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## NOTES ON NOMINAL COMPOUNDS IN PRESENT-DAY ENGLISH

HANS MARCHAND

1.1. When two or more words are combined into a morphological unit, we speak of a compound. The principle of combining two words arises from the natural human tendency to see a thing identical with another one already existing and at the same time different from it. If we take the word *rainbow*, for instance, identity is expressed by the basic *bow*: the phenomenon of a rainbow is fundamentally a bow. But it is a bow connected with the phenomenon rain: hence the differentiating part *rain*. The compound is thus made up of a determining and a determined part. In the system of languages to which English belongs the determinant generally precedes the determinatum. The types which do not conform to this principle are either syntactical compounds (e.g. *father-in-law*) or loan-compounds (e.g. *MacDonald*, *Fitzgerald*) with the «inner form» of a non-English language. The determinatum is the grammatically dominant part which undergoes the changes of inflection. On the other hand, its semantic range is considerably narrowed as the second word of a compound, determined as it is by the first word.

1.2. A compound, we have said, has two constituent elements, the determinatum and the determinant. There are, however, many combinations which do not seem to fulfill this condition. The essential part of the determinatum as a formal element is obviously missing in such types as *pickpocket*, *runabout*, *overall*, *blackout*, *dugout*, the bahuvrihi types *hunchback*, *paleface*, *five-finger*, *scallorbrain*. A pickpocket is neither a pick nor a pocket, a hunchback is neither a hunch nor a back, and so on. In all of the preceding combinations the basis, the determinatum, is implicitly understood, but not formally expressed. The combinations are compounds with a zero determinatum (also called

exocentric compounds, as the determinatum lies outside the combination).

**1.3.** A similar concept underlies combinations of the type *householder*. The analysis of *householder* is parallel to that of *pickpocket*: 'one who holds a house'. The difference is that *householder* has a formal determinatum (-er) whereas *pickpocket* has not. However, the conceptual analysis clashes with a word-forming principle in English. *Householder* cannot be considered a suffixal derivative from the basis *household* in the way that *old-timer* or *four-wheeler* are derived from *old time(s)* or *four-wheel(s)*, as there is no compound verb \*to *household* in English. The modern type *to brainwash* is of quite recent development and is not nearly so well established as the type *householder*, which is very old (in its present form, extended by -er, it goes back to late Old English, while the original OE type *man-slaga* 'man-killer' is Indo-European; cf. Latin *armiger*, *signifer*, *artifex*). The idea of verb/object relation could combine with the concept of agent substantive only by way of joining an agent noun created ad hoc as a pseudo-basis to a common substantive. We are thus faced with the fact that an analysis which considers the underlying concept only may be disavowed by the formal pattern. The formative basis of combinations of the type *householder* is the agent substantive, however artificial the analysis may sometimes appear. A *skyscraper*, though not naturally analyzable as 'a scraper of the sky' but '(a building which) scrapes the sky', from the formative point of view must be understood as a compound with *scraper* as the basis. This type of compound therefore is not the primary one which arises from combining two fully independent common substantives (as in the type *rainbow*). Because of their 'forcible' character, such compounds have been termed synthetic compounds (in German they are called *Zusammenbildungen*).

**1.4.** Parallel to *householder* are the types *housekeeping* (sb.) and *heartbreaking* (adj.). The second words of such combinations do not often exist as independent words: *holder*, *keeping*, *breaking* are functional derivatives, being respectively the agent substantive, the action substantive, and the first participle of the underlying verbs. Strictly speaking, they should not figure in a dictionary, which is an assemblage of semantic units. The lexical value of, say, the word *crasher* is nil, as the word represents nothing but the aspect of actor of the verb *crash*, whereas *gate-crasher* is a lexical

unit. In the same sense, most compound impersonal substantives of the type *housekeeping* and most compound participles of the type *heartbreaking* are semantic units separate from *keeping*, *breaking*, etc. only in conjunction with their first words, *house* and *heart*. In a similar way, other combinations with participles as second words are synthetic compounds : *cooking*, *going*, *working* are not adjectives, but preceded by adjectives or locative particles they form compounds (*quick-cooking*, *easy-going*, *hard-working*; *forthcoming*, *inrushing*, *outstanding*). *Eaten*, *bred*, *borne*, *baked*, *flown*, *spread* are nothing but participles, but *moth-eaten*, *home-bred*, *air-borne* or *fresh-baked*, *high-flown*, *widespread* are compounds.

