The xellipsis Package, v1.1

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Abstract

TEX 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.

Contents

1	Introduction	1
2	Preconfigured Formats	2
3	The Nitty-Gritty: Configuration	3
4	Implementation	5

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.

LATEX, 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 LATEX 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 LATEX setting of \dots or \ldots. (The LATEX 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. (.\ \xelip)

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

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

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? (\xelip)

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. (\xelip)

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.

\xelipchar

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 \xelipchar. Simply redefine \xelipchar in the normal way to get something different from the ordinary:

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.

\xelipnum

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

> \xelipnum=6 \xelip

Most likely this would be 3 or 4, but I'm not going to try to limit you. \xelipnum defaults to 3.

\xelipbef \xelipaft \xelipgap

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

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 LATEX \setlength incantation if you'd prefer:

\xelipprechar

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.

```
\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.

\xelipprebef \xelippreaft \xelippostbef \xelippostaft The unsurprisingly-named \mathbb{xelipprebef}, \mathbb{xelippreaft}, \mathbb{xelippostbef}, and \mathbb{xelippostaft} control the spacing around these two characters; by default, all four are set to Opt. They are dimens and can be set in either the TeX way or the LATeX \mathbb{xetlength} way.

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

Please be aware that these \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 TeXing!

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.

```
1 \newif\ifxel@latex\xel@latexfalse
```

- 2 \newif\ifxel@chicago\xel@chicagofalse
- 3 \newif\ifxel@oldmla\xel@oldmlafalse
- 4 \newif\ifxel@mla\xel@mlafalse
- 5 \newif\ifxel@bluebook\xel@bluebookfalse
- 6 \DeclareOption{latex}{\xel@latextrue}
- 7 \DeclareOption{chicago}{\xel@chicagotrue}
- 8 \DeclareOption{oldmla}{\xel@oldmlatrue}
- 9 \DeclareOption{mla}{\xel@mlatrue}
- 10 \DeclareOption{bluebook}{\xel@bluebooktrue}
- 11 \ProcessOptions

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

```
12 \newdimen\xelipgap\xelipgap=3pt
```

- 13 \newdimen\xelipbef\xelipbef=3pt
- 14 \newdimen\xelipaft\xelipaft=3pt
- 15 \newdimen\xelipprebef\xelipprebef=Opt
- 16 \newdimen\xelippreaft\xelippreaft=0pt
- 17 \newdimen\xelippostbef\xelippostbef=Opt
- 18 \newdimen\xelippostaft\xelippostaft=0pt

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

```
19 \newcount\xelipnum\xelipnum = 3%
```

Next we devise a command which will hold the characters we use for ellipses. The main ellipsis character defaults to a period; the pre- and post-ellipsis characters default to nothing.

- 20 \def\xelipchar{.}
- 21 \def\xelipprechar{}
- 22 \def\xelippostchar{}

Finally, we're ready to define the actual ellipsis code. First, we need to define a counter for the loop.

```
23 \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.

```
24 \left\lceil \frac{xelip}{x} \right\rceil
```

 $25 \hskip0pt\hbox{%}$

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

 $26 \hskip\xelipprebef\xelipprechar\hskip\xelippreaft\%$

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

27 \hskip\xelipbef\xelipchar%

Now we loop, printing \mathbb{xelipchar} and skipping \mathbb{xelipgap} as many times as \mathbb{xelipnum} requires. We start be resetting the \mathbb{xelOloopi} variable, just in case.

```
28 \xel@loopi = 1%
```

- 29 \loop\ifnum\xelipnum>\xel@loopi%
- 30 \advance\xel@loopi by1%
- 31 \hskip\xelipgap%
- 32 \xelipchar%
- 33 \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.

- 34 \hskip\xelipaft%
- 35 \hskip\xelippostbef\xelippostchar\hskip\xelippostaft%
- 36 }%
- 37 }%

Set up the latex option.

- 38 \ifxel@latex
- 39 \xelipbef=0pt%
- 40 \xelipaft=\fontdimen3\font%
- 41 \xelipgap=\fontdimen3\font%
- 42 \fi

The Chicago Manual of Style option.

- 43 \ifxel@chicago
- 44 \xelipbef=0pt%
- $45 \xelipaft=\fontdimen2\font\%$
- 46 \xelipgap=\fontdimen2\font%
- 47 \fi

The MLA option.

- 48 \ifxel@mla
- 49 \xelipbef=\fontdimen2\font%
- 50 \xelipaft=\fontdimen2\font%
- 51 \xelipgap=\fontdimen2\font%
- 52 \fi

The Bluebook option.

- 53 \ifxel@bluebook
- 54 \xelipbef=\fontdimen2\font%
- 55 \xelipaft=\fontdimen2\font%
- 56 \xelipgap=\fontdimen2\font%
- 57\fi

The old MLA option.

```
58 \ifxel@oldmla
59 \xelipbef=\fontdimen2\font%
60 \xelipaft=\fontdimen2\font%
61 \xelipgap=\fontdimen2\font%
62 \def\xelipprechar{[]%
63 \def\xelippostchar{]]%
64 \xelipprebef=\fontdimen2\font%
65 \xelippostaft=\fontdimen2\font%
66 \fi
67 % This is\xelip how it's supposed to work, I guess? (|\xelip|)
68 % }
```

And there's the xellipsis package. I hope it proves useful to someone besides myself. Happy TeXing!

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.

${f A}$	\ifxel@mla 5, 6	\xel@chicagotrue 5
\advance 6	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	$\xel@latexfalse \dots 5$
		\xel@latextrue 5
D	${f L}$	\xel@loopi 5, 6
\DeclareOption 5	\loop 6	\xel@mlafalse 5
\def 5-7		\xel@mlatrue 5
<u>_</u>	${f N}$	\xel@oldmlafalse 5
${f F}$	\newcount 5	\xel@oldmlatrue 5
\fi 6, 7	\newdimen 5	\xelip 6, 7
\font 6, 7	\newif 5	\xelipaft 5-7
\fontdimen $\dots 6, 7$		_
	P	\xelipbef 5-7
H	\ProcessOptions 5	\xelipchar 5, 6
\hbox 6	-	\xelipgap 5-7
\hskip 6	${f R}$	\xelipnum 5, 6
-	\repeat 6	\xelippostaft $\dots 5-7$
I	•	\xelippostbef $5, 6$
\ifnum 6	\mathbf{X}	\xelippostchar \dots 5-7
\ifxel@bluebook $5, 6$	$\$ \xel@bluebookfalse 5	\xelippreaft $5, 6$
\ifxel@chicago \dots 5, 6	$\xel@bluebooktrue 5$	\xelipprebef $5-7$
\ifxel@latex \dots 5, 6	\xel@chicagofalse 5	\xelipprechar 5-7