

Fig. 5: Annotated structure graph for an excerpt from the (concrete and abstract) hierarchical microstructure which can be assigned to the comment on form of *da₂*; *abbreviations:* WA = dictionary article; FK = comment on form; LZGA = item giving the form of the lemma sign; RA = orthography item; WFA.NSg = wordform item for the nominative singular; Wak|VQK = marking giving the word accent and the vowel quantity; "||" = below enlarged by; MorA.S = morphology item for nouns; ArtA = item giving the definite article; "-|" = what follows, is inferable; G = gender; WK = word class; DekKA = item giving the declension class; v.SgbA = condensed item giving the singular formation; v.PlbA = condensed item giving the plural formation.

I will now describe the process of condensation of the comment on form step by step.

Step 1: Sentence [2] of the full text is omitted. Instead, a metatext of the corresponding dictionary will tell the user that the spelling of the lemmata is in accordance with the official rules of orthography. The propositional content p_2 belonging to [2] reads as follows when put into the canonic *that*-formulation: p_2 = *that the proper spelling of "Böschung" is |Böschung|*. The user familiar with dictionary look-up and the metatext assigns p_2 to the lemma **Böschung**. The item giving the form of the lemma sign is at the same time an orthography item.

Step 2: Sentence [3] of the full text is also omitted. Instead, a metatext of the corresponding dictionary will tell the user that the canonic form for lemmata by which nouns are mentioned is the nominative singular. The propositional content belonging to sentence [3] reads as follows: p_3 = *that the form of the nominative singular is "Böschung"*. The user with a good knowledge of dictionary look-up can assign p_3 to the lemma as well. The item giving the form of the lemma sign is therefore at the same time a wordform item for the nominative singular.

Step 3: Sentence [4] of the full text is substituted by a dot which is placed below the accented syllable. This results in the creation of an item giving the form of the lemma sign below enlarged by a marking giving the word accent and the vowel quantity. Since the function of the dot is explained in one of the

dictionary's metatexts, the user familiar with dictionary look-up is able to refer this dot to its address, the item giving the accented syllable, and assign to the ordered pair of dot and item giving the accented syllable those propositional contents which sentence [4] of the full text contains.

Step 4: Sentences [5] and [6] of the full text are substituted by the definite article *die* which follows the lemma. The metatext of the dictionary gives the explanation that the gender and the word class may be inferred from the item giving the article. The user with a good knowledge of dictionary look-up may therefore infer from the item giving the article *die*, which is addressed to the item giving the form of the lemma sign, that *Böschung* is a noun and that it is of the female gender, when he is referring the item given under the article referring to *Böschung*. In other words: the user with a good knowledge of dictionary look-up may assign to the ordered pair of *der* and *Böschung* those two propositional contents which sentences [5] and [6] of the full text contain.

Here it can be seen that it is necessary to clearly distinguish the items given in the dictionary article from lexicographic information given to a user. Pieces of lexicographic information are cognitive entities. One cannot infer them merely from a single item. One rather has to relate the item to its address, which always represents a different item. In other words: the user always obtains a piece of lexicographic information from an ordered pair of items (cf. Wiegand 1996e).

Step 5: When transforming the full text into the dictionary article, sentence [7] is condensed in such a way that only *Böschung* remains. Next, *Böschung* is substituted by the hyphen "-", resulting in the creation of the condensed item giving the singular formation. Within the framework of a real lexicographic process, such items are given, for instance, by applying a rule of substitution which reads "Within the framework of the item giving the declension class word stems are to be substituted by the hyphen".

For the user, the hyphen as the item giving the singular formation represents a free-standing repetition symbol. He may be able to infer a piece of lexicographic information only if he reverses, so to speak, the operation of substituting. He can do this only if he knows what the hyphen stands for at this position and if he is at the same time familiar with the linguistic form which he has to insert. Here, this form is represented by the mentioned lemma sign. This means that the repetition symbol is an item with cohesion instruction. The user has to establish an anaphoric relation from the repetition symbol to its address, the item giving the form of the lemma sign, and substitute the hyphen by the word stem which may be inferred from this item. It is only after having carried out this operation that a user will receive the information which may be stated as follows: the form of the genitive singular of *Böschung* is *Böschung*.

Step 6: In this step, sentence [8] of the full text, which reads "The form of the nominative plural is *Böschungen*", is first condensed in such a way that only *Böschungen* remains. Next, the word stem is substituted by the hyphen, resulting in the condensed item giving the plural formation. Here, the repetition

symbol is not free-standing, but joined to the word ending. With respect to the operations the user has to carry out in order to receive the right piece of information, the same is valid, as explained in step 5.

After having completed step 6 within the first stage of textual condensation, one may apply the code of the dictionary for the typographic and nontypographic structural indicators to the results obtained by the process of textual condensation. Then one will obtain the comment on form of da_2 .

In the following, we will take a look at how the sentences [9] and [10] of the full text are condensed into the comment on semantics of da_2 . You will find a structural graph depicting this part of the dictionary article in fig. 6.

It is a common phenomenon, about which much has been written, too (cf. Wiegand 1985 and 1989c), that in dictionary articles of modern dictionaries the two-place relational terms which establish the relation between the lemma sign and the item giving the meaning paraphrase are frequently left out. This is also true for the HWDG and thus also in regard to da_2 . Incidentally, there are at least 80 possible relational terms (R) in the German language, if one includes the various forms of technical language. Examples are:

- R₁: an x is a y
- R₂: x means as much as y
- R₃: x means "y"
- R₄: x is used in order to refer to y

In these relational terms, "x" is a variable for lemma signs and "y" serves as a variable for items giving the meaning paraphrase. In the full text on da_2 , I have chosen "x means as much as y" in order to formulate sentence [9].

