) and (36), the Subject is panjangnya and beratnya, as it
happens in clause-final position; the Predicate is tiga meter and empat
kilo. Note then, that, in (35) and (36), tiga meter panjangnya and empat
kilo beratnya are not phrases at all - of any kind. In contrast, in (30)
and (31), each of which is monoclausal (this symbolized by the prohibited
pause) the Subject is papan ini and bungkus ini; and the Predicate, tiga
meter panjangnya and empat kilo beratnya, each of them a genuine phrase,
with panjangnya and beratnya as principals, and tiga meter and empat kilo
as modifiers.

Note that the constructions of (30) and (31) are those of "inalienable
possession"; that is to say, the -nya of panjangnya and beratnya is (apart
from being a nominalizing affix; see Verhaar 1984a:12, 10.0, (b) and 10.2)
anaphoric, possessively, to the Subject (papan ini; bungkus ini), and
"inalienably" so, in the sense that if the board's length is three meters,
then the board itself is three meters; and similarly with the weight of
the parcel. Since panjangnya and beratnya are nouns, with tiga meter and
empat kilo as modifiers, the entire phrase in each case is a nominal
phrase, whose form is severely constrained to such nominalized measure/
weight lexemes as panjangnya 'length', lebaranya 'width', dalaman 'depth',
tingginya 'height', beratnya 'weight', and the like, and with the
modifiers preceding the principal and consisting of a numeral plus unit of
measure/weight.

Note that the possessor noun in such constructions need not be the
Subject (as in (30) and (31)), but may also be the (verbal) Object: sebuah
papan yang tiga meter panjangnya in (32); or the (prepositional) Object:
bungkus yang empat kilo beratnya in (33). In such cases, the noun phrase
itself (tiga meter panjangnya and empat kilo beratnya) happens to be the
attribute within a larger noun phrase (sebuah papan yang tiga meter
panjangnya and bungkus yang empat kilo beratnya; with sebuah papan and bungkus
as principals; I ignore, for simplicity's sake, the preposition dengan,
since it is irrelevant to the point being made here). Note that, within
that larger phrase, the attribute must be joined to the principal by means
of the ligature yang; this is striking, since the ligature yang joins
attribute nouns to their principals only in this type of construction and
in certain appositional noun phrases, as discussed in Section 6, below.

This striking deviation from the general rule that the ligature yang
normally only joins nonnominal attributes to their head nouns is to be ex-
plained by the "inalienable" possession of the -nya noun by the principal
noun as possessor.

There is quite a bit more to the type illustrated by (30) and (31), in
that there are special procedures to negate them. Indeed, such negations
(with tidak sampai) are the only way of negating adjectival phrases of the
type panjang tiga meter or berat empat kilo; this will be discussed in
detail in my other paper in this volume.

1.5 Other attributes

As noted earlier (Section 0.2, above), almost any semantic relation
from the attribute to the head noun is in principle possible. One could,
for example, conceive of a (straightforward) context within which patung
pahlawan 'the hero's statue' could denote a statue associated with some
hero only in that the hero would have to do one particular thing with it
(e.g. in a game). Such instances would be rare (and could still be de-
scribed as having a "possessive" relationship of some sort between at-
tribute and attribute). One could, for example, distinguish a "parti-
tive" relationship in

\[(37)\] ujung pohon; kaki gunung; isi botol
end tree foot mountain contents bottle
'the top of the tree'; 'the foot of the mountain'; 'the
contents of the bottle'
or a "destinatory" one in

(38) alat penerangan; kayu api; jas hujan
    instrument lighting wood fire coat rain
    'lighting device'; 'firewood'; 'raincoat'

and probably many other semantic relations. Though it may be that an exhaustive description of such semantic relationships would shed more light on noun-plus-noun phrases, it seems also possible that it would show no more than what is already known: that this type of phrase is simply characterized by "opaqueness" of such semantic relationships, as indicated before.

2 ACTION NOUN PHRASES

2.0 Introduction

Action nouns are nouns morphemically derived from verbs such that the action is preserved nominally, i.e. lexicalized nominally for the action. Examples in English would be arrival, from to arrive; or invitation, from to invite; in Indonesian keberangkatan 'departure', from berangkat 'to depart'; or penuduhan 'accusation', from menuduh 'to accuse'. Note that the examples here are: one intransitive and one transitive, for each language.

Action noun phrases are phrases with such action nouns for their heads, and with one or more attributes, which bear semantic relations to the action noun resembling the relations Arguments bear to their verbs in clause organization, as one would expect, seeing that action nouns in part preserve the verbal character of their morphemic origin. Thus, in the arrival of the new students, the attribute of the new students is in a "subjective" (intransitive, in this instance) relation to arrival. Thus, also, in the invitation of the guests, the attribute the guests bears an "objective" relationship to invitation. Similar analyses may be made for Indonesian instances of such constructions, as will be analyzed in Section 2.1, below.

The best recent studies (so far as we are aware) of action noun phrases with noun attributes across languages are Comrie (1976 and 1978). Verhaar 1983b is indebted to a large extent to these publications, expanding the issues a bit, and including Indonesian data. Consider the following examples:

(39) the enemy's arrival
(40) the enemy's destruction of the city
(41) the city's destruction (by the enemy)
(42) przyjazd vraga [Russian]
    arrival enemy-of
    'the arrival of the enemy'
(43) razrusenie goroda (vragom) [Russian]
    destruction city-of enemy-by
    'the destruction of the city (by the enemy)'
(44) razrusenie vraga [Russian]
    destruction enemy-of
    'the destruction of the enemy'
(45) la destrucccion de ART
    destruction of la ciudad (por el enemigo)
    ART city by ART enemy
    'the destruction of the city (by the enemy)'
(46) la destrucción del enemigo [Spanish]
    ART destruction of-ART enemy
    'the destruction of the enemy'

(47) de evacuatie van de vluchtelingen [Dutch]
    ART evacuation of ART refugees
doctor de soldaten
    by ART soldiers
    'the evacuation of the refugees by the soldiers'

(48) de evacuatie van de soldaten [Dutch]
    ART evacuation of ART soldiers
    'the evacuation of the soldiers'

Examples (39) through (48) are all action noun (-plus-noun) phrases. Because of the partially "verbal" nature of the deverbal head noun, the attributes have, to some extent, "Argument" valency, in regard to the action noun. These Arguments may be either one or two in number (or even three, depending on whether additional NP's are considered as "Arguments" or not, e.g. a "dative"). They may (following Comrie 1978) be characteized as either "S" (i.e. "Subject", but only an intransitive Subject), or "A" (for."Agent", i.e. the transitive Subject), or "P" (for "Patient")-Object). Note that, if there is in this type of phrase only one Argument, that can be either S or P, but not A, and this verifies in the above data. That is to say, in (39) the enemy's is A, but that is not the only Argument; in (41), by the enemy is A, but again that is not the only Argument (and it is in fact optional); the same analysis holds for vragom in (43); in (44), where vragom is the only Argument, it must be P, and cannot be A; in (46) del enemigo must be P, and cannot be A; similarly with van de vluchtelingen in (47) and van de soldaten in (48).

It is clear, therefore, that in these action noun phrases, S and P are treated in the same manner, while A is treated in a manner different from S and P. And this shows such phrases to be ergatively organized; on "ergativity", see [PP-8]. The ergative organization of such phrases seems to obtain widely across languages, and may well be language-universal. It certainly also holds for Indonesian, as will be shown in 2.1, below.

A few notes on "markings" of these Arguments to action noun phrases may be in order. In ergative languages (see [PP-8]), S and P are unmarked, while A is marked; this I propose as a general rule for the clause level. The principle may also be applied to the phrase level. Note that S is in the genitive: for S, e.g. the enemy's in (39) (the enemy's happens to be a "case genitive", but in English could also be a "periphrastic" genitive, e.g. in the arrival of the enemy); in (41), the city's (which is P) is also in the genitive. It is true that the enemy's in (40), which is A, is also a genitive, but then it is not the only Argument (of the city, i.e. P, being another). The genitive, then, seems to be the unmarked Argument, while A must be marked (for agentivity), as it is in (43) (the agentive case vragom), in (45) (por el enemigo), and in (47) (door de soldaten). It appears, then, that the rule that S and P be unmarked and A marked verifies also at the phrase level, in action noun phrases, and across languages.

A final note may be in order. Nouns which are morphemically "action nouns" may not be that semantically, at least in a variety of languages. For this, consider English invitation, in a clause like I have the invitation right here (the speaker shows a card). Though invitation is often a genuine action noun (e.g. the invitation by my parents) also semantically, invitation as the name of an invitation card, e.g., seems to be a case of metonymy. Similarly, some action nouns may assume a "resultative" meaning; thus, excretion may indicate the result of the "excreting" action, and is then not an action noun. I have, however, not found any such "resultative" meanings of action nouns in Indonesian. There are, it is true, such nouns as penglihatan 'vision' (i.e. that which is seen) and pendengaran 'hearing (as one of the senses)', but this class of pe(N)-[an nouns (on which see [PP-9]) does not seem to occur ever as a class of genuine action nouns.
2.1 Action noun phrases in Indonesian

The introduction now enables us to deal with Indonesian action noun phrases in a summary fashion. Consider the following examples:

(49) keberangkatan ayah [S] departure father 'father's departure'

(50) penuduhan lurah [P] (oleh bupati [A]) accusation village-headman by district administrator 'the accusation of the village headman (by the district administrator)'

(51) penuduhan lurah [A] *(terhadap bupati [P]) accusation village-headman in-regard-to district administrator 'the village headman's accusation of the district administrator'

(52) penuduhan- (oleh-)nya [A] (terhadap bupati [P]) accusation by 3s/p in-regard-to district administrator 'his accusation (of the district administrator)'

(53) penjelasan- nya [A] (mengenai persoalan itu [P]) explanation 3s/P concerning problem that 'their explanation of that problem'

(54) penolakannya [A] terhadap usulan itu [P] rejection 3s/p in-regard-to proposal that 'his rejection of that proposal'