1.5. The non-compound character of extended bahuvrihi combinations is manifest. *Hunchbacked*, *palefaced*, *five-fingered*, *knock-kneed* are not analyzable into the immediate constituents *hunch+backed*, *pale+faced*, etc.; the determinatum is always *-ed* while the preceding compound basis is the determinant. Extended bahuvrihi adjectives therefore are suffixal derivatives from compounds or syntactic groups. Exactly parallel are combinations of the types *old maidish* and *four-wheeler*.

1.6. One of the constituent members of a compound may itself be a compound. In German, the determinant as well as the determinatum occur as compounds (*Rathaus-keller*, *Berufsschul-lehrer*; *Stadt-baurat*, *Regierungs-baumeister*). The regular pattern in English, however, is that of the determinant being a compound (*aircraft carrier*, *traffic signal controller*, *flower pot stand*, *plainclothes man*, *milk truck driver* etc.), whereas in the event of a compound determinatum the whole combination becomes a two-stressed syntactic group (*night watchman*, *village schoolmaster*, *house doorkeeper*). The only case of a compound determinatum in English I can think of is one in which the second constituent is a preparticle compound, as in *baby outfit*, *hunting outfit*.

2.1. What is the criterion of a compound? Many scholars have claimed that a compound is determined by the underlying concept; others have advocated stress; some even seek the solution of the problem in spelling. H. Paul says that « the cause which makes a compound out of a syntactic phrase is to be sought in the fact that the compound is in some manner isolated as compared to its elements. »<sup>1</sup> By isolation he understands difference in meaning

<sup>1</sup> H. Paul, *Deutsche Grammatik*. Band V, Teil IV: Wortbildungslehre (Halle, 1920) 4.

from a syntactic group with the same words, and treats as compounds such phrases as *dicke Milch* or *das goldene Vlies*, which are what Bally terms *groupes locutionnels*. H. Koziol<sup>2</sup> holds that the criterion of a compound is the psychological unity of a combination, adding that there «seems to be» a difference of intonation between a compound and a syntactic group which it is, however, difficult to describe. W. Henzen,<sup>3</sup> who discusses at some length the diverse definitions, decides for «the impossibility of a clear-cut distinction» between a compound and a syntactic group and hesitatingly proposes to consider a compound as «the multi-stem expression of a conceptual unit which is spelled without a space». This is a very weak definition and he admits that the German separable verbs do not fit it. Bloch and Trager<sup>4</sup> do not treat the question in detail; they call a compound «a word made up wholly of smaller words,» specifying that both of the immediate constituents must be free forms.

**2.2.** Stress also has been advocated as a criterion. «Wherever we hear lesser or least stress upon a word which would always show high stress in a phrase, we describe it as a compound member: *ice-cream* <sup>1</sup>*ajs-krijm* is a compound, but *ice cream* <sup>1</sup>*ajs* <sup>1</sup>*krijm* is a phrase, although there is no denotative difference of meaning.»<sup>5</sup> Kruisinga<sup>6</sup> makes no difference at all between a compound and a syntactic group, at the same time feeling the need to maintain the traditional concept of compound. He defines the compound as «a combination of two words forming a unit which is not identical with the combined forms or meanings of its elements.» In a similar way, Bally defines the compound as a syntagma expressive of a single idea.<sup>7</sup> Jespersen also introduces the criterion of concept, and rejects Bloomfield's criterion of stress. «If we stuck to the criterion of stress, we should have to refuse the name of compound to a large group of two-linked phrases that are generally called so, such as *headmaster* or *stone wall*.» This is certainly no argument, nor is the objection that words such as *sub-committee*, *non-conductor* have forestress according to

<sup>2</sup> H. Koziol, *Handbuch der englischen Wortbildungslehre* (Heidelberg, 1927) 46 f.

<sup>3</sup> W. Henzen, *Deutsche Wortbildung* (Halle, 1947) 44.

<sup>4</sup> B. Bloch and G. L. Trager, *Outline of Linguistic Analysis* (Baltimore, 1942), 54, 68.

<sup>5</sup> L. Bloomfield, *Language* (New York, 1933) 228.

<sup>6</sup> E. Kruisinga, *A Handbook of Present-Day English*, Part II: Accidence and Syntax 3. Fifth edition (Groningen, 1932) 1581.