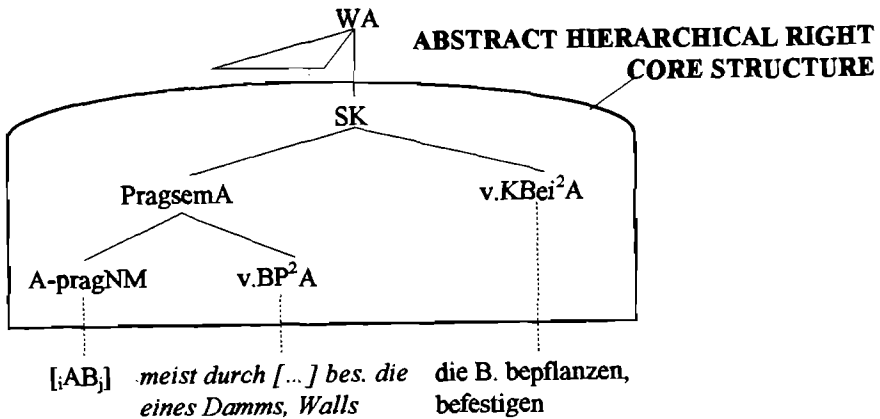


Fig. 6: Annotated structure graph for an excerpt from the (concrete and abstract) hierarchical microstructure which can be assigned to the comment on semantics of da_2 ; abbreviations: SK = comment on semantics; PragsemA = pragmatic-semantic item; v.KBei²A = condensed item giving competence examples, which allows ascertaining two competence examples; A-pragNM = item concerning the pragmatic zero marking; v.BP²A = condensed item giving meaning paraphrases, which allows to ascertain two meaning paraphrases

Step 7: In order to get from sentence [9] to the item giving the meaning paraphrase of da_2 the following textual condensing operations have to be carried out: in sentence [9], the mentioned lemma sign *Böschung* and the relational term "means as much as" have to be deleted. If this were the only condensing operation, then the item giving the meaning paraphrase of da_2 would not be condensed. However, further condensing operations have to be carried out. The word *besonders* has to be abbreviated and the word *oder* has to be substituted by a comma. If the operations of substitution just mentioned are in fact carried out, then this will result in a non-natural textual condensation, because we will obtain a section of a text, i.e. "*die eines Damms, Walls*", regarded as ungrammatical in the language which is being lexicographically processed. The non-natural textual condensation may appear in numerous variants. This is bad lexicographic practice, particularly for users who are not native speakers.

Step 8: In a last step, sentence [10] of the full text is condensed firstly so that only the two examples *die Böschung bepflanzen* and *die Böschung befestigen* remain. These two examples are the same with respect to the first two word forms. In the second example, *die* and *Böschung* are therefore deleted, leading to a comprimation which, in turn, results in the creation of a condensed item yielding competence examples. This allows us to determine two competence examples, i.e. *die Böschung bepflanzen, befestigen*. In this item, *Böschung* is abbreviated as B., and we obtain the item appearing in da_2 . In this case, too, the result of the textual condensation is ungrammatical so that the textual condensation is non-natural.

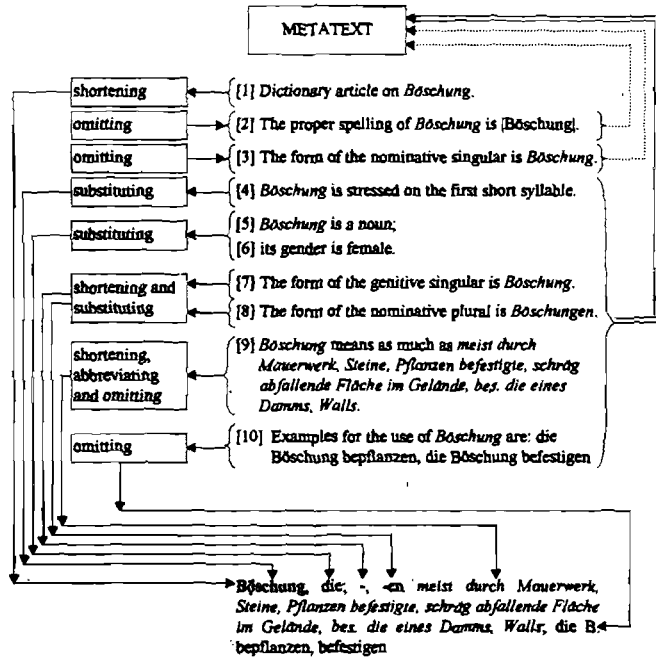


Fig. 7: Visualisation of the condensing operations to get from a full text to a dictionary article

In fig. 7, you will find a survey of the textual condensing operations treated.

At this point, the following can be said: all textual condensing operations which have to be carried out at least once in order to get from a full text to a dictionary article on a monosemous lemma sign may be assigned to a set. The n -th carrying out of the operations belonging to this set which is necessary in order to obtain the condensate represents the first stage of textual condensation.

All standardized dictionary articles on monosemous lemma signs may therefore be understood as the result of textual condensation processes of the first stage. Their degree of textual condensation may be different. The propositional density of the respective dictionary articles may be calculated if one proceeds as outlined in the following.

