

# COMPOUND ADJECTIVES IN ENGLISH

RYODO OGATA

## 1. What are compounds?

English grammarians including traditional ones have dealt with compounds but they seem to have failed to give a precise definition of compounds.

Sweet (1891, § 63) defines a compound as 'a combination of two words equivalent formally and logically to a single word'. By 'formally' he means a single, indivisible word like 'blackbird' distinct from 'black bird'.

Jespersen (1914, § 13.2<sub>1</sub>, § 13.2<sub>2</sub>), on the other hand, argues that 'stone wall', written as two words as contrasted with German 'Steinmauer', is given 'equal stress which shows that to the linguistic feeling they are two words and no longer compounds of two mutually dependent elements'. But in his another book which was published about thirty years later, Jespersen (1942, § 8.2<sub>2</sub>) includes 'stone wall' in substantive-compounds.

Sweet (1891, § 65) says that 'The formal unity of a compound is often further strengthened by its having only one strong stress'. But can stress pattern be a criterion for compounds?

Taking, as examples, a 'bookcase (with shelves for books) and a 'book |case (case or cover for holding a single volume) and 'headstone and 'head |stone, Jespersen (1942, § 8) suggests that all these are compounds so that it is incorrect to exclude level-stress from compounds.

By 'logically' in the first definition above, Sweet implies that compounds are characterized by 'meaning-particularization'. It is true that 'meaning-particularization' has occurred in 'a queer bird (= a queer person)', but it can occur in idiomatic expressions such as 'kick the basket (= to die)'. So 'meaning-particularization' alone cannot be a criterion for compounds.

What is noteworthy about the transformational grammarians' standpoint is that they do not give any definition of 'compounds'. They only insist that 'black-board' has the stress pattern of 'primary-tertiary' because it *is* a compound<sup>1)</sup> while 'black board' has 'secondary-primary' stress pattern because it is a noun phrase.

From this point of view, 'book |case' or 'head |stone' above have, rather than 'level stress', 'secondary-primary' stress and thus should be included in noun phrases.

Transformational linguists' attitude does not mean that they are not interested in the definition of compounds but they do not seek for it, for the answer can not be obtained.<sup>2)</sup>

---

1) Zandvoort (1961, § 808) also agrees that compounds usually have this stress pattern.

2) Cf. Yasui (1974).

### 1.1 'Narrow miss' versus 'wide miss'

Bolinger (1967) suggests that 'narrow miss' is a compound and is different from 'wide miss'. Both of these may be syntactically generated:

- (1) He fired. It was a narrow miss.
- (2) He fired. It was a wide miss.

To show the syntactic differences between 'narrow miss' and 'wide miss', Bolinger gives three tests.

(a) Referent-modification test

- (3) \*That miss was narrow; you'll make it next time.
- (4) That miss was wide; you'll have to aim better next time.

(b) Comparative test

- (5) \*That was a narrower miss.
- (6) That was a wider miss.

(c) Nominalization test<sup>3)</sup>

- (7) \*That miss was a narrow one.
- (8) That miss was a wide one.

These criteria apply to 'blackboard'. When the Comparative test is applied we have:

- (9) \*That was a blacker board. (for a 'blackboard')
- (10) That was a blacker board. (for a 'black board')

That is to say, adjectives in compounds are inseparable from their co-constituent.

If the stress assignment were as is stated above, they would be pronounced a narrow miss and a wide miss.

1            3            2            1

### 1.2 Semantic interpretation of compounds

As Bloomfield (1933, § 14.1) suggests that 'The construction of compound words are most similar to the construction of syntax', compounds can be treated in the frame of syntax. But how do we construe the relation between a compound of (11) and its semantic meaning (12)? Can it be explained in terms of syntax?

- (11) bootlick
- (12) one who curries favour

We must stretch our imagination to understand (11) as having the meaning of (12). In the case of (13) and (14),

- (13) to bootleg
- (14) to smuggle alcoholic liquor

for one to understand the meaning of (13), one has to know the historical event where smuggled liquor was often hidden in the legs of boots.<sup>4)</sup> In both compounds, (11) and (13), 'meaning-particularization' has taken place. Compounds, therefore, have to be explained on semantic ground also.

