

SOME ASPECTS OF GERMAN CONTRACTED BRAILLE

by

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I really doubt whether it is of great value to those of you who don't know the German language to explain all the rules which are now valid, but let me touch on two of them.

In the older system, it was very important to label contractions, which was done mainly by a hyphen. If this contraction was part of a larger word, this hyphen had to be put before and behind the contraction. In the new system both hyphens are omitted. Contractions composed of two signs can be applied without any precautions. We have contractions consisting of two as well as of one character and the contractions consisting of one character now have to be preceded by dot 2 if they are part of a larger word. Of course if they occur as a single word, for instance the word "und", only a "u" is written between two blank cells. This is a very great simplification and it is now possible because of this and other simplifications also to learn the new system within three weeks, which is a fraction of the time necessary before the changes were made. Reading is nearly the same as it was, but writing is easier than it was before. What the computer is producing is especially well-readable and it is so good that we intend to produce not only magazines but also books in this way. I wish to mention one thing about the contractions. I have mentioned before in the discussions that we have about 400 contractions in the lists; 300 are taken from the old system and about 100 new contractions have been added. Fortunately, shortly before the first system was developed, a large count had been taken by Keding. He counted 2 million German words from miscellaneous texts, counted the frequency of a great many of them, and listed those which occurred at least 10 times. The first list of contractions was based on this count with the effect that the most frequently used words have been contracted, which was very effective. Unfortunately, there is no new count, and when searching for new contractions the old lists (now nearly 100 years old) had to be used. The language, however, has changed only in some certain aspects and most of the frequency counts found 100 years ago are still fairly reliable. Selecting new contractions, we looked for the frequencies of them in the lists and for the abbreviation effect.

Let's take a word like "Volk", meaning "people" in English. I don't know the exact frequency of it now, but it consists of four letters, V-o-l-k, and can be abbreviated by "vk". We are willing to place it in two cells. To multiply this by the frequency number, say 11,000, gives about 22,000. This is the effectivity. To determine which contractions could be used, we went down to an effectivity count of about 10,000. If a contraction has an effectivity of 10,000 and it is possible to contract it in a pleasant way, we decided we would take it in our lists. For instance, the word "Bild", meaning "picture", occurs in different meanings such as "Bildung", meaning "education". This word is a high-frequency word (about 12,000). If we could contract it by using two letters, we would have an effectivity of 25,000. However, there is no letter combination which would give a satisfactory contraction, and therefore, this possibility had to be omitted.

I wish to touch on one other point. This change looks very grave. We substituted the character for full-stop dot (dots 2, 5, 6) with dot 3. We did this because the dot has a large number of meanings in inkprint:

- 1) full stop
- 2) abbreviation dot, for instance in "i.e."
- 3) separating numbers, for instance in telling time (i. e., 10.45)
- 4) decimal point
- 5) to fill gaps, for instance in quotations or to continue lines in a Table of Contents to indicate ordinal numbers first, second, third, and so on.

Dot three has been used in German for all these meanings except the full-stop dot. Because the computer isn't able to determine whether a dot in text means full-stop or has some other meaning, and due to the desire to unify such contractions and to eliminate contradictions, it was determined to write dot three instead of the old full-stop dot. As a

consequence, apostrophe, which was also represented by dot three, is now represented by dot six.

I must give some background information to present another aspect of this change. Louis Braille was a Frenchman. Naturally, he was guided by the French language when he chose the valid characters for letters as well as for the inter-punctuation-signs. The comma is the most frequent punctuation sign in French as well as in German (possibly in other languages, too). The second most frequent punctuation sign in French is the apostrophe, whereas in German the second most frequent sign is the full-stop dot. I think this is the same in most languages. Braille decided that these most frequent signs should be represented by the most simple Braille characters, namely, dot two and dot three. Consequently the most frequent punctuation signs in other languages are represented by the most simple characters, too. That means dot two for the comma and dot three for the full-stop dot. I doubt that a change would be possible in England or in the United States, but I think it would be worth thinking about.

It has often been mentioned here that in German it is possible to chain up words. For instance, "Punkt" means dot, "Schrift" means script, "Brief" means letter. We can connect these three words to form the word "Punktschriftbrief", meaning "a letter written in Braille". Formerly all three parts of the word could be contracted "pt(sch)tbf". They used to be joined by a hyphen. This hyphen had the special effect of separating words and therefore making reading easier. This hyphen is now omitted and because of this there are some problems for the reader. He must decide which characters belong together. Normally, this is not a very severe problem, but occasionally ambiguities may occur. For instance, Verszeile, meaning "the line of a verse" has the prefix "Ver", the "s", "z", and "eile". "Sz" is a new abbreviation for "Satz", so possibly "Ver-satz-eile" may be read. There are various other examples, but they do not occur very often. I think that the resistance to the new system which arose during the last months will decrease when one sees that it is not worthwhile.