

The poetrytex package

SAM WHITED
sam@samwhited.com

July 25, 2012
v1.1

Contents

Introduction	2
History	2
License / about the source	2
Acknowledgements	2
Package building and loading	2
Document setup and structure	3
Environment setup and defaults	3
Title page	3
Dedication	4
Tables and links	5
Poems and annotations	5
The poem environment	6
Formatting	7
Headings	7
Numbering	7
Spacing and indentation	8
Stylization	9
Groups and linking	10
The annotation environment	11
List of Poems	13

Introduction

The `poetrytex` package is designed to aid in the formatting and typesetting of anthologies of poetry.

History

The package started out as a collection of macros for automating simple tasks that I often had to perform while working on a collection of poetry and prose. After a time, I decided to turn it into an STY file which would be geared more towards the idea of an anthology or a collection of works and less about typesetting the verse itself (for which there were already several good packages on CTAN). While the file was small this worked well—Learning to use the package was easily accomplished by reading the annotated source code (generated via a modified version of Jeremy Ashkenas’ literate programming tool ‘docco’). However, as the source and scope of the project grew I decided to move away from docco and start working on a proper package that would use more traditional T_EX-style docs.

License / about the source

This project may be distributed and/or modified under the conditions of the L^AT_EX Project Public License, either version 1.3c of this license or (at your opinion) any later version. The latest version of this license is in:

<http://www.latex-project.org/lppl.txt>

and version 1.3c or later is part of all distributions of L^AT_EX version 2008/05/04 or later.

Contributions are welcome, and the latest development version of the project can always be found at <https://github.com/samwhited/poetrytex>.

Acknowledgements

A special thanks is in order for Brittany Taylor. Though she probably has no idea what T_EX is or that this project even exists it is due mostly to her influence that it ever got off the ground.

Package building and loading

```
1 <*poetrytex>
```

Building Before building `poetrytex` you should verify that the following dependencies are installed:

```
2 \RequirePackage{expl3}
3 \RequirePackage[pdftborder=0, bookmarks, colorlinks=false, hidelinks]{hyperref}
4 \RequirePackage[parfill]{parskip}
```

Once you have all the required packages, building `poetrytex` from source can be accomplished in multiple ways. If the Makefile is present running `make help` will tell you everything you need to know. To manually extract the files and generate the documentation simply run `pdflatex` or `XYLaTeX` against `poetrytex.dtx`:

```
pdflatex poetrytex.dtx
```

You can also use the `--shell-escape` option to generate documentation which includes the current git commit short-hash in the version number:

```
pdflatex --shell-escape poetrytex.dtx
```

It should be noted that this option is extremely unsafe, and you should only use it if you understand the risks.

Loading Using `poetrytex` in your project works exactly as you'd expect:

```
\usepackage{poetrytex}
```

Document setup and structure

The `poetrytex` package is fairly simple as far as `TEX` packages go, so it's worth taking a look at how it works internally.

Environment setup and defaults

First we setup our environment, define some useful properties, and choose some default values for those properties.

Title page

We'll start with the title page:

```
\pttitle  These properties will affect the appearance of \maketitle:
\ptsubtitle
\ptauthor  5 \newcommand*{\pttitle}{Title}
           6 \newcommand*{\ptsubtitle}{Subtitle}
\ptdate    7 \newcommand*{\ptauthor}{Author}
           8 \newcommand*{\ptdate}{\today}
```

Since we define them as commands, you can change the appearance of your title page by redefining them in your preamble like so:

```
\renewcommand*{\pttitle}{My Title}
\renewcommand*{\ptauthor}{The Author}
```

We then use these properties to set the document title, author, and date:

```

9 \title{%
10  \pttitle%
11  \ifx\ptsubtitle\@ptundefined\relax\else\\ptsubtitle\fi%
12 }
13 \author{\ptauthor}
14 \date{\ptdate}

```

Since `\maketitle` clears the internal title, author, and date we use the `\pt` equivalents so that we can refer to them again later, or redefine them throughout the document—in anthologies with works by multiple authors, for instance.

