

The `quoting` package^{*}

Thomas Titz[†]

August 8, 2011

Abstract

As an alternative to the \LaTeX standard environments `quotation` and `quote`, the `quoting` package provides a consolidated environment for displayed text. First-line indentation is activated by adding a blank line before the `quoting` environment. A key–value interface allows to configure font properties and spacing and to control orphans within and after the environment.

1 Introduction

The \LaTeX standard classes as well as many custom classes provide two environments for displayed text: `quotation` and `quote`. They can be described as follows:

[In] the `quotation` environment [...] text is indented on both sides relative to the normal page margins. Paragraphs within the environment are marked with an additional indentation of the first line.

[The `quote` environment is] [t]he same as the `quotation` environment except that the first line of a paragraph is not indented; instead, additional line spacing comes between paragraphs. [3, p. 480]

So when to prefer one environment to the other? A common suggestion is to use the `quotation` environment for quotes extending to several paragraphs so that the paragraph indentation matches that of the surrounding text [4–6]. For single-paragraph quotes one may either use `quote` or, in case the quoted text starts a new paragraph (which should be indicated by indentation), `quotation`.

Why didn’t Leslie Lamport, the initial developer of \LaTeX , implement a single environment for displayed text and provide control over its first-line indentation by other means, e. g. the presence of a blank line (or a `\par` command) before the environment? The likely reason is that Lamport envisaged an additional application of the `quote` environment, namely “a sequence of short quotations, separated by blank lines” [5, p. 24]. But such a sequence (which seems to be of limited use) could also be put into effect by stringing together several instances of a consolidated quoting environment.

Some unfavourable effects of `quotation` and `quote` in their present form are:

^{*}This document corresponds to `quoting` v0.1, dated 2011/08/08.

[†]E-mail: `thomas.titz@chello.at`

- The `quotation` environment isn't suited for documents which use vertical spacing instead of indentation to denote the start of new paragraphs. If one retroactively adopts such a layout, one should change the definition of `\quotation` and `\endquotation` to `\quote` resp. `\endquote`.
- The side-by-side existence of two environments for displayed text narrows the utility of the `csquotes` package which provides higher-level wrapper environments, e.g. for quoting in a foreign language and specifying the source of citations. Currently, `csquotes` uses `quote` as a backend environment, but with L^AT_EX's default settings, this is not appropriate for multi-paragraph quotes.

2 Using the quoting package

As an alternative to `quotation` and `quote`, the `quoting` package provides a consolidated environment for displayed text. Besides being indented relative to the normal page margins, the `quoting` environment behaves as follows:

- A blank line before the environment marks a new paragraph, i.e. the environment's first line will be (additionally) indented in this case (assuming a positive `\parindent`). The mechanism also works for adjoining `quoting` environments of the same depth and for nested quotes.¹
- If a `quoting` environment directly follows a sectioning command (which may or may not be considered good style), its first line won't be indented.²
- As the start of a new paragraph is already indicated by first-line indentation, the vertical space before and after the `quoting` environment is kept constant (contrary to list environments like `itemize` and `enumerate`).
- Because the `quoting` environment uses a custom mechanism to control orphans³ within and after it, it is not affected by L^AT_EX bug 4065 (`\clubpenalty` not always being reset after list environments).

The options provided by `quoting` use the key-value interface '`\langle key \rangle = \langle value \rangle`'. Set them globally with `\usepackage[\langle options \rangle]{quoting}` or for single environments with `\begin{quoting}[\langle options \rangle]`. For boolean options, the default value is `false`, and specifying `\langle key \rangle` is equivalent to `\langle key \rangle = true`.

font The font used for typesetting the contents of a `quoting` environment. Permitted values are the names (without preceding backslash) of L^AT_EX's font-switching/formatting commands; e.g. use `font=itshape` to typeset quotes in italics. (By default, `quoting` uses the font/formatting of the surrounding text.) To specify several font properties, invoke `font+` in addition to `font`.

¹See [2, p. 120–121] for an example of nested quotes.

²That is, unless the `@afterindent` switch was set to true, e.g. by loading the `indentfirst` package. In this case, the quote's first line will be indented.