<sup>7</sup> Ch. Bally, *Linguistique générale et linguistique française*, second edition (Bern, 1944) 94.

Jones, but level stress according to Sweet. The first elements are not independent morphemes, anyway. For this reason it is wrong to argue that «the prefixes *un-* (negative) and *mis-* are often as strongly stressed as the following element; are they, then, independent words?»<sup>8</sup> If it rains, the ground becomes wet. But if the ground is wet, we are not entitled to the conclusion that it has rained. As for the criterion of stress, we shall see that it holds for certain types only.

**2.3.** That spelling is no help in solving the problem I will add for the sake of completeness only. A perusal of the book *Compounding in the English Language*,<sup>9</sup> which is a painstaking investigation into the spelling variants of dictionaries and newspapers, shows the complete lack of uniformity.

**2.4.** For a combination to be a compound there is one condition to be fulfilled: the compound must be morphologically isolated from a parallel syntactic group. However much *the Holy Roman Catholic Church* or *the French Revolution* may be semantic or psychological units, they are not morphologically isolated: they are stressed like syntactic groups. *Bláckbird* has the morpho-phonemic stress pattern of a compound, *bláck márkét* has not, despite its phrasal meaning; the latter therefore is a syntactic group, morphologically speaking. Stress is a criterion here. The same distinction keeps apart the types *stróngthòld* and *lóng wait*, the types *shárpshóòter* and *góód rider*, the types *búll's-èye* and *rázor's édge*, the types *wríting-làble* and *fólding dóór*.

**2.5.** On the other hand, there are many combinations with double stress which are undoubtedly compounds. Most combinations with participles as second elements belong here: *eásy-góíng*, *hígh-bórn*, *móth-eáten*. We have already pointed out their synthetic character. Being determined by first elements which syntactically could not be their modifiers, they must be considered compounds. The type *gráss-greén* has two heavy stresses, but again the criterion is that an adjective cannot syntactically be modified by a preceding substantive (the corresponding syntactic construction would be *green as grass*). The adjectival type *ícy-cóld* is isolated in that syntactically the modifier of an adjective

<sup>8</sup> O. Jespersen, *A Modern English Grammar on Historical Principles*, Part VI: Morphology (Copenhagen, 1942) 8.12.

<sup>9</sup> A. M. Ball, *Compounding in the English Language* (New York, 1939) and *The Compounding and Hyphenation of English Words* (New York, 1951).

can only be an adverb. The corresponding coordinative type *German-Russian (war)* is likewise morphologically distinct. The corresponding syntactic construction would be typified by *long, grey (beard)*, with a pause between *long* and *grey*, whereas the combination *German-Russian* is marked by the absence of such a pause.

**3.1.** The most important type in which stress is morpho-phonemic is *rainbòw*. As it has been the object of much discussion, it will here be given a somewhat detailed treatment. English has at all periods known and made use of this Germanic type of word formation. The possibility of combining substantives is today as strong as ever. On the other hand, English has, for at least three centuries, been developing the syntactic group of the type *stóne wáll*,<sup>10</sup> which has two stresses. While the coining of forestressed compounds continues, a new syntactic type has arisen which challenges the privileged position of the type *rainbow*. Though the co-existence of two types of substantive+substantive combination has long been recognized, the conditions under which a combination enters the compound type, *rainbòw*, or the syntactic group type, *stóne wáll*, do not seem to have been studied. Sweet, in his chapter on the stressing of compounds,<sup>11</sup> has a few remarks on the subject, but otherwise the problem has not received attention. The following, therefore, can be an attempt only.

**3.2.** The most important factor is the underlying concept. Some concepts are invariably tied up with forestress pattern. The concept may be grammatical: when the verb/object or subject/verb relation is present, the combination receives forestress. Therefore the following are types of stable compounds: *houéshòlder*, *skyscraper*, *doorkeeper*, *caretaker*; *houésekeèping*, *sightseeing*, *mindreading*, *childbearing*; *ráttnesnàke*, *popcorn*, *sob-sister*, *crybaby*. The first element is the object in the verbal nexus substantives *householder* and *housekeeping*. There are also combinations in which the underlying relation is the same though the formal type be different (*geógraphy teàcher*, *árt crílic*, *cár thief*) and related constructions such as *teá mèrchànt*, *clóth deàler*, *leàther wòrker*, *stéel prodúction*, *tráffíc contròl*, *móney restrictions*, *fúr sàle*, *gráin stòrage*. If the second element has

<sup>10</sup> O. Jespersen, *A Modern English Grammar on Historical Principles* (Heidelberg, 1909-1914) 1. 5. 33-37 and 11. 13.