3) 'Nominalization' here is not in the sense of 'transformational nominalization'.

4) Meys (1975), p. 5.

The criteria for compounds, therefore, would at best be the following one given by Meys:

I would suggest that fore-stress, single-word characteristics ('isolability' and 'inseparability'), morpheme-inversion, semantic particularization and even writing-conventions, should be jointly employed as criteria.<sup>5)</sup>

What is characteristic about the above criteria is that it consists of phonological, syntactic and semantic features which 'should be jointly employed'.

## 2. Compound adjectives

'Meaning-particularization' which we observed above, is considered in traditional view as the hall-mark of a compound. But it is mainly based on evidence presented by noun compounds. This can be readily seen when we think of compound adjectives like 'time-consuming', 'ready-made' or 'self-built'. As a rule, compound adjectives can be derived in a fairly straightforward way from underlying structures. They are thus called by Meys 'condensed sentences'.<sup>6)</sup>

### 2.1 Identification of compound adjectives

The fact that compound adjectives are different from compound nominals can be seen from the next observation.<sup>7)</sup>

Compare (15) and (16) both containing a complex form with superficially identical structure in a DET \_\_\_\_\_ N frame:

(15) a ballot-rigging case

(16) time-consuming procedures

It is possible to paraphrase (15) as (17) or paraphrase (16) as (18)–(20).

(17) a case (which is) of ballot-rigging

(18) procedures (which) are time-consuming

(19) procedures which consume time

(20) procedures consuming time

Notice that (16) cannot be paraphrased as (21) in the form of (17), nor can (15) be paraphrased as (22)–(24) which correspond to (18)–(20) paraphrases of (16).

(21) \*procedures (which are) of (or for) time-consuming

(22) \*a case (which) is ballot-rigging

(23) \*a case which rigs (the) ballot

(24) \*a case rigging (the) ballot

The difference in underlying structure between compound adjectives as in (16) and attributive compound nominals as in (15) can thus be roughly characterized by the formulas (25) and (26) respectively:<sup>8)</sup>

$$(25) \quad \left[ \begin{array}{c} \text{DET } N_1 \left[ \begin{array}{c} N_1, L_1, L_2, (S_1), (S_2), \dots \end{array} \right] \\ \text{NP} \quad \quad \quad \text{S} \quad \quad \quad \text{NP} \end{array} \right] \\ \rightarrow \left[ \begin{array}{c} \text{DET} \left[ \begin{array}{c} L_1 (S_1) L_2 (S_2) \end{array} \right] N_1 \\ \text{NP} \quad \quad \text{CPDAJ} \quad \quad \text{CPDAJ} \quad \quad \text{NP} \end{array} \right]$$

5) Meys, *op. cit.*, p. 84.

6) *Ibid.*, p. XIII.

7) *Ibid.*, p. 85.

8) *Ibid.*, p. 86.

$$(26) \quad \begin{array}{c} \left[ \text{DET } N_i \left[ N_i \text{ BE } \left[ P \left[ L_1 (S_1) L_2(S_2) \right] \right] \right] \right] \\ \text{NP} \quad \text{S} \quad \text{PP} \quad \text{CPDN} \quad \text{CPDN} \quad \text{PP} \quad \text{S} \quad \text{NP} \\ \longrightarrow \left[ \text{DET} \left[ L_1(S_1) L_2(S_2) \right] N_i \right] \\ \text{NP} \quad \text{CPDN} \quad \text{CPDN} \quad \text{NP} \end{array}$$

(The symbols  $L_1$ ,  $L_2$  in the above formulas refer to the lexical items functioning as constituents in the compounds, and in their underlying structures. The symbols  $S_1$ ,  $S_2$  refer to structural elements — affixes like *-ing*, *-ed*, *-ly*, etc. — which may or may not be present in the compounds and their underlying structures — hence the round brackets are used. The use of comma in S must be interpreted to mean that the order in which the elements within S are shown here need not correspond to their actual sequential ordering. In this way the formulas can be applied to any compound type, thus allowing for a variety of underlying structures within S. CPADJ = compound adjective; CPDN = compound nominal; P = preposition; PP = prepositional phrase)

Given such formulas as (25) and (26), we may wonder as to which formula (27) belongs.

