

Ellipsis:

Efficient Lightweight Library In PHP... Scientific Information Staging

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1 Introduction

Competency in a variety of subtle and complex software languages is required when writing a scientific paper. Separate languages are needed for generating and displaying equations, plots, charts, graphs, images, listings, tables. The Xenofile principle is to offer the ease of each language while hiding the tricky bits in specialty service modules.

In this paper, we illustrate the use of the ellipsis library (this package) with demonstrations of how several of these specialty languages have been integrated. For instance, we show the use of gnuplot and graphviz through what we call service modules.

Development cycle

Software engineers consider the development cycle to be costly and use special tools and automation to facilitate rapid generation. These efforts are focused primarily on their own needs, but these efforts are quite productive when put in service to groups having similar needs, like scientific authors.

Ellipsis (this package) reduces a writer's development cycle to writing text and including efficient calls to simplified services to generate and organize images to accompany text. The development cycle consists of two steps: edit and refresh. The developer uses their favorite text editor to improve their source then refreshes a browser window on the improved source. The cycle is tight and rapid.

HELP!

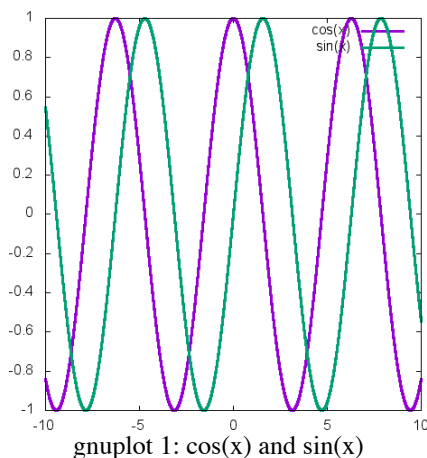
Some challenges are keeping this package from living up to its potential. One major challenge is the effective management of page breaks. We currently use a vernier of the combination of fixed size white rectangles and a red horizontal line to force a rough alignment which enables a heuristic guess on "best" page breaking. Advice is requested on a better approach.

Examples

Here are two examples of image inclusions made possible by application of the xenofile principle. The first and third are an ancient Greek theorem. The second and fourth are plots.

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

the quadratic formula [1]



$$e^{i\pi} + 1 = 0$$

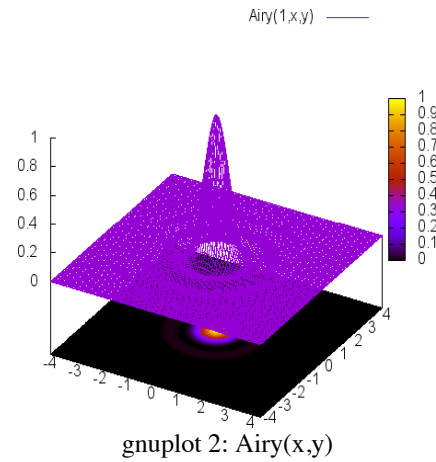
Euler's identity [2]

meta highlighting

Software engineers use syntax highlighting to discriminate between content of different types. In Ellipsis we use both intensity and color to mark objects apart from content; blocks of information that are not part of the paper, but act as a sticky note with language usage instructions and reminders the user wishes to place. This is meta-data, not part of the actual paper, but useful while writing.

backticks

Backticks are used to execute xenofile service calls. Instructions to an external service are enclosed in backticks. A service name by itself shows the default values used in the service which may be overridden by the writer. A service name followed by a question mark shows a miniature usage manual page for the service. A service name followed by a question mark then text shows a reminder to the user to develop further. A service name followed by a period and an id uses the id to lookup the name of the service instance (such as ``equation.Euler``) is a



reference to an equation identified by the id. A service name followed by a period, an id, a vertical bar, a label, a vertical bar and plotting instructions causes immediate generation of the plot and its inclusion in the paper at that location. Each of these will be illustrated with examples under Methods.

