

# Inkscape for Fun and Profit



INKSCAPE

*Draw Freely.*

Donna Benjamin

Linux Users of Victoria

May 2008



INKSCAPE

[www.inkscape.org](http://www.inkscape.org)



- Inkscape is an Open Source scalable vector graphic (SVG) editor. Forked from SodiPodi in 2003, Version 0.46 was released in late March 2008. Despite the low version number Inkscape is strong, stable, intuitive and ready for Prime Time. Donna will showcase Inkscape art and practical applications, demonstrate Vector Drawing techniques, and provide pointers on where to go to learn more.
- Donna Benjamin runs her own business and procrastinates daily by exploring new features and bugs of the bleeding edge version of Inkscape. She has managed to find legitimate uses of the software for creating web graphics, re-recreating corporate logos and creating posters and banners. Creative Contingencies does customised web application development, hosting, research and meeting facilitation. Donna is also a board member of Open Source Industry Australia and was conference director for linux.conf.au 2008.



# Gratuitous unrelated photo



<http://www.flickr.com/photos/charliebrewer/197988512/>



# This talk ...

- starts with a brief description of Inkscape
  - what it is
  - what it does
  - how it does it
- and finishes off with pointers to help you do it too.



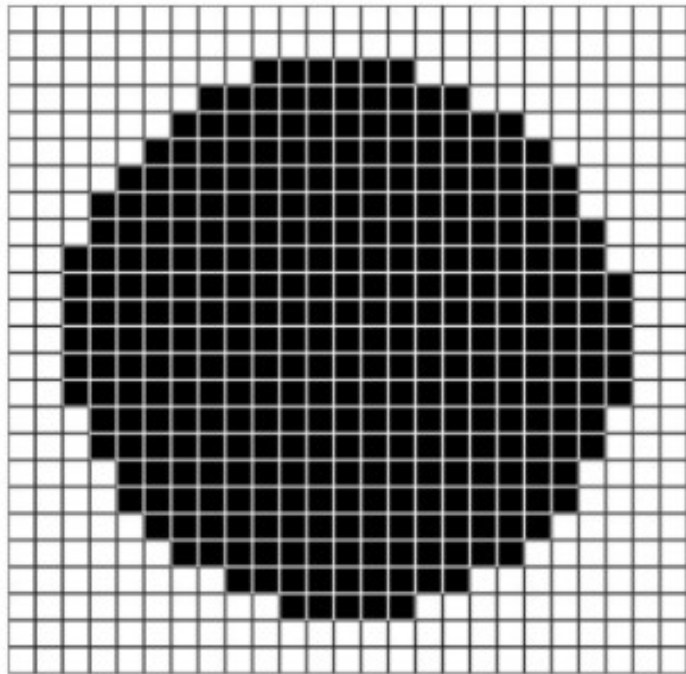
# Scalable Vector Graphics

- **Native** File format is W3C SVG1.1
  - ★ <http://www.w3.org/Graphics/SVG/>
  - ★ SVG is a language for describing two-dimensional graphics and graphical applications in **XML**.  
SVG 1.1 is a W3C Recommendation and forms the core of the current SVG developments.
- Interoperable with a range of apps,  
and useful modern web browsers.  
(watch out for blurs, gradients & transparency)

