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Title:   **Additional information on typesetting Fraktur**
Source:   **Asmus Freytag**
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Related:   **See also N2655 as well as N2639 and N2647**

The discussion of recent proposals, among them N2636, N2639 and N2647 has involved a discussion of the rules for typesetting Fraktur. The current document attempts to collect the information available to this author in order to provide a minimum of further background information.

Fraktur is a typographical style that was popular in some countries until the early 20th century. It is dense in the horizontal direction, emphasizing the vertical strokes especially in lower case letters, but also embellishing the capital letters. Both aspects make it difficult to read for people not used to it. However, its ready availability as a font style in Germanic countries has encouraged scientists and scholars to borrow letter and character shapes for unrelated uses.

## Typesetting Fraktur

The rules for typesetting Fraktur differ from those of typesetting modern type styles, even for the same languages.

The following samples are from a 1911 book typeset in Fraktur. We can assume that it is a representative example, of average typographical quality. It is neither a newspaper nor did the publisher seem to have lavished extra typographical care. In fact, by reading it closely we discover that while the proofreader did not let any obvious spelling or punctuation errors slip through, the same is not true for purely typographical features. The latter show some interesting and possibly unintentional inconsistencies.

## Hyphen

As a work of popular science, the book cited here uses several words that are hyphenated, something that is much more uncommon in German than, for example, in English.

As you will note, in the sample below all three uses of HYPHEN are rendered consistently as a set of two short upward slanted lines. That demonstrates a clear case for a font shift: using a different symbol while retaining the properties of the regular hyphen.



Note that the use of space around the hyphen appears to be inconsistent, unless the discrepancy can be ascribed to the need for line justification.

## Long s

Fraktur text uses the long s. The last line of the sample above shows that long s is usesd everywhere, except at the *end* of words, including words that have been combined into a compound (e.g. des-halb). Because of compound words, the decision when to apply a long s cannot be automated.

## Foreign Words

In some situations foreign words in Fraktur text get typeset as Antiqua. This is analogous to the use of Katakana for foreign words in Japanese context, or the use of italics for the same purpose in English, but with the twist that the cited foreign word appears *as it would have been written in the source text,* since most other languages used Antiqua, and not Fraktur. Here are two examples

As can be seen from the foregoing example, foreign names are often not treated the same way as foreign words. This can lead to interesting complications, to wit, the insertion of the Antiqua letter 'è ' in the middle of a word otherwise typeset in Fraktur:

> kommnete dadurch die Camera obscura beträchtlich. Genau dieselben Gründe waren es, die dazu führten, in photographischen Apparaten Linsen zu verwenden. Der Franzose N i c e p h o r e N i è p c e (1765—1833) dachte zuerst daran, die in der mit einer Linse versehenen Camera

## Hyphenating foreign words

Text set in Antiqua uses the regular hyphen. If a hyphenated term is of mixed German/foreign origin, the Fraktur hyphen is used, *except* between two parts that are in Antiqua. Such examples are not very common, except depending on the subject matter.

## Ligatures

Fraktur uses a richer set of ligatures than Antiqaua text. The most common ones in the samples presented here are the ch and st ligatures.

## Sperrsatz

Several of the samples also show the use of letter s p a c i  n g  (German: Sperrsatz) to highlight a term. The use of Sperrsatz in German is no longer as common as it was in Fraktur, but it is still common enough to make the use of increased letterspacing an undesirable option in laying out German text.

One interesting feature of Sperrsatz is the fact that many common ligatures are maintained, as in the following example.

> Körper das Licht mehr oder minder durchlassen, unterscheidet man d u r c h = s i c h t i g e und halbdurchsichtige oder d u r c h s c h e i n e n d e.  Die Körper, die kein Licht hindurchlassen, werden u n d u r c h s i c h t i g e genannt.  Das Licht pflanzt sich in geraden Linien  fort, die  wir  L i c h t s t r a h l e n

## Older texts

Older texts in Fraktur have additional interesting conventions. Here's a scan from the -Vorrede- of Dr. Johann Jacob Rambach's "*Neun Buß-reden über auserlesene Texte [usw]*"), 1736.

In the upper right quadrant you'll see "procuri[e]ret" and "elabori[e]ren" in mixed typographies, Fraktur/Antiqua, with the German ending on the Latin loan word set in Fraktur. (Sample courtesy of Bernard S. Greenberg).