Non-paper, meta-output, will be off-white boxes. For instances, defaults are shown in gray, reminders are shown in light red, service documentation is shown in light cyan, and lists of service names are shown in light green.

Security concerns in PHP typically involve the use of data input through the server interface to access functionality on the host machine. Ellipsis does not allow input through the web interface. So, the writer is responsible for all their own code and can only achieve the same amount of damage they usually can, but they need not worry about a hacker using the interface.

2 Methods

Ordinary text can appear anywhere. No special markup or markdown is necessary to have ordinary text appear. A paragraph is construed as any block of text not separated by an empty line. An empty line is used to indicate the beginning of a new paragraph.

Text is indented or given extra space by using three underscores in a row `___` at the beginning of a line. This enables authors to use traditional indenting of paragraphs. It can also be achieved with backticks enclosing three spaces. Backticks enclosing two spaces separates sentences by more than one space.

HTML wraps text around block material like images. A string of four '^'s (carets) in a row forces text to continue underneath the block. To stop the current line and continue on the next, a string of three '^'s becomes a simple line break. Five '^'s is a page break.

Equations

Equations can be referenced both backwards and forwards. For instance, equation³ has not been defined yet but will be defined below. Equations make use of $\text{T}_\text{E}\text{X}$ notation.

$$a^2 = b^2 + c^2$$

Pythagorean theorem [3]

Now that it has been defined, we can reference it again here with equation³.

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

the quadratic formula [4]

Here we show the quadratic equation⁴ to illustrate that numbering extends over multiple equations.

<u>equation</u> defaults ...
No defaults ...
/Users/jlettvin/Desktop/Ellipsis/...service.equation.php

<u>equation</u> reminder ...
This is a bookmark for a future equation.

<u>equation</u> service documentation ...
`equation.\$id \$label \$code`
https://www.tug.org/texlive/doc/texlive-en/texlive-en.pdf
\$id: a keyword to use when referencing this equation;
\$label: a title for this equation;
\$code: TeX instructions to generate this equation.
This service uses TeX to generate an image of the equation. The image is converted to base64 format and inserted directly in the tag instead of referenced through an URL.
/Users/jlettvin/Desktop/Ellipsis/...service.equation.php

Plots

Here, we just backtick gnuplot to see defaults and source location.

figure defaults ...	
samples	10000
term	png size 512,512 crop enhanced
/Users/jlettvin/Desktop/Ellipsis/...service.gnuplot.php	

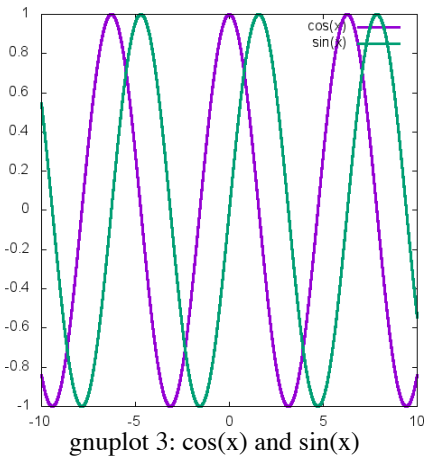
Here, we backtick with an id to forward reference.. gnuplot³

Here, we backtick a future plot.

<u>gnuplot</u> reminder ...
This is a bookmark for a future plot. This note describes it.

Here, we ask for the gnuplot service documentation.

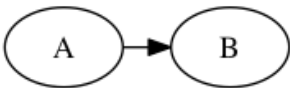
<u>gnuplot</u> service documentation ...
`gnuplot.\$id \$label \$code`
www.gnuplot.info/docs_4.4/gnuplot.pdf
\$id: a keyword to use when referencing this plot;
\$label: a title for this plot;
\$code: gnuplot instructions to generate this plot.
The standard offered here is to generate a 512x512 PNG image using thick lines for scientific paper photo-reproduction and reduce its size to 256x256 to save space then title the plot at the bottom in bold.
The image is converted to base64 format and inserted directly in the tag instead of referenced through an URL.
/Users/jlettvin/Desktop/Ellipsis/...service.gnuplot.php



Here, we backtick define a gnuplot. This is text that wraps around the image.