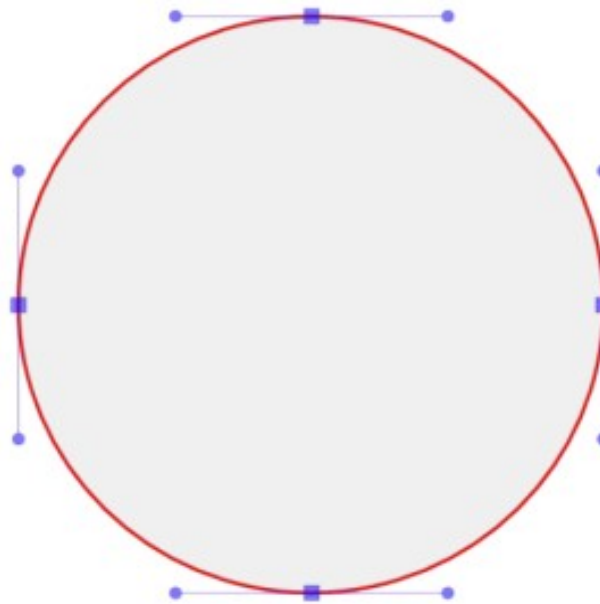




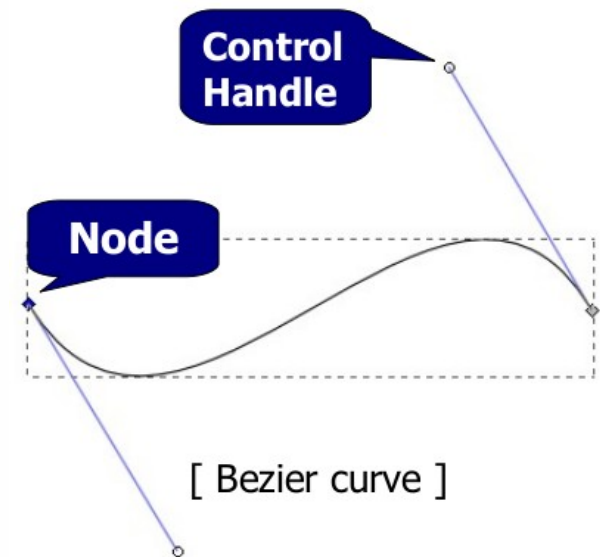
# Raster and Vector



Bitmap / Raster



Vector



Control  
Handle

Node

[ Bezier curve ]