<sup>11</sup> H. Sweet, *A New English Grammar* (Oxford, 1892) 889-932.

acquired the status of an independent word, the predicate/object nexus may have come to be blurred, as in *párty leáder*, *fúnéral diréctor*, which are stressed as syntactic groups. Again, a combination may step out of line, either because the verbal nexus is blurred or because the combination is too long: *cóntract violátións*, *búsíness administrátió*n, *cóncert perfórman*ce always have two stresses.

**3.3.** As a rule, combinations in which a verbal nexus is expressed have forestress. Most combination with a verbal stem therefore are compounds: *shówroóm*, *paýdàý*, *dánce floór*, *pláýboý*, *sweátshòp*. But in cases where the verbal stem is used in adjunctal function, i.e. has become a quasi-adjective, equivalent to a past participle, a situation similar to that in *stone wall* has arisen: the two constituents receive full stress. We say *roást beéf*, *roást múlton*, etc., and *wáste páper*, *wáste lánd* are often heard though many speakers always give to these combinations the compound stress. The case is the same with combinations whose first constituents are *-ing* forms of a verb. Most combinations of type *writing-tàble* are compounds because the underlying concept is that of destination (*looking-glass*, *frying-pan*, etc.). But when the verbal *-ing* is apprehended as an adjunct, i.e. a participle, the combination is susceptible of being treated as a syntactic group: *Flýing Dútchman*, *flýing saúcers*, *revólving doór*. However, other combinations have forestress owing to the idea of implicit contrast: *húmming-bird*, with the frequent constituent *bird*, receives forestress to distinguish it from *bláckbird*, *bluébird*, *mócking-bird*.

**3.4.** Other relations are of a purely semantic nature. The following cases involve forestress pattern:

The underlying concept is that of purpose, destination: *theater ticket*, *freight train*, *bread basket*, *paper clip*, *reception room*, *concert hall*, *windshield*, *toothbrush*.

The signifié of the second element is naturally dependent on that of the first: *windmill*, *watermill*, *water clock*, *motorcar*, *motorboat*, *steam engine*, *mule cart*, *sea bird*, *water rat*, *lap dog*.

The first element denotes the originator of what is expressed by the second: *rainwater*, *rainbow*, *bloodstain*, *birth right*, *pipe smoke*, *smoke screen*.

The underlying concept is that of resemblance: *blockhead*, *bell-flower*, *goldfish*, *horse-fish*, *iron-weed*, *silkweed*, *wiregrass*.

**3.5.** There are other, quite external factors conducive to forestress. The frequent occurrence of a word as second constituent is apt to give combinations with such words compound



character. The most frequent word of this kind is probably *man* (the reduction of the vowel and the loss of stress of *man* as a second element is another result of the same phenomenon: *police-man*, *congressman*, *gunman*, *postman*, *milkman*). A few other words frequent as second constituents of compounds are *ware* (*houseware*, *hardware*, *silverware*), *work* (*woodwork*, *network*, *wirework*), *shop* (*giftshop*, *candyshop*, *hatshop*), *store* (*bookstore*, *drugstore*, *foodstore*), *fish* (*bluefish*, *goldfish*, *jellyfish*). The forestress of such combinations is thus due to implicit contrast: each *-man*, *-shop*, *-store* word is automatically stressed on the first member to distinguish the combination from others of the same series. The case of *-girl* combinations is particularly interesting in this connection. Appositional combinations are usually syntactic groups with two stresses in English (*boy king*, *woman writer*, *gentleman farmer*), but *servant girl*, *slave girl*, *peasant girl*, *gipsy girl* have contrastive forestress.