For each item type which includes elementary items it is possible to formulate a standardized sentence scheme for a sentence of a full text. This sentence scheme always contains either a variable "x" for the lemma sign or, in the case of nonlemmatic addressing, a variable for other items. If necessary, it may contain further variables.

As item type, let us take, for example, the condensed item giving the plural formation. It is then possible to formulate the following as the corresponding standardized sentence scheme for a sentence of a full text: "The nominative plural of x is y."

Here, "x" is the variable for the lemma sign and "y" the one for the plural form. With respect to da_2 , the corresponding sentence of a full text reads as follows: *The nominative plural of "Böschung" is "Böschungen"*.

By means of the sentence scheme it is now possible to create full text sentences for all items giving the plural formation in a single or in a number of dictionaries. These full text sentences consist of the same number of wordforms and, if one does not consider the inserted wordforms, of the same number of letters. If one proceeds like this with each and every item type, one obtains an ordered set of sentence schemes for every dictionary article, by means of which it is possible to create a full text which, in a certain sense, has the same length. This, in turn, will make it possible to calculate different quotients and compare dictionary articles with respect to their degree of textual condensation (cf. Wiegand 1996b). The quotients refer to the number of printed characters used in relation to the number of the elementary propositional contents.

5.2 The second stage of inner textual condensation

With respect to dictionary articles on polysemous lemma signs the operations of the shifting to the left have additionally to be taken into consideration. They represent the second stage of inner textual condensation. Shifting operations of this kind result in textual structures which probably only exist in lexicographic texts.

For all descriptive, factual-referential texts which are not dictionary arti-

cles, and thus for full texts, too, it is valid that statements given within a text are valid until they are revised by subsequent statements given in the same text or, respectively, until interferences from subsequent text sections are suggested which revise the validity of the preceding statement. The statements of a text therefore have fields within the text in which they are valid and they are related to each other by relations which regulate their validity, such as, for example, *exactly when*, *then-relations* or *either-or-relations* etc. The items given in a dictionary article are also valid and they have fields within the article in which they are valid, which becomes particularly comprehensible if one understands them as the result of statements of a full text which have been subjected to textual condensing operations. The fact that a statement is valid means, *inter alia*, the following: with respect to an ordered pair (consisting of this item and its address) there exists at least one valid statement, from which the same propositional content is inferable as from the pair. The items given in the dictionary article are also related to each other by relations which regulate their validity, and if these do not correspond to those of the natural textual constitution they have to be standardizingly regulated, something which has to be explained in the metatext. The occurrence of non-natural relations which regulate validity in articles on polysemous lemma signs may be understood as conditioned by the operations of the shifting to the left, which I will now explain in a few words.

When doing this, I have to rely on extreme simplification. At first, we will assume the most simple case, i.e. the shifting to the left of the pragmatic items.

Holzerei, die; -, -en

1. Fußball umg. abwertend *das Holzen*:
das Spiel artete in eine üble H. aus

2. landsch. umg. abwertend *Prügelei*:
so war denn bald eine böse Holzerei im Gange
WELK Grambauer 334

Translation of da_3 :

(The polysemous word "Holzerei" is rendered in the English language by the monosemous words "rough game" and "roughhouse".)

- $da_{3,1}$: rough game, the; -, -s
soccer colloquial, pejorative *clogging*: the match
turned into a rough game
- $da_{3,2}$: roughhouse, the; -, -s
geographically, colloquial, pejorative *roughhouse*: they
soon engaged in rough boisterous play

Fig. 8: Dictionary article da_3 from HWDG and its translation

This dictionary article is taken from the WDG. Here, the shifting to the left which is prescribed in this dictionary and which has been carried out in article da_4 , for example (cf. fig. 9), has been neglected.

Generator, der; -s, Generatoren (lat.) Techn.
 1. Maschine, die mechanische Energie in elektrische umwandelt, Stromerzeuger, Dynamo
 2. Schachtofen zur Erzeugung von Heiz- und Treibgas
 zu 1 Atom-, Dampf-, Drehstrom-, Gas-, Turbo-, Wechselstromgenerator

Translation of da_4 :

da_4 : generator, the; generators <lat.> technology
 1. a machine by which mechanical energy is changed into electrical energy, electricity producing device, dynamo
 2. shaft furnace kiln in which gas or vapor is formed to 1 nuclear-, vapor-, three-phase current-, gas-, turbo-, alternating current generator

Fig. 9: Dictionary article da_4 from WDG and its translation

The two items in da_3 whose shifting to the left has been neglected are the pragmatic item on style, which reads "umgangssprachlich", and the item on the pejorative meaning, which reads "abwertend". They each appear twice, i.e. once in the first and once in the second sub-comment on semantics. This is why they should have been shifted to the left, i.e. in that article position in which in da_4 there is the item giving the subject field, which reads "Technik".

If we do the neglected shifting operation now, the article da_3 has the form which can be seen in fig. 10.

da_3' : **Holzerei**, die; -, -en u m g . a b w e r t e n d
 1. Fußball *das Holzen*: das Spiel artete in eine üble H. aus.
 2. l a n d s c h . *Prügelei*: so war denn bald eine böse Holzerei im Gange WELK Grambauer 334

Translation of da_3' :

$da_{3.1}'$: rough game, the; -, -s colloquial pejorative
 soccer *clogging*: the match turned into a rough game
 $da_{3.2}'$: roughhouse, the; -, -s colloquial pejorative
 geographically *roughhouse*: they soon engaged in rough boisterous play

Fig. 10: Dictionary article da_3' and its translation

In fig. 11 the annotated structural graph of the comment on semantics of the incorrect article da_3 will be found. Below, fig. 12 will be found the structural graph of the comment on semantics after the shifting to the left has been carried out within the comment on semantics.