`\@ptpoemlabeltext` Each time you create a poem in your document we automatically assign it a special label that can be used to link to it later. This label is prefixed with `\@ptpoemlabeltext` to prevent it from conflicting with user defined labels, or labels defined in other packages.

```

15 \newcommand*{\@ptpoemlabeltext}{poetrytexpoem:}

```

Chances are you'll never need to touch this.

`poemnum` The `poemnum` and `absolutepoemnum` counters will be incremented every time we include a poem in our document and can be used later to number the poems. The `absolutepoemnum` counter will never be reset by `poetrytex` while `poemnum` may sometimes be reset to 0 (at the beginning of a new `poemgroup` for instance).

```

16 \newcounter{poemnum}
17 \newcounter{absolutepoemnum}

```

Dedication

After your title page you might want to add a dedication page.

`\ptdedication` As with the `\pttitle` and `author` commands you can simply redefine `\ptdedication`
`\makededication` to change the dedication text.

To create a dedication page, the `\makededication` command can be called. By default, this command aligns everything to the right, however, by adding an optional argument you can specify any environment to wrap the dedication in.

```

18 \newcommand*{\ptdedication}{Renew \textsf{\textbackslash ptdedication}}
19 \newcommand*{\makededication}[1][flushright]{%
20  \thispagestyle{empty}
21  \vspace*{\fill}
22  \begin{#1}
23    \emph{\ptdedication}
24  \end{#1}
25  \vspace*{\fill}
26 }

```

Tables and links

Next we setup the table of contents and list of poems:

`\toptitle` The value of `\toptitle` will be rendered atop the Table of Poems, and
`\topentrytype` `\topentrytype` will set the default entry type for poems in the TOP.

```
27 \newcommand*\toptitle{List of Poems}
28 \newcommand*\topentrytype{subsection}
```

We then set the `secnumdepth` and `tocdepth` counters to disable chapter, section, and subsection numbering, and to limit the maximum depth of entries in the TOC.

```
29 \setcounter{secnumdepth}{-1}
30 \setcounter{tocdepth}{2}
31 \renewcommand*\listtablename{\toptitle}
```

`\maketoc` Once you've configured the TOC and TOP you probably want to insert them
`\maketop` into your document somewhere. While you could just use the \LaTeX commands
`\maketop*` `\tableofcontents` and `\listoftables`, we provide alternatives that add a bit of formatting and clear the page. By default the TOP creates a listing in the TOC—Using the star modifier prevents this. An example table of poems can be found at the end of this document.

```
32 \newcommand*\maketoc{%
33   \tableofcontents
34   \pagestyle{plain}
35   \clearpage
36   \thispagestyle{empty}
37 }
38 \newcommand*\maketop{\@ifstar{\@ptmaketopStar}{\@ptmaketopNoStar}}
39 \newcommand*\@ptmaketopStar{%
40   \listoftables
41   \pagestyle{plain}
42   \clearpage
43 }
44 \newcommand*\@ptmaketopNoStar{%
45   \cleardoublepage
46   \phantomsection
47   \addcontentsline{toc}{section}{\toptitle}
48   \listoftables
49   \pagestyle{plain}
50   \clearpage
51 }
```

`\numbertop` Placing this command in your document preamble will cause the table of poems to be numbered.

```
52 \newcommand*\numbertop{\newcommand*\@ptnumbertop{}}
```

Poems and annotations

Now that we've got all the boilerplate, configuration, titles, tables, and properties out of the way, it's time to move on to the core functionality of `poetrytex`: displaying and organizing poems!

The poem environment

`poem` Inserting a poem or other writing into your anthology is accomplished by wrapping it in the `poem` environment. This environment takes in two arguments, the title and subtitle (or author, date, etc.) of the poem.

```
53 \newenvironment{poem}[3][verse]{%
```

By default `poem` re-wraps your text in the `verse` environment. However, this can be changed by passing in an optional argument with the name of another environment to wrap it in (eg. `center`).

```
54 \newcommand*{\@ptwrapenvironment}{#1}
```

For example, a poem wrapped in the `center` environment might look like this:

```
\begin{poem}[center]
{The Sea Bell}{J.R.R. Tolkien}
I walked by the sea,
and there came to me,\
as a star-beam on the wet sand,\
a white shell like a sea-bell;\
trembling it lay
in my wet hand.\
In my fingers shaken
I heard waken\
a ding within, by a harbour bar\
a buoy swinging, a call ringing\
over endless seas,
faint now and far\ldots
\end{poem}
```

	The Sea Bell
	J.R.R. Tolkien
I walked by the sea, and there came to me,	
as a star-beam on the wet sand,	
a white shell like a sea-bell;	
trembling it lay in my wet hand.	
In my fingers shaken I heard waken	
a ding within, by a harbour bar	
a buoy swinging, a call ringing	
over endless seas, faint now and far...	

