

# The `xellipsis` Package, v2.0

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## Abstract

`T`<sub>E</sub>X users have long been remarking that the default characteristics of ellipses, whether produced by `\dots`, `\ldots`, or some other command, just aren't quite right. While some packages have attempted to resolve this issue (e.g., `lips` and `ellipsis`), these have never quite fit my use cases. `xellipsis` attempts to fill this gap by providing absurdly configurable ellipses, along with preconfigured options for the Chicago Manual of Style (and Turabian), MLA, and the Bluebook.

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## 1 Introduction

Typography has long made use of these strange sequences of (usually) dots called *ellipses* (singular *ellipsis*). An ellipsis typically indicates an omission from a quotation (indeed, the Greek root means “omission”), but they have also been used in a huge variety of other ways over the years:

- The aforementioned omission. “Four score and . . . seven years ago.”
- An unfinished thought. “Our forefathers brought forth . . . I don't know; something, I guess.”
- Indications of preceding matter. “. . . a new nation, conceived in liberty.”
- A pause. “I think . . . therefore, I am.”
- Probably lots of other things, as well.

L<sup>A</sup>T<sub>E</sub>X, by default, produces ellipses with the `\dots` (...) or `\ldots` (...) commands. These are fine, as far as they go; however, they suffer a few clear faults. For example, there is much less space at the beginning than at the end, which many people don't like; they are fairly close together, which not only do many people not like, but which goes against some important style manuals; they cannot have four or more dots, which some style manuals require in certain circumstances; and their spacing is not in any way configurable.

So `xellipsis` gives you all the configuration options for your ellipses that you could possibly want, and probably lots more than you'll ever need. It also comes prepackaged with a few common formats, which are selected as package options at load time.

`xellipsis` is packaged according to the L<sup>A</sup>T<sub>E</sub>X DOCSTRIP utility, which allows automatic extraction of code and documentation from the same files.

## 2 Preconfigured Formats

`xellipsis` comes with some preconfigured ellipsis formats for the convenience of users. These are all set as package options; so, for example, when loading the package one states `\usepackage{xellipsis}` for the default behavior, but `\usepackage[latex]{xellipsis}` to specify the `latex` format.

Please note that the usage of these ellipses is not always clear, even according to the manuals. I've done my best to get them right here, but if they're wrong on some detail, please let me know and I'll try to fix them. `xellipsis` offers ample configuration options to get these things right.

`latex` The `latex` option sets up `\xelip` to behave identically to the default L<sup>A</sup>T<sub>E</sub>X setting of `\dots` or `\ldots`. (The L<sup>A</sup>T<sub>E</sub>X kernel defines `\ldots` as `\let\ldots=\dots`, so the two are the same.) In a convoluted way, `\dots` is defined in terms of `\textellipsis`, which itself is simply three dots separated by the current font's `\fontdimen3`, which is the stretchability of interword space. Not the interword space itself, mind you, but just the stretchability of that space. This leads to pretty tightly spaced ellipses for most fonts; but there we are. It also specifies no particular space before the ellipsis, but the same space as the gaps afterwards. This option yields the following:

This is... pretty tight, really. (`\xelip`)

This is... pretty tight, really. (`\ldots`)

`chicago` *The Chicago Manual of Style* has some very specific rules about ellipses; specifically, that they should be three periods plus two nonbreaking spaces. So `xellipsis` defines them precisely that way, in terms of `\fontdimen2` (the non-glue portion of the interword space for the font), and adds no space before the first dot. The CMOS also specifies that, at the end of a natural sentence, the period of the sentence should remain *prior* to the ellipsis; this works fine with our definition. This system yields:

This is. . . pretty loose, really. (`\xelip`)

I like that. . . . It makes some sense. (`\xelig`)

`mla` The MLA advises similar ellipses to the CMOS, except that there should always be a space before the first period.

This is . . . pretty loose, really. (`\xelig`)

`oldmla` The MLA formerly advised that ellipses indicating omissions should be surrounded by square brackets (`[]`). The materials I've seen seem to indicate that this might still be required when the quotation already contains ellipses in the original material; however, usually they are not required. Either way, here's the option:

This is [ . . . ] how it's supposed to work, I guess? (`\xelig`)

`bluebook` Finally, in the United States legal citations are governed by our overlords at the Harvard Law Review, who publish *The Bluebook*. Their ellipses are formatted just like the MLA ellipses:

This is . . . pretty loose, really. (`\xelig`)

`\xeligend` Finally, there is a special command `\xeligend`. This is identical to `\xelig` except that the closing space is omitted.

“This is pretty neat . . .” (`\xeligend`)

“This is pretty neat . . . ” (`\xelig`)

`\xeligend` is primarily useful immediately preceding some quoting character; some people prefer there to be no or much more limited spacing in this location. Use `\xeligend` if you prefer this type of behavior.

### 3 The Nitty-Gritty: Configuration

We've already seen examples of the `xellipsis` defaults used (any time in this document that we haven't been explicitly demonstrating something else), so let's get down-and-dirty with the internals and do some customizing.