$$p(t) = \sum_{i=0}^n \binom{n}{i} t^i (1-t)^{n-i} p_i$$



Inkscaping for  
Fun and Profit

... for art's sake



<http://klowner.deviantart.com/art/Emerald-Hunter-9487349>

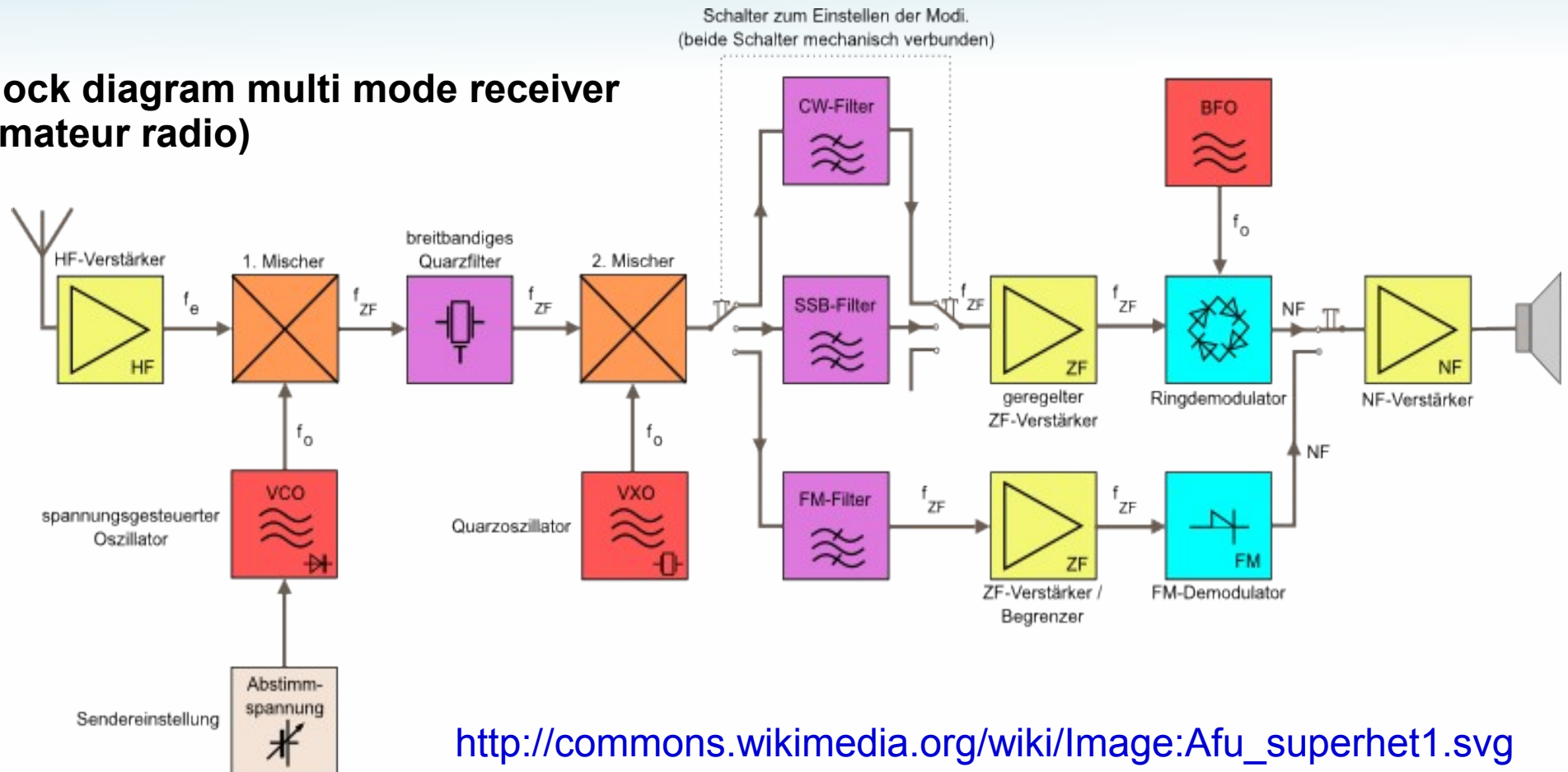


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## Block diagram multi mode receiver (amateur radio)



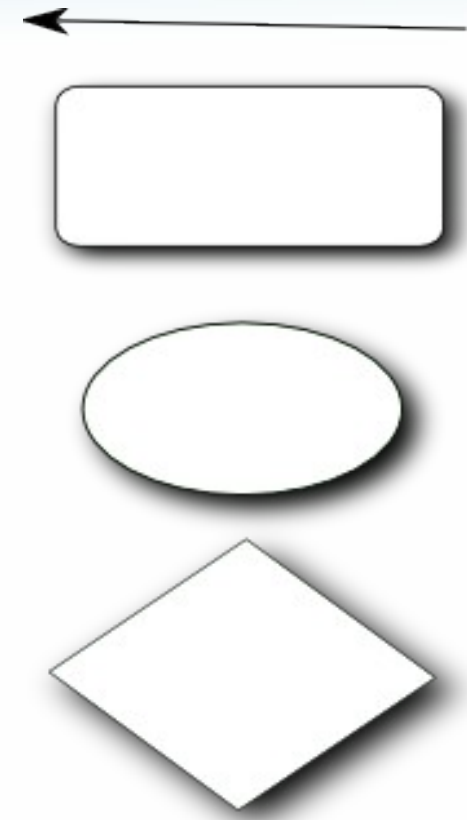
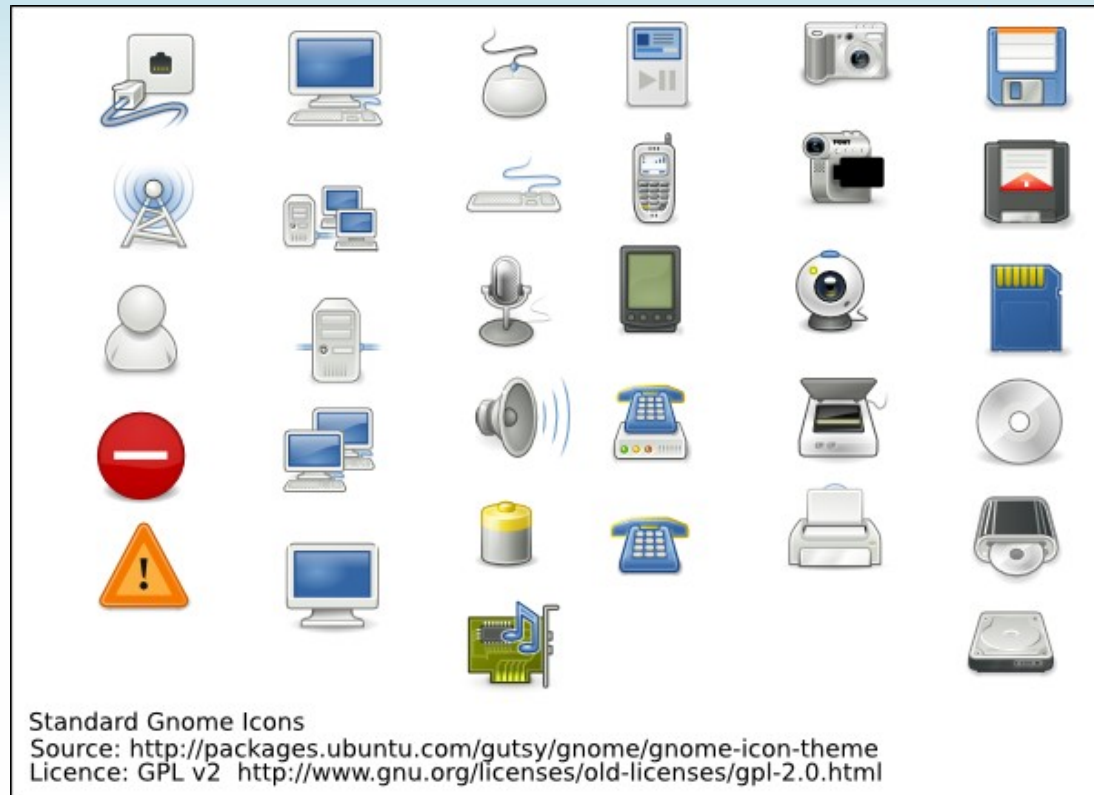
[http://commons.wikimedia.org/wiki/Image:Afu\\_superhet1.svg](http://commons.wikimedia.org/wiki/Image:Afu_superhet1.svg)  
created by <http://de.wikipedia.org/wiki/Benutzer:Appaloosa>