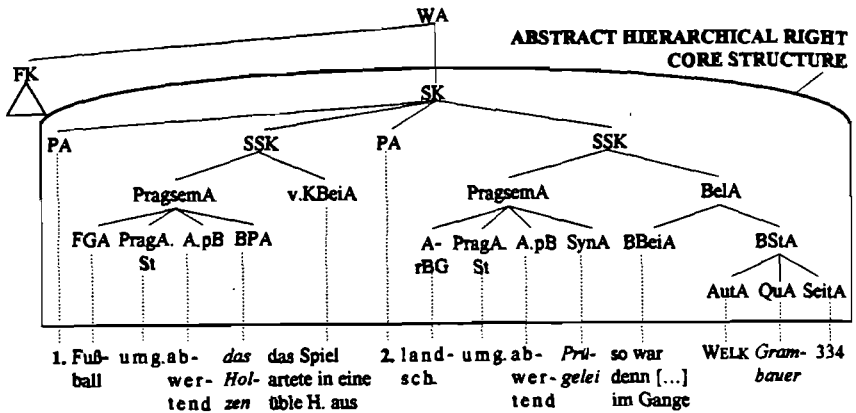


Fig. 11: Annotated structure graph for an excerpt from the (concrete and abstract) hierarchical microstructure which can be assigned to the comment on semantics of da_3 ; *abbreviations:* PA = item giving polysemy; SSK = sub-comment on semantics; PragsemA = pragmatic-semantic item; v.KBeiA = condensed item giving a competence example; BelA = quotation item; FGA = item giving the subject field; PragA.St = pragmatic item on style; A.pB = item of the pejorative meaning; BPA = item giving the meaning paraphrase; A-rBG = item concerning regional restriction of use; SynA = item giving the synonym; BBeiA = item giving a quoted example; BStA = item giving the place where the quoted example is found; AutA = item giving the author's name; QuA = item giving the source; SeitA = item giving the page.

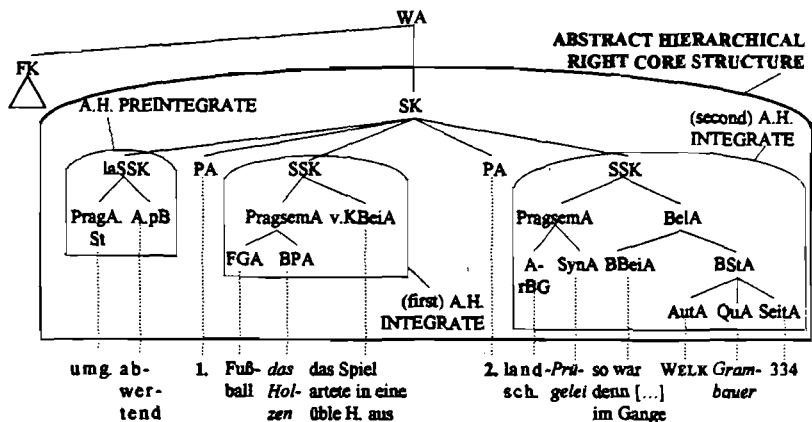


Fig. 12: Annotated structure graph for an excerpt from the (concrete and abstract) hierarchical microstructure which can be assigned to the comment on semantics of da_3 ; *abbreviations:* laSSK = sub-comment on semantics, shifted to the left; A = ABSTRACT; H = HIERARCHICAL.

The comparison of the two structural graphs shows that by means of the shifting to the left the comment on semantics obtains a new direct textual constituent, i.e. the sub-comment on semantics shifted to the left (laSSK). This sub-comment directly precedes the first item giving polysemy. The partial structure of the microstructure which belongs to the sub-comment is called *pre-integrate*. By means of the shifting to the left the complete microstructure of the dictionary article is changed. A simple integrated microstructure turns into a simple partially integrated microstructure with a pre-integrate. Thus the propositional density increases because, on the whole, two pragmatic items, which appear twice in da_3 , are deleted. First and foremost, however, the scope of the shifted items has to be explicitly determined. One of the metatexts has to provide the user with the information that the shifted items "umgangssprachlich" and "abwertend" are valid for the use of the lemma sign with respect to both the first and the second meaning. This means that the textual scope of the two items given in the sub-comment on semantics shifted to the left extends to both of the subsequent sub-comments on semantics. That this is the case cannot be inferred from the shifted items themselves, nor from their textual position. The reason is that after the shifting to the left has been carried out, there are textual connections within the article which do not appear in non-lexicographic texts.

There are further forms of shifting to the left, which I cannot discuss at this point for lack of space (cf. Wiegand 1996b). I would only like to point out that in articles on polysemous lemma signs the complete comment on form, too, may be understood as a textual constituent shifted to the left.

Whereas in the first stage of textual condensation the textual condensing operations become effective only with respect to the elements belonging to the domains of the microstructures, the operations of the shifting to the left, which represent the second stage of textual condensation, also change the relations of the structure.

This is also the case in regard to the third stage of inner textual condensation, which I will tackle now.

5.3 The third stage of inner textual condensation

We speak of the third stage of inner textual condensation in the case of such operations as the shifting to the right which are accompanied by textual condensation. This is only rarely the case. The operation of shifting to the right serves first and foremost as a means of loosening the text. It would be wrong to assume that textual loosening is exactly the opposite of textual condensation. The reason is that if an operation of shifting to the right is carried out the propositional density does not decrease. What happens instead is that the distribution of data within the article is merely changed in such a way that the inner rapid access structure is differentiated, resulting in smaller fields of search with respect to certain search questions (cf. Wiegand 1996a).