This text is pushed below the image.

Graphs



A reference to graph¹ is used here.

graph 1: Simple directed graph

Listings

```
<?php
/// index.php (HTML entypoint for Ellipsis).
///
/// index.php is generated automatically by /Users/jlettvin/Desktop/Ellipsis/...ellipsis.php
/// when it is missing from a directory served by Ellipsis
/// and the directory is named on a line in "...".
/// and recursively into contiguous directories served by Ellipsis.
/// Ellipsis boilerplate used as tail of ellipsis participating script.
list($SEP, $ELL)=array(DIRECTORY_SEPARATOR,"...ellipsis.php");
for(list($DIR,$PHP)=array(__DIR__, $SEP.$ELL); $DIR!=$SEP;) {
    list($INC,$DIR)=array("{ $DIR } { $PHP }", dirname($DIR));
    if(is_readable($INC)) { require_once($INC); root($argv); exit(0); }}
echo "<html><body>{ $ELL } missing.</body></html>".PHP_EOL;
?>
```

Listing 1: Simple file listing

Boxes

Mountain spring. Quick! Look!
Spotless leopard frog kicks deep.
Sweet cold green water.

Directory Tree

```
.  
./...Contents  
./...ellipsis.png  
./Appendices  
./Appendices/...ellipsis.png  
./Appendices/background.png  
./Appendices/index.php  
./background.png  
./Citations  
./Citations/...ellipsis.png  
./Diagrams  
./Diagrams/...ellipsis.png  
./Equations  
./Equations/...ellipsis.png  
./Equations/Equations...  
./Figures  
./Figures/...ellipsis.png  
./Graphs  
./Graphs/...ellipsis.png  
./index.php  
./index.php.old  
./Linkage  
./Linkage/...ellipsis.png  
./Listings  
./Listings/...ellipsis.png  
./Methods...  
./Numbering  
./Numbering/...ellipsis.png  
./Numbering/background.png  
./Numbering/index.php  
./Numbering.php  
./Plots  
./Plots/...ellipsis.png  
./Tables  
./Tables/...ellipsis.png
```

(unimplemented: anonymous,thing,does nothing,This is not interesting.)

Other random

The remainder of this manual is output from the symbol table which actually works as a reference to what can be found where in the Ellipsis code base.

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'Head/'																																													
'2': 'Head/Head...'																																													

'3': 'Introduction/'
'4': 'Introduction/Introduction...'
'5': 'Methods/'
'6': 'Methods/Methods...'
'7': 'Results/'
'8': 'Results/Results...'
'9': 'Discussion/'
'10': 'Discussion/Discussion...'
'11': 'Literature/'
'12': 'Literature/Literature...'
'13': 'Appendices/'
'14': 'Appendices/Appendices...'

'attributes':

'service': 'attributes'
'name': '/Users/jlettvin/Desktop/Ellipsis/...attributes.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...attributes.php'

'document_service':

'service': 'document_service'
'name': '/Users/jlettvin/Desktop/Ellipsis/...document_service.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...document_service.php'

'ellipsis':

'service': 'ellipsis'
'name': '/Users/jlettvin/Desktop/Ellipsis/...ellipsis.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...ellipsis.php'

'interpret.line.braces':

'service': 'interpret.line.braces'
'name': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.braces.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.braces.php'

'interpret.line.breaks':

'service': 'interpret.line.breaks'
'name': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.breaks.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.breaks.php'

'interpret.line.equals':

'service': 'interpret.line.equals'
'name': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.equals.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.equals.php'

'interpret.line.indent':

'service': 'interpret.line.indent'
'name': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.indent.php'

```
'path': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.indent.php'
```

'interpret.line.list':

```
'service':  
'interpret.line.list'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.list.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.list.php'
```

'interpret.line.quotes':

```
'service':  
'interpret.line.quotes'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.quotes.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...interpret.line.quotes.php'
```