# Inkscape for Fun and Profit

# ... for diagrams



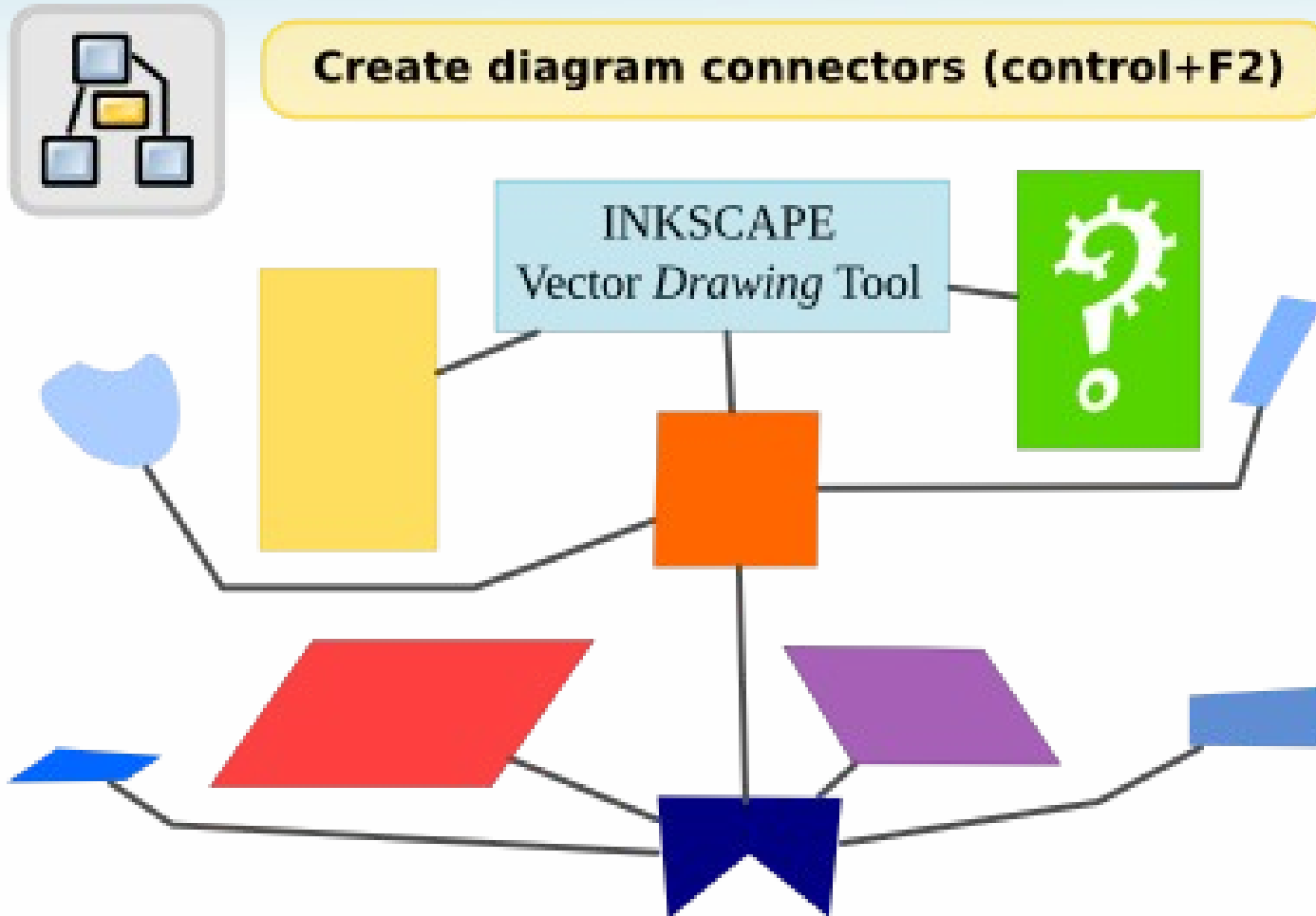
<http://www.lynchconsulting.com.au/blog/index.cfm/2008/2/12/Pretty-network-diagrams-and-flow-charts-with-Open-Source-software>