One example for an article showing the results of a shifting-to-the-right operation is da_4 in fig. 9. Here, the items giving the compounds are shifted from the first sub-comment on semantics to the right into an annex. In case of a shifting to the right of items given in a sub-comment on semantics the affiliation to the scope of the item giving the meaning paraphrase is lost at the level of the dictionary form. To retrieve it, the item giving the semantic affiliation "Zu 1" has to precede the annex.

Let us now take a look at the article da_5 , given in fig. 13. Here we see two annexes as a result of shifting-to-the-right operations.

da_5 : **Benennung, die; -, -en**
1. Name, Bezeichnung: einer neuen Ware eine B. geben; die alte B. ändern; bekannt unter der B. ...; In diesen Benennungen [der Häuser] war die Sitte der Jahrhunderte deutlich zu erkennen G. KELLER 6,310 (*Kleider machen Leute*)
2. das Benennen, die Namengebung: die B. der neuen Straße nach einem bekannten Dichter
3. papierdt. das Namhaftmachen: die B. von Zeugen; Ein solches Vorgehen wurde im Grundsatz beschlossen und sodann zur Benennung der einzelnen Opfer geschritten G. KELLER 6,575 (*Verlor. Lachen*)
 zu 1 u. 2 Orts-, Warenbenennung
 zu 2 Umbenennung

Fig. 13: Dictionary article da_5 from WDG

If there is an annex in a dictionary article, as in the case of da_5 , which is preceded by an item giving the semantic affiliation, by which the annex is assigned to two or more sub-comments on semantics, then the carrying out of the shifting also contributes to loosening the text, but at the same time it is connected with a textual condensing operation of omitting. In da_5 , the condensed item giving the compound word, which allows to ascertain two compound words, i.e. *Ortsbenennung* and *Warenbenennung*, appeared once in the first and once in the second sub-comment on semantics before the shifting to the right had been carried out. However, it has not been shifted to the right twice into two different annexes, but only once, i.e. once it has been deleted. This is why the item giving the semantic affiliation has to read "Zu 1 und 2" and the annex is a condensed annex.

Just like shifting to the left, shifting to the right, too, affects the relations of the microstructures, resulting in the creation of partially integrated microstructures with a postintegrate.

We have now outlined the inner textual condensation and will now briefly tackle the outer one.

6. Outer textual condensation

Outer textual condensation pertains to the carriers of the guiding element such as lemmata and sublemmata, for example. A simple example will be found in fig. 14.

da₆₋₉: **Pflaume** *f* bot олхўри
 ~ baum *m* олхўри дарахти
 ~ kern *m* олўри данаги
 ~ kompost *n* олхўри компоти

Fig. 14: Four dictionary articles from Benjaminow et al. (1985)

These are four short articles taken from Benjaminow et al. (1985). The condensation can be found insofar as, with respect to three lemma signs, which are compounds, the respective first constituent has been substituted by a tilde. This results in partial lemmata (sensu Wiegand 1983). During the condensing operation, however, a mistake has been made, because in each case it has been forgotten to insert the linking letter *n* as the first letter of the partial lemma.

With respect to condensed cross-reference articles, we will find a different form of outer textual condensation. An example, taken from the FWB, is given in fig. 15.

da₁₀: **ablösungsbrief, -geld, -hilfe, -pfund-**
geld, -zeit, s. *ablösung* 2.

Fig. 15: Condensed cross-reference article from FWB

This condensed cross-reference article, from which 5 cross-references can be inferred, may be understood as if it were the result of the 5 cross-reference articles after they have been subjected to condensing operations, which follow each other in alphabetical order and which are given in fig. 16.

ablösungsbrief, s. *ablösung* 2.
 ablösungsgeld, s. *ablösung* 2.
 ablösungshilfe, s. *ablösung* 2.
 ablösungspfundgeld, s. *ablösung* 2.
 ablösungszeit, s. *ablösung* 2.

Fig. 16: Five cross-reference articles

During the transformation of the five cross-reference articles into one condensed cross-reference article, the first thing to be done, for example, is to delete all those items giving the cross-reference which read "s. ablösung", except for those appearing in the last cross-reference article. Next, with respect to all lemma signs except the first one, i.e. *ablösungsbrief*, the first constituent and the linking letter *s* are substituted by a tilde. Finally, all parts of the text which are left on this line are moved up. The result is the condensed cross-reference article given in fig. 15. Expressing it in terms of the macrostructure we have a lemma cluster, whereas in terms of the microstructure there is an item giving the form of the lemma sign within the condensed cross-reference article, from which five lemma signs are inferable.

Even though there are a number of other cases, we have now gained a modest insight into outer textual condensation and I would like to come to a concluding remark.

7. Conclusion

In conclusion, I would like to draw your attention to a phenomenon which I deliberately did not discuss, but which also belongs in the context of textual condensation. Textual condensation serves inter alia as a means to save printing space. To save printing space means that a certain amount of printable matter is filled with as many propositional contents brought into written form as possible. This may also be achieved by selecting, for example, a smaller type size, by reducing the line spacing, and by making minimal use of different means of outer structural formatting such as paragraph formation etc. This is then a type of textual condensation which does not change the proportion of the number of printed characters used in relation to the number of elementary propositions, but the proportion of the number of printed characters used in relation to the printable matter. A discussion on this different type of textual condensation will be found in Wiegand 1996b.