`\xeligchar` The first is the most obvious: the character from which the ellipsis is constructed. This defaults to “.” (a period), and is held in the variable `\xeligchar`. Simply redefine `\xeligchar` in the normal way to get something different from the ordinary:

```
\def\xeligchar{*}
\xelig          * * *
```

This was actually quite common in older legal documents (using asterisks for ellipses, that is): “And the ruling of the lower court \* \* \* is hereby AFFIRMED.” So this sort of thing has some real functionality at times.

`char` The same effect can be achieved by using the `char` package option; e.g., by

loading `xellipsis` with `\usepackage[char=*]{xellipsis}`. Indeed, as of version 2.0, all these settings can be made at the time of package loading.

`\xelinum` The *number* of characters in an ellipsis is governed by `\xelinum`. `\xelinum` is a *counter*, not a macro, so if you change it, do so with a simple `=`:

```
\xelinum=6
\xelip      . . . . .
```

Most likely this would be 3 or 4, but I'm not going to try to limit you.  
`num` `\xelinum` defaults to 3. The package option is `num`.

There are three lengths responsible for controlling the spacing of the ellipses.  
`\xelipbef` The space *before* the first character of the ellipses is `\xelipbef`; the space *after* the  
`\xelipaft` last character of the ellipses is `\xelipaft`; and the space *between* the characters  
`\xelipgap` of the ellipses is `\xelipgap`. Each of these default to 3pt. Their package options  
`before` are `before`, `after`, and `gap`.

The benefit of having each of these independently configurable is that you don't have to worry about inserting special spacing before the ellipsis. Furthermore, you don't have to worry about `\xelip` eating the space after your command unless you prevent that with `{}` or `\`; it *does* eat the space, but that's okay, because the appropriate spacing is built into it. So you can say `I went\xelip to the store` and you'll get "I went . . . to the store", exactly as you undoubtedly wanted. No need for `\xelip{}` or such expedients.

Remember that these lengths are `dimens`, so they are reset using a simple `=`; you can also use the L<sup>A</sup>T<sub>E</sub>X `\setlength` incantation if you'd prefer:

```
\xelipbef=1em
\xelipgap=2em
\setlength{\xelipaft}{2pt}
This is\xelip strange.      This is . . . strange.
```

Finally, some style guides (including the MLA, until recently) require some surrounding punctuation for an ellipsis. `xellipsis` provides for this, too. The character that is to go *before* the ellipsis is `\xelipprechar`, while the character that is to go *after* the ellipsis is `\xelippostchar`. Both of these default to be empty. Their package options are `prechar` and `postchar`.

`\xelipprechar`  
`\xelippostchar`  
`prechar`  
`postchar`

```
\def\xelipprechar{[}
\def\xelippostchar{]}
This is\xelip strange.      This is[ . . . ]strange.
```

As with `\xelipchar`, you can use really anything for this, even things that would be truly bizarre (daggers? fleur-de-lis?); but this is a typical use case.

The unsurprisingly-named `\xelipprebef`, `\xelippreaft`, `\xelippostbef`, and `\xelippostaft` control the spacing around these two characters; by default, all four are set to 0pt. They are `dimens` and can be set in either the T<sub>E</sub>X way or the L<sup>A</sup>T<sub>E</sub>X `\setlength` way. Their package options are `prebefore`, `preafter`, `prebefore`, and `preafter`.

```

postbefore, and postafter,
postbefore  \def\xelipprechar{[]}
postafter   \def\xelippostchar{[]}
            \xelipprebef=6pt
            \xelippreaft=3pt
            \setlength{\xelippostbef}{3pt}
            \setlength{\xelippostaft}{6pt}
            This is\xelip strange.           This is [ . . . ] strange.

```

Please be aware that `\xelippreaft` *stacks* with `\xelipbef`, and `\xelippostbef` stacks with `\xelipaft`; so their sum should be the spacing you want. Often this means simply leaving the two of them alone, as you’ve already got the appropriate space in the shorter-named `dimens`.

And that’s it; if `xellipsis` can’t meet your ellipsis needs somehow, please contact me and let me know, and I’ll endeavor to add what you require. Happy  $\TeX$ ing!

## 4 Implementation

Our first task, as usual, is to define our options. We have options for default  $\LaTeX$  ellipsis behavior, Chicago Manual of Style behavior, old MLA behavior, and current MLA behavior. These all default to *off*, and the default `xellipsis` behavior described above is *on*. We define the conditions for the options, then process the options themselves. We use `xkeyval` to get these options, so we can easily give them key-value arguments. We also need to define our default characters.

```

1 \RequirePackage{xkeyval}
2 \def\xelipchar{.}
3 \def\xelipprechar{}
4 \def\xelippostchar{}

```

Proceed to define the `dimens` that we will need. These are mostly self-explanatory; the first is for the gap between the characters of the ellipsis, the second is for the space *before* the ellipsis begins, and the third is for the space *after* the ellipsis ends. The fourth and fifth are for the spaces around the pre-ellipsis character, and the sixth and seventh are for the spaces around the post-ellipsis character.

```

5 \newdimen\xelipgap\xelipgap=3pt
6 \newdimen\xelipbef\xelipbef=3pt
7 \newdimen\xelipaft\xelipaft=3pt
8 \newdimen\xelipprebef\xelipprebef=0pt
9 \newdimen\xelippreaft\xelippreaft=0pt
10 \newdimen\xelippostbef\xelippostbef=0pt
11 \newdimen\xelippostaft\xelippostaft=0pt

