

*The*

LETTERSPACE MODULE

*for ConT<sub>E</sub>Xt MkIV*

A CONTRIBUTION TO  
HORIZONTAL MOVEMENT

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The latest Version can be found at <https://bitbucket.org/phg/>.

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## INTRODUCTION

Robert BRINGHURST quotes Frederick GOUDY's famous dictum on the topic of letterspacing: *A man who would letterspace lowercase would steal sheep.*<sup>1</sup> Likewise other judgements: *Letter spacing is a form of markup particularly hard to handle, that only master typographers should get involved with.*<sup>2</sup> And another: *Letter spacing is disapproved of in the same way as of capitals [...].*<sup>3</sup> This module is partly a reaction on the excellent article the last quotation was taken from, and partly the endeavour of a convinced ConT<sub>E</sub>Xt user and letter spacer to replace a number of kludges already in use with something more consistent. To be sure, those warnings are grounded in facts and they should seriously be taken into account before one resorts to letterspacing.

Before the advent of LuaT<sub>E</sub>X the implementation of proper letter spacing in \*T<sub>E</sub>X proved to be extremely difficult. For instance, the `soul` package provides some means but at the same time severely limits the content passed to macros. Nevertheless there are magnificent examples of letterspacing done right, like the **LEIBNIZ-Edition** by the LEIBNIZ-Archiv in Hanover that has been typeset with EDMAC and pdfT<sub>E</sub>X. Nowadays the Lua node library removes the technical restrictions and thus leaves the task of correct letterspacing to the user. The `Letterspace` module for ConT<sub>E</sub>Xt was designed to collect everything necessary to achieve this and to make it accessible from one place.

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<sup>1</sup> Bringhurst (2008), p. 31.

<sup>2</sup> Willberg/Forssman (1997), p. 126.

<sup>3</sup> Roemer (2011), p. 10.

## COMMANDS

Technically, the `Letterspace` module doesn't do anything fancy; it just maps some existing ConTeXt macros into a single setup and lets you define and configure your own derivatives of it. The module is supposed to be loaded the regular way: somewhere before `\starttext` should be the line

```
\usemodule [letterspace]
```

– That's all.

### DEFAULT LETTERSPACE COMMAND

Initially one `letterspace` command is already defined and configured, as well as a `letterspacing` environment. They are now ready for use in running text.

```
\usemodule [letterspace]
```

```
\starttext
```

```
\startlines
```

```
uides ut \letterspace{alta} stet \letterspace{niue} candidum  
Soracte
```

```
\stoplines
```

```
\startletterspace
```

```
\startlines
```

```
hac {\italic ait} in Thebas, hac me iubet ardua uirtus  
ire, Menoeceo qua lubrica sanguine turris.  
experiar quid sacra iuuent, an falsus Apollo.
```

```
\stoplines
```

```
\stopletterspace
```

```
\stoptext
```

```
\LETTERSPEACE [...,1,...] {2.}
                OPTIONAL    OPTIONAL
```

1 *inherits from* `\setupletterspace`

2 CONTENT

```
\startLETTERSPEACE [.,.*.,...] ... \stopLETTERSPEACE
                        OPTIONAL
* inherits from \setupletterspace
```

## DEFINING AND CUSTOMIZING LETTERSPACE COMMANDS

The `Letterspace` module allows the letterspacing to be adjusted via three parameters. The `factor` determines the value by which the `intra`word spacing (between letters) will be extended. `spaceskip` specifies a dimension for the `inter`word spacing and, if applicable, the surrounding spaces. `suppresskern` allows for disabling the letter kerning which can improve the spacing of capitals (see below, [p. 8](#)).

The following lines reconfigure the predefined `\letterspace` macro to behave in an extreme fashion.

```
\setupletterspace [
  factor=2,          % default: 0.125
  spaceskip=2em,    % default: 0.5em
]
```

```
\letterspace{vapula!}
```

```
\setupletterspace [.1.] [...,2.,...]
                        OPTIONAL
1 IDENTIFIER
2 factor      = NUMBER
  spaceskip   = DIMENSION
  suppresskern = no yes
```

The recommended alternative to constantly readjusting the base command is to define separate macros for different purposes.

```
\defineletterspace [LSbighead]
\defineletterspace [LSEmphasis]
\defineletterspace [LSSmcp]

\setupletterspace [LSbighead]
  [factor=.2, spaceskip=.7em, suppresskern=yes]
\setupletterspace [LSEmphasis]
  [factor=.111, spaceskip=.4em, suppresskern=no,]
\setupletterspace [LSSmcp]
  [factor=.06, spaceskip=.4em, suppresskern=no,]
```

```
\LSbighead{\bf\WORD This is a candidate for sectioning, innit?}
\blank [line]
```

```
\startlines
  terrarum delicta nec exsaturabile \LSmcp{\sc Diris}
  \LSEmphasis{ingenium mortale} queror, quonam usque nocentum
  exigar in poenas! taedet saeuire corusco
  fulmine.
\stoplines
```