Now we render the page header, title, and the actual poem:

```
55 \poetryheadings
56 \addtocounter{poemnum}{1}
57 \addtocounter{absolutepoemnum}{1}
58 \begin{center}
59 \phantomsection%
60 \addcontentsline{lot}{\topentrytype}{%
61 \ifx\@ptnumbertop\@ptundefined%
62 \relax%
63 \else%
```

```

64      \arabic{poemnum}.\ %
65      \fi#2}%
66 \label{\@ptpoemlabeltext\arabic{absolutepoemnum}}
67 {\poemtitleformat%
68   \ifx\@ptnumberpoems\@ptundefined
69     \relax
70   \else
71     \arabic{poemnum}\\\%
72   \fi#2}\\\%
73   #3
74 \end{center}
75 \begin{\@ptwrapenvironment}
76 \begingroup\setlength{\parskip}{\stanzaparskip}
77 }{%
78 \endgroup
79 \end{\@ptwrapenvironment}
80 \ifx\@ptclearpageafterpoem\@ptundefined
81   \relax
82 \else
83   \clearpage
84 \fi
85 }

```

Formatting

The `poem` environment provides some reasonable defaults for formatting your work but chances are you want a little more control.

Headings

`\poetryheadings` Every time a new `poem` or `annotation` environment is created, we automatically call `\poetryheadings`. By redefining this, you can change how your headings look, use packages like `fancyhdr`, or remove headers from poem pages altogether.

```

86 \newcommand*{\poetryheadings}[0]{%
87   \pagestyle{myheadings}
88   \markboth{ | \MakeUppercase{\pttitle}\hfill }
89             {\hfill\MakeUppercase{\ptgroup}\ | }
90 }

```

Numbering

`\resetnumongroup` `\numberpoems` These commands determine if the `poemnum` counter should be reset when the poem group changes, and if the poems should display their number above the title. Generally these should be called from the preamble, but they can be defined at any point in your document to change how numbering works, or turn on numbering from that point forward.

```

91 \newcommand*{\resetnumongroup}{\newcommand*{\@ptresetnumongroup}{}}

```

92 \newcommand*{\numberpoems}{\newcommand*{\@ptnumberpoems}{}}

Using \numberpoems results in:

\numberpoems

```
\begin{poem}{The Highwayman}
{Alfred Noyes}
The wind was a torrent of
darkness among the gusty trees,\
The moon was a ghostly galleon
tossed upon cloudy seas,\
The road was a ribbon of
moonlight over the purple moor
\end{poem}
```

2 The Highwayman

Alfred Noyes

The wind was a torrent
of darkness among the
gusty trees,
The moon was a ghostly
galleon tossed upon
cloudy seas,
The road was a ribbon of
moonlight over the pur-
ple moor

Spacing and indentation

\stanzaparskip This length is used to change the parskip within a poem environment.

```
93 \newlength{\stanzaparskip}
94 \setlength{\stanzaparskip}{0.7em}
```

\clearpageafterpoem clearpageafterpoem causes the page to be cleared after every poem environment.

95 \newcommand*{\clearpageafterpoem}{\newcommand*{\@ptclearpageafterpoem}{}}

\ptgap The \ptgap length and \ptind command are two of those places where poetrytex strays a bit into the realm of poetry typesetting. They overlap with the verse package's \vgap and \vin commands, and insert indentation at the beginning of a line. This is useful for typesetting poems consistently when the verse package is not loaded. Redefine \ptgap to change the length that \ptind indents by. The starred version of ptind uses \hspace*.

```
96 \newlength{\ptgap}
97 \setlength{\ptgap}{2em}
98 \newcommand*{\ptind}{%
99   \ifstar{%
100     \@ptindStar
101   }{%
102     \@ptindNoStar
103   }
104 }
105 \newcommand*{\@ptindStar}{\hspace*{\ptgap}}
106 \newcommand*{\@ptindNoStar}{\hspace{\ptgap}}
```