³If a page break occurs after the first line of a paragraph, that line is referred to as "orphan".

font+	Font properties used for typesetting the contents of a <code>quoting</code> environment in addition to those properties specified by <code>font</code> (and previous calls of <code>font+</code>).
leftmargin	The width of the environment's left-hand indentation relative to the surrounding text. The default value is <code>\leftmargin</code> . ⁴
rightmargin	The width of the environment's right-hand indentation relative to the surrounding text. By default, <code>rightmargin</code> matches <code>leftmargin</code> .
vskip	The vertical space before and after a <code>quoting</code> environment. The default value is the sum of <code>\topsep</code> and <code>\partopsep</code> .
listvskip	A boolean option that, if enabled, adjusts <code>quoting</code> 's vertical spacing to that of list environments (and ignores <code>vskip</code> in the process).
noorphanfirst	A boolean option that controls whether orphans are prohibited in the first paragraph of a <code>quoting</code> environment.
noorphanafter	A boolean option that controls whether orphans are prohibited directly after a <code>quoting</code> environment.
noorphans	A shortcut boolean option enabling both <code>noorphanfirst</code> and <code>noorphanafter</code> .
<code>\quotingsetup</code>	The command <code>\quotingsetup</code> , which takes a comma-separated list of key-value options as argument, allows to change the attributes of the <code>quoting</code> environment mid-document.
<code>\quotingfont</code>	The options <code>font</code> and <code>font+</code> do not accept values which itself take an argument. In such cases you must resort to redefining the command <code>\quotingfont</code> , e.g. by including <code>\renewcommand*{\quotingfont}{\setstretch{1.5}}</code> in your document preamble (with the <code>setspace</code> package loaded).

3 The package code

Announce the name and version of the package, which requires L^AT_EX 2_ε.

```

1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{quoting}
3 [2011/08/08 v0.1 Consolidated environment for displayed text]
```

We require the packages `kvoptions` (to conveniently specify options as key-value pairs) and `etoolbox` (e.g. for length assignments and boolean switch handling).

```
4 \RequirePackage{etoolbox,kvoptions}
```

We use `quo@` as a short prefix to internal macros defined by `kvoptions`.

```
5 \SetupKeyvalOptions{family=quo,prefix=quo@}
```

⁴Note that the value of `\leftmargin` depends on the depth of the `quoting` environment, i.e. nested quotes will feature smaller indentation by default.

`\quotingfont` The keyval command `\define@key` is used to define the keys `font` and `font+`. We convert their value to a command and use this command to define `\quotingfont` resp. to append its definition.

```

6 \newcommand*\quotingfont{}
7 \define@key{quo}{font}{%
8   \def\quotingfont{\csname #1\endcsname}%
9 }
10 \define@key{quo}{font+}{%
11   \appto{\quotingfont}{\csname #1\endcsname}%
12 }
```

`\quo@leftmargin` We use `kvoptions` to define the keys `leftmargin` and `rightmargin` and to set their default values.

```

13 \DeclareStringOption[\leftmargin]{leftmargin}
14 \DeclareStringOption[\quo@leftmargin]{rightmargin}
```

`\quo@toppartop` The length `\quo@toppartop` is set to the sum of `\topsep` and `\partopsep` and used as the default value of the key `vskip`.

```

15 \newlength{\quo@toppartop}
16 \deflength{\quo@toppartop}{\topsep + \partopsep}
17 \DeclareStringOption[\quo@toppartop]{vskip}
```

We define the boolean options `listvskip`, `noorphanfirst`, and `noorphanafter`.

```

18 \DeclareBoolOption{listvskip}
19 \DeclareBoolOption{noorphanfirst}
20 \DeclareBoolOption{noorphanafter}
```

The shortcut boolean option `noorphans` will pass its value to `quo@noorphanfirst` and `quo@noorphanafter`. We then process our options.

```

21 \define@key{quo}{noorphans}[true]{%
22   \setbool{quo@noorphanfirst}{#1}%
23   \setbool{quo@noorphanafter}{#1}%
24 }
25 \ProcessKeyvalOptions*
```

`\quotingsetup` We define `\quotingsetup` as an alias of `\setkeys{quo}`.

```

26 \newcommand*\quotingsetup[1]{\setkeys{quo}{#1}}
```

The boolean switch `quo@afterquo` stores whether we are immediately (without a paragraph in between) following a `quoting` environment; the `quo@afterquoclub` switch stores whether an orphan is permitted after the environment. (For the latter task, we don't use `quo@noorphanafter` directly because its state needs to be forwarded outside the group established by the current environment.)

```

27 \newbool{quo@afterquo}
28 \newbool{quo@afterquoclub}
```