(55) pemeriksaan SIM [P] (oleh polisi [A]) examination driver's licence by police 'the examination of the driver's licence (by the police)'

(56) pemeriksaan polisi [A] investigation police 'police investigation'

(57) pengangkutan barang [P] (oleh perusahaan ini [A]) transportation goods by company this 'the transportation of the goods (by this company)'

(58) pengangkutan *(oleh-nya) barang ini [P] transportation by 3s of goods this 'his transportation of these goods'

(59) pengangkutan *(oleh) perusahaan ini [A] transportation by company this *(dari) barang ini [P] of goods this 'the transportation by the company of these goods'

(60) pemuatan batubara [P] (di atas truk itu) loading coal on top truck that (oleh buruh [A]) by worker 'the loading of the coal (on to the truck) (by the workers)'
(61) pemuatan *oleh buruh [A] *dari batubara [P]
loading by worker of coal
(di atas truk)
on top truck
'the loading by the workers of the coal (on to the truck)'

(62) pemuatan *oleh nya [A] *dari batubara [P]
loading by 3s/p of coal
(di atas truk)
on top truck
'their loading of the coal (on the truck)'

(63) pemuatan truk itu [P] (dengan batubara)
loading truck that with coal
(oleh buruh [A])
by worker
'the loading of the truck (with coal) (by the workers)'

(64) pemuatan *oleh buruh [A] *dari truk [P]
loading by worker of truck
(dengan batubara)
with coal
'the loading by the workers of the truck (with coal)'

(65) pemuatan *oleh-nya [A] *dari truk [P]
loading by 3s/p of truck
(dengan batubara)
with coal
'their loading of the truck (with coal)'

A variety of constraints appears clearly from these examples. Note, first, the intransitive action noun keberangkatan (in (49)), with the S following, unmarked; it may take full nominal form, as in (49) (ayah), or enclitic form (as in keberangkatan-nya [Â] 'his/her/their departure). All the other examples involve action nouns derived from transitive verbs: penuduhan in (50) through (52); penjelasan in (53); penolakan in (54); pemeriksaan in (55) and (56), pengangkutan in (57) through (59); and pemuatan in (60) through (65). The verbs of origin of these action nouns are: menuduh 'to accuse'; menjelaskan 'to explain; menolak 'to reject'; memeriksa 'to investigate, examine'; mengangkut 'to transport'; and, for (60) through (65), two verbs of origin are involved: memuatan 'to load [something onto something]'; and memuati 'to load [something]'; and memuati 'to load with something'. About all these derivations, see [PP-9]. Keberangkatan of (49) derives from berangkat 'to depart, leave'.

The constraints that appear to hold for these data are, by and large, the same as those discovered for the data of (39) through (48), above (2.0). Note that, in most of (49) through (65), the A attribute/Argument cannot be the only Argument, as appears from (51), (58), (59), (61), (62), (64), and (65); there must be a P attribute also. However, this constraint apparently does not hold for encliticized A (-nya) in (53) (perhaps also not in (54)), and not for the solitary full noun Â (polisi) in (57) either. Perhaps pemeriksaan polisi (56) may be considered as a somewhat "frozen" expression. (Otherwise, pemeriksaan polisi, in appropriate context, could, straightforwardly, mean that the police is P, i.e. is being investigated.) As for the -nya Â (as unique attribute) (as in (53)), that may be explained as making the action noun "resultative" (and therefore no longer a full action noun) in such constructions. There is some plausibility for such an analysis, since -nya is anaphoric, which may be because pemeriksaan is itself also already old information: as a known entity, pemeriksaan might then acquire a "resultative" meaning to some extent. However, no final analysis is possible in this regard without extensive discourse analysis.

Note, further, that the A argument (in all the other instances) must be marked (by oleh 'by'), whenever it is either encliticized (as in (58),
(59), (61), (62), (64), and (65)), or separated from the action noun (as in (50), (55), (57), (60), and (63)). In contrast, note that the P attribute is unmarked whenever it follows the action noun immediately (as in (50), (51), (55), (57), (60), and (63)), and that it may be the sole attribute. In case, however, the P attribute is separated from the action noun by the A attribute, P must be marked: mostly perhaps by dari (as in (58), (59), (61), (62), (64), and (65)), or by other prepositional markers, such as mengenai (in (63)), or terhadap (in (51) and (54)).

As may easily be inferred from these constraints, by and large S and P are treated the same way, while A is treated differently, which, once again, argues the ergative organization of this type of action noun phrases.

A final comment is needed on (60) through (65). As noted, pemuant derives either from memuati (as in (63) through (65)) or from memuatkand (as in (60) through (62)). The underlying view here (to be worked out in full detail in [PP-9]) is that the token pemuant is ambiguous, and represents pemuant (from memuati) and pemuatkand (from memuatkand). Hence batubara is P when going with pemuant, (the Patient is P), while truk is P when going with pemuatkand, (the Locative is P). The constructions are different according to the distribution of the attributes/Arguments in keeping with the difference between the two action nouns, as also the verbs of origin require such a different distribution.

3 ACTOR NOUN PHRASES

3.0 Introduction

Actor nouns are nouns morphemically derived from verbs such that the verbal action is preserved nominally, lexicalized for the Agent. Examples in English would be conductor, from to conduct, or reader, from to read; Indonesian examples would be pembaca 'reader', from membaca 'to read', or penjual 'seller', from menjual 'to sell'.

Actor noun phrases are phrases with such actor nouns as heads, with one or more attributes. Actor noun phrases, in contrast to action noun phrases, would naturally have no A attribute, since the Actor is already lexicalized in the actor noun. Therefore, it is to be expected that actor nouns derived from two-place verbs would only have one Argument, i.e. P; and that actor nouns derived from three-place verbs, may have one more Argument apart from P. (On two- and three-place verbs, see Verhaar 1984b.) In regard to actor nouns derived from intransitive verbs, such as perenang 'swimmer', those would have no attributes that are Arguments, since the only "Argument" would be the Actor, which is, however, lexicalized in the actor noun.

3.1 Actor noun phrases in Indonesian

Consider the following examples:

(66) pembaca koran
    reader newspaper
    'reader of a newspaper'

(67) penjual kuda
    seller horse
    'seller of horses'

(68) penulis surat
    writer letter
    'writer of a letter'
(69) pencakar langit
scraper sky
'sky scraper'

(70) penonton tv
watcher television
'television watcher'

(71) pembawa damai
bringer peace
'bringer of peace'

These examples present no surprises. The attributive noun is invariably a P attribute. Note that intransitive actor nouns such as pejalan 'walker' may have a noun attribute such as found in pejalan kaki 'pedestrian' (kaki is 'foot, leg'); however, such expressions are morphemic compounds, since the pe(N)- actor prefix has not just jalan, but jalan kaki for its 'scope'. (On morphemic composition, see [PP-12]; and Verhaar 1984b.)

It is important to note that, in each of (66) through (71), and in all similar constructions, dari(pada) may introduce the P attribute: pembaca dari koran: penjual dari kuda; etc. The use of dari(pada) is not "probable" in terms of text counts, and it may be used to introduce the P attribute as an "afterthought", in the fashion explained for other noun phrases in Section 1.1, [a], and 1.2; and in parallel structure with P attributes to action nouns, as explained in Section 2.1, above; that is to say, the P attribute must be introduced by dari(pada) if another constituent intervenes between actor noun and P attribute as in:

(72) pembaca budiman *dari koran dan majalah
reader sensible of newspaper and magazine
'the sensible reader of newspapers and magazines'

Actor nouns derived from three-place verbs would most frequently have only a P attribute, but the non-P attribute can certainly be added (as "marked", by a preposition) wellformedly, as in:

(73) alat pemuet barang di atas truk
device loader goods on on truck
'a device loading goods on to a truck'

(74) alat pemuet truk dengan barang
device loader truck with goods
'a device loading trucks with goods'

In (73), pemuet derives from memuetkan 'to load [something on to something]', barang is the P attribute, while di atas truk is the second attribute; in contrast, in (74), pemuet derives from memuati 'to load [something with something]', with truk as P attribute, and dengan barang as the second attribute. In those examples, pemuet is one token for two lexical types (see Section 2.1, after the examples, for a similar distinction between the action nouns pemuan (from memuatan) and pemuati (from memuati)). In noun phrase heads like pemuet, however, in which the only attribute is the P attribute, the lexical distinction between the two pemuet's is "neutralized", as in alat pemuet 'loading device'. For the relation between alat and pemuet, in this example as well as in the longer actor noun phrases in (62) and (63), see discussion of the noun-plus-'copying' attribute phrases in Section 7, below.

What has been treated in the present subsection does not exhaust all possibilities of action noun phrases in context, but I suggest these data represent "prototypical" cases. To explain this, note the following. In pembaca koran 'reader of the newspaper', koran is P. However, one could imagine a reading of pembaca koran such that the reader is the type of reader discussed in newspapers, as distinct, say, from the type of reader discussed on radio and television. We would, therefore, have readers 'of
the newspaper' (i.e. discussed by newspapers), and readers 'of the air media' (i.e. discussed by the air media). While such a reading is improbable statistically, it is by all means possible, given the appropriate context. In such a case, then, koran would be "possessive" in that wider "opaque" sense discussed earlier (e.g. in 1.5). However, such a reading of pembaca koran would be highly "unprototypical".

4 NOUN-PLUS-NOUN PHRASES WITH SERIAL ATTRIBUTES

By "serial attributes" is meant a sequence of attributes none of which is subordinated to the other; serial attributes are possible, to a limited extent, with noun-plus-noun phrases also (there are fewer constraints on noun-plus-nonnoun phrases in this respect; on those, see Section 17, below), and they should be briefly treated here.