INKSCAPE

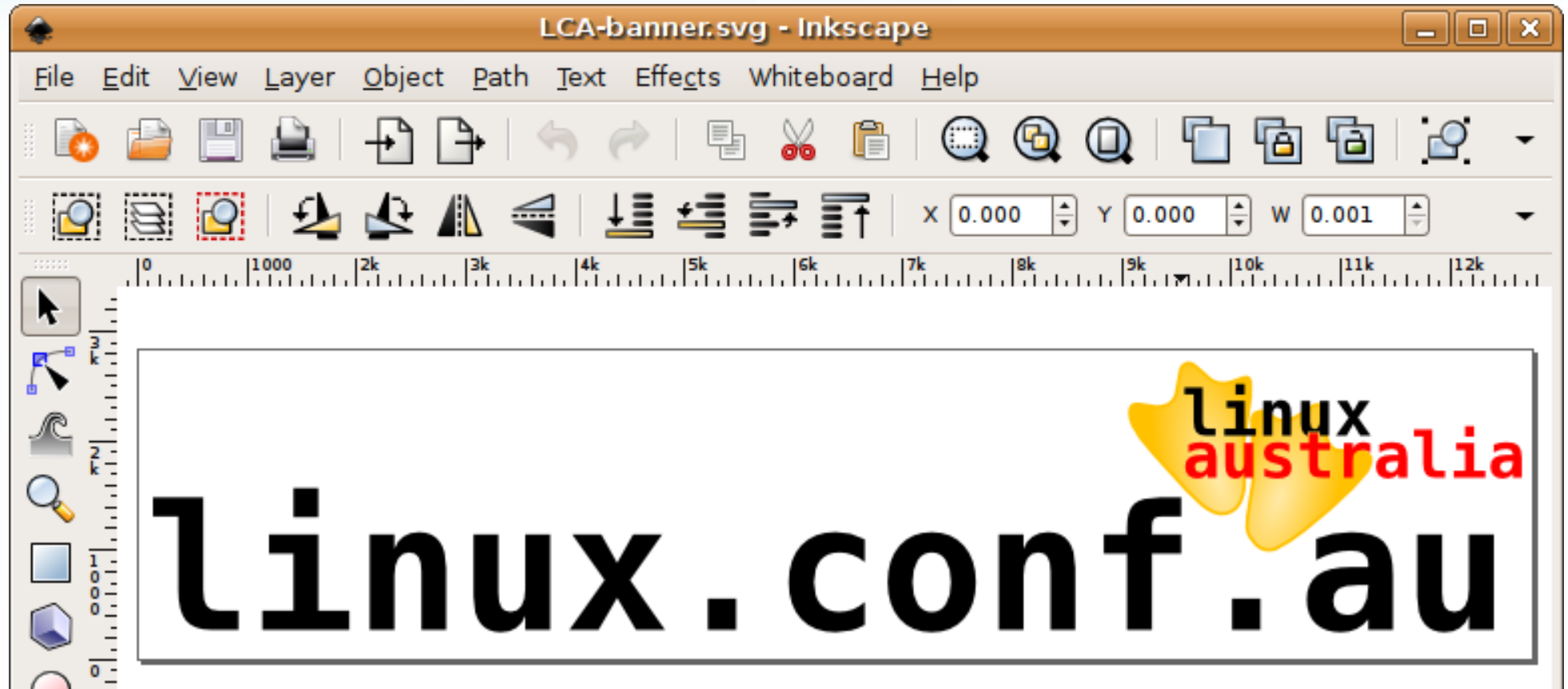
[www.inkscape.org](http://www.inkscape.org)