`\quo@doendquoclub` If the `quo@afterquoclub` switch is set to false, `\quo@doendquoclub` will set `\clubpenalty` to 10000. It will restore `\everypar` and the default value of `\clubpenalty` in the next paragraph.

```

29 \newcommand*{\quo@doendquoclub}{%
30   \ifbool{quo@afterquoclub}{%
31     \clubpenalty=\@clubpenalty
32     \everypar{}%
33   }{%
34     \booltrue{quo@afterquoclub}%
35     \clubpenalty=\@M
36   }%
37 }

```

`\quo@doendquo` The macro `\quo@doendquo` is an extended version of the L^AT_EX kernel macro `\@doendpe`. In the original, “[t]o suppress the paragraph indentation in text immediately following a paragraph-making environment, `\everypar` is changed to remove the space, and `\par` is redefined to restore `\everypar`.” [1, p. 227] `\quo@doendquo` adds the following changes to `\par/\everypar` over and above `\@doendpe`:

- `\quo@doendquoclub` is executed;
- At the end, the `quo@afterquo` switch is globally set to false.

```

38 \newcommand*{\quo@doendquo}{%
39   \booltrue{@endpe}%
40   \def\par{%
41     \@restorepar
42     \everypar{\quo@doendquoclub}%
43     \par
44     \boolfalse{@endpe}%
45     \global\boolfalse{quo@afterquo}%
46   }%
47   \everypar{%
48     {\setbox\z@ \lastbox}%
49     \quo@doendquoclub
50     \boolfalse{@endpe}%
51     \global\boolfalse{quo@afterquo}%
52   }%
53 }

```

`quoting` The definition of the `quoting` environment includes an optional argument which may be used to change package settings locally.

```

54 \newenvironment{quoting}[1] []{%
55   \setkeys{quo}{#1}%

```

We start a list environment and (unless the boolean switch `listvskip` is set to true) use the value of `vskip` for vertical spacing.

```

56 \list{}{%
57   \ifbool{quo@listvskip}{%
58   }{%
59     \setlength{\topsep}{\quo@vskip}%
60     \setlength{\partopsep}{\z@}%
61   }%

```

The length `\itemindent` is responsible for the first-line indentation of `quoting`. `\itemindent` will be set to `\parindent` if the following conditions are met:

- We are in vertical mode (which usually means that a blank line or a `\par` command is present before the environment – but see below);
- The boolean switch `quo@afterquo` is set to false (i.e., vertical mode does not stem from a preceding quoting environment of the same depth);
- The L^AT_EX kernel switch `@nobreak` is either set to false (the `quoting` environment does not directly follow a sectioning command), or both `@nobreak` and `@afterindent` are set to true.

Otherwise, `\itemindent` will be set to 0 pt.

```

62   \setlength{\itemindent}{%
63     \ifbool{vmode}{%
64       \ifbool{quo@afterquo}{%
65         \z@
66       }{%
67         \ifbool{@nobreak}{%
68           \ifbool{@afterindent}{%
69             \parindent
70           }{%
71             \z@
72           }%
73         }{%
74           \parindent
75         }%
76       }%
77     }{%
78       \z@
79     }%
80   }%
```

The lengths `\leftmargin`, `\rightmargin`, `\listparindent`, and `\parsep` are set, the latter two in accordance with the settings for normal running text.

```

81   \setlength{\leftmargin}{\quo@leftmargin}%
82   \setlength{\rightmargin}{\quo@rightmargin}%
83   \setlength{\listparindent}{\parindent}%
84   \setlength{\parsep}{\parskip}%
85 }%
```

We issue the necessary `\item` command, disable orphans in the environment’s first paragraph when indicated, and switch to `\quotingfont`. (With regard to orphans, we make use of `\@item`’s internal mechanism to prevent orphans directly after sectioning commands [1, p. 229].)

```

86   \item\relax
87   \ifbool{quo@noorphanfirst}{%
88     \global\booltrue{@nobreak}%
89   }{%
```

```

90 }%
91 \quotingfont

```

At the end of quoting, the following actions are taken:

- The L^AT_EX kernel switch @endpe is set to false (so that \doendpe won't be executed);
- The state of the quo@noorphanafter switch is forwarded outside the current group (using T_EX syntax);
- quo@afterquo is globally set to true;
- \quo@doendquo is executed after the current group.

```

92 }{%
93 \endlist
94 \boolfalse{@endpe}%
95 \ifbool{quo@noorphanafter}{%
96   \aftergroup\quo@afterquoclubfalse
97 }{%
98   \aftergroup\quo@afterquoclubtrue
99 }%
100 \global\booltrue{quo@afterquo}%
101 \aftergroup\quo@doendquo
102 }