Let an English example of this subtype of noun phrases be: the house of Jim and Mary; it has of Jim and Mary for its serial attribute, whose constituents are coordinated. Indonesian has similar constructions, e.g.:

(75) rumah Bapak dan Ibu Sumarman
    =Mr and Mrs Sumarman's home'

(76) pendidikan anak- anak dan orang dewasa
    =the education of children and adults'

(77) pemimpin buruh dan majikan
    =leader of workers and employers'

(78) perbanyakan folder atau majalah
    =the duplication of folders or magazines

(79) tulisan Rahmat dan Pranjoto
    =the writings of [or 'by'] Rahmat and Pranjoto'

The coordinated constituents within the attribute are pretty much confined to the 'and' and 'or' variety. They seem to be possible for all kinds of attributes, considered under the aspect of their semantic relations to their head nouns: in (75), the relation is possessive; in (76) and (77) the relation is objective, in regard to an action noun; in (78) it is that, in relation to an actor noun; in (79), it is agentive. There are also other types, and all could have the attribute introduced by dari(pada), as explained before.

5 NOUN-PLUS-NOUN PHRASES WITH MULTIPLE ATTRIBUTES

By "multiple attributes" here is meant the type of attribute that is itself composed of head noun and attributive noun. Consider the following examples:

(80) milik ibu- nya guru
    =property mother 3s teacher
    =the property of the teacher's mother'
(81) umur kepala bagian penerangan
age head department information
'the age of the head of the information department'

(82) pemahat patung pahlawan
sculptor statue hero
'the sculptor of the hero's statue'

(83) pemimpin rakyat setempat
leader people in-the-same-place
'the leader of the people in that area'

These constructions occur widely across languages, and may well be language-universal. They present no special surprises. The phrase which functions as attribute (ibunya guru in (80), kepala bagian penerangan in (81), etc.) may be of any kind; as it happens, in the above examples, they are all of the noun-plus-noun type; needless to say, they may be of the noun-plus-nonnoun type also, as in milik ibunya guru yang tertua ('property mother-her teacher LG oldest') 'the property of the oldest teacher's mother', where guru itself has an adjectival attribute.

Note that all kinds of types on noun-plus-noun phrases may function as multiple attributes. In (80) and (81) the attributive phrases are in possessive relation to the head noun, but these phrases themselves also consist of head plus noun-as-possessee of some kind. In (82) the head of the entire phrase (pemahat) is an action noun, and the P attribute (patung pahlawan) itself consists of a head plus "objective" attribute, i.e. the patung represents the pahlawan. Mixtures of other types would be easy to construct. No surprising constraints seem to obtain.

In all attributes, the ones to the heads of the entire phrase in each instance, as well as the attribute within the attribute, can usually be introduced by dari(pada), with the exception (in the above examples) of setempat in (83); on that constraint there, see Section 16, below.

6 APPOSITIONS

6.0 Introduction

Recent research in appositional structure (Verhaar 1983c) has found that the possibility of accommodating appositions largely depends on the sequential order alternatives of Operand-Operator and Operator-Operand orders (the former is called "VO" and the latter "OV" in Verhaar 1983c, but these expressions, when applied to infraclausal order, may be confusing).

Briefly, languages with Or-Od order (as in Japanese, e.g.) cannot really accommodate, without problems (of which ambiguity is one, and the impossibility of accommodating nonrestrictive appositions another), genuine appositions. Since Indonesian, however, has exclusively the Od-Or order, at the noun phrase level, appositional phrases are, on the whole, fairly unproblematic and quite straightforward, as they seem to be in all languages of that sequential order in phrases.

As is widely recognized, appositions may be of the restrictive or nonrestrictive kind. In English, for example, the two appositions in Charles the Bald, not Charles the Bold are restrictive, since they are uniquely identifying in regard to their heads. In contrast, in Sue, our executive secretary incidentally, [...], the apposition must be nonrestrictive (and the test making this indubitable is the sentence adverb incidentally, which, in the nature of the case, can occur only in nonrestrictive appositions).

We believe that text counts will show that most appositions in the Od-Or order are nonrestrictive. This, we hypothesize, can also be verified
for Indonesian. But in any case, both restrictive and nonrestrictive appositions are found in Contemporary Indonesian.

6.1 Appositions in Indonesian

As noted, sequential order in noun phrases is Od-Or in Indonesian, and, as is the case in this order (as shown in Verhaar 1983c), appositions are coordinated rather than subordinated in regard to the head noun. The most convenient subdivision, descriptively, seems to be the one based on the distinction between nonrestrictive and restrictive appositions.

[a] Nonrestrictive appositions

Consider the following examples:

(84) Bapak Sriyono, Profesor Kedokteran pada Universitas Gadjah Mada
Mr. S. Professor medicine at University
'Mr. Sriyono, Professor of Medicine at the Gadjah Mada University'

(85) ruangan ini, kamar makan untuk staf
room this room eat for staff
'this room, dining room for the staff'

The assumption is (symbolized by the comma) that all these appositions are nonrestrictive in context (of course, in other contexts, where they uniquely identify the head, they would be restrictive). These appositional structures do not seem to pose any special problems. Note that yang is out if the apposition is nonrestrictive (see [b], below, for the importance of noting this).

[b] Restrictive appositions

First, consider (84) and (85), above, and consider that the first two of them could be read as containing a uniquely identifying and therefore restrictive apposition; in (85), however, the restrictive reading would be improbable because ini would already be uniquely identifying in most contexts.

Apart from such constructions, there are a few others which would have restrictive attributes testable on grammatical grounds alone; in particular:

[i] the yang appositions; consider:

(86) teman saya (yang) tentara itu
friend is LG soldier DET
'my friend the soldier'

(87) buruh (yang) upahan itu
worker LG pay DET
'the workers on daily pay'

(88) ibu (yang) ketua itu
lady LG chairperson DET
'the lady (who is) the chairperson'

In these constructions, though yang is optional, nevertheless yang, if there, necessarily stamps the apposition introduced by it as restrictive; this type of construction is the only one where yang is a ligature in noun-plus-noun phrases. While some careful speakers object to the use of inter-
nominal yang, this use of yang is well attested in earlier Malay.

[iii] the "copying" semiatribute, see Section 7, below. Such semiatributes are really restrictive appositions, but of such a special kind that they may be considered as constituting a separate subtype of noun-plus-noun phrase.

7 NOUN-PLUS-"COPYING" SEMIAATTRIBUTE

7.0 Introduction

As has been described and elaborated in Verhaar (1983c:298-9), the Od-Or organization of noun-plus-noun phrases allows for a type of phrase which seems to be peculiar for a number of Austronesian languages (and not for Indo-European languages), Indonesian among them; among other things, this phrase type seems to resist IC analysis. There are at least two subtypes here:

[a] the two-noun class, of the type alat pemuat 'loading device';

[b] the three-noun class, of the type cerpen susunan Ali 'short stories written by Ali'.

In each of [a] and [b] the second noun is, to a certain extent, a "semantic copy" of the first (and head) noun, and is not really subordinated, either syntactically or semantically, to the head noun, of which it is in part a semantic "copy". The second noun could be classified as one particular type of (restrictive) "apposition", but it seems more convenient to treat the phrases containing it as a separate class, distinguishable as subclasses [a] and [b].

These subclasses [a] and [b] must now be discussed in Sections 7.1 and 7.2, below.

7.1 The two-noun noun-plus-"copying" semiatribute

Consider the following examples:

(89) alat pemuat
    tool loader
    'loading device'

(90) rencana macam ini
    plan sort this
    'a plan of this sort'

(91) garis penghubung
    line connector
    'hyphen'

The second noun (pemuat, macam, and penghubung respectively) contains, semantically, a further clarification of what is semantically contained in the first noun (alat, rencana, garis); in other words, the second noun is, at least in part, a "semantic copy" of the first noun, which is the "head" all right, but "head" in an unusually expanded meaning (as compared to head nouns whose attributes belong to those treated in Sections 1 through 5, above). As noted, it could be considered as an "apposition", but of a peculiar kind (notably, it can only be restrictive; and, in general, apposi-
tions, even restrictive ones, are not normally "semantic copies", even partially, of the head noun), so that it is more consistently described as a separate class.

In discussions in which we have participated, it has occasionally been suggested that the second noun is "really" an "adjective". But that would obviously be an analysis purely ad hoc, for actor nouns like pemuatan and penghubung are not "adjectival" in any other use of them; moreover, there is no consistent way of considering macam as "adjectival".

Note, finally, that in (90), which contains three constituents, we still have a two-noun phrase of the noun-plus-noun type, since ini (though it may, in other constructions, be used "substantively") is here used "adjectively", so that there are still only two nouns. Note that ini is obligatory in (90) (*rencana macam is not wellformed).

One thing this analysis shows is that macam, in (90), cannot possibly be considered as an "ordinary" attribute, for if it were that, *rencana macam would be wellformed, which it is not.

7.2 The three-noun noun-plus-"copying" semiatribute

Consider the following examples:

(92) rumah (milik) Pak Ali
     house property Mr A.
     'Mr Ali's house'; or: 'the house owned by Mr Ali'

(93) surat (keterangan) jalan
     letter information road
     'travel permission document'

(94) cerpen (susunan) Ali
     short-story writing A.
     'a short story by Ali'

(95) ruang (tempat) rapat
     room place meeting
     'meeting room'

The optional forms are all nouns, and they "copy", in terms of lexical semantic content, part of the semantic lexical content of the leftmost noun. What is striking about these phrases is that they resist IC analysis: the leftmost noun is certainly the head, and the rightmost noun is certainly the attribute; the middle noun, however, is not in any straightforwardly subordinate relation to the head noun; instead, it certainly would be the head of the rightmost noun, which would be an attribute to the middle noun.

These constructions are not "freezes" of any kind, and they may be added to productively: barang (buatan) Jepang (goods made Japan) 'Japanese-produced goods' (note, despite the gloss 'made', that buatan is not an adjective; see Verhaar 1984a, and [PP-11]).

8 NOUN PHRASES WITH CLASSIFIER "HEADS"

8.0 Introduction

Though probably every language has nominal classifiers of some sort, some languages (Japanese and, to a somewhat lesser extent, Indonesian) have extensive sets of them. Nominal classifiers for Contemporary Indonesian
are extensively surveyed in [PP-10]. Their importance in the present paper is merely that phrases containing them are one specific subtype of noun-plus-noun phrases with quite idiosyncratic properties, as compared to other types of noun-plus-noun phrases.