(27) snow-clearing workmen

(27) is ambiguous because it can be analyzed in both ways:

$$(28) \quad \begin{array}{c} \left[ \phi \text{ workmen } \left[ \text{the workmen be clear- ing snow} \right] \right] \\ \text{NP} \quad \text{S} \quad \text{S} \quad \text{NP} \\ \text{DET} \quad N_i \quad \quad \quad N_i \quad \quad \quad L_2 \quad S_2 \quad L_1 \end{array}$$

$$(29) \quad \begin{array}{c} \left[ \phi \text{ workmen } \left[ \text{the workmen be } \left[ \text{for } \left[ \text{snow-clear-ing} \right] \right] \right] \right] \\ \text{NP} \quad \text{S} \quad \text{PP} \quad \text{CPDN} \quad \text{CPDN} \quad \text{PP} \quad \text{S} \quad \text{NP} \\ \text{DET} \quad N_i \quad \quad \quad N_i \quad \text{BE} \quad P \quad L_1 \quad L_2 \quad S_2 \end{array}$$

The difference in syntactic analysis is matched by a difference in semantic interpretation; (28) implies that the workmen involved are in fact clearing snow, although they may not be professional snow-clearers at all, while an interpretation in terms of analysis (29) would mean that we are dealing with a group of professional snow-clearers, whereas there is no implication that they are actually engaged on their work now.<sup>9)</sup>

In actual spoken language, however, the ambiguity of (27) is avoided by the difference in stress-pattern. The modification to be given is to regard (29) as compound nominal not as a noun phrase thus label it N instead of NP. Thus (28) and (29) become (30) and (31) respectively:

$$(30) \quad \begin{array}{c} \left[ \left[ \left[ \text{snow} \right] \left[ \text{clear} \right] \text{ing} \right] \left[ \text{workmen} \right] \right] \\ \text{NP} \quad \text{ADJ} \quad \text{N} \quad \text{N} \quad \text{V} \quad \text{V} \quad \text{ADJ} \quad \text{N} \quad \text{N} \quad \text{NP} \end{array}$$

$$(31) \quad \begin{array}{c} \left[ \left[ \left[ \text{snow} \right] \left[ \text{clear} \right] \text{ing} \right] \left[ \text{workmen} \right] \right] \\ \text{N} \quad \text{CPDN} \quad \text{N} \quad \text{N} \quad \text{V} \quad \text{V} \quad \text{CPDN} \quad \text{N} \quad \text{N} \quad \text{N} \end{array}$$

Stress assignment rules in the form of (32) now apply to (30) and (31), yielding the last lines of (30) and (31).

9) *Ibid.*, p. 88.

- (32)  $\left[ \begin{array}{c} 1 \text{ stress} \\ \text{V} \end{array} \right] \rightarrow [1 \text{ stress}] \left\{ \begin{array}{l} [ \dots \overset{1}{\text{V}} \dots ]_{\text{NAV}} \\ [ \overset{1}{\text{V}} \dots ] \end{array} \right\}$  (a) Compound Rule  
 (b) Nuclear Stress Rule

- (30')  $\left[ \begin{array}{cccccc} \text{NP} & \text{ADJ} & \text{N} & \text{V} & \text{ADJ} & \text{NP} \\ \text{[snow]} & \text{[clear]} & \text{[workmen]} \\ \text{N} & \text{V} & \text{N} \end{array} \right]$
- |       |   |   |   |  |            |
|-------|---|---|---|--|------------|
| 1     | 1 |   |   |  | 1 st cycle |
| ----- |   |   |   |  |            |
|       |   | 1 |   |  |            |
| 1     | 2 |   |   |  | 2 nd cycle |
| 2     | 3 |   | 1 |  | 3 rd cycle |