4.1. The criterion of the underlying concept may now be applied to the syntactic group type *stone wall*. The grammatical concept which involves syntactic stressing is that of adjunct/primary. All coordinative combinations, additive as in *king-emperor*, *secretary-stenographer*, or appositional as in *gentleman-farmer*, *prince consort*, have two heavy stresses. The only copulative combination I know, that has forestress is *fighter-bomber*, the stress obviously being due to contrast with common bombers. Here belong combinations with sex or age denoting first constituents as *man*, *woman*, *boy*, *girl*, *baby*, *embryo*, except that owing to contrast, *boy friend*, *girl friend*, *manservant*, *maidservant* have developed forestress. (It is perhaps interesting to point out that the sex denoting pronouns *he*, *she*, as in *he-goat*, *she-dog*, form forestressed compounds, despite Sweet 904.) Combinations with first constituents denoting relational position, as *top*, *bottom*, *average*, *brother*, *sister*, *fellow* likewise have the basic stress pattern of the syntactic group under discussion.

4.2. Combinations with a first member denoting material are treated as adjunct/primary groups and receive two stresses: *gold watch*, *silver chain*, *steel door*, *iron curtain*, *cotton dress*, *silk stocking*, *leather glove*, *straw hat*, *paper bag*.

4.3. Incidentally, the treatment of adjunct/primary combinations consisting of two substantives has a parallel in Turkish. Determinative substantive+substantive combinations all receive the determinative group suffix whereas coordinative combinations

made up of two substantives do not. Turkish morphologically opposes *kadın terzi-si* (*kadın* 'woman', *terzi* 'tailor, dressmaker', -*si* = the determinative group suffix), 'women's tailor' to *kadın terzi* '(woman) dressmaker'. Coordinative groups in both languages are treated like syntactic groups of adjective + substantive.

**5.1.** Often two contradictory principles are at work; then one has to give way. Though material denoting first constituents usually make a combination into a syntactic group, a frequently used second element may obviate the result, as in *linwàre*, *ironwàre*, *silverwàre*, or contrastive stress may interfere with the normal two-stress pattern of coordinative combinations, as in *fighter-bòmber*, *girl friend*, *bóy friend*.

**5.2.** When a substantive can also be interpreted as adjective, changed analysis may lead to change in the stress pattern. Though a hospital can be neither mental nor animal, we stress *mén-tal hóspítal*, *á-ní-mal hóspítal*, as against *síck roòm*, *póór hóuse*. Similar shifts occur also in a more amply inflected language such as German: *ein deutsches Wörterbuch*, *ein lateinisches Heft*, *die französische Slunde*.

**5.3.** Many forestressed compounds denote an intimate, permanent relationship between the two signifiés to the extent that the compound is no longer to be understood as the sum of the constituent elements. A summerhouse, for instance, is not merely a house inhabited in summer, but a house of a particular style and construction which make it suitable for the warm season only. Two-stressed combinations of type *stóne wáll* never have this character. A syntactic group is always analyzable as the additive sum of its elements. It is an informal, non-committal meeting, never a union of the constituents. This is a great advantage which English enjoys, for instance, over German. German cannot express morphologically the opposition 'permanent, intimate relationship' ~ 'occasional, external connection' instanced by *súmmerhóuse* ~ *súmmer résidence*, *Chrístmas trée* ~ *Chrístmas tráffic*. English, therefore, has acquired a substantive + substantive combination of a looser, casual kind for groups in which an intimate, permanent relationship between the signifiés is not meant to be expressed: *field artillery*, *world war*, *country gentleman*, *village constable*, *parish priest*, *cíty court*, *státe police*, *home town*, *district attorney*, and countless other combinations.

**5.4.** On the one hand, the possibilities of coining compounds are much more restricted than in German, where any occasional

combination of two substantives automatically becomes a fore-stressed compound. On the other hand, English compounds are much closer morphologic units which cannot be split up the way German compounds are. In German, it is possible to say, for instance, *Hand- und elektrische Modelle* (*Weltwoche*, Sept. 26, 1947), clipping the *rainbow* type compound and leaving the adjective/substantive syntactic group intact. However, in English as well as in German, serial combinations like *house and shop owners*, *wind and water mills* occur (Bloomfield, *Language*, 232, restricts them to German).

5.5. It is nevertheless often difficult to tell why in one case the language has created a compound while in another it has coined a syntactic group. Conceptually, *college président* is in about the same position as *opera director*, but the first combination is a syntactic group, the second a compound. Form is one thing, concept is another. On the other hand, the same morphologic pattern does not necessarily involve the same degree of semantic unity: *lipstick* is a closer unit than *reception room*. The morphologic criterion of a compound enables us to do justice to both form and concept.