The Vorrede uses superscripted 'e' instead of the two dots for an umlaut, which is something that can be seen quite often in older works. As it is a systematic change, it would be implemented by using a font that provides the three vowels A O and U with supercripted 'e' instead of umlaut.
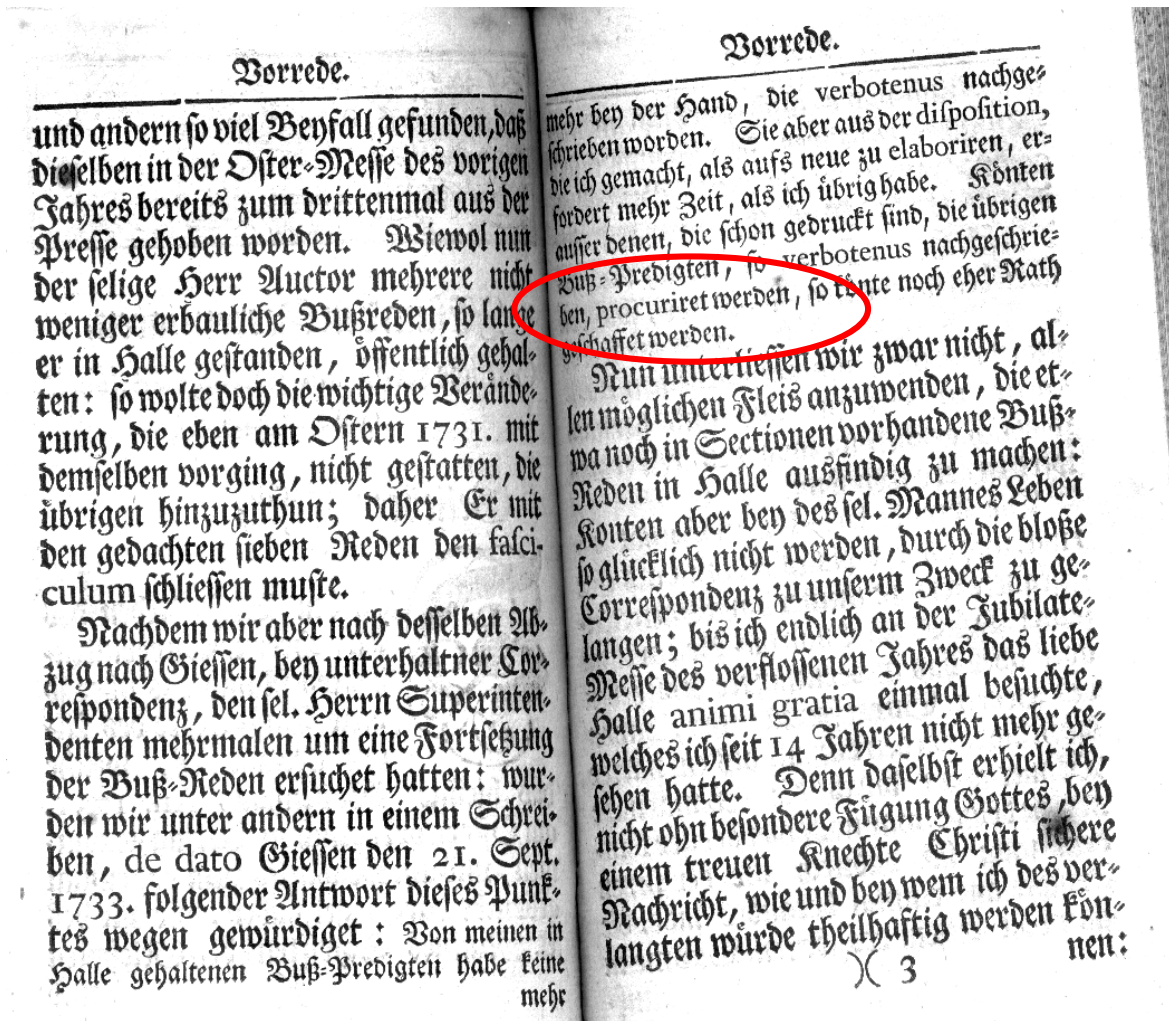
Note that the term Bußrede can appear with and without a hyphen (Buß-Rede and Bußrede). Several other compound nouns are hyphenated, contrary to modern German usage.

Finally note the continuation of lines in the bottom margin, a practice found mostly in earlier works.

## References

The bulk of the Fraktur samples are taken from

Dr. Albert Neuburger, *Ergötzliches Experimentierbuch*, Ullstein & Co., Berlin 1911

A fairly complete set of rules for the orthography (and the typesetting) of Fraktur can be found in

Der Große Duden, Band 1, *Rechtschreibung*, Bibliographisches Institut, 1968, Mannheim, Zürich.