- (31')  $\left[ \begin{array}{cccccc} \text{N} & \text{N} & \text{N} & \text{N} & \text{N} & \text{N} \\ \text{[snow]} & \text{[clearing]} & \text{[workmen]} \\ \text{N} & \text{N} & \text{N} \end{array} \right]$
- |       |   |   |   |  |            |
|-------|---|---|---|--|------------|
| 1     | 1 |   |   |  | 1 st cycle |
| ----- |   |   |   |  |            |
|       |   | 1 |   |  |            |
| 1     | 2 |   |   |  | 2 nd cycle |
| 1     | 3 |   | 2 |  | 3 rd cycle |

In the first cycle, the basic stress-assignment rule operates assigning primary stress on one vowel in each word. In the second cycle the *Compound Rule* (32a) applies in both cases because 'snow-clearing' in (30') is an adjective (A) and 'snow-clearing' in (31') is a noun (N). In the third cycle, however, (30') undergoes the *Nuclear Stress Rule* (32b) because it is a noun phrase (NP) while (31') undergoes the *Compound Rule* (32a) again because it is a compound noun (N). Thus we have a noun phrase (30'') with the form of compound-adjective-plus-headword-noun and a compound noun (31'') with compound-nominal-plus-headword-noun.

- (30'') snow-clearing workmen  
           2      3      1

- (31'') snow-clearing workmen  
           1      3      2

Notice incidentally that the compound nominal in the attributive position, the latter kind of combination, can form even larger compound nominals with another headword-noun. For example:

- (33) the snow-clearing workmen station  
 which is derived from

- (34)  $\left[ \begin{array}{ccccccccc} \phi & \text{station} & \text{[station]} & \text{be} & \text{[for]} & \text{[snow-clearing]} & \text{ ] } & \text{ ] } & \text{ ] } \\ \text{N} & & \text{S} & & \text{PP} & \text{CPDN} & \text{CPDN} & \text{PP} & \text{S} & \text{N} \end{array} \right]$
- DET N<sub>i</sub>        N<sub>i</sub>    BE    P        L<sub>1</sub>    L<sub>2</sub>    S<sub>2</sub>

As for the stress assignment, (33), undergoing the *Compound Rule*, has the stress pattern of (35).

- (35) the snow-clearing workmen station  
           1      4      3      2

## 2.2 Stress assignment and focus

Although the fact about stress assignment on compounds in isolation is clear, sentence-stress may override the difference we observed in 3.1 and make (30'') and (31'') formally indistinct. Thus both (30'') and (31'') become (37) in the context (36).

(36) The \_\_\_\_\_ are tired.

(37) The snow-clearing workmen are tired.

1                      3                      2

Also, when another factor of 'focus' is involved, the relation between stress assignment and the consequent interpretation becomes more complicated. Let us first consider the problem of stress assignment and focus with a rather clear-cut example.<sup>10)</sup>

Chart (39) shows the possible combination of focus and stress pattern about the interrogative sentence (38).

(38) Was it  $\left\{ \begin{array}{l} \text{(a)} \quad \left[ \begin{array}{cccccc} \text{[a]} & \text{[black]} & & \text{[bird]} & & \end{array} \right] \\ \text{NP} \quad \text{ADJ} \quad \text{ADJ} \quad \text{N} \quad \text{N} \quad \text{NP} \\ \text{(b)} \quad \left[ \begin{array}{cccccc} \text{[a]} & \text{[black]} & & \text{[bird]} & & \end{array} \right] \\ \text{NP} \quad \text{N} \quad \text{ADJ} \quad \text{ADJ} \quad \text{N} \quad \text{N} \quad \text{NP} \end{array} \right\} \text{ that you saw?}$

(Case (a) is the normal adjective-noun construction *black bird*,  
case (b) is the compound *blackbird*.)