8. Acknowledgements

I would like to thank Antje Immken for translating the German text, as well as Matthias Kammerer for producing the typescript.

9. Abbreviations of the names for the item classes

A.pB	Angabe der pejorativen Bedeutung	<i>item of the pejorative meaning</i>
A-pragNM	Angabe zur pragmatischen Nullmarkierung	<i>item concerning the pragmatic zero marking</i>
A-rBG	Angabe zur regionalen Beschränkung des Gebrauchs	<i>item concerning regional restriction of use</i>
ArtA	Artikelangabe	<i>item giving the definite article</i>
ArtA...G WK	Artikelangabe, aus der das Geschlecht und die Wortklasse erschließbar ist	<i>item giving the definite article, which allows to ascertain the gender and the word class</i>
AutA	Autorenangabe	<i>item giving the author's name</i>
BBeiA	Belegbeispielangabe	<i>item giving a quoted example</i>
BelA	Belegangabe	<i>quotation item</i>
BPA	Bedeutungsparaphrasenangabe	<i>item giving the meaning paraphrase</i>
BStA	Belegstellenangabe	<i>item giving the place where the quoted example is found</i>
DekKA	Deklinationenklassenangabe	<i>item giving the declension class</i>
FGA	Fachgebietsangabe	<i>item giving the subject field</i>
FK	Formkommentar	<i>comment on form</i>
GA	Genusangabe	<i>item giving the gender</i>
laSSK	links ausgelagerter Subkommentar zur Semantik	<i>sub-comment on semantics, shifted to the left</i>
LZGA	Lemmazeichengestaltangabe	<i>item giving the form of the lemma sign</i>
MorA.S	Morphologieangabe bei Substantiven	<i>morphology item for nouns</i>
PA	Polysemieangabe	<i>item giving polysemy</i>
PragA.St	pragmatische Angabe zum Stil	<i>pragmatic item on style</i>
PragsemA	pragmatisch-semantische Angabe	<i>pragmatic-semantic item</i>
QuA	Quellenangabe	<i>item giving the source</i>
RA	Rechtschreibangabe	<i>orthography item</i>
SeitA	Seitenangabe	<i>item giving the page</i>
SK	semantischer Kommentar	<i>comment on semantics</i>
SSK	semantischer Subkommentar	<i>sub-comment on semantics</i>
SynA	Synonymangabe	<i>item giving the synonym</i>
v.BP ² A	verdichtete Bedeutungsparaphrasenangabe, aus der zwei Bedeutungsparaphrasen erschließbar sind	<i>condensed item giving meaning paraphrases, which allows to ascertain two meaning paraphrases</i>
v.KBeiA	verdichtete Kompetenzbeispielangabe	<i>condensed item giving a competence example</i>
v.KBei ² A	verdichtete Kompetenzbeispielangabe, aus der zwei Beispiele erschließbar sind	<i>condensed item giving competence examples, which allows to ascertain two competence examples</i>
v.PlbA	verdichtete Pluralbildungsangabe	<i>condensed item giving the plural formation</i>
v.SgbA	verdichtete Singularbildungsangabe	<i>condensed item giving the singular formation</i>
WA	Wörterbuchartikel	<i>dictionary article</i>
WAK VQK	Wortakzentangabe und Vokalquantitätskennzeichnung	<i>marking giving the word accent and the vowel quantity</i>
WFA.NSg	Wortformenangabe für Nominativ Singular	<i>wordform item for the nominative singular</i>