Using it works something like this:


```

\setlength{\ptgap}{2em}
\begin{poem}[flushleft]{PoE\TeX}
{An {\tipaencoding
/Ig"zA:mp@l/} poem}
There once was a poem called%
PoE\TeX\\*
That's name sounded somewhat%
{\tipaencoding /p@"TEtEk/}.\\*
\ptind It was really quite%
sad,\\*
\ptind to see pronunciation%
so bad,\\*
And to read such a terrible%
{\tipaencoding /"lIme(@)rEk/}!
\end{poem}

```

PoET_EX

An /ɪg'zɑ:mpəl/ poem

There once was a poem called PoET_EX
That's name sounded somewhat
/pə'θetɛk/.

It was really quite sad,
to see pronunciation so bad,
And to read such a terrible
/'lIme(ə)rɛk/!

Stylization

`\poemtitleformat` By redefining `\poemtitleformat` we can change how the poem title is rendered.

```
107 \newcommand*{\poemtitleformat}{\normalfont\bfseries\large\centering}
```

If you want a stylistic marker between two poems, or between sections or stanzas within a poem, the following commands are your friend.

`\ptspacergap` The `ptspacergap` length is the indentation of the spacer, and `\ptspacerchar` the actual character that will be printed `\ptspacernum` times.

```

\ptspacernum
108 \newlength{\ptspacergap}
109 \setlength{\ptspacergap}{4em}
110 \newcommand*{\ptspacerchar}{\S}
111 \newcommand*{\ptspacernum}{3}

```

`\ptspacer` The starred version of the `ptspacer` command uses `\hspace*` for indentation.
`\ptspacer*`

```

112 \newcommand*{\ptspacer}{%
113   \@ifstar{%
114     \@ptspacerStar
115   }{%
116     \@ptspacerNoStar
117   }
118 }
119 \newcommand*{\@ptspacerStar}{%
120   \hspace*{\ptspacergap}%
121   \@ptrepeat{\ptspacernum}{\ptspacerchar}%
122 }
123 \newcommand*{\@ptspacerNoStar}{%
124   \hspace{\ptspacergap}%
125   \@ptrepeat{\ptspacernum}{\ptspacerchar}%
126 }
127 \ExplSyntaxOn

```

```
128 \cs_new_eq:NN \@ptrepeat \prg_replicate:nn
129 \ExplSyntaxOff
```

For example:

```
\renewcommand{\ptspacerchar}{\o}
\renewcommand{\ptspacernum}{2}
\begin{poem}{The Love Song%
of J. Alfred Prufrock}
{T.S. Eliot}
\ldots I should have been a pair%
of ragged claws\\
Scuttling across the floors of%
silent seas.

\ptspacer

And the afternoon, the evening,
sleeps so peacefully!\\
Smoothed by long fingers,\\
Asleep\ldots\ tired\ldots\ or%
it malingers,\\
Stretched on the floor, here%
beside you and me\ldots
\end{poem}
```

The Love Song of J. Alfred Prufrock

T.S. Eliot

... I should have been a pair
of ragged claws
Scuttling across the floors of
silent seas.

∅∅

And the afternoon, the
evening, sleeps so peace-
fully!
Smoothed by long fingers,
Asleep... tired... or it ma-
lingers,
Stretched on the floor, here
beside you and me...

Groups and linking

When putting together a large collection of poetry and prose you most likely need a way to organize your works and find them quickly. While the table of poems helps we might also want to link directly to poems, or further subdivide the collection into groups of related works (by year written, or subject matter for instance).