(39)

Focus	Stress pattern	Natural response
(i) 'black'	(a') Was it a <b>BLACK</b> bird that you saw?	No, I saw a <b>PURPLE</b> bird.
	(b') Was it a <b>BLACKbird</b> that you saw?	No, I saw a <b>BLUEbird</b> .
(ii) 'bird'	(a'') Was it a black <b>BIRD</b> that you saw?	No, I saw a black <b>CAR</b> .
	(b'') Was it a black <b>BIRD</b> that you saw?	No, I saw a black <b>BOARD</b> .
(iii) entire phrase (NP)	(a''') Was it a black <b>BIRD</b> that you saw?	No, I saw a <b>GHOST</b> .
	(b''') Was it a <b>BLACKbird</b> that you saw?	No, I saw a <b>GHOST</b> .

If main stress falls on **BLACK**, (38) will have three interpretations of (a'), (b') and (b''). And if main stress falls on **BIRD**, (38) will also have three interpretations of (a''), (b'') and (a'''). Therefore, (38) is in either case three ways ambiguous, although 'plus juncture' may intervene in case (a).

The same phenomena can be observed with (30'') and (31''). If 'snow' is focused in (30''), stress pattern will be the same as in (31''):

(40) Was it **SNOW**-clearing workmen that you saw?

and the natural responses for (40) will be (41) when 'SNOW-clearing' is taken as an compound adjective, and (42) when 'SNOW-clearing' is taken as a compound noun:

10) Jackendoff (1972), pp. 240-241.

- (41) No, I saw CHIMNEY-sweeping workmen.  
 (42) No, I saw CHIMNEY sweeps.

### 3. Compound adjectives as 'condensed sentences'

Although Jespersen almost abandoned the classification of compounds,<sup>11)</sup> Meys (1975) have exhaustively classified compound adjectives in the frame of transformational generative grammar. In this section I will touch upon some of the features of compound adjectives.

#### 3.1 -looking compounds

Among the left-branching compounds there is a '-looking' compound. Compounds in this form show interesting characteristics. Compare the following sets of (43) and (44).<sup>12)</sup>

- (43) { (a) a *rural* policeman  
 (b) \*a *rural-looking* policeman  
 (c) \*The policeman is *rural*.  
 (44) { (a) a *drowsy* policeman  
 (b) a *drowsy-looking* policeman  
 (c) The policeman is *drowsy*.

The ungrammaticality of (43c) and the grammaticality of (44c) are paralleled to the unacceptability of (43b) and the acceptability of (44b). That is to say, a compound adjective of the form '-looking' can be used as a criterion for the presence of predicative use of the word. Thus from (45), we see that the words like 'mere' or 'distant' cannot be used predicatively, i.e. in the form of (43c).<sup>13)</sup>

- (45) { \**mere-looking* kid  
 \**distant-looking* cousin  
 \**old-looking* school (in the sense of 'former school')  
 \**personal-looking* friend

Compare (45) with the next list (46) which indicates that 'friendly' or 'useful' allows the predication in the form of (44c).

- (46) { *friendly-looking* soldier  
*useful-looking* tool  
*hard-looking* surface  
*deadly-looking* cobra

11) . . . it is difficult to find a satisfactory classification of all the logical relation that may be encountered in compounds. In many cases the relation is hard to define accurately. (Jespersen (1942), § 8.14)

12) Bolinger (1967), p. 17.

13) 'Brave' seems to be idiosyncratic, because, although *brave-looking sight* is normal, \**the sight is brave* is ungrammatical. (Cf. Bolinger, *op. cit.*, p. 32)

The grammaticality of a sentence in the predicative form like 'The soldier is friendly (-looking),' conversely affirms the claim that the compound adjectives are 'condensed sentences'.

### 3.2 'Well-known' versus 'well-spoken'

The superficial resemblance between the two compound adjectives, 'well-known' and 'well-spoken', is brought to light when we compare the two in the following.