Nominal classifiers are of two kinds: numeral; and nonnumeral. In English two head of cattle has head for its numeral classifier; in Indonesian, :pucuk (for the "." symbol, which indicates precategorial status of the lexeme, see [PP-11], [PP-10]; and Verhaar 1984a) in se-pucuk surat ('a/one-CL letter') 'a letter'. An example of a nonnumeral classifier in English is bit in a bit of information (cf. *an information); in Indonesian, air anggur (CL wine) 'wine' (air as a NON-classifier is 'water', and as a classifier it classifies liquids of various kinds).

One important characteristic of nominal classifiers (across languages, probably language-universally) is that they are obligatorily atonic, and in that respect they differ from all other head nouns, which may be emphasized for any appropriate reason, e.g. contrastively. Therefore, as one might say, nominal classifiers are the "heads" of the entire phrase only syntactically, but semantically the "heads" are the classified nouns themselves (which syntactically would be the "attributes").

One could characterize these noun phrases with classifier "heads" as exhibiting "head reversal" (or "head shift") as compared to noun-plus-noun phrases of the types discussed in Sections 1 through 6. The classifier nouns (or precategorials, in some instances) are semantically "bleached" to the point where they have no independent lexical value semantically. They are also subject to syntactic constraints, across languages, in that, though they may be used with zero for the classified noun (if already identified in context), they cannot take their own attributes without more ado. Consider:

(96) What about your cattle? -- I have two (*beautiful) head(*s).

(97) Meja saya beli dua buah *(yang) besar.

'Table I bought two CL LG big

'As for tables, I bought two large ones.'

In (96), two head may be used wellformedly as "props" for the classified noun (cattle), but no attribute added to head is allowed; and head cannot be pluralized formatively (*-s is out). In (97), the classifier buah (used as "prop" for meja) may, it is true, have an attribute like besar, but then the ligature yang is obligatory, in contrast to the more general rule (Section 14, below) that yang as introducing adjectival attributes is optional.

8.1 Noun phrases with classifier "heads" in Indonesian

As noted, the classifier system for this language is treated extensively in [PP-10], to which we may refer the reader. Here, consider the following examples:

(98) se- pucuk surat; se- carik kertas; se- lemar
a/one CL letter a/one CL paper a/one CL kertas
paper
'a/one letter'; 'a/one piece of paper'; 'a/one sheet

of paper'

(99) kertas dua lemar *(yang) tipis
paper two CL LG thin

'two thin sheets of paper'
The classifier (:pucuk; :carik; lembar; butir; buah; ekor; air) are either nonnumeral (above: only air) or numeral (all the others). The numeral classifiers are either "precategorials" (on which see [PP-11], i.e. needing either derivation or (as in this case) composition); or "free forms". The free forms can all be used also as nonclassifying "notional" nouns of full meaning (lembar 'sheet'; butir 'grain, particle, pellet'; buah 'fruit'; ekor 'tail'), but above they are classifiers. Air as a "notional" noun of full meaning means 'water'. The numeral classifiers fit fairly determinate classifications; thus lembar is used as a classifier for what is flat, thin, and flexible; ekor for any animal (whether in fact it has a tail or not); butir for what is round and fairly small; buah can be used for any object, especially larger ones, even abstract ones (sebuah kesimpulan 'a conclusion'). The precategorial classifiers are less easy to determine, but :pucuk is used, in fact, only for surat 'letter'; and so forth. The use of classifiers has been declining for some time, and may be reduced even more in the future.

Note that the "free" (but not the precategorial) classifiers may, together with their numeral quantifiers, follow the quantified noun rather than preceding it, as illustrated in (99) and (101); no such inversion is possible with nonnumeral classifiers, as is only natural, because (as we may straightforwardly assume) the basis for the inversion is that quantifiers themselves may be "bloated". Such an inversion, however, separates the classifier from the classified noun, so that precategorial classifiers (such as :pucuk and :carik) cannot follow the classified noun.

Note, also, another illustration of what was shown by (97), above (8.0): that the classifiers, being semantically subordinated to the classified noun (even though syntactically the "principal"), cannot easily take attributes of their own. In (97), yang obligatorily introduces besar; similarly, tipis in (99) must be introduced by yang. As semantic subordinates, numeral classifiers are ordinarily atomic, and they may receive stress only for special reasons such as contrast:

not three cigarettes, but three packs of cigarettes'
"opaque" about the relation. An attributive adjective, for example, will signify a property of the head noun; a relative clause will be a statement about the head. In other subtypes of noun-plus-nonnoun phrases, the semantic relation of attribute to head is straightforwardly determinable. Second, there is great variety of subtypes in noun-plus-nonnoun phrases, while the noun-plus-noun phrases are quite less varied. Third, most of the nonnoun attributes may, or must, be "welded" to the head noun by the ligature yang (and a few others), whereas in noun-plus-noun phrases only one (rare) subtype of them may take yang (see 6.1, [b], above). Fourth, nonnoun attributes take the ligature yang optionally or obligatorily according to a cross-linguistically relevant strict rule of "bondedness hierarchy", with anaphorics at the top (at least in the application of the hierarchy to Indonesian) and relative clauses at the bottom, as explained in 0.3 above.

9.1 Various subtypes of noun-plus-nonnoun phrases

According to the "bondedness hierarchy", six levels should be distinguished, as indicated in 0.1, [b], [i] through [vi], above. In addition, as indicated in Section 0.1, [b], [vii] through [x], above, several other types of nonnoun attributes are conveniently described separately; i.e. attributes of an "adverbial" kind; serial attributes, multiple attributes; and, finally, "headless" yang phrases.

All these are to be discussed in Sections 10 through 19, below.

10 NOUN-PLUS-ANAPHORIC

See Section 0.3 for Foley's identification of the top level of his seven-level hierarchy of bondedness; he calls that top level that of the "article". Since Contemporary Indonesian has no article, yet does have an attribute that is close to it, i.e. anaphoric itu, we propose to call that top level, in its application to Indonesian, that of "noun-plus-anaphoric". Anaphorics, of course, may be called "deictic" endophorphically, i.e. utterance-externally (see [PP-4]); and the point of saying this is that Foley's second level, i.e. that of "deictic" attributes, are in fact "deictic" only ectophorically, i.e. referring to utterance-external person, place or time (see [PP-5]). The two levels are distinct in Indonesian since at the top (anaphoric) level yang is prohibited, while on the second (ectophoric) level it is optional.

Although the present section concerns only that top level (without yang), it is most convenient to compare the first and second levels here; consider (104) and (105) (= (9) and (10), above, in Section 0.3) (see also Kaswanti Purwo 1984a):

(104) meja *(yang) itu
      table LG the
     'the (aforementioned) table'

(105) meja  (yang) itu/ini
      table LG that this
     'that/this table (over there/right here)'

In (104), yang is prohibited on the reading that itu is anaphoric, i.e. endophorphically "deictic"; in contrast, in (105), on the reading that itu is deictic in the ectophoric sense (and the same would hold for ini), yang is optional. It is phrase (104) which is relevant to this section. Here is another example, in which anaphoric tersebut (lit.: 'aforementioned') cannot be introduced by yang:

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11 NOUN-PLUS-DEICTIC

By "deictic" here is meant what is "ectophorically", i.e. utterance-externally, deictic, referring to extralingual person, place, or time. For this, see once again Kaswanti Purwo 1984a. A good example of such a phrase is (105), above, as well as the following:

(107) meja (yang) ini, bukan (meja) (yang) itu
    table LG this not table LG that
    'this table, not that one/table'

where the second meja may be suppressed (but in that case yang is obligatory).

Yang is here marked as optional. This is not to say, however, that it makes no difference whether yang is used or not; yang often adds emphasis to the attribute (which it would normally already have in the phrase, i.e. as "new information"); in many a case, the emphasis might be due to contrast, as in (107) (assuming yang is used there).

There are also (ectophorically) "deictic" attributes in noun phrases which belong to another subtype of noun-plus-nonnoun phrases, by reason of the different syntactic form of the attribute. An example would be pohon *(yang) di situ ('tree at-place-by-you') 'that tree (over there) (by you)', and it would belong to the type discussed in Section 16, below. For the present subtype, then, ini and itu (ectophoric) would be the only instances of the relevant attribute.

12 NOUN-PLUS-INTERROGATIVE

For a complete treatment of interrogative pronouns, see [PP-12]. The pronouns involved in the present section are only: apa? 'what?' (used both substantively and adjectivally); and mana? 'which?' (used only adjectivally). Consider the following examples:

(108) maksud (*yang) apa?
    intention what
    'what (kind of) intention?'

(109) buku (*yang) apa?
    book what
    'what (kind of) book?'

(110) tali (yang) mana?
    string LG which
    'which string?'

(111) buku (yang) mana?
    book LG which
    'which book?'

Note that apa? cannot be connected with the head noun by yang, but mana? can (optionally). Apa? asks 'what (kind of)?', i.e. out of an undetermined total of objects specified by the head noun; in contrast, mana asks 'which (one)?', out of a determined limited number.
A note about siapa? 'who?' is in order here. Certainly siapa? may be found in attributive position, as in anak siapa? ('child who') ('whose child?') but then siapa? is substantively used (and, as it happens in this example, possessively), and does not therefore belong to the noun-plus-nonnoun class, but rather to the noun-plus-noun class treated in Section 1, above. However, an expression like orang siapa? ('CL who?') 'what person?' has orang (normally 'person', here a nominal classifier) for its head (purely syntactically, that is), and siapa? for the (syntactic) semiattribute of the "copying" kind, as discussed in Section 7. Siapa?, therefore, is never truly "adjectival", and does not therefore pertain to the subtype described in the present section.

Note that :mana may also be precategorial, combining with di or ke or dari(*pada) to form adverbial compounds: di mana? 'where?'; ke mana? 'where?'; dari mana? 'from where?'; see [PP-11], [PP-13], [PP-14].