10. Bibliography

- Benjaminow, J.R., T.S. Mirsatow, S.S. Saidow and M.S. Rustambekowa.** 1985. *Deutsch-Usbekisches Wörterbuch*. Taschkent.
- Frühneuhochdeutsches Wörterbuch.** 1989. Hrsg. v. Anderson, Robert R., Ulrich Goebel, Oskar Reichmann. Bd. 1: Einführung. A—äpfelkern. Bearb. v. Oskar Reichmann. Berlin. New York. [= FWB].
- Handwörterbuch der deutschen Gegenwartssprache.** 1984. In zwei Bänden. Von einem Autorenkollektiv unter der Leitung von Günter Kempcke [...]. Bd. 1: A—K; Bd. 2: L—Z. Berlin. [=HWDG].
- Hausmann, Franz Josef and Herbert Ernst Wiegand.** 1989. Component parts and structures of general monolingual dictionaries: a survey. *Wörterbücher. Ein internationales Handbuch zur Lexikographie*, 1. Teilbd. Hrsg. v. Franz Josef Hausmann, Oskar Reichmann, Herbert Ernst Wiegand, Ladislav Zgusta. Berlin. New York (Handbücher zur Sprach- und Kommunikationswissenschaft 5.1): 328-360.
- Hellwig, Peter.** 1984. Titulus oder über den Zusammenhang von Titeln und Texten. Titel sind ein Schlüssel zur Textkonstitution. *Zeitschrift für germanistische Linguistik* 12: 1-20.
- Hellwig, Peter.** 1984a. Grundzüge einer Theorie des Textzusammenhangs. *Text — Textsorten — Semantik. Linguistische Modelle und maschinelle Verfahren*. Hrsg. v. Anneli Rothkegel und Barbara Sandig. Hamburg (Papiere zur Textlinguistik 52): 51-79.
- Ising, Gerhard.** 1978. Textverdichtung und Redundanz in der Lexikographie. *Wissenschaftliche Zeitschrift der Wilhelm-Pieck-Universität Rostock* 27. *Gesellschafts- und sprachwissenschaftliche Reihe*. H. 12: 9-13.
- Konerding, Klaus-Peter and Herbert Ernst Wiegand.** 1994. Framebasierte Wörterbuchartikel. Zur Systematisierung der lexikographischen Präsentation des Bedeutungswissens zu Substantiven. *Lexicographica* 10 [published 1995]: 100-170.
- Pan Zaiping and Herbert Ernst Wiegand.** 1995. Über die Musterartikel für das Große Deutsch-Chinesische Wörterbuch. Zugleich ein Beitrag zu einer Theorie zweisprachiger lexikographischer Texte. *Studien zur zweisprachigen Lexikographie mit Deutsch II*. Hrsg. v. Herbert Ernst Wiegand. Hildesheim. New York (Germanistische Linguistik 127-128): 63-190.
- The New Collins Concise Dictionary of the English Language.** 1982. Managing editor: William T. McLeod. Consultant editor: Patrick Hanks. London and Glasgow. [= CCDE].
- Wiegand, Herbert Ernst.** 1983. Was ist eigentlich ein Lemma? Ein Beitrag zur Theorie der lexikographischen Sprachbeschreibung. *Studien zur neuhochdeutschen Lexikographie III*. Hrsg. v. Herbert Ernst Wiegand. Hildesheim. Zürich. New York (Germanistische Linguistik 1-4/82): 401-474.
- Wiegand, Herbert Ernst.** 1983a. Ansätze zu einer allgemeinen Theorie der Lexikographie. *Die Lexikographie von heute und das Wörterbuch von morgen*. Hrsg. v. Joachim Schildt und Dieter Viehweger. Berlin (Ost) (Linguistische Studien, Reihe A. Arbeitsberichte 109): 92-127.
- Wiegand, Herbert Ernst.** 1983b. Überlegungen zu einer Theorie der lexikographischen Sprachbeschreibung. *Symposium zur Lexikographie. Symposium on Lexicography. Proceedings of the Symposium on Lexicography, September, 1-2 1982, at the University of Copenhagen*. Ed. by Karl Hyldgaard-Jensen and Arne Zettersten. Hildesheim. Zürich. New York (Germanistische Linguistik 5-6/82): 35-72.

- Wiegand, Herbert Ernst. 1984. On the Structure and Contents of a General Theory of Lexicography. *LEXeter Proceedings. Papers from the International Conference on Lexicography at Exeter 9-12 September 1983*. Ed. by R.R.K. Hartmann. Tübingen (Lexicographica. Series Maior 1): 13-30.
- Wiegand, Herbert Ernst. 1984a. Prinzipien und Methoden historischer Lexikographie. *Sprachgeschichte. Ein Handbuch zur Geschichte der deutschen Sprache und ihrer Erforschung*. Hrsg. v. Werner Besch, Oskar Reichmann, Stefan Sonderegger. 1. Halbbd. Berlin. New York (Handbücher zur Sprach- und Kommunikationswissenschaft 2.1): 557-620.
- Wiegand, Herbert Ernst. 1985. Eine neue Auffassung der sog. lexikographischen Definition. *Symposium on Lexicography II. Proceedings of the Second International Symposium on Lexicography May 16-17, 1984 at the University of Copenhagen*. Ed. by Karl Hyldgaard-Jensen and Arne Zettersten. Tübingen (Lexicographica. Series Maior 5): 15-100.
- Wiegand, Herbert Ernst. 1987. Zur handlungstheoretischen Grundlegung der Wörterbuchbenutzungsforschung. *Lexicographica* 3: 178-227.
- Wiegand, Herbert Ernst. 1988. Vorüberlegungen zur Wörterbuchtypologie. Teil I. *Symposium on Lexicography III. Proceedings of the Third International Symposium on Lexicography. May, 14-16th 1986 at the University of Copenhagen*. Ed. by Karl Hyldgaard-Jensen and Arne Zettersten. Tübingen (Lexicographica. Series Maior 19): 3-105.
- Wiegand, Herbert Ernst. 1988a. Wörterbuchartikel als Text. *Wörterbücher. Artikel und Verweisstrukturen. Jahrbuch des Instituts für deutsche Sprache 1987*. Hrsg. v. Gisela Harras. Düsseldorf (Sprache der Gegenwart LXXIV): 30-120.
- Wiegand, Herbert Ernst. 1988b. "Schanghai bei Nacht." Auszüge aus einem metalexikographischen Tagebuch zur Arbeit beim Großen Deutsch-Chinesisches Wörterbuch. *Studien zur neuhochdeutschen Lexikographie VI*, 2. Teilbd. Mit einem Namen- und Sachregister zu den Bänden I-VI sowie einer Bibliographie zur Wörterbuchforschung. Hrsg. v. Herbert Ernst Wiegand. Hildesheim. Zürich. New York (Germanistische Linguistik 87-90): 522-626.
- Wiegand, Herbert Ernst. 1989. Aspekte der Makrostruktur im allgemeinen einsprachigen Wörterbuch: Alphabetische Anordnungsformen und ihre Probleme. *Wörterbücher. Ein internationales Handbuch zur Lexikographie*, 1. Teilbd. Hrsg. v. Franz Josef Hausmann, Oskar Reichmann, Herbert Ernst Wiegand, Ladislav Zgusta. Berlin. New York (Handbücher zur Sprach- und Kommunikationswissenschaft 5.1): 371-409.
- Wiegand, Herbert Ernst. 1989a. Der Begriff der Mikrostruktur: Geschichte, Probleme, Perspektiven. *Wörterbücher. Ein internationales Handbuch zur Lexikographie*, 1. Teilbd. Hrsg. v. Franz Josef Hausmann, Oskar Reichmann, Herbert Ernst Wiegand, Ladislav Zgusta. Berlin. New York (Handbücher zur Sprach- und Kommunikationswissenschaft 5.1): 409-462.
- Wiegand, Herbert Ernst. 1989b. Arten von Mikrostrukturen im allgemeinen einsprachigen Wörterbuch. *Wörterbücher. Ein internationales Handbuch zur Lexikographie*, 1. Teilbd. Hrsg. v. Franz Josef Hausmann, Oskar Reichmann, Herbert Ernst Wiegand, Ladislav Zgusta. Berlin. New York (Handbücher zur Sprach- und Kommunikationswissenschaft 5.1): 462-501.
- Wiegand, Herbert Ernst. 1989c. Die lexikographische Definition im allgemeinen einsprachigen Wörterbuch. *Wörterbücher. Ein internationales Handbuch zur Lexikographie*. 1. Teilbd. Hrsg. v. Franz Josef Hausmann, Oskar Reichmann, Herbert Ernst Wiegand, Ladislav Zgusta. Berlin. New York (Handbücher zur Sprach- und Kommunikationswissenschaft 5.1): 530-588.