These macros can subsequently accessed from whatever markup element requires letterspacing: section titles, front matter makeup, emphasis etc.

```
\defineletterspace [.1.] [..2..2.]
OPTIONAL
```

1 IDENTIFIER

2 *inherits from* \setupletterspace

## APPLICATIONS

### PRECAUTIONS

Letterspacing is a dynamic property of a string of text, as opposed to static font properties that are e.g. italics or slant. In principle, when applying a letterspacing to text, the current font is not merely pushed back in favor of another font. Instead, the way of typesetting the same font is modified by certain parameters; in the case of the *Letterspace* module these are the *kerning* and the *interword space*. Therefore it exclusively depends on the correct adjustment of said parameters whether the letterspacing will achieve its purpose or not. On the other hand, external factors like harmonizing different typefaces, the font's design size &c. are ruled out as possible influences, which can be a great advantage if for example a font happens to lack a matching italic face for emphasizing.

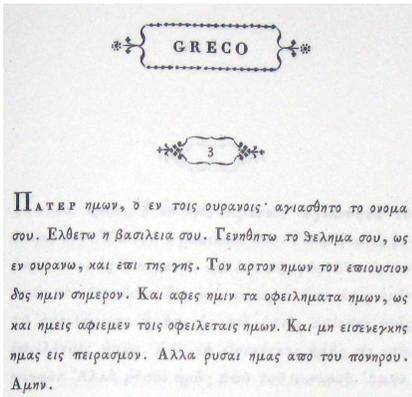


Figure 1 Letterspaced greek small capitals after an initial in *Bodoni* (1818), vol. 2.

in many outstanding examples of typography. Apart from its seductive versatility there are no objections against letterspacing on a general level, as long as it is carefully utilized.

Letterspacing has two prevailing uses: (1) for emphases and (2) for spacing capital letters, which is especially valuable in display situations like for instance the front matter of books or section headings. Both come with a set of peculiarities that the

Due to its flexibility and because it poses relatively small demands on the typesetting environment, thoughtless letterspacing may easily ruin a product. Moderate values don't express how important a particular emphasis is to the author? Just `w i d e n t h e s p a c i n g` and no reader will ever skip over your message .... Sure, everybody will get the cue, though the appearance of the highlighted text, the paragraph, and possibly the whole page will certainly be spoilt. Granted, from this perspective letterspacing might appear to be too dangerous a tool, only begging for misuse. But this judgement is premature as letterspacing has in fact a long tradition and was employed

typesetter must consider in order to figure out the appropriate values for the interword and letter spacings.

### EMPHASIS

Documents that require many levels of different emphases are among the primary targets of letterspacing. For example, in linguistics an author might wish to distinguish (1) names of cited authors, (2) ordinary text emphasis, (3) inline quoted passages, and (4) word forms or etymological roots. To be sure, this can be accomplished with a mapping like 1: small capitals, 2: italics, 3: quotation marks, and 4: a slanted face. But quotation marks are hard to keep track of, if the enveloped text exceeds a certain length; also, they discourage skimming because the reader always has to check whether the point that caught his eye might belong to a quotation instead of the main text. In various fonts – mainly sans serif – slant cannot easily be told apart from italics, thus defeating the very purpose of emphasis, in other fonts it might not be available at all. Bold face might seem to be an obvious alternative but even semi bold weights cause text to stand out from the surrounding paragraph, diverting the readers attention away from its normal trail along successive lines. Besides, the more a text is intermingled with different weights, the closer it resembles the look of a dictionary.<sup>4</sup>

seit Plt. Amph. 719, *gravis* Acc. trag. 302, Liv., Epid. 153 *auro* (*ante*- Trin. 1116), *opulentus* Plt. *beneficus* Epid. 117, *largus* (s. oben § 59a), 39, *satur* seit Poen. prol. 8, *fetus* und *opimus* sich ist der Abl. bei *plenus*, *inanis* für älteren a über Gen. und Abl. bei *ferax*, *fertilis*, *dives*, wandten *to*-Partizipien richten sich altlat. *densus*, *mansues* (Plt. Asin. 504), *mollis* (Aul. 422), *nugnus*, eigentlich 'geziert mit', denselben Abl. wie c. abl. Plt. Mil. 619 u. ö. Thes. V 1, 216, 78, sowie hat, ist § 59d erwähnt; vgl. noch *condignus* c. abl. Plt., Apul., Ps. Aug., *condignus* c. gen. sicher 41, 21. 54). Zum Wechsel von Abl. und Gen. bei ß des Rhythmus (Tert. fug. 12, 3) s. LÖFSTEDT, *incertus* c. abl. Tert. idol. 18 p. 52, 14 (s. HOPPE,

Figure 2 Letterspaced italics along normal ones in Hofmann/Szantyr (1965)

letterspaced italics or slants. Here another convenient feature of letterspacing becomes apparent: as it is basically a different method of typesetting the same font it can theoretically be applied on any typeface and weight. It follows, that in the foregoing mapping, parts of longer (italic) quotations may be emphasized as well:

After these deliberations the validity of letterspacing, including lower case, as a means of emphasis is already half established. It beats slant with respect to availability and differentiating effect. It is preferable over quotation marks because the emphasized passage clearly differs from the main font style. Finally, it triumphs over weight switching as the result is very close to the mean overall distribution of ink within the text body. In the previous graduation of emphasis levels an alternative involving letter spacing could be as follows: 1: small caps, 2: letterspaced text font, 3: italics, and 4:

<sup>4</sup> Willberg/Forssman (1997), p. 122 distinguish active from integrated markup. Semi bold and underling belong to the former, italics and slant to the latter. As the effect of letter spacing heavily depends on the environment, it may count as active when used as the only means of emphasis. However, in a "colorful" product with many different layers of emphasis it might not stick out as much among the others and thus count as integrated (cf. p. 126).

*regum timendorum in proprios greges / reges in ipsos imperium est Iouis / clari Giganteo triumpho / cuncta supercilio mouentis.* However, substituting rule 2 for 3, the resulting mapping will be less satisfactory. As quotations are prone to extending over multiple lines, whereas normal emphasis rarely spans more than two words, spacing out the former might lead to the unbalanced appearance of paragraphs. So best avoid letterspacing in cases where the object possibly encompasses entire sentences.

Caution is necessary concerning punctuation adjacent to the letterspaced passage. In contrast to italicized or bold emphasis where an immediately succeeding punctuation sign is best typeset in the surrounding main face (e.g. “*et tu, Brute?*”), letter spacing may require the sign to be typeset as part of the emphasis. The reason for this consists partly in the larger interword spacing that extends onto the surrounding spaces, and partly also on the letterspacing itself which would be disrupted by a tighter-spaced character. (Bad: O Tite, tute, Tati, tibi tanta, tyranne, tulisti; good: O Tite, tute, Tati, tibi tanta, tyranne, tulisti.)

**MISPAVAYATSIM**  
**MISPAVAYATSIM**  
**MISPAVAYATSIM**

Another natural use of letter spacing is to space out capitals and small caps, whose legibility suffers with increasing markup length. The appearance of capitals can be influenced in various ways, as demonstrated in the illustration to the left. In the

first row, no modification is applied and the capitals are placed with full kerning. Row number two has the kerning removed and thus the distance between letters increases. The final row, as the second, lacks kerning and adds 20% letter spacing.

As is apparent from the example, the difference in spacing particularly influences the outcome. The UNMODIFIED TEXT in the first row is packed too tightly, whereas disabling the kerning results in irregular widening of the PREVIOUSLY KERNED letters near the center. In the third row the sequence looks much better because of additional LETTERSPACING. With some fonts SMALL CAPITALS profit from additional spacing as well, as employed in the section headings of this document. The Letterspace module provides a switch `suppresskern` that, if set to *yes*, will disable kerning during letterspacing. This option is meant for the special treatment of capitalization but depending on the font it might equally help when dealing with emphasis as well.

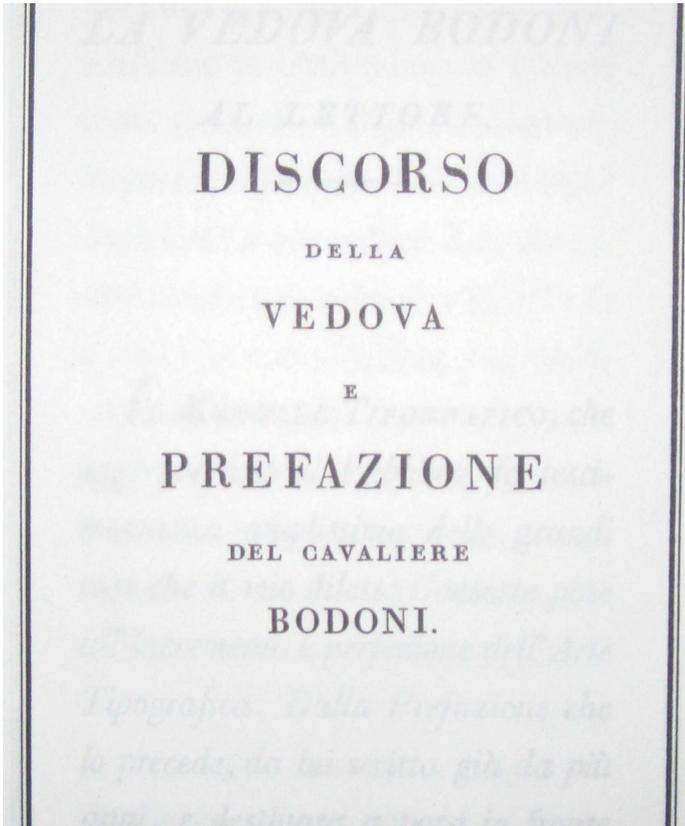


Figure 3 Letterspaced capitals constitute a title page in Bodoni (1818), vol. 1.



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