- (47a) known words
- (47b) well-known words
- (48a) spoken words
- (48b) \*well-spoken words
- (48c) a well-spoken man

When it is used as the second element in compounds, 'spoken' has the sense of 'speaking' or 'given to speaking' in a specified way. Thus we have (a) 'soft-spoken', 'broad-spoken', 'plain-spoken', 'fair-spoken', 'smooth-spoken', 'slow-spoken', 'fine-spoken'; and (b) 'blunt-spoken', 'civil-spoken', 'out-spoken'.<sup>14)</sup> In English, 'spoken' cannot be used without a qualifying term if it were to have the meaning of 'speaking'.<sup>15)</sup> And they can be interpreted in terms of an underlying general present:

- (49) a man who speaks well → a well-spoken man<sup>16)</sup>

Comparing (49) with (50), the derivation for (47b),

- (50) words which *are known well* → words which are well-known → well-known words,

we can see that 'known' in (47a) and (47b) and 'spoken' in (48a) have 'passive meaning' while 'spoken' in 'a well-spoken man' does not.

Another difference is that with 'well-known' we have 'better-known' and 'best-known', but not with 'well-spoken' (\*better-spoken, \*best-spoken). Thus we see that 'gradability',<sup>17)</sup> which is one feature of some adjectives, can also be seen only with some but not all compound adjectives.

It is true that the past participle morpheme is the normal accompaniment of the passive construction,<sup>18)</sup> but the past participle in 'well-spoken' does not have 'passive' meaning.

Another difference between 'well-known' and 'well-spoken' might be attributed to the difference between 'transitivity' and 'intransitivity' of the verbs 'know' and 'speak'.

14) The classification of (a) and (b) is that in the (b) group -ly or the like elements in the underlying structure are truncated in the surface structure: A man who speaks bluntly → A blunt-spoken man. A man who speaks outwardly → An out-spoken man.

15) Cf. Icelandic *talaðr* (past participle form of *tala* 'to speak') is used without a qualifying term. (O.E.D., s.v. *spoken*)

16) Meys, *op. cit.*, p. 155.

17) Quirk et al. (1972), p. 234.

18) McCawley (1973), p. 351.



### 3.3 Negative and comparative factors

While 'liked' is freely used in compound adjective forms as in '*well-liked man*', single participles like those in '*draped-figure*', '*liked-man*' are outnumbered by the use of negative participles like the one in '*undraped figure*' or a word with negative import like '*hated man*'. Similarly, we have the following pairs:

- (51) { an unheard combination of words  
\*a heard combination of words
- (52) { your absent friend  
\*your present friend ('present' as antonym of 'absent')<sup>19)</sup>
- (53) { departed guests  
\*arrived guests

Next, compare the following:

- (54) { \*the close man  
the closer man
- (55) { \*the far figure  
the further figure

From these facts we conclude that some unacceptable single-morpheme prenominal modifiers become acceptable when they are compounded with another morpheme (considering 'neg' as one morpheme). For example, 'absent' might be derived from the prelexical structure 'not+present'.<sup>20)</sup> And this supports the use of compound adjectives.

### 3.4 'Blue-eyed man' versus 'blue-roofed house'

In the discussion of the "Use of occasional attributive adjectives of the form 'D-N.ed'", Kawakami (1971) gives the formula of  $D_0-N_0\text{-ed}+N_1$  and proposes that, in one class of it, the determiner  $D_0$  like 'blue' in 'blue-eyed man' is non-omissible when  $N_0$  ('eye' in the example) is an inseparable constituent of  $N_1$  ('man'). This rule excludes 'nosed elephant', 'haired man', 'faced woman' as ungrammatical.

But how about 'roofed houses'? Is a 'roof' an inseparable constituent of a 'house'? If it is, only 'blue-roofed houses' or 'thatch-roofed houses' are acceptable. But in some corner of the world, there can be houses without roofs and 'roofed houses' (=houses with roofs)<sup>21)</sup> is grammatical while 'roomed houses' seems ungrammatical because we cannot imagine a house without a room.

Grammaticality therefore is sometimes to be explained in terms of the speaker's belief about the real world, rather by the form of the grammar of English. And these beliefs may vary from speaker to speaker especially when 'referent' is involved. As an example of this, Dowty (1972) gives (56), which would not normally be accepted by most speakers of English, but is accepted by residents of Austin, Texas, because the tower at the University of Texas, which is usually lighted with white light, is lighted with orange light after major athletic

19) (52) and (53) are from Bolinger, *op. cit.*, p. 11.

