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 lurah 'the accusation against the village headman'; penuduhan oleh lurah 'the accusation by the village headman'; penuduh lurah '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" semiattributes;
[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" semiattribute (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 prases 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 <u>my</u> <u>brother</u>) and "prepositional phrases" (see [PP-2]) (like <u>to</u> <u>my</u> <u>brother</u>); nevertheless, in many clause constructions, especially where (say) <u>to</u> <u>my</u> <u>brother</u> 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 <u>yang</u> 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" <u>yang</u>. Although <u>yang</u>-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**). <u>Yang</u> 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 <u>yang</u> attributes more in general here first, so as to facilitate discussion in Sections **10** through **18** , below, to none of which individually <u>yang</u> 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 <u>yang</u> have in common (excepting, for the moment, constructions with "headless" <u>yang</u>; see Section **19**), is that this "ligature" <u>yang</u> "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)   <u>mataba-ng</u>   <u>maruno-ng</u>   <u>tao</u>
      fat   LG   wise   LG   man
      '(a) fat, wise man'

3

(2) <u>marani-ng</u> <u>bata</u>
    many   LG child
    'many children'

(3) <u>kulay</u> <u>ni-iyon</u>
    color   LG that
    'that color'

(4) <u>a-ng</u> <u>babae-ng</u> <u>nag-bahasa</u> <u>na-ng</u> <u>diyaryo</u>
    T LG   woman LG   AF   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: <u>-ng</u>, <u>ni-</u>, 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

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

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).

(6)

	Tag.	Pal.	Ilo.	T.B.	Tol.	Wol.	Mal.
7. article	+						
6. deictic	+	+					
5. interrogative	+	+	+				
4. quantifier	+	+	+	+			
3. adjective	+	+	+	+	+		
2. participle	#	#	#	#	#		
1. relative	+	+	+	+	+	+	<u>+</u>

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 (<u>izay</u>), 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 boundedness 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 <u>tak dikenal</u> in (14) is the same as that of a participle within the hierarchy. Finally, level 1 has <u>yang</u> obligatorily, as illustrated by (15), and by any <u>yang</u> **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)   <u>rumah</u>   <u>saya</u>
>   house 1s
>   'my house'

> (17)   <u>halaman</u>   <u>sekolah</u>
>   grounds 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 <u>dari</u> (sometimes expanded to <u>daripada</u>), 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-nonnoun phrases, to be discussed in Section 16, below. (The <u>daripada</u> form is usually context-sensitive to personal pronouns, but is rare in possessive constructions in this form.)
Consider:

> (18)   <u>milik</u>   <u>(dari(pada))</u>   <u>Pak Sujito</u>
>   property of   Mr S.
>   'Mr Sujito's property'

<pre>
(19) atap   (dari(pada)) gedung   yang tinggi itu
      roof   of   building LG   high   that
      'the roof of that high building'
</pre>

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" semiattribute 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:

<pre>
(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   S.
      'Saparjo's mother'
</pre>

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-**non**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   1p
       '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 repre-
sents the hero, so that pahlawan would be in an "objective" semantic rela-
tion 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 possessive 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 posses-
sion"

   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) predica-
tively, 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 Predicate.) 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', lebarnya 'width', dalamnya '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 explained 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 described as having a "possessive" relationship of some sort between attribute and attributee). One could, for example, distinguish a "partitive" 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

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

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:

<pre>
(39)   the enemy's arrival
(40)   the enemy's destruction of the city
(41)   the city's destruction (by the enemy)
(42)   priezd 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   destruccion de   [Spanish]
       ART   destruction of
       la   ciudad   (por el   enemigo)
       ART   city   by   ART   enemy
       'the destruction of the city (by the enemy)'
</pre>

```
(46)  la     destruccion  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
      door   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 characterized 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 vraga 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 nouns 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 2.0 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) penolakan-nya [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 [A]
transportation by 3s
*(dari) barang ini [P]
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 [A] '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: memuatkan 'to load [something onto something]'; and memuati 'to load [something]'; and memu- ati 'to load [something 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 A (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 A (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 cliticized (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 <u>dari</u> (as in (58), (59), (61), (62), (64), and (65)), or by other prepositional markers, such as <u>mengenai</u> (in (63)), or <u>terhadap</u> (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, <u>pemuatan</u> derives either from <u>memuati</u> (as in (63) through (65)) or from <u>memuatkan</u> (as in (60) through (62)). The underlying view here (to be worked out in full detail in [PP-9]) is that the token <u>pemuatan</u> is ambiguous, and represents <u>pemuatan</u>$_1$ (from <u>memuati</u>) and <u>pemuatan</u>$_2$ (from <u>memuatkan</u>). Hence <u>batubara</u> is P when going with <u>pemuatan</u>$_1$ (the Patient is P), while <u>truk</u> is P when going with <u>pemuatan</u>$_2$ (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 <u>conductor</u>, from <u>to conduct</u>, or <u>reader</u>, from <u>to read</u>; Indonesian examples would be <u>pembaca</u> 'reader', from <u>membaca</u> 'to read', or <u>penjual</u> 'seller', from <u>menjual</u> '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 <u>perenang</u> '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)   <u>pembaca</u> <u>koran</u>
            reader   newspaper
            'reader of a newspaper'

    (67)   <u>penjual</u> <u>kuda</u>
            seller   horse
            'seller of horses'

    (68)   <u>penulis</u> <u>surat</u>
            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 morphe-
mic 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 "proba-
ble" in terms of text counts, and it may be used to introduce the P attri-
bute 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 inter-
venes 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   pemuat   barang   di   atas   truk
               device   loader   goods   on   on   truck
               'a device loading goods on to a truck'

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

    In (73), pemuat derives from memuatkan 'to load [something on to
something]', barang is the P attribute, while di atas truk is the second
attribute; in contrast, in (74), pemuat derives from memuati 'to load
[something with something]', with truk as P attribute, and dengan barang as
the second attribute. In these examples, pemuat is one token for two
lexical types (see Section 2.1, after the examples, for a similar dis-
tinction between the action nouns pemuatan (from memuatkan) and pemuatan
(from memuati)). In actor noun phrases with heads like pemuat, however,
in which the only attribute is the P attribute, the lexical distinction
between the two pemuat's is "neutralized", as in alat pemuat 'loading
device'. For the relation between alat and pemuat, 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
        house Mr   and Mrs S.
        'Mr and Mrs Sumarman's home'

(76)   pendidikan anak- anak dan orang   dewasa
        education   child RED   and person adult
        'the education of children and adults'

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

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

(79)   tulisan Rahmat dan Pranjoto
        writing R   and P
        '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 impossiblity 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
      Mr   S.   Professor medicine   at   University
      Gadjah Mada
      G.   M.
      '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-

19

nominal yang, this use of yang is well attested in earlier Malay.

[ii] the "copying" semiattribute, see Section 7, below. Such semiattributes 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" SEMIATTRIBUTE

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 sub-types 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 subordi-nated, 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" semiattribute

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 pe-culiar 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 pemuat 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 'adjectivally", 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" semiattribute

Consider the following examples:

<div>

(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'

</div>

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   1s   buy   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-   lembar
>   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 lembar *(yang) tipis
>   paper   two CL   LG   thin
>   'two thin sheets of paper'

22

(100)   se-   butir telur; se-   buah almari; se-   ekor
      a/one CL   egg   a/one CL   cabinet a/one CL
      burung
      bird
      'a/one egg'; 'a/one cabinet'; 'a/one bird'

(101)   telur dua butir; almari dua buah; burung tiga ekor
      egg   two   CL   cabinet two CL   bird   three CL
      'two eggs'; 'two cabinets'; 'three birds'

(102)   air anggur; air liur
      CL   wine   CL   saliva
      'wine'; 'saliva'

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 atonic, and they may receive stress only for special reasons such as contrast:

(103)   rokok   bukan tiga   **batang**, melainkan tiga
      cigarette not   three CL   but   three
      bungkus
      pack
      'not three cigarettes, but three packs of cigarettes'

9   NOUN-PLUS-NONNOUN PHRASES

9.0 Introduction

As briefly set forth in Section 0.2, above, noun-plus-nonnoun phrases must be sharply distinguished from noun-plus-noun phrases, in various respects. First, the former type has, on the whole, a clear semantic relation from attribute to head noun; that is to say, there is nothing

"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" endophorically, i.e. utterance-internally (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. endophorically "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 the present section. Here is another example, in which anaphoric tersebut (lit.: 'aforementioned') cannot be introduced by yang:

```
(106)  meja  (*yang)  tersebut
       table   LG      mentioned
       'the table just mentioned/the aforementioned table'
```

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? '(to) 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   chir   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';

(116) Saya mau   anak   *(yang) banyak (*itu).
      1s   want child   LG   many   DET
      'I want (*the/those) many children.'

(117) Dia membeli banyak jeruk   *(itu)
      3s   buy   many   orange   DET
      'He bought (*the/those) many oranges.'

(118) Jeruk (yang) *(se-)banyak *(itu) mau   diapakan?
      orange LG   EQ   many   DET   want be-done-with
      'With that many oranges what would one want to do?'

(119) meja   dua,   kursi lima, rak
      table two   chair five   case
      tiga ([....])   [in enumeration]
      three
      'two tables, five chairs, three bookcases ([....])'

(120) se-orang   pembaca
      a CL   reader
      'a reader'   [indefinite, nonreferential]

(121) pembaca se-   orang
      reader   one   CL
      'one reader'   [indefinite, referential]

(122) Ada   se-orang pembaca yang   suara-nya kurang
      be   a CL   reader   LG   voice 3s   not-enough
      nyaring.
      loud
      'There is a/one reader whose voice is not loud enough.'
      [indefinite, referential]

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 empat and kursi 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 <u>rencana (yang) baik</u> ('plan LG good') 'a good plan', or <u>gedung (yang) tinggi</u> ('building LG high') 'a high building'. In general, the ligature <u>yang</u> 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 <u>yang</u> 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 <u>yang</u>.

Sometimes verbs serve "adjectivally" in this type of phrase, i.e. without the use of <u>yang</u> (<u>yang</u> 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 <u>rencana (yang) baik</u> and <u>gedung (yang) tinggi</u> 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) <u>ilmu</u>   (*<u>yang</u>)   <u>pasti</u>
      science   LG   certain
      'mathematics'

(124) <u>ilmu</u> <u>yang</u> <u>pasti</u>
      'a science providing certainty'

(125) <u>sekolah</u>   (*<u>yang</u>)   menengah
      school   LG   middle
      'secondary school'

(126) <u>jalan</u>   (*<u>yang</u>)   <u>buntu</u>
      road   LG   blocked-up
      'dead end road'

(127) <u>gunung</u>   (*<u>yang</u>)   <u>ber- api</u>
      mountain   LG   PREF-fire
      'volcano'

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

(128) <u>bini-nya</u>   *(<u>yang</u>)   <u>bijaksana</u>
      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 alrady 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
                'vice-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)
                1s   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 emphasis 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 subordinated 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 Contemporary Indonesian. Such a description is greatly hampered if some more general principles, valid across languages (and some of them perhaps language-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 "replacive" 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 attribute 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". Relativizing yang in Indonesian, like the ligatures in many other Austronesian languages, e.g. those of Foley's sample (see 0.3, above), are nonpronominal. 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 prenominal relative clauses (like Japanese) never have relative pronouns, but some such languages (like Palauan) may have a nonpronominal ligature connecting the end of the prenominal relative clause with the head. In Indonesian, however, prenominal 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'

(147) pembantu   yang   mengerjakan   tugas   ini
       helper   LG   accomplish   task   this
       'the employee who does this job'

(148) *orang   yang   saya   mengundang
        person   LG   1s   invite
       'the man I am inviting'

(149) *teman   kepada   yang   saya   menjelaskan   masalah   ini
        friend   to   LG   1s   explain   problem   this
       'the friend to whom I explained this problem'

(150) *teman   yang   saya   menjelaskan   masalah   ini
        friend   LG   1s   explain   problem   this
       kepada-nya
       to   him
       'the friend to whom I explained this problem'

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) mengerja n 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 Philipine 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: categorially 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- nya 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 (156). 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

33

'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 DPCC 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 DPCC 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 membicarakan-nya 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 menyebutkan **suatu angka**,
[name of power company] mention a figure
yaitu **lima belas juta Rupiah**, yang ternyata
namely fifteen million Rupiah LIG ternyata
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 Patent-like in kk N-D I 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
     1s 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 1s need medication
     yang mana **pengobatan** itu tidak mampu
     LG MANA medication DET not be-able
     saya bayar, [....].
     1s 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 sociolingual 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 1s 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   - dengan yang mana kami   bekerja
           instrument with   LG   which 1p [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 interrogatives. 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 teman 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'; <u>waktu</u> is also the regular noun for 'time'; <u>ketika</u> may also be the regular conjunction for 'when [referring to a relatively indivisible moment of time]', and also <u>ketika</u> is the regular noun for _'[indivisible] moment'.

On "headless" <u>yang</u> phrases (to which the "headless" <u>tempat</u> in (176) is strictly parellel), see Section 19, below. On relative pronouns generally, see Kaswanti Purwo 1984c. See also Section 7.2, above, where <u>tempat</u> 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 <u>the flowers</u> <u>on the table</u>; or <u>the program</u> <u>for undergraduates</u>. The attributes are <u>on</u> <u>the table</u>, and <u>for</u> <u>undergraduates</u>. Apart from their attributive capacity, such expressions would be adverbial, and in fact simple adverbs would be available for attributive service as well: <u>the table</u> <u>here</u>; <u>the building</u> <u>over there</u>. The term "adverbial" 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 "adverbial" 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 "adverbial" attributes. Consider the following Japanese examples:

> (178)   <u>Nihon</u>   <u>no</u>   <u>fune</u>
> Japan   AM   ship
> 'A ship coming from/going to/belonging to Japan'

> (179)   <u>Nihon</u>   <u>kara</u>   <u>no</u>   <u>fune</u>
> Japan   from   AM   ship
> 'A ship (coming) from Japan'

In (178), <u>no</u> is an attribution marker, which, though it **may** be possessive, **need** not be that; hence the neutrality of <u>no</u> 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, <u>kara</u>, may be used, but only on condition that <u>kara</u> be followed by the ("neutral") attribution marker <u>no</u>, as in (179). In other words, the "adverbial" phrase <u>Nihon</u> <u>kara</u> cannot serve as an attribute, without <u>no</u> appended; stacked postpositions are needed to prevent an attribute·from becoming one of the "adverbial" type. The reason for this constraint is that **prenominal** attributes (the only position possible in this language) cannot be of the "adverbial" type. In Operand-Operator order, however, i.e. the order having the attribute to the right, such "adverbial" attributes are possible because they are (at least originally) "**afterthoughts**": <u>the flowers</u> [<u>pause ....</u>] <u>on</u> <u>the table</u>. Then such "afterthoughts" are "grammaticalized" as true attributes, retaining the originally "adverbial" form.

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

16.1   Noun-plus-"adverbial" 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 op-
tionally; for **time**, however, it seems that a **definite** time is required for
yang to be possible, as illustrated by (184), where definiteness is indi-
cated 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 re-
search. 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 setujui (statement aforementioned LG
1p [incl.] agree-with) 'that (aforementioned) statement that we agree
with', but then the attributes itu and yang kita setujui 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)'

38

(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-manieth?']

(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 keberapa, 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 (ectophoric) deictic plus verb is not well-formed, as appears from (191):

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

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

In (190), yang, because of its essentially **non**pronominal nature, can still serialize two levels as different as adjective and relative clause; in contrast, in (191) the levels for (ectophoric) 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 subject to stricter constraints. It is most convenient here to review the various types of nonnoun attributes as dealt with in Sections 10 through 16.

The noun-plus-determiner type (Section 10) may have multiple attributes by having adjectives or relative clauses or "adverbial" attributes 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   1p [excl.]   forget
       'the (agenda) item just now which we forgot'

(194) bunga   (yang) di meja   itu   yang belum
       flowers   LG   on table DET   LG   not-yet
       diganti
       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; at the "adjective/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 replacive yang. Consider:

(202) yang   di   meja   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 entertainment 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
           others.

    (214) Whoever cannot help should let me know.

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

    (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 definit-
ize 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.
           LG   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

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 begining of a cited form): to mark precategorial 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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