6.1. A few words are required about the problem of stress with regard to compounding. With Stanley S. Newman<sup>12</sup> we accept three degrees of phonemic stress: heavy stress (marked'), middle stress (marked''), and weak stress (which is traditionally and perhaps more appropriately called absence of stress). As a combination of two independent words, basically speaking, a compound combines two elements which are characterized by presence of stress. Absence of stress in general indicates grammaticalization of a morphemic element (as in *police-man*, *Mac Dónald*, *Fitz-gérald*). The determinant has the heavy, the determinatum the middle stress. Thus the usual pattern is '' (e.g. *rainbòw*), which is also followed by combinations with a zero determinatum (*pickpòcket*, etc., see 1.2). All substantival compounds show this pattern, with the exception of those whose first elements are the pronouns *all* and *self*. Such compounds have double stress (e.g. *áll-soùl*, *áll-creátor*, *sélf-respéct*, *sélf-seéker*). Of adjectival compounds, only two types have the stable stress pattern heavy stress/middle stress: the type *cólor-blind*, i.e. adjectives determined by a preceding substantive (unless the

<sup>12</sup> Stanley S. Newman, « On the Stress System of English », *Word* 2. 171-187 (1946).

underlying concept is that of emphatic comparison, as in *gráss-greén*, where double stress is the rule) and *heárt-breáking*. All other adjectival types are basically double stressed.

**6.2.** Bloch and Trager<sup>13</sup> posit four degrees of phonemic stress: loud stress, reduced loud stress, medial stress, and weak stress. They find reduced loud stress on the adjunct of a syntactic adjunct/primary group (*óld mán*) as well as on second elements of forestressed compounds (*bláckbîrd*, *élevàtor-òperator*) which are obviously not on the same level. But it seems to be more correct to say that the reduced stress on *old* is rhythmically conditioned by the position of *old* before a likewise heavy stressed word to which *old* stands in the subordinate relation of adjunct. This is a syntactic phenomenon of stress reduction. No change of the underlying concept is involved in a shift from reduced to loud stress, as no oppositional stress pattern '' ~ '' exists in the case of adjective/substantive combinations. So *óld mán* is really a free variant of *óld mán*. *Bláckbird* is different: we cannot oppose *bláckbird* to *bláck bird* without changing the underlying concept. The stress pattern '' of *bláckbird* is morpho-phonemic. The case of *élevàtor-òperator* is similar. A combination of the type *houë-hòlder* (discussed in 1.3) implies the stress pattern '' as morpho-phonemically relevant. Though in the particular case of *élevàtor-òperator* we cannot oppose the heavy/middle stress to a heavy/heavy stress combination, we can conceive of other pairs where change of stress implies change of the underlying concept, as *Frénch teácher* 'a teacher of French' ~ *Frénch téácher* 'a teacher who is French' *réd hùnter* 'one who hunts reds' ~ *réd hùnter* 'a hunter who is red', *fát prodücer* 'one producing fat' ~ *fát prodücer* 'a producer who is fat'.

We must therefore assume a relevant degree of stress which distinguishes the phonemic non-heavy stress of *bláckbird* and *élevàtor òperator* from the non-phonemic non-heavy stress of *óld mán*. While we interpret the reduced loud stress as a positional variant of the heavy stress, we must consider the phonemic secondary stress of *bird* and *òperator* as a middle stress. On the other hand, the degree of stress on the third syllable of independent *élevàtor* and *òperàtor* is not different from that on *bird* in *bláckbird*: in either case we have a full middle stress. When these words become second elements of compounds, the intensity of the full middle stress is lessened and shifted to a

<sup>13</sup> B. Bloch and G. L. Trager, *Outline of Linguistic Analysis*, 48.

light middle stress (which, for the sake of convenience, I will here mark ~): *élevátor òperátor*. This light middle stress is non-phonemic. We interpret it as the rhythmically predictable form assumed by the full middle stress in a position before or after a morpho-phonemic full middle stress. In composition, it chiefly occurs with compounds of type *aircrăft-càrrier* (see 1.6) on the second element of the determinant, the full middle stress being morpho-phonemically reserved for the determinatum. That full middle stress on the determinatum is morpho-phonemic is also manifest in the behavior of German compounds: those having a compound determinant are stressed as in *Ráthaüs-kèller* whereas those with a compound determinatum are stressed as in *Stádt-baùràt*.

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