13 NOUN-PLUS-QUANTIFIER/INDEFINITE

13.0 Introduction

A few characteristics of quantifiers obtain, as is generally known, widely across languages. One is that, in many languages, quantifiers may be "floated", as appearing in the comparison of clauses like All were arrested and They were all arrested. This "floating", however, should be more properly described in clause syntax, since the quantifier may be "floated" beyond the boundaries of the noun phrase (or simple noun) concerned; on this, see Kaswanti Purwo (this volume). But even within noun phrase boundaries the sequential place of quantifiers is variable. Notably, in a number of languages, the quantifier may either precede or follow the head noun, irrespective of otherwise stable Or-Od or Od-Or order rules, in such a way that the preceding quantifier makes the head noun indefinite, while in postnominal position the quantifier makes the head noun definite (Greenberg 1978a:284); this is, as will be demonstrated in a moment, the case also in Indonesian, except for enumerative serial noun phrases with quantifiers.

13.1 Noun-plus-quantifier/indefinite in Indonesian

Consider the following examples:

(112) empat kursi (itu); kursi yang empat itu
four chair DET chair LG four DET
'(the/those) four chairs'; 'those four chairs';

(113) ke- empat kursi *(itu); kursi (yang) ke-empat
CCN four chair DET chair LG ON four
'the/those four chairs'; 'the fourth chair'

(114) ke- lima anak *(itu); anak (yang) ke-lima
ON five child DET child LG ON five
'the/those five children'; 'the fifth child'

(115) semua majalah *(itu);
all magazines DET
majalah (*yang) semua (itu)
magazines LG all DET
'all (the/those) magazines';
A number of characteristics of this phrase type appears from these data. First, *yang* is never used between a preceding quantifier and its head noun; i.e. not between *seorang* and *banyak* in (112, first ex.), nor between *semua* and *majalah* in (115, first ex.), nor between *banyak* and *jeruk* in (117). It is also not used between the quantified noun and a following quantifier, as appears from (112, second ex.) and (115, second ex.). An exception to this, however, is *banyak*, as in (116); compare with the latter (118), where the indefinite numeral *banyak* must take the form of "equative" *se-banyak*. Note that *semua*, which follows the general rule (no *yang* either before or after) is not such an "equative". (On "equatives", see my other paper in this volume.)

There is, however, a "collective" ordinal numeral, prefixed by ke- (see Verhaar 1984a:17-18, Sections 15.0 (f), and 15.6), which can only precede the quantified noun (and without *yang*), as in (113, first ex.) and (114, first ex.); when these "same" ke- forms follow the head noun, however, as in (113, second ex.) and (114, second ex.), they are ordinal numerals; they may take *yang*. (However, ordinal ke- forms of this sort are given only for the sake of contrast here: they do not belong in the present section. For numerals within the categorial system of Indonesian, see Kaswanti Purwo (this volume)).

Note also the "enumerative" use of this type of phrases, as illustrated in (119); *yang* is prohibited here, according to the rule given earlier. (Of course, in such an enumeration the numerals may also precede the noun.)

Finally, note the difference between (120) and (121): with preposed *seorang*, the noun is indefinite and nonreferential; with that quantifier postposed, the noun is indefinite and referential (and numerically "one"); all this holds for these phrases as phrases. In the "presentative" construction, however (illustrated in (122)) which requires a cleft construction, *seorang pembaca* is, though indefinite, referential. The examples (120) and (121), however, seem to modify Greenberg’s law cited above (13.0) in the sense that a following quantifier may be indefinite,
provided it is referential.

14 NOUN-PLUS-ADJECTIVE/VERB

14.0 Introduction

Adjectives in Indonesian take the Operator place in Od-Or order, as is illustrated in phrases like rencana (yang) baik ('plan LG good') 'a good plan', or gedung (yang) tinggi ('building LG high') 'a high building'. In general, the ligature yang is optional, thus confirming Foley's (1976; 1980) "bondedness hierarchy" in its application to Indonesian (Section 0.3). Other constraints, of course, come in, such as that yang will serve additional emphasis, for example, contrastively. On the other hand, when noun-plus-adjective already make up a semantically close unity, the tendency will be to avoid yang.

Sometimes verbs serve "adjectivally" in this type of phrase, i.e. without the use of yang (yang plus verb would constitute a relative clause; see Section 15, below), i.e. when bondedness of noun-plus-verb is already otherwise (e.g. idiomatically; or contextually) guaranteed. These verbs, then, may, without forcing the application of Foley's "bondedness hierarchy", be considered as "participles", even though Indonesian does not identify "participles" on morphemic grounds.

14.1 Noun-plus-adjective/verb in Indonesian

The above (14.0) examples rencana (yang) baik and gedung (yang) tinggi will represent the average case, and this type presents no surprises.

The ligature is absent in phrases already "welded" together on grounds of semantic content (Verhaar 1983a:49). Consider the following (Fokker 1951:186)

(123) ilmu (*yang) pasti
    science    LG    certain
    'mathematics'

(124) ilmu yang pasti
    'a science providing certainty'

(125) sekolah (*yang) menengah
    school    LG    middle
    'secondary school'

(126) jalan (*yang) buntu
    road    LG    blocked-up
    'dead end road'

(127) gunung (*yang) ber-api
    mountain    LG    PREP-fire
    'volcano'

In contrast, yang is obligatory when any constituent intervenes between the (bare) head noun and the adjective (Fokker 1951:188):

(128) bini-nya (*yang) bijaksana
    wife-3s    LG    prudent
    'his prudent wife'
(129) ibu- nya *(yang) tua
mother 3s LG old
'her old mother'

Also, when the adjectival attribute itself is composed either serially
((130)), or because the adjective has itself a coconstituent ((131)), yang
is obligatory (Fokker 1951:189):

(130) anak *(yang) rajin dan pandai
child LG industrious and bright
'an industrious and bright child'

(131) kalimat *(yang) kurang jelas
sentence LG less clear
'a not-so-clear sentence' ('an obscure sentence')

In some instances yang is obligatory because the "same" phrase without
yang already has a specified meaning (Fokker 1951:189):

(132) orang *(yang) tua
person LG old
'an old man/woman'

(133) orang *(yang) tua
'parents'

(134) menteri *(yang) muda
minister LG young
'a young (cabinet) minister'

(135) menteri *(yang) muda
'veice-minister', 'under-secretary'

Apart from such special instances, yang usually adds emphasis to the
adjectival attribute. As noted this may be for contrast, as in (Verhaar
1983a:49):

(136) Saya suka rumah *(yang) besar, bukan rumah *(yang)
like house LG big not house LG
kecil
small
'I like a big house, not a small one.'

Not all such instances of contrast, however, need yang; the following
example is due to Sudaryanto (pers. comm.):

(137) Bukan apel (yang) merah kesukaan-nya, melainkan
not apple LG red liking 3s but
apel (yang) hijau.
apple LG green
'What he likes is not red apples, but green apples.'

where yang could easily be dispensed with. Note, further, that the empha-
sis requiring yang need not be contrastive; compare:

(138) hasil *(yang) bagus!
result LG beautiful
'a terrific result'

where it is not at all necessary that the good result be contrasted, in
discourse, with a disappointing result. Emphasis, of course, by its own
nature, loosens the bond between attribute and noun, lessening the subordi-
nated nature of the adjective to the noun, so that yang is called for to
strengthen bondedness of the two.

It remains to give an example of verbs in attributive position;
consider:

(139) Rumah-nya di-rampas oleh orang tak di-kenal.
     house 3s DI plunder by person not DI know
     'His house was plundered by persons unknown.'

Note that yang is possible here (oleh orang yang tak dikenal), in
which case the attribute would be a relative clause. In (134), however,
the "participle" level of Foley's hierarchy would seem to apply according
to all syntactic parameters, even though this language, as noted earlier,
has no independent morphemic support for verbal forms like "participles".
If we postulate such a level, then it, too, confirms the applicability of
Foley's bondedness hierarchy for Indonesian, for yang is optional in
(127).

15 NOUN-PLUS-RELATIVE CLAUSE

15.0 Introduction

The purpose of this section is to describe relative clauses in Contem-
porary Indonesian. Such a description is greatly hampered if some more
general principles, valid across languages (and some of them perhaps lan-
guage-universal) are not brought to bear. To set forth these general
principles is the purpose of the present subsection 15.0. Relative clauses
may be described from various angles (as e.g., in [PP-15], i.e. the place
of relative clauses in the composite sentence); the only angle relevant
here is relative clauses as attributes. Relative clauses may also be "re-
placive" for the head; those are discussed in Section 19, below. Much of
the following introductory expositions may be found in Verhaar 1983a:
55-61.

In the bondedness hierarchy according to Foley, the level of relative
clauses is the lowest level in the hierarchy, and in Indonesian the attri-
bute requires, obligatorily, introduction by yang. Without yang, the
relative clause is not firmly enough connected with the head (or
"antecedent"). All relative clauses in this language are postnominal.

Relativizing yang (like yang at all higher levels) has been called,
above, a "ligature". Ligatures may be pronominal (such as who or which in
English), and then we traditionally speak of "relative pronouns". Rela-
тивizing yang in Indonesian, like the ligatures in many other Austronesian
languages, e.g. those of Foley's sample (see 0.3, above), are nonpronom-
inal. That is to say, yang does not have any "categorial" status (it is,
in particular, not a "pronoun"), and it also cannot have an "argument"
status within the relative clause. Languages which have pronominal rela-
tive clauses (like Japanese) never have relative pronouns, but some such
languages (like Palauan) may have a nonpronominal ligature connecting the
end of the pronominal relative clause with the head. In Indonesian,
however, pronominal relative clauses do not occur.

To clarify the difference between pronominal and nonpronominal status
of relativizing ligatures, let the following examples provide some data:

(140) the man who came yesterday
(141) the sales clerk whom I saw last week
(142) the girl to whom Charles gave the ring
(143) the fool that I was
(144) (looking like) a baseball player, which he appeared to be
(145) the accountant with whom she went over the records
(146) tamu yang datang terlambat
     guest LG come late
     'the guest who came late'
In (140), who is the Subject of the relative clause (RC): in (141), whom is the Direct Object; in (142), to whom is the Indirect Object; (143), that is the nominal part of the Predicate (restrictive); in (144), which is the same (but nonrestrictively); finally, in (145), with whom is an "adjunct", of the exocentric type, with whom as the head within that type.