- Wiegand, Herbert Ernst.** 1990. Printed Dictionaries and Their Parts as Texts. An Overview of More Recent Research as an Introduction. *Lexicographica* 6. [published 1991]: 1-126.
- Wiegand, Herbert Ernst.** 1994. Deutsch-Türkmenisches Wörterbuch. Einblicke in die Wörterbucharbeit an der Türkmenischen Staatlichen Magtymguly-Universität in Aschghabat. *Lexicographica* 10. [published 1995]: 249-300.
- Wiegand, Herbert Ernst.** 1995. Lexikographische Texte in einsprachigen Lernerwörterbüchern. Kritische Überlegungen anlässlich des Erscheinens von Langenscheidts Großwörterbuch Deutsch als Fremdsprache. *Deutsch als Fremdsprache. An den Quellen eines Faches. Festschrift für Gerhard Helbig zum 65. Geburtstag.* Hrsg. v. Heidrun Popp. München, 463-499.
- Wiegand, Herbert Ernst.** 1996. Über die Mediostrukturen bei gedruckten Wörterbüchern. *Symposium on Lexicography VII. Proceedings of the Seventh Symposium on Lexicography May 5-6, 1994 at the University of Copenhagen.* Ed. by Arne Zettersten, Viggo Hj. mager. Tübingen (*Lexicographica. Series Maior* 76): 11-43.
- Wiegand, Herbert Ernst.** 1996a. Das Konzept der semiintegrierten Mikrostrukturen. Ein Beitrag zur Theorie zweisprachiger Printwörterbücher. *Wörterbücher in der Diskussion II. Vorträge aus dem Heidelberger Lexikographischen Kolloquium.* Hrsg. v. Herbert Ernst Wiegand. Tübingen (*Lexicographica. Series Maior* 70): 1-82.
- Wiegand, Herbert Ernst.** 1996b. Textverdichtung in der Lexikographie. Ein wichtiger Ausschnitt aus einer Theorie lexikographischer Texte. *Symposium on Lexicography VIII. Proceedings of the Eighth Symposium on Lexicography May 2-3, 1996 at the University of Copenhagen.* Ed. by Arne Zettersten, Viggo Hj. mager. Tübingen [forthcoming].
- Wiegand, Herbert Ernst.** 1996c. *A theory of lexicographic texts. An overview.* [Keynote lecture, given at the Annual Congress of the Linguistic Society of Southern Africa 1996. Forthcoming].
- Wiegand, Herbert Ernst.** 1996d. Deutsch-Uzbekisches Wörterbuch. Einblicke in die Wörterbucharbeit an der Staatlichen Usbekischen Weltsprachen-Universität in Taschkent. *Lexicographica* 12. [Forthcoming].
- Wiegand, Herbert Ernst.** 1996e. *Printed Language Dictionaries and their Standardization: Notes on the Progress Toward a General Theory of Lexicography.* [Forthcoming].
- Wolski, Werner.** 1989. Formen der Textverdichtung im allgemeinen einsprachigen Wörterbuch. *Wörterbücher. Ein internationales Handbuch zur Lexikographie.* 1. Teilbd. Hrsg. v. Franz Josef Hausmann, Oskar Reichmann, Herbert Ernst Wiegand. Berlin. New York (Handbücher zur Sprach- und Kommunikationswissenschaft 5.1): 956-967.
- Wolski, Werner.** 1991. Formen der Textverdichtung im zweisprachigen Wörterbuch. *Wörterbücher. Ein internationales Handbuch zur Lexikographie.* 3. Teilbd. Hrsg. v. Franz Josef Hausmann, Oskar Reichmann, Herbert Ernst Wiegand. Berlin. New York 1991 (Handbücher zur Sprach- und Kommunikationswissenschaft 5.3): 2837—2854.
- Wörterbuch der deutschen Gegenwartssprache.* 1974⁷. Hrsg. v. Ruth Klappenbach u. Wolfgang Steinitz. 1. Bd.: A—deutsch; 2. Bd.: Deutsch—Glauben; 3. Bd.: glauben—Lyzeum. Hrsg. v. R. Klappenbach u. W. Steinitz. [...] 7. bearb. Aufl. Berlin.