```

The end of the package.

```

103 \endinput

```

References

- [1] Braams, Johannes, David Carlisle, Alan Jeffrey, Leslie Lamport, Frank Mittelbach, Chris Rowley, and Rainer Schöpf. *The L^AT_EX 2_ε sources*. 2009/09/24. <http://www.tug.org/texlive/Contents/live/texmf-dist/doc/latex/base/source2e.pdf> (accessed August 2, 2011).
- [2] Fischel, William A. *Regulatory takings: Law, economics, and politics*. Cambridge, MA: Harvard University Press, 1995.
- [3] Kopka, Helmut and Patrick W. Daly. *Guide to L^AT_EX*. 4th edition. Boston: Addison-Wesley, 2004.
- [4] Kottwitz, Stefan. *L^AT_EX beginner's guide*. Birmingham: Packt Publishing, 2011.
- [5] Lamport, Leslie. *L^AT_EX: A document preparation system*. 2nd edition. Boston: Addison-Wesley, 1994.
- [6] Oetiker, Tobias, Hubert Partl, Irene Hyna, and Elisabeth Schlegl. *The not so short introduction to L^AT_EX 2_ε*. Version 5.01, April 6, 2011. <http://mirror.ctan.org/info/lshort/english/lshort.pdf> (accessed August 2, 2011).

Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

Symbols	L	Q
<code>\@clubpenalty</code> 31	<code>\lastbox</code> 48	<code>\quo@afterquoclubfalse</code> 96
<code>\@restorepar</code> 41	<code>\leftmargin</code> 13, 81	<code>\quo@afterquoclubtrue</code> 98
A	<code>leftmargin</code> (option) . . . 3	<code>\quo@doendquo</code> . . <u>38</u> , 101
<code>\aftergroup</code> . 96, 98, 101	<code>\list</code> 56	<code>\quo@doendquoclub</code> <u>29</u> , 42, 49
<code>\appto</code> 11	<code>\listparindent</code> 83	<code>\quo@leftmargin</code> . <u>13</u> , 81
C	<code>listvskip</code> (option) 3	<code>\quo@rightmargin</code> <u>13</u> , 82
<code>\clubpenalty</code> 31, 35	N	<code>\quo@toppartop</code> <u>15</u>
D	<code>noorphanafter</code> (option) . 3	<code>\quo@vskip</code> <u>15</u> , 59
<code>\DeclareBoolOption</code> 18–20	<code>noorphanfirst</code> (option) . 3	<code>quoting</code> (environment) <u>54</u>
<code>\DeclareStringOption</code> 13, 14, 17	<code>noorphans</code> (option) . . . 3	<code>\quotingfont</code> . . . 3, <u>6</u> , 91
<code>\define@key</code> . . . 7, 10, 21	O	<code>\quotingsetup</code> 3, <u>26</u>
<code>\deflength</code> 16	options:	R
E	<code>font</code> 2	<code>\rightmargin</code> 82
<code>\endlist</code> 93	<code>font+</code> 3	<code>rightmargin</code> (option) . . 3
environments:	<code>leftmargin</code> 3	S
<code>quoting</code> <u>54</u>	<code>listvskip</code> 3	<code>\setbool</code> 22, 23
<code>\everypar</code> . . . 32, 42, 47	<code>noorphanafter</code> 3	<code>\setbox</code> 48
F	<code>noorphanfirst</code> 3	<code>\setkeys</code> 26, 55
<code>font</code> (option) 2	<code>noorphans</code> 3	<code>\SetupKeyvalOptions</code> . 5
<code>font+</code> (option) 3	<code>rightmargin</code> 3	T
G	<code>vskip</code> 3	<code>\topsep</code> 16, 59
<code>\global</code> . . 45, 51, 88, 100	P	V
I	<code>\parindent</code> . . 69, 74, 83	<code>vskip</code> (option) 3
<code>\itemindent</code> 62	<code>\parsep</code> 84	
	<code>\parskip</code> 84	
	<code>\partopsep</code> 16, 60	
	<code>\ProcessKeyvalOptions</code> 25	

Change History

v0.1
 General: Initial public release 1