'interpret':

```
'service':  
'interpret'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...interpret.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...interpret.php'
```

'interpret.service':

```
'service':  
'interpret.service'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...interpret.service.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...interpret.service.php'
```

'introspect':

```
'service':  
'introspect'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...introspect.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...introspect.php'
```

'library':

```
'service':  
'library'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...library.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...library.php'
```

'markdown':

```
'service':  
'markdown'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...markdown.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...markdown.php'
```

'root':

```
'service':  
'root'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...root.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...root.php'
```

'service.blist':

```
'service':  
'service.blist'  
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.blist.php'  
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.blist.php'
```


'service.box':

'service':
'service.box'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.box.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.box.php'

'service.comment':

'service':
'service.comment'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.comment.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.comment.php'

'service.debug':

'service':
'service.debug'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.debug.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.debug.php'

'service.define':

'service':
'service.define'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.define.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.define.php'

'service.dirtree':

'service':
'service.dirtree'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.dirtree.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.dirtree.php'

'service.equation':

'service':
'service.equation'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.equation.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.equation.php'

'service.figure':

'service':
'service.figure'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.figure.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.figure.php'

'service.gnuplot':

'service':
'service.gnuplot'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.gnuplot.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.gnuplot.php'

'service.graphviz':

'service':
'service.graphviz'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.graphviz.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.graphviz.php'

'service.listing':

'service':
'service.listing'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.listing.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.listing.php'

'service.make':

'service':
'service.make'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.make.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.make.php'

'service':

'service':
'service'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.php'

'service.reference':

'service':
'service.reference'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.reference.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.reference.php'

'service.table':

'service':
'service.table'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.table.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.table.php'

'service.timestamp':

'service':
'service.timestamp'
'name': '/Users/jlettvin/Desktop/Ellipsis/...service.timestamp.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...service.timestamp.php'

'shell':

'service':
'shell'
'name': '/Users/jlettvin/Desktop/Ellipsis/...shell.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...shell.php'

'symbols':

'service':
'symbols'
'name': '/Users/jlettvin/Desktop/Ellipsis/...symbols.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...symbols.php'

'tag':

'service':
'tag'
'name': '/Users/jlettvin/Desktop/Ellipsis/...tag.php'
'path': '/Users/jlettvin/Desktop/Ellipsis/...tag.php'

'tree':

'service':

<div>'tree'</div> <div>'name': '/Users/jlettvin/Desktop/Ellipsis/...tree.php'</div> <div>'path': '/Users/jlettvin/Desktop/Ellipsis/...tree.php'</div>	
'doc':	
<div>'attributes':</div> <div><div><div>es service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...attributes.php</div></div></div>	
<div>'document_service':</div> <div><div><div>_service service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...document_service.php</div></div></div>	
<div>'ellipsis':</div> <div><div><div>service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...ellipsis.php</div></div></div>	
<div>'interpret.line.braces':</div> <div><div><div>t.line.braces service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...interpret.line.braces.php</div></div></div>	
<div>'interpret.line.breaks':</div> <div><div><div>t.line.breaks service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...interpret.line.breaks.php</div></div></div>	
<div>'interpret.line.equals':</div> <div><div><div>t.line.equals service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...interpret.line.equals.php</div></div></div>	
<div>'interpret.line.indent':</div> <div><div><div>t.line.indent service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...interpret.line.indent.php</div></div></div>	
<div>'interpret.line.list':</div> <div><div><div>t.line.list service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...interpret.line.list.php</div></div></div>	
<div>'interpret.line.quotes':</div> <div><div><div>t.line.quotes service documentation ...</div><div>/Users/jlettvin/Desktop/Ellipsis/...interpret.line.quotes.php</div></div></div>	
<div>'interpret':</div> <div><div><div>‡ service documentation ...</div></div></div>	

/Users/jlettvin/Desktop/Ellipsis/...interpret.php

'interpret.service': '

lservice service documentation ...