20) Cf. McCawley *op. cit.*, p. 354.

21) Cf. Onions (1904), p. 12.

victories.

(56) Did you see the tower orange?

### 3.5 Compound adjective → simplex adjective?

The normal interpretation of 'deep similarities' may be 'profound or great similarities'. But when it is used in a context like 'their deep similarities outweigh their superficial differences in syntactic behavior',<sup>22)</sup> it is provided with another meaning in contrast with 'superficial differences'. If we suppose that it has the derivation of

(57) deep (-) structurally similar → deep (-) structurally interpreted similarities → deep similarities,

we must assume the simplex attributive adjective 'deep' to have originated in a compound.

## 4. Productability of compound adjectives

Jespersen comments that 'New compounds have at all times been formed, and are constantly being formed whenever the necessity arises — very often without the user being conscious of the fact that he is framing a new combination'.<sup>23)</sup>

As we have observed in 3.3, some unacceptable simplex adjectives become acceptable when they are compounded. Thus, unacceptable forms of \*'made goods' or \*'made person', as compared with acceptable 'made dishes' or 'made fun', become acceptable when compounded: 'home-made goods', 'a well-made person'. Also \*'a fought battle' versus 'a severely-fought battle'; \*'a born citizen' versus 'an American-born citizen'.

We cannot say 'a clad girl' but we say 'a well-clad girl' or 'a bikini-clad girl'. This is further developed in a magazine where we find 'Capraro-clad Ford'<sup>24)</sup> (= Mrs. Ford with a dress designed by Capraro).

Meys (1975) gives many examples as emergence of new compound verbs.<sup>25)</sup> Among them are:

(58) Seven thick coats, *hand-finished* by Coventry craftsmen.

(59) Dodge is *rust-protected*.

(60) A two-piece in BRI-NYLON always keeps its shape even when *machine-washed*.

These and many other examples can be found in advertisements.<sup>26)</sup> An advertisement of a vacuum bottle reads: 'leak-proof, rust-proof, dent-proof; with an *electronically-tested*, seamless, *vacuum-insulated* filler'.

Other examples are:

22) Ross (1969), p. 353.

23) Jespersen (1942), § 8. 15.

24) *Time*, March 22, 1976, p. 42.

25) Meys, *op. cit.*, pp. 96-97.

26) Speaking of commercial advertisement, it is interesting to notice, apart from our present concern on compounds, that 'The *now* taste of Tab' was found on an advertisement of a beverage company. (Bolinger (1957), p. 11, fn.)

- (61) a *conjunction-introduced* clause<sup>27)</sup> ← a clause which is introduced by a conjunction  
 (62) a *work-incurred* ailment ← an ailment which is incurred by a work  
 (63) a *snow-cleared* highway ← a highway from which snow has been cleared

When one hears a word 'ring-wise', one would think of it in the paradigm of 'clockwise', 'sidewise' or 'likewise'. But when one finds it in an article about boxing, 'Billy Walker beat the *ring-wise* Doncaster heavyweight Peter Bates', one understands that it means 'wise in the ring' and therefore it is a compound of the [Noun + Adjective] type.<sup>28)</sup>

This and other novel *hic et nunc* formations makes even Meys refrain from trying and predicting what kinds of combinations should be ruled out on semantic grounds.<sup>29)</sup>

#### Appendix: String Compounds

More productive compounds are what are usually called 'string compounds' or 'group adjectives'. Here are some examples most of which are from newspapers or magazines.