`\linktopoem` We can *link to poems* easily enough by providing `linktopoem` with the text for the link and, optionally, the number of the poem to link to. If only one argument is given it is used as both the link destination and text.

```
130 \newcommand*{\linktopoem}[2][ptnull]{%
131   \ifx{#1}{ptnull}
132     \hyperref[\@ptpoemlabeltext#2]{#2}\relax
133   \else
134     \hyperref[\@ptpoemlabeltext#1]{#2}\relax
135   \fi
136 }
```

`\ptgroup` Dividing poems up into groups can be accomplished with the `\poemgroup` command. The command creates a title-page for the group at the current location and adds entries to the TOP and TOC unless the starred version of the command `\poemgroup*`

is used. The `\ptgroup` command will always contain a reference to the current group in case you need to refer to it later.

```

137 \newcommand*\ptgroup{}
138 \newcommand*\poemgroup{%
139   \@ifstar{%
140     \@ptpoemgroupStar
141   }{%
142     \@ptpoemgroupNoStar
143   }
144 }
145 \newcommand*\@ptpoemgroupStar[1]{%
146   \ifx\@ptresetnumongroup\@ptundefined
147     \relax
148   \else
149     \setcounter{poemnum}{0}
150   \fi
151   \cleardoublepage
152   \vspace*{\fill}
153   \renewcommand*\ptgroup{#1}
154   \pagestyle{empty}
155   \begin{center}
156     \section*{#1}
157   \end{center}
158   \vspace*{\fill}
159   \clearpage
160 }
161 \newcommand*\@ptpoemgroupNoStar[1]{%
162   \ifx\@ptresetnumongroup\@ptundefined
163     \relax
164   \else
165     \setcounter{poemnum}{0}
166   \fi
167   \cleardoublepage
168   \vspace*{\fill}
169   \renewcommand*\ptgroup{#1}
170   \pagestyle{empty}
171   \begin{center}
172     \section{#1}
173     \addcontentsline{lot}{section}{#1}
174   \end{center}
175   \vspace*{\fill}
176   \clearpage
177 }

```

The annotation environment

annotation Annotations allow you to insert prose that relates to a specific poem into your document. It uses `\poetryheadings`, clears the page twice, and adds itself to the TOC (but not the TOP). The page is also cleared again after the annotation.

Like the `poetry` environment, an optional first argument can be used to specify the

environment in which the annotation will be wrapped. This defaults to `flushleft`.

```
178 \newenvironment{annotation}[2][flushleft]{%
179   \newcommand*{\@ptwrapenvironment}{#1}
180   \cleardoublepage
181   \poetryheadings
182   \begin{\@ptwrapenvironment}
183   \subsection{#2}
184 }{%
185
186   \end{\@ptwrapenvironment}
187   \clearpage
188 }
189 \</poetrytex>
```

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	E
<code>\@ifstar</code> 38, 99, 113, 139	<code>\else</code> 11, 63, 70, 82, 133, 148, 164
<code>\@ptclearpageafterpoem</code> 80, 95	<code>\emph</code> 23
<code>\@ptindNoStar</code> 102, 106	<code>\end</code> 24, 74, 79, 157, 174, 186
<code>\@ptindStar</code> 100, 105	<code>\endgroup</code> 78
<code>\@ptmaketopNoStar</code> 38, 44	environments:
<code>\@ptmaketopStar</code> 38, 39	<code>annotation</code> 178
<code>\@ptnumberpoems</code> 68, 92	<code>poem</code> 53
<code>\@ptnumbertop</code> 52, 61	<code>\ExplSyntaxOff</code> 129
<code>\@ptpoemgroupNoStar</code> 142, 161	<code>\ExplSyntaxOn</code> 127
<code>\@ptpoemgroupStar</code> 140, 145	
<code>\@ptpoemlabeltext</code> . . . 15, 66, 132, 134	F
<code>\@ptrepeat</code> 121, 125, 128	<code>\fi</code> 11, 65, 72, 84, 135, 150, 166
<code>\@ptresetnumongroup</code> 91, 146, 162	<code>\fill</code> 21, 25, 152, 158, 168, 175
<code>\@ptspacerNoStar</code> 116, 123	
<code>\@ptspacerStar</code> 114, 119	H
<code>\@ptundefined</code> . 11, 61, 68, 80, 146, 162	<code>\hfill</code> 88, 89
<code>\@ptwrapenvironment</code>	<code>\hspace</code> 105, 106, 120, 124
. 54, 75, 79, 179, 182, 186	<code>\hyperref</code> 132, 134
<code>\</code> 11, 71, 72	
	I
<code>_</code> 64, 89	<code>\ifx</code> 11, 61, 68, 80, 131, 146, 162
A	L
<code>\absolutepoemnum</code> 16	<code>\label</code> 66
<code>\addcontentsline</code> 47, 60, 173	<code>\large</code> 107
<code>\addtocounter</code> 56, 57	<code>\linktopoem</code> 130
annotation (environment) 178	<code>\listoftables</code> 40, 48
<code>\arabic</code> 64, 66, 71	<code>\listtablename</code> 31
<code>\author</code> 13	
B	M
<code>\begin</code> 22, 58, 75, 155, 171, 182	<code>\makededication</code> 18
<code>\begingroup</code> 76	<code>\maketoc</code> 32
<code>\bfseries</code> 107	<code>\maketop</code> 32
	<code>\maketop*</code> 32
C	<code>\MakeUppercase</code> 88, 89
<code>\centering</code> 107	<code>\markboth</code> 88
<code>\cleardoublepage</code> . . . 45, 151, 167, 180	
<code>\clearpage</code> 35, 42, 50, 83, 159, 176, 187	N
<code>\clearpageafterpoem</code> 95	<code>\newcommand</code> . 5–8, 15, 18, 19, 27, 28,
<code>\cs</code> 128	32, 38, 39, 44, 52, 54, 86, 91, 92,
	95, 98, 105–107, 110–112, 119,
D	123, 130, 137, 138, 145, 161, 179
<code>\date</code> 14	<code>\newcounter</code> 16, 17
	<code>\newenvironment</code> 53, 178
	<code>\newlength</code> 93, 96, 108
	<code>\normalfont</code> 107
	<code>\numberpoems</code> 91