Convert backtick content to ellipsis custom function output.

/Users/jlettvin/Desktop/Ellipsis/...interpret.service.php

'introspect': '

ct service documentation ...

/Users/jlettvin/Desktop/Ellipsis/...introspect.php

'library': '

service documentation ...

/Users/jlettvin/Desktop/Ellipsis/...library.php

'markdown': '

service documentation ...

/Users/jlettvin/Desktop/Ellipsis/...markdown.php

'root': '

service documentation ...

/Users/jlettvin/Desktop/Ellipsis/...root.php

'service.blist': '

blist service documentation ...

`bulleted.\$id\$label\$code`

`numbered.\$id\$label\$code`

\$id: a keyword to use when referencing this list;

\$label: a title for the containing box;

\$code: material to convert to a list.

/Users/jlettvin/Desktop/Ellipsis/...service.blist.php

'service.box': '

box service documentation ...

`box.\$id\$label\$code`

\$id: a keyword to use when referencing this box;

\$label: a title for this box;

\$code: material to wrap with this box.

This service puts \$code in a single cell in a single table with a border.

It changes the font to the <code> fixed width style and maintains the same line breaks as found in the \$code section.

/Users/jlettvin/Desktop/Ellipsis/...service.box.php

'service.comment': '

comment service documentation ...

`comment.{nonempty}||{anything}`

All material in a comment service field is ignored.

/Users/jlettvin/Desktop/Ellipsis/...service.comment.php

'service.debug': '

debug service documentation ...

`^symboltable.{anything}`

This service shows the Ellipsis symboltable with the exception that the 'body' symbol is not shown.

This is because the body symbol would repeat what is already seen. The remaining fields in {anything} are ignored.

/Users/jlettvin/Desktop/Ellipsis/...service.debug.php

'service.define': '

define service documentation ...

`^def.idlabel$code``

\$id: a keyword to use when referencing this definition;

\$label: an unused title for this definition;

\$code: replacement text for this definition.

This service puts \$code in a single cell in a single table with a border.

It changes the font to the <code> fixed width style and maintains the same line breaks as found in the \$code section.

/Users/jlettvin/Desktop/Ellipsis/...service.define.php

'service.dirtree': '

dirtree service documentation ...

`^dirtree.{anything}`

This service shows a directory tree for the current directory.

The remaining fields in {anything} are ignored.

/Users/jlettvin/Desktop/Ellipsis/...service.dirtree.php

'service.equation': '

equation service documentation ...

`^equation.idlabel$code``

<https://www.tug.org/texlive/doc/texlive-en/texlive-en.pdf>

\$id: a keyword to use when referencing this equation;

\$label: a title for this equation;

\$code: TeX instructions to generate this equation.

This service uses TeX to generate an image of the equation.

The image is converted to base64 format and inserted directly in the tag instead of referenced through an URL.

/Users/jlettvin/Desktop/Ellipsis/...service.equation.php

'service.figure': '

figure service documentation ...

`^figure.idlabel$code``

\$id: a keyword to use when referencing this figure;

\$label: a title for this figure;

\$code: TeX instructions to generate this figure.

The image is converted to base64 format and inserted directly in the tag instead of referenced through an URL.

/Users/jlettvin/Desktop/Ellipsis/...service.figure.php

'service.gnuplot': '

gnuplot service documentation ...

`gnuplot.\$id\$label\$code`

www.gnuplot.info/docs_4.4/gnuplot.pdf

\$id: a keyword to use when referencing this plot;

\$label: a title for this plot;

\$code: gnuplot instructions to generate this plot.

The standard offered here is to generate a 512x512 PNG image using thick lines for scientific paper photo-reproduction and reduce its size to 256x256 to save space then title the plot at the bottom in bold.

The image is converted to base64 format and inserted directly in the tag instead of referenced through an URL.

/Users/jlettvin/Desktop/Ellipsis/...service.gnuplot.php

'service.graphviz': '

graphviz service documentation ...