- (a) the *soon-to-be-tested* French nuclear bomb  
 (b) Shintaro Ishihara, *novelist-turned-politician*  
 (c) Yukio Mishima's *laughing-up-his-sleeves* tale  
 (d) this *much-talked-about* anti-American sentiment in Japan  
 (e) Each person, young or old, is a *not-to-be-repeated* reflection of God himself.  
 (f) Copies will be mailed on a *first-come-first-served* basis until we have no more.
- (i) Declarative sentence as an attributive use  
 (a) a *you're-kidding-me* attitude  
 (b) the '*nothing-can-be-done-about-it*' attitude  
 (c) the *army-was-never-like-this* look  
 (d) He smiled an '*I-told-you-so*' smile.  
 (e) *I'll-go-where-you-go-do-what-you-do-be-what-you-are-and-I'll-be-happy* philosophy worked out splendidly for Mother. (B. MacDonald: *The egg and I*)
- (ii) Imperative sentence as an attributive use  
 (a) a *don't-talk-about-China* order  
 (b) the prohibited *come-out-and-have-a-drink* look  
 (c) a *pay-as-you-go* program

27) Kimball (1972), p. 190.

28) Meys, *op. cit.*, p. 94.

29) *Ibid.*, p. 199.

- (d) 'read-aloud-and-translate' method of teaching English
  - (e) The *wait-a-minute-don't-tell-me* attitude is not conducive to easy speech. (H.E. Palmer, *The oral method of teaching languages*, p .133)
- (iii) Prepositional phrase
- (a) *around-the-clock* operations
  - (b) *under-the-sleeve* vote-buying practice
- (iv) Noun + Prepositional phrase
- (a) *arm-around-the-shoulder* sympathy
  - (b) a *blow-below-the-belt* ending
  - (c) a typical *man-in-the-street* opinion
- (v) Miscellaneous
- (a) *boot-dress-coat-hood* outfits
  - (b) the *first-in-the-nation* primary (election)
  - (c) their circus-like \$100,000 *winner-take-all* tennis battle
  - (d) *how-to-do-it* books
  - (e) a *hit-and-run* driver

All of them are used for simplicity and convenience or sometimes for novelty and enjoyment.

#### REFERENCES

- Bloomfield, L. 1933. *Language*. Allen and Unwin.
- Bolinger, D. L. 1967. "Adjectives in English: attribution and predication" *Lingua*, 18, 1.
- Chomsky, N. and M. Halle. 1968. *The sound pattern of English*. Harper & Row.
- Dowty, D. 1972. "Temporary restrictive adjectives" in Kimball (ed.) *Syntax and semantics*. Vol. 1, pp. 51-62.
- Jackendoff, R. S. 1972. *Semantic interpretation in generative grammar*. M.I.T. Press.
- Jespersen, O. 1914. *A modern English grammar on historical principles*. Vol. 2. Ejnar Munksgaard.
- . 1942. *A modern English grammar on historical principles*. Vol. 6.
- Kawakami, S. 1971. "Rinjiteki gentei keiyoshi 'D-N-ed' no goho" in *The rising generation*. Vol. 116, 10. Kenkyusha.
- Kimball, J. (ed.) 1972. *Syntax and Semantics*. Vol. 1. Taishukan.
- Lees, R. B. 1963. *The grammar of English nominalization*. Mouton & Co.
- McCawley, J. D. 1973. *Grammar and meaning*. Taishukan.
- Meys, W. J. 1975. *Compound adjectives in English and the ideal speaker-listener*. North-Holland Publishing Company.
- Onions, C. T. 1904. *An advanced English syntax*. Kegan Paul.
- Otsuka, T. (ed.) 1970. *Sanseido's dictionary of English grammar*. Sanseido.
- Quirk, R., S. Leech, & J. Svartvik. 1972. *A grammar of contemporary English*. Prentice-Hall.
- Ross, J. R. 1969. "Adjectives as noun phrases" in Rebel and Schane (eds.) *Modern studies in English*. Prentice-Hall.
- Sweet, H. 1891. *A new English grammar*. Oxford.
- Yasui, M. 1974. *Eigogaku no sekai*. Taishukan.
- . 1975. *Shingengogaku jiten* (Kenkyusha's dictionary of new linguistics). Kenkyusha. (revised)
- Zandvoort, R. W. 1961. *A handbook of English grammar*. Longmans.