```

Now we define the counter which holds the number of ellipsis characters we want. Defaults to 3.

```

12 \newcount\xelipnum\xelipnum = 3%

```

```

13 \newif\ifxel@latex\xel@latexfalse
14 \newif\ifxel@chicago\xel@chicagofalse
15 \newif\ifxel@oldmla\xel@oldmlafalse
16 \newif\ifxel@mmla\xel@mmlafalse
17 \newif\ifxel@bluebook\xel@bluebookfalse
18 \DeclareOptionX{latex}{\xel@latextrue}
19 \DeclareOptionX{chicago}{\xel@chicagotrue}
20 \DeclareOptionX{oldmla}{\xel@oldmlatrue}
21 \DeclareOptionX{mmla}{\xel@mmlatrue}
22 \DeclareOptionX{bluebook}{\xel@bluebooktrue}
23 \DeclareOptionX{char}{\def\xelipchar{#1}}
24 \DeclareOptionX{num}{\xelipnum=#1}
25 \DeclareOptionX{before}{\xelipbef=#1}
26 \DeclareOptionX{after}{\xelipaft=#1}
27 \DeclareOptionX{gap}{\xelipgap=#1}
28 \DeclareOptionX{prechar}{\def\xelipprechar{#1}}
29 \DeclareOptionX{postchar}{\def\xelippostchar{#1}}
30 \DeclareOptionX{prebefore}{\xelipprebef=#1}
31 \DeclareOptionX{preafter}{\xelippreaft=#1}
32 \DeclareOptionX{postbefore}{\xelippostbef=#1}
33 \DeclareOptionX{postafter}{\xelippostaft=#1}
34 \ProcessOptionsX

```

Now we define the loop variable.

```
35 \newcount\xel@loopi\xel@loopi = 0%
```

Next, we define the box which will hold the ellipsis; this way we can be sure that it won't break across lines.

```
36 \def\xelip{%
37 \nobreak\hskip0pt\hbox{%

```

Put it the code for the `\xelipprechar` and its spacing:

```
38 \hskip\xelipprebef\xelipprechar\hskip\xelippreaft%
```

Now, we use `\xelipbef` to skip the pre-ellipsis distance.

```
39 \hskip\xelipbef\xelipchar%
```

Now we loop, printing `\xelipchar` and skipping `\xelipgap` as many times as `\xelipnum` requires. We start by resetting the `\xel@loopi` variable, just in case.

```
40 \xel@loopi = 1%
41 \loop\ifnum\xelipnum>\xel@loopi%
42 \advance\xel@loopi by1%
43 \hskip\xelipgap%
44 \xelipchar%
45 \repeat

```

Lastly, we skip `\xelipaft`, then skip for `\xelippostchar` and its dimens, close our box, and sit back in the satisfaction of an ellipsis well-made.

```
46 \hskip\xelipaft%
47 \hskip\xelippostbef\xelippostchar\hskip\xelippostaft%
48 }%
49 }%

```

Set up a special command, `\xeliptend`, which omits the spacing at the end and can be used immediately before quotations or the like.

```
50 \def\xeliptend{%
51 \begingroup%
52 \xeliptaft=0pt
53 \xelipt%
54 \endgroup%
55 }%
56 %
57 % Set up the |latex| option.
58 %   \begin{macrocode}
59 \ifxel@latex
60 \xeliptbef=0pt%
61 \xeliptaft=\fontdimen3\font%
62 \xeliptgap=\fontdimen3\font%
63 \fi

The Chicago Manual of Style option.
64 \ifxel@chicago
65 \xeliptbef=0pt%
66 \xeliptaft=\fontdimen2\font%
67 \xeliptgap=\fontdimen2\font%
68 \fi

The MLA option.
69 \ifxel@mmla
70 \xeliptbef=\fontdimen2\font%
71 \xeliptaft=\fontdimen2\font%
72 \xeliptgap=\fontdimen2\font%
73 \fi

The Bluebook option.
74 \ifxel@bluebook
75 \xeliptbef=\fontdimen2\font%
76 \xeliptaft=\fontdimen2\font%
77 \xeliptgap=\fontdimen2\font%
78 \fi

The old MLA option.
79 \ifxel@oldmmla
80 \xeliptbef=\fontdimen2\font%
81 \xeliptaft=\fontdimen2\font%
82 \xeliptgap=\fontdimen2\font%
83 \def\xeliptprechar{[]}%
84 \def\xeliptpostchar{[]}%
85 \xeliptprebef=\fontdimen2\font%
86 \xeliptpostaft=\fontdimen2\font%
87 \fi
88 % }
```

And there's the `xellipsis` package. I hope it proves useful to someone besides myself. Happy T<sub>E</sub>Xing!

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