`graph.\$id,\$label,\$code`

www.graphviz.org/Documentation/dotguide.pdf

\$id: a keyword to use when referencing this plot;

\$label: a title for this plot;

\$code: graphviz instructions to generate this graph.

This service uses graphviz to generate a graph using the 'dot' language. The graph title is at the bottom in bold.

The image is converted to base64 format and inserted directly in the tag instead of referenced through an URL.

/Users/jlettvin/Desktop/Ellipsis/...service.graphviz.php

'service.listing': '

listing service documentation ...

`listing.\$id\$label\$code`

\$id: a keyword to use when referencing this listing;

\$label: a title for this listing;

\$code: TeX instructions to generate this listing.

This service formats text for viewing as code.

/Users/jlettvin/Desktop/Ellipsis/...service.listing.php

'service.make': '

make service documentation ...

`make.\$id\$label\$code`

\$id: a keyword to use when referencing this make;

\$label: a title for this make;

\$code: material to execute with this make.

This service blindly executes code in an external shell.
The idea is to produce artifacts needed for use in the paper.

/Users/jlettvin/Desktop/Ellipsis/...service.make.php

'service': '

service documentation ...

service function to capture stderr while executing services.

\$command will be stripped of final semicolon if any.

/Users/jlettvin/Desktop/Ellipsis/...service.php

'service.reference': '

reference service documentation ...

`reference.\$id\$label\$code`

\$id: a keyword to use when referencing this reference;

\$label: a title for this reference;

\$code: TeX instructions to generate this reference.

This module prepares in-text references and reference listings.

\$label is unused.

/Users/jlettvin/Desktop/Ellipsis/...service.reference.php

'service.table': '

table service documentation ...

`table.\$id\$label\$code`

\$id: a keyword to use when referencing this tabe;

\$label: a title for the containing box;

\$code: material to convert to a table.

/Users/jlettvin/Desktop/Ellipsis/...service.table.php

'service.timestamp': '

timestamp service documentation ...

`timestamp.\$id\$label\$code`

\$id: a keyword to use when referencing this equation;

\$label: a title for this equation;

\$code: TeX instructions to generate this equation.

This service inserts a timestamp in place of its call.

/Users/jlettvin/Desktop/Ellipsis/...service.timestamp.php

'shell': '

service documentation ...

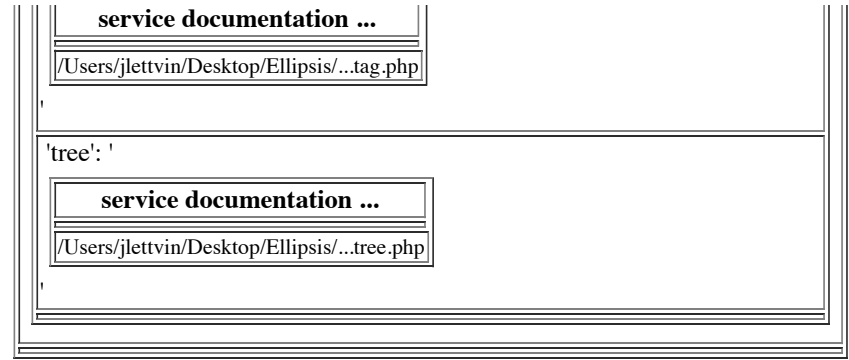
/Users/jlettvin/Desktop/Ellipsis/...shell.php

'symbols': '

service documentation ...

/Users/jlettvin/Desktop/Ellipsis/...symbols.php

'tag': '



`?

Equations may be referenced before or after their definition.

equation^{2.1}

$$a^2 = b^2 + c^2$$

Pythagorean theorem [2.1]

equation^{2.1}

2.1 Plots

2.2 Graphs

2.3 Diagrams

2.4 Figures

2.5 Listings

2.6 Tables

2.7 Citations

2.8 Appendices

2.9 Numbering

2.10 Linkage

3 Results

4 Discussion

5 Acknowledgments

6 Literature

7 Appendices

8 Missing