<code>\numbertop</code>	52		
P		R	
<code>\pagestyle</code> ...	34, 41, 49, 87, 154, 170	<code>\relax</code>	11, 62, 69, 81, 132, 134, 147, 163
<code>\parskip</code>	76	<code>\renewcommand</code>	31, 153, 169
<code>\phantomsection</code>	46, 59	<code>\RequirePackage</code>	2–4
<code>poem</code> (environment)	53	<code>\resetnumongroup</code>	91
<code>\poemgroup</code>	137	S	
<code>\poemgroup*</code>	137	<code>\S</code>	110
<code>\poemnum</code>	16	<code>\section</code>	156, 172
<code>\poemtitleformat</code>	67, 107	<code>\setcounter</code>	29, 30, 149, 165
<code>\poetryheadings</code>	55, 86, 181	<code>\setlength</code>	76, 94, 97, 109
<code>\prg</code>	128	<code>\stanzaparskip</code>	76, 93
<code>\ptauthor</code>	5, 13	<code>\subsection</code>	183
<code>\ptdate</code>	5, 14	T	
<code>\ptdedication</code>	18	<code>\tableofcontents</code>	33
<code>\ptgap</code>	96	<code>\textbackslash</code>	18
<code>\ptgroup</code>	89, 137	<code>\textsf</code>	18
<code>\ptind</code>	96	<code>\thispagestyle</code>	20, 36
<code>\ptind*</code>	96	<code>\title</code>	9
<code>\ptspacer</code>	112	<code>\today</code>	8
<code>\ptspacer*</code>	112	<code>\topentrytype</code>	27, 60
<code>\ptspacerchar</code>	108, 121, 125	<code>\toptitle</code>	27, 31, 47
<code>\ptspacergap</code>	108, 120, 124	V	
<code>\ptpacernum</code>	108, 121, 125	<code>\vspace</code>	21, 25, 152, 158, 168, 175
<code>\ptsubtitle</code>	5, 11		
<code>\pttitle</code>	5, 10, 88		

Change History

1.0		
	General: Converted package to dtx	2
	Removed fontspec / xelatex dependency	2
	<code>\ptspacer</code> : Repeat <code>\ptspacernum</code> times	9
1.1		
	General: Added an example table of poems	13
	<code>\linktopoem</code> : Fix spacing and multiple use issues	10
	<code>\makededication</code> : Added optional ‘environment’ argument	4
	<code>annotation</code> : Added optional ‘environment’ argument	11

List of Poems

The Sea Bell	6
The Highwayman	8
PoET _E X	9
The Love Song of J. Alfred Prufrock	10