These English examples show clearly that the RC introducers are truly pronouns, and have categorial status as such, as well as Argument value (or extranuclear value, as in (145)), within the RC. It is also shown that the constituent valency of the relative pronoun within the relative clause is independent of how the antecedent is semantically related to the verb in the RC, or (as we shall say) the "relative verb" (RV).

None of this holds for Indonesian relativizing yang, as shown in (146) through (150). The antecedent must be in Subject relation to the RV, if I may be allowed the rather "extended" use of the term "Subject" (and, in a moment, of "Object" also) here (symbolized by quotes). Thus, (147) is wellformed, because pembantu is in Subject relation to the RV (mengerjakan); the same is the case in (146), where tamu is in Subject relation to the RV datang. In contrast, no such relation exists, in (148) through (150), between the antecedent (orang; teman; teman) and the RV (mengundang; menjelaskan; menjelaskan). In (148), that relation would be that of Object (orang in relation to mengundang); in (149), that of Indirect Object (teman, marked by kepada within the RC, to menjelaskan); while the wellformedness of (150) is not even salvaged by having kepada right extraposed, and encliticized by a pronominal "copy" -nya.

While these Indonesian data speak for themselves, denial of Argument status and categorial status of yang is amply confirmed on typological grounds, involving other Austronesian languages, including a great number of Philippine languages. In this typology, the principal constraint on RC's is that the "focus marking" on RV's should be such that the head (i.e., the antecedent) is the "target" of that focus. Thus, in (147) mengerjakan is "marked" for the "Agent" focus (by men-), and pembantu is that Agent. In contrast, the focus marking on the RV in (148) through (150) is not "targeted" on the antecedent. On the face of it, we could express this constraint by saying that yang must be the Subject of the RV; however, yang has no Argument status, so to speak of it as a "Subject" would be inconsistent, and incompatible with the syntactic properties of yang-introduced attributes. The comparison with Philippine languages shows bound forms (like -ng or nang in Tagalog) as ligatures, while Indonesian yang is "free"; however, this difference does not affect the non-pronominal, non-Argument character of this ligature.

What has just been said may also be phrased as follows. In pronominally introduced RC's (as in English), the head, or antecedent, "delegates" the place it takes within the RC to a pronoun: categorically determinable (since the ligature is pronominal), and with an inner-RC Argument (or extranuclear) position. In contrast, nonpronominal ligatures have no syntactic function like that "delegated" to them. The "delegation"
is extremely wide; the "delegate" may even be in a hypotactic position in regard to any Argument (or extranuclear position) within the RC, as is clear from a phrase like the sales clerk whose wallet she found on the counter where whose is an attribute within whose wallet, which in its turn is the Object of the RC. No such "delegation" is possible with yang-introduced RC's.

For such constructions, "coreferentiality conditions" must be explored. This will be done, among other things, in the following subsection 15.1.

There are also RC's in Indonesian with "adverbial" relativizers, just as there are in a language like English (e.g. the place where he stayed; the day when he came). These will also be treated in 15.1.

15.1 Noun-plus-relative clause phrases in Indonesian

Relative clauses (with an antecedent) in Indonesian are of three different types. Consider examples (134) through (134) through (138) (Section 15.0, above), as well as the following:

(151) guru ini yang anak- nyan meninggal
teacher this LG child 3s die
'this teacher whose child died'

(152) pembantu yang sapu- nya hilang
helper LG broom 3s disappear
'the janitor whose broom has disappeared'

(153) rumah itu yang atap-nya di- bongkar
house that LG roof 3s DI tear-down
'that house of which the roof has been torn down'

(154) rumah itu yang di-bongkar atap-nya
house that LG DI tear-down roof 3s
'that house of which the roof has been torn down'

(155) *guru ini yang meninggal anak- nya [see (115)]
(156) *pembantu yang hilang sapu-nya [see (152)]
(157) teman yang sudah lama saya ingin menjelaskan
friend LG already long 1s want explain
masalah ini kepada-nya
problem this to 3s
'the friend to whom I have already wanted for a long time to explain this problem'

(158) *anak yang dua hari yang lalu Ali memukul-nya itu
child LG two day LG ago A. beat 3s DET
'the boy that Ali beat two days ago'

(159) anak yang sudah sering kali Ali memukul-nya itu
child LG already often time A. beat 3s DET
'the boy that Ali has already beaten so often'

(160) soal yang sudah lama kita ingin
problem LG already long 1p [incl.] want
membicarakan-nya
discuss 3s
'the problem that we have already for a long time wanted
to discuss'

These data exhibit evidence for no fewer than three conditions of
coreferentiality of the antecedent and the RV. These coreferentiality conditions may be phrased as follows:

[a] The "focus coreferentiality condition" (FCC). This is the condition found in (146) and (147), and violated in (148) through (150): the rule states, as indicated above, that the "focus" of the RV must be the referent of the antecedent.

[b] The "possessor's pro-form coreferentiality condition" (PPCC). It is exhibited in (151) through (154). In the RC, pro-form -nya is coreferential with the antecedent, but at the same time the possessee is the (formative) Subject of the RC: anak in (151), sapu in (152), atap in (153); and, in clause-final position, atap in (154). Note that atap in (153) and (154) is variable in position, while the same position variability for anak in (155) does not obtain, any more than that of sapu in (152) and (155). The reason for the variability where it obtains is that the possession is inalienable (if the roof is torn down, the house itself is, at least in part, torn down), and the reason why anak in (144) or sapu in (156) cannot occur in clause-final position is that the possession is alienable (if the teacher's child dies, that does not entail that the teacher dies; if the broom disappears, that does not entail that the janitor disappears).

[c] The "delayed pro-form coreferentiality condition" (DPCC). This is found in (157), (159), and (160), whereas it is out in (158). The DPCC deserves more study. One observation (due to Kaswanti, pers. comm.) is that the wellformed data have longer relative clauses than those that are not wellformed. Note how close (157) is to (159), yet (159) is not wellformed, while (157) is accepted by a large sample of careful speakers. In (150), the FCC has not been met; it is true that the FCC has not been met in (157) either, but there the DPCC overrides the FCC, and sheer length of the RC has almost certainly something to do with that. But there is more. Compare, for example, (158) and (159). According to Kaswanti (pers. comm.), sudah sering kali in (159) not only lengthens the RC, but there is a "modal" value in it (say, "iterativeness"), whereas dua hari yang lalu in (158) is merely an adjunct of time, with no modal value: hence careful speakers in fairly great numbers reject (158), while accepting (159). In (160), the sudah lama adjunct imparts to the entire Predicate (which already has a "modal" verb, ingin) a "progressive" character.

15.2 Restrictive and nonrestrictive relative clauses in Indonesian

It seems that no prenominal relative clauses can ever be nonrestrictive: Japanese is a language which can only have prenominal RC's. The reason for this constraint seems to be straightforward. A nonrestrictive RC provides additional information about the head noun, not needed for unique identification of that head. Such additional information, however, takes the form of an "afterthought", and "afterthoughts" would naturally be accommodated after, i.e. to the right of, the head noun; it would be hard to accommodate an "afterthought" to the left, i.e. as a kind of "forethought".

The point of this observation is to show that postnominal relative clauses (the only type found in Contemporary Indonesian) may be either restrictive or nonrestrictive. We do indeed find both types; consider:

(161) Orang yang datang terlambat tidak boleh masuk.
     person LG come late not may enter
     'Those who are late are not admitted.'

(162) Rencana ini, yang memang sudah lama merupakan plan this LG indeed already long be
     prioritas tertinggi, akhirnya akan dapat priority highest finally will can
     dilaksanakan.
     be-executed
"This plan, which has indeed been the highest priority for a long time, it will finally be possible to execute."

In (161), suppression of the RC yang datang terlambat would lead to a different reading of the sentence; the RC uniquely identifies the antecedent orang: only those who are late will be denied access. In contrast, (162) would be perfectly wellformed without the RC (yang memang sudah lama merupakan prioritas tertinggi) and in context rencana would be uniquely identified: the RC merely provides additional information, by way of an "afterthought". Note the presence, also, of memang in the RC, and compare this with (163):

(163) I would like to introduce you to my cousin, who incidentally is a famous author.

where incidentally, a "sentence adverb" necessarily stamps the RC as non-restrictive.

The very use of pro-forms in RC's may be assumed to originate from nonrestrictiveness of the RC, which then needs a pro-form to reidentify, for the hearer, the antecedent, as the kind of "adaptation" needed to accommodate "afterthoughts" in composite sentences. This must, we suggest, be the reason why the DPCG overrides the FCC (see 15.1, in fine [a] and [c]). In (159) and (160), for example, the FCC is violated. As these phrases appear above, they look like restrictive ones, but we suggest the original forms of the DPCG must have been in nonrestrictive RC's of this type; in fact, these constructions could very easily be nonrestrictive, in the following form:

(164) anak ini -- yang sudah sering kali Ali memukulnya itu --

(165) Soal tersebut -- yang sudah lama kita ingin membicarakannya itu --

But then, of course, such nonrestrictive RC's may easily become uniquely identifying, and therefore restrictive.

Support for this view is provided by an example like the following (taken from the newspaper Kompas):

(166) PLN [name of power company] menyebutkan suatu angka, a figure
yaitu lima belas juta Rupiah, yang ternyata
namely fifteen million Rupiah, as is
setelah dilakukan pendekatan dengan masyarakat,
after be-done approach with society
biaya itu tidak bisa dikumpulkan.
expense that not can be-collected

'The PLN [power company] named a sum, namely fifteen million Rupiah, which, as it turned out after there had been consultation with the people, it would be impossible to collect.'