Inkscaping for  
Fun and Profit

... for signs & logos





Inkscaping for  
Fun and Profit

... for signs & logos



<http://www.flickr.com/photos/chrissamuel/2222027499>



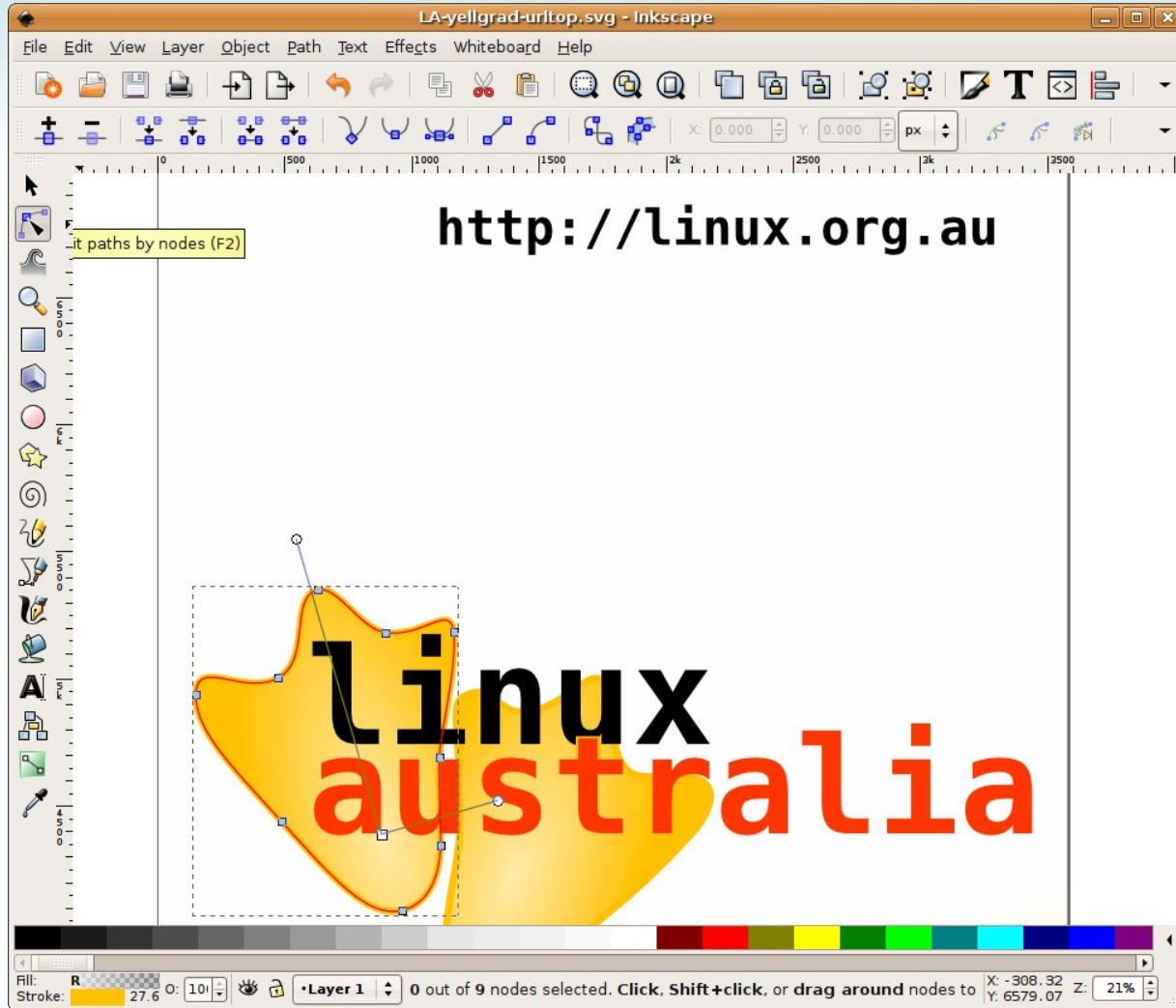
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Inkscaping for  
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... for trade banners



INKSCAPE