Note that the relative clause (yang ternyata [...] dikumpulkan) is nonrestrictive; it is also very long, containing an embedded subclause (setelah [...] masyarakat). The antecedent (suatu angka), after the long RC is well under way, is picked up in fully nominal form (biaya itu), before the Predicate of the RC is finally accommodated (tidak bisa dikumpulkan). What in many constructions would be a pronominal copy is here a copy all right (biaya itu is a paraphrase of suatu angka), but not even in case yang were to be replaced by dan 'and', the entire sentence would be perfectly wellformed (and, according to some of our informants, even more wellformed than the form it takes in (81)). Nonrestrictive yang RC's therefore, are only very "mildly" subordinated to the antecedent, and are more like RC attributes.

Here is another example with yang with the antecedent picked up in
fully nominal form within the relative clause (from a student paper):

(167) Ketransitifan itu ditandai oleh kehadiran transitivity DET be-marked by presence komplemen pasientif pada kk N-D I yang di complement Patient-like in LG in dalam kalimat pasif komplemen pasientif itu in sentence passive complement Patient-like DET mengisi fungsi subjek fill function Subject

'That transitivity is marked by the presence of a Patient-like Complement [...] which, in a passive sentence, fills the function of Subject.'

Also, the following illustrates the same syntactic organization, but with some mana introducer of the RC (the mana-introduced RC will be discussed in 15.3 and 15.4 below, but the fully nominal anaphoric is more conveniently discussed here):

(168) Saya dan teman-teman ingin mengucapkan i.e. and friend RED wish pronounce terima kasih kepada Bapak yang mana Bapak thank-you to (you)-Sir LG MANA (you)-Sir telah menyetujui mendirikan ASP agree found koperasi ini coop this [from a TV play]

'I and my friends wish to thank you Sir, who have agreed to found this coop.'

(169) Kalau misalnya saya membutuhkan obat, when for-example is need medication yang mana pengobatan itu tidak mampu LG MANA medication DET not be-able saya bayar, [....]. I is pay [from a TV interview]

'When for example I need medication such that I cannot pay for it, [....].' Again, the inclination towards paratactic rather than hypotactic organization of the RC appears here very clearly. However, many careful speakers would characterize (166) through (169) as "substandard". This may betray sociolinguial bias, but it represents accepted opinion among those who are supposed to know what is or is not "standard".

15.3 Relative clauses with pronominal ligatures in Indonesian

As is well-known, many languages have developed RC’s through the use of relative pronouns originating from interrogative pronouns (such as who and which in English); another development is relative pronouns from demonstratives (e.g. that in English, or dat and die in Dutch). It is the former development (from interrogatives) which seems to be affecting Contemporary Indonesian. Consider the following examples:

(170) murid-murid dengan siapa saya berkumpul setiap pupil RED with who is get-together each minggu week

'the students with whom I get together once a week'

(171) Akhirnya dia lulus, hal mana amat menggembirakan finally 3s passed thing which very give-joy-to
orangtua-nya.
parents 3s
'finally he passed the exam, which gave great joy to his
parents.'

(172) alat dengannyang mana kami bekerja
instrument with LG which Ip [excl.] work
'the device with which we work'

Siapa is originally a relative pronoun (see Kaswanti Purwo 1984c), but
here used for the purpose of relativization. Its relative function is
recent in the language, and may well be due to interference from a language
like English. However, to claim that it is only that may be to jump to
conclusions, considering that many languages have developed RP's from in-
terrogatives. Note that mana? is also interrogative in origin, but it
would be harder to demonstrate foreign interference here ([.....], which
thing [.....]?). Another argument against the claim that such erstwhile
interrogatives as relatives now is exclusively due to foreign interference
is the inclination towards paratactic construction as illustrated in (168)
and (169), above; for borrowing such construction from other languages
would cause speakers to tend towards hypotactic organization; we do find
that in (170), but not in (171) and (172).

15.4 Relative clauses with adverbial ligatures in Indonesian

As a language like English may relativize places with adverbial where,
and time with adverbial when, thus, also in contemporary Indonesian, we may
encounter relativizations like the following:

(173) di dalam rumah di mana saya jatuh sakit
in in house where friend 1s fall ill
'in the house where my friend fell ill'

(174) pada waktu (?kapan) dia bekerja di situ
at time when 3s work at there
'at the time when he worked there'

The adverbial relativizer of place di mana may often be heard, though
some proponents of "standard" Indonesian frown upon it (and blame it on
foreign interference); the temporal adverbial relativizer kapan is more
dubious, and is (I believe) much less often heard.

Consider, in contrast, the older, and probably original constructions:

(175) rumah tempat saya menginap
house place 1s stay-overnight
'the house where I stayed overnight'

(176) pada tempat mereka belajar
at place 3s study
'in the place they did their studies'

(177) pada saat (ketika/waktu) mereka masuk
at moment moment time 3p enter
'at the moment they entered'

Note how tempat (which is widely and commonly used as a noun, for
'place') in (175) is an "adverbial" relativizer of the antecedent rumah
'house'. In contrast, in (176), tempat is a "headless" relativizer of
place. As for time relativization, consider (177): saat itself may be a
"headless" relativizer (i.e. when it is immediately followed by mereka
masuk; saat, however may also be the antecedent with ketika (but not waktu)
as the "adverbial" time relativizer. (Waktu is the regular conjunction of
time 'when'; waktu is also the regular noun for 'time'; ketika may also be the regular conjunction for 'when [referring to a relatively indivisible moment of time]', and also ketika is the regular noun for '[indivisible] moment'.

On "headless" yang phrases (to which the "headless" tempat in (176) is strictly parallel), see Section 19, below. On relative pronouns generally, see Kaswanti Purwo 1984c. See also Section 7.2, above, where tempat is discussed as a "copying" semi-attribute.

16 NOUN-PLUS-ATTRIBUTE OF AN "ADVERBIAL" CHARACTER

16.0 Introduction

An English example of the type of noun phrase meant here would be the flowers on the table; or the program for undergraduates. The attributes are on the table, and for undergraduates. Apart from their attributive capacity, such expressions would be adverbal, and in fact simple adverbs would be available for attributive service as well: the table here; the building over there. The term "adverbal" is merely a convenient descriptive label, and is being placed here within "scare quotes": these attributes are, of course, true attributes.

Some notes on such "adverbal" attributes in their relevance across languages are of some use, for our purpose. As set forth elsewhere (Verhaar 1983c), languages with Operator-Operand order in noun phrases cannot have such "adverbal" attributes. Consider the following Japanese examples:

(178) Nihon no fune
        Japan AM ship
     'A ship coming fromgoing to/belonging to Japan'

(179) Nihon kara no fune
        Japan from AM ship
     'A ship (coming) from Japan'

In (178), no is an attribution marker, which, though it may be possessive, need not be that; hence the neutrality of no in regard to specific semantic relations from the attribute to the head, possessive or not. If, however, a Japanese speaker wishes to express the "origin" relationship ("from Japan"), then the appropriate postposition for that, kara, may be used, but only on condition that kara be followed by the ("neutral") attribution marker no, as in (179). In other words, the "adverbal" phrase Nihon kara cannot serve as an attribute, without no appended; stacked postpositions are needed to prevent an attribute from becoming one of the "adverbal" type. The reason for this constraint is that prenominal attributes (the only position possible in this language) cannot be of the "adverbal" type. In Operand-Operator order, however, i.e. the order having the attribute to the right, such "adverbal" attributes are possible because they are (at least originally) "afterthoughts": the flowers [pause ....] on the table. Then such "afterthoughts" are "grammaticalized" as true attributes, retaining the originally "adverbal" form.

Contemporary Indonesian has this Operand-Operator organization of phrases. Hence a fair range of possibilities of "adverbal" attributes is open, and productively so.

16.1 Noun-plus-"adverbal" attribute in Indonesian

Consider the following examples of this type of phrase:
(180) bunga- bunga (yang) di meja ini
flower RED LG on table this
'the flowers on this table'

(181) pengumuman (yang) tadi malam itu
announcement LG earlier evening DET
'the announcement last night'

(182) rencana-nya (yang) ke Jakarta itu
plan 3s/p LG to J. DET
'their plan (to go) to Jakarta'

(183) rakyat (*yang) se- tempat
people LG same place
'the people in that area'

(184) Waktu-nya (yang) untuk istirahat (kurang)
time DET LG for rest not
cukup.
sufficient
'The time for rest was not sufficient.'

(185) kedatangan mereka (*yang) dari Solo
arrival 3p LG from S.
'their arrival from Solo'

On the whole, these examples are rather straightforward and do not seem to pose any special problems, except for the prohibition/optionality of yang. It seems that the "adverbial" attributes of place take yang optionally; for time, however, it seems that a definite time is required for yang to be possible, as illustrated by (184), where definiteness is indicated by -nya; for example, a more "general" (and therefore "indefinite" waktu (*yang) untuk istirahat 'time for rest' precludes the use of yang. The attribute setempat never takes yang. Why yang is out in (185), I do not know. The use of yang with this type of attribute deserves more research. In general, hesitation on the part of the speaker in regard to the "adverbial" attribute might trigger yang (to cover the "gap"), introducing an "afterthought".

17 NON-PLUS-NONNOUN SERIAL ATTRIBUTES

Serial attributes of all types seem to be possible for all levels of Foley's "bondedness hierarchy", in Indonesian, except, in the nature of the case, for the highest level, that of the "article", i.e. of the anaphoric deictic itu (see Section 1, above). That is to say, in the nature of the case, pernyataan itu 'the (aforementioned) statement' (with itu, therefore, as endophoric), cannot have its attribute expanded to include anything else; therefore, itu in (186) must be ectophorically deictic, belonging to the second highest level in the hierarchy. Of course one could have a phrase like pernyataan itu, yang kita setuju (statement aforementioned LG 1p [incl.] agree-with) 'that (aforementioned) statement that we agree with', but then the attributes itu and yang kita setuju would be multiple, not serial, attributes.

Here are some examples of serial attributes from the second highest level down, including also the phrases with "adverbial" attributes:

(186) pernyataan (yang) itu dan (yang) ini
statement LG that and LG this
'that (statement) and this (one)'
(187) anak (yang) ini dan (yang) itu
child LG this and LG that
'this child and that one'

(188) alat *(yang) mana dan *(yang) ke-berapa
tool LG which and LG ON how-many?
'which tool and what in number?' ['how-many?']

(189) gedung *(yang) indah dan (yang) tinggi itu
building LG beautiful and LG high DET
'that beautiful and high building'

Note that yang is obligatory the first time, simply because of the
serial nature of the attributed, which, because of its length, demands yang
for "bondedness" of that attribute to the attributee. The second
time, however, yang is optional, except for the ordinal numeral ke-berapa, which
differs too much from the adjectival first part of the attribute for it to
be serialized with that adjective (indah) without yang.
So far the examples are rather straightforward. Phrase (188) is a
good example of a serial predicate that has attributes of two different
levels (in the "bondedness hierarchy") serialized, with the consequence
that even the second yang is required for the serialization. The ordinal
numeral seems, however (despite its essential adjectival nature), at least
to be serializable with a "regular" adjective like indah. One could not,
however, have *alat yang mana dan indah (even with yang to introduce
indah), any more than one could have *which and beautiful tools? in
English. In Indonesian, however, a level difference between adjective and
relative verb does not preclude their serialization in an attribute, as is
apparent from (190), while (ectorphic) deictic plus verb is not well-
formed, as appears from (191):

(190) orang *(yang) baik dan (yang) bisa dipercayaya
person LG good and LG can be-trusted
'a good and trustworthy person'

(191) orang (yang) ini (*dan bisa dipercayaya)
person LG this and can be-trusted
'this person'

In (190), yang, because of its essentially nonpronominal nature, can
still serialize two levels as different as adjective and relative clause; in
contrast, in (191) the levels for (ectorphic) deictic and relative
clause are too far apart for them to be serialized in the same attribute.

18 NOUN-PLUS-NONNOUN MULTIPLE ATTRIBUTES

As explained earlier (Sections 4 and 5, above), "multiple attributes"
are attributes which are themselves of the head-plus-attribute type. While
for noun-plus-nonnoun attributes such added-on multiple attributes are sub-
ject to stricter constraints. It is most convenient here to review the
various types of nonnoun attributes as dealt with in Sections 16 through
16.

The noun-plus-determiner type (Section 10) may have multiple at-
tributes by having adjectives or relative clauses or "adverbial" at-
tributes added; or any combination of those. Consider:

(192) acara tadi *(yang) menarik itu
(agenda) item just-now LG attractive
'that attractive (agenda) item just now'
(193) acara tadi *(yang) kami lupa (agenda) item just-now LG ip [excl.] forget 'the (agenda) item just now which we forgot'

(194) bunga (yang) di meja itu yang belum diganti flowers LG on table DET LG not-yet be-replaced 'the flowers on the table that have not yet been replaced'

The noun-plus-deictic type (Section 11) may have multiple attributes in various ways as well:

(195) gedung (yang) itu *(yang) akan dibongkar building LG that LG will be-torn-down 'that building (over there) that will be torn down'

(196) naskah (yang) ini *(yang) tidak sedikit itu document LG this LG not few DET 'these documents (here) which are not few (in number)'

It should be noted that (195) and (196) are phrases, not clauses, as are the other data in this section.

Similar combinations can easily be found with all the other forms of multiple attributes of the noun-plus-nonnoun type.

19 "HEADLESS" YANG PHRASES

19.0 Introduction

This last type of phrase is the one which contains yang as "replacive", to borrow a term from Downing (1978), which is used to characterize relative clauses without a "head". We apply it here to any yang phrase which has no head, no matter whether the phrase is a relative clause or belongs at any other higher level on the "bondedness hierarchy". Since yang is indeed used frequently without a head, it merits some discussion here; however, it is subject to some doubt whether yang may, in such phrases, still be called a "ligature". Indeed, we may well be concerned here with something uniquely characteristic for Indonesian, among Austronesian languages, most of which have ligatures of the morphemically bound type, so that they could not, therefore, stand alone, i.e. without being bonded to the head.

It should at this point be noted that also the "adverbial" relativizers discussed in 15.4, above, can be used "headlessly"; I will not return to those constructions any more below.

19.1 "Headless" yang phrases in Indonesian

It appears that, at all levels of the "bondedness hierarchy", excepting only the highest ("article"; i.e. "anaphoric") level, yang may replace the head, whenever the context makes repetition of the head superfluous. Here are some examples:

(197) yang itu/ini LG that (over there/right here) 'the one over there/right here'
(198) yang mana?
   LG    which (one)
   'which one?'

(199) yang banyak itu
   LG    many DET
   'those ones that are numerous'

(200) yang tinggi itu
   LG    high DET
   'the high one'

(201) yang sudah dikumpulkan itu
   LG    already be-collected DET
   'the ones that have already been collected'

Note that itu in (197) is deictic (ectophorically), and belongs to
the second highest (not the highest) level in the hierarchy. The top
level itu (endophoric, anaphoric) cannot have "replacive" yang.

The other examples present no specific problems; all the "adjec-
tive/verb" level, however, the "verb" plus replacive yang (e.g., yang tak
dikenal 'unknown (one(s)), as short for orang tak dikenal 'persons unknown'
would be indistinguishable from the relative clause introduced by replacive
yang (of which an example would be (210)).

The attribute type of the "adverbial" character also can have re-
placive yang. Consider:

(202) yang di mej a itu
   LG    on table DET
   'the one(s) on the table'

(203) yang sesudah upacara itu
   LG    after ceremony DET
   'the one [e.g. a meeting] after the ceremony'

(204) yang untuk anak-anak kecil itu
   LG    for child RED small DET
   'the one(s) for small children'

This type, also, presents no surprises.
It is important to note that replacive yang replaces the head noun
fully, in that, like the head noun it replaces, yang may even be preceded
by a preposition. Consider:

(205) dengan yang itu
   with LG that (over there)
   'with the one over there'

(206) untuk yang mana?
   for LG which (one)?
   'for which one?'

(207) tanpa yang empat itu
   without LG four that
   'without those four'

(208) Kepada yang tidak mau ikut akan disajikan
to LG not want follow will be-offered
acara lain program other
'To those who do not want to come along some other enter-
tainment will be offered.'

(209) Tentang yang sudah kalian pelajari akan ada
   about LG already 2p study will be
ujian.
examination
'About what you have already studied there will be an ex-
amination.'

These examples seem to present no problems for wellformedness, so far
as feedback from careful speakers tells us, with some hesitation only in
regard to (209). One linguist (Sudaryanto, pers. comm.) blames the
cacophony of tentang yang for this hesitation, and it is suggested that, if
tentang were to be replaced by mengenai 'concerning', there would be no
problem.

19.2 Yang as "definitizer"

The definitizing character (or lack thereof) of the headless relative
construction has considerable relevance across languages, which must here
be set forth very briefly first.

In a language like English (which has pronominal ligatures) headless
relative clauses are possible only with what, and there may be some
diachronic connection here with the interrogative origin of that relative
pronoun, in that which and who, which are also interrogative in origin but
definitizing semantically, cannot be used headlessly. Consider:

(210) What you cannot do will be done by others.
(211) *Which you cannot do will be done by others.
(212) *Who you cannot phone we will visit.

However, when definiteness is taken out of who and which, by adding
-ever, headless use of them is wellformed:

(213) Whichever (job) you cannot do will be taken care of by

(214) Whoever cannot help should let me know.

and the same holds for what + ever, a fortiori, since what without -ever is
already indefininite:

(215) Whatever you cannot do will be done by others.

We may bypass here the "attraction" of the head within the relative
clause (as in Whatever job you cannot do [.....]), a characteristic showing
up in relative clauses in many languages, but not in Indonesian.

In contrast, replacive yang clauses in Indonesian invariably defini-
tize whatever it is that is modified by the attribute (relative clause or
not), and indefiniteness will preclude the use of replacive yang. Con-
sider:

(216) Yang miskin perlu ditolong.
Ló poor necessary be-helped
'Those who are poor must be helped.'

In (216), the reference is not to all the poor, but to those who are
poor in one (contextually well-defined) group. (For '(all) the poor' Indo-
nesian would use the collective determiner kaum: kaum miskin.) Some
careful speakers (Kaswanti, pers. comm.) have indicated that yang in (216)
even makes the phrase yang miskin contrastive, i.e. as opposed to those
who are well-off, in the same group.
NOTE

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ABBREVIATIONS

A Agent; transitive Subject
AF Actor focus
AM attribution marker
ART article
ASP aspect
CCL collective cardinal numeral
CL classifier
CN cardinal numeral
DET determiner
DI di- prefix, with verbs
excl. exclusive
EQ equative
Ilo. Ilocano
incl. inclusive
LG ligature
Mal. Malagasy
NOM nominalizing suffix (-nya)
Od Operand
ON ordinal numeral
Or Operator
P Patient; Object
Pal. Palauan
PREF prefix
RED reduplication
S (intransitive) Subject
T topic
T.B. Toba Batak
Tag. Tagalog
Tol. Tolai
Wol. Wolio
1s first person singular
2s second person singular
3s third person singular
1p first person plural
2p second person plural
3p third person plural

SYMBOLS

| (vertical slash): to separate initial and final sections of circumfixes
/ (diagonal slash): to separate alternatives in cited data, or in their glosses; or in the body of the text
: (colon, in italics, at the beginning of a cited form): to mark pre-categorial forms

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(brackets): to enclose clarifications not part of the expressions in which they have been inserted

[. . . . ] (four periods in brackets): to indicate ellipse of original matter
*(X) (asterisk outside parentheses): to symbolize that X as an insertion is obligatory (the asterisk prohibits optionality)
(*X) (asterisk inside parentheses): to symbolize that X as an insertion is prohibited
* (asterisk, to the left of cited form): to symbolize that what follows is not wellformed
(X) (parentheses): to symbolize that X is optional
# (double cross): to denote absence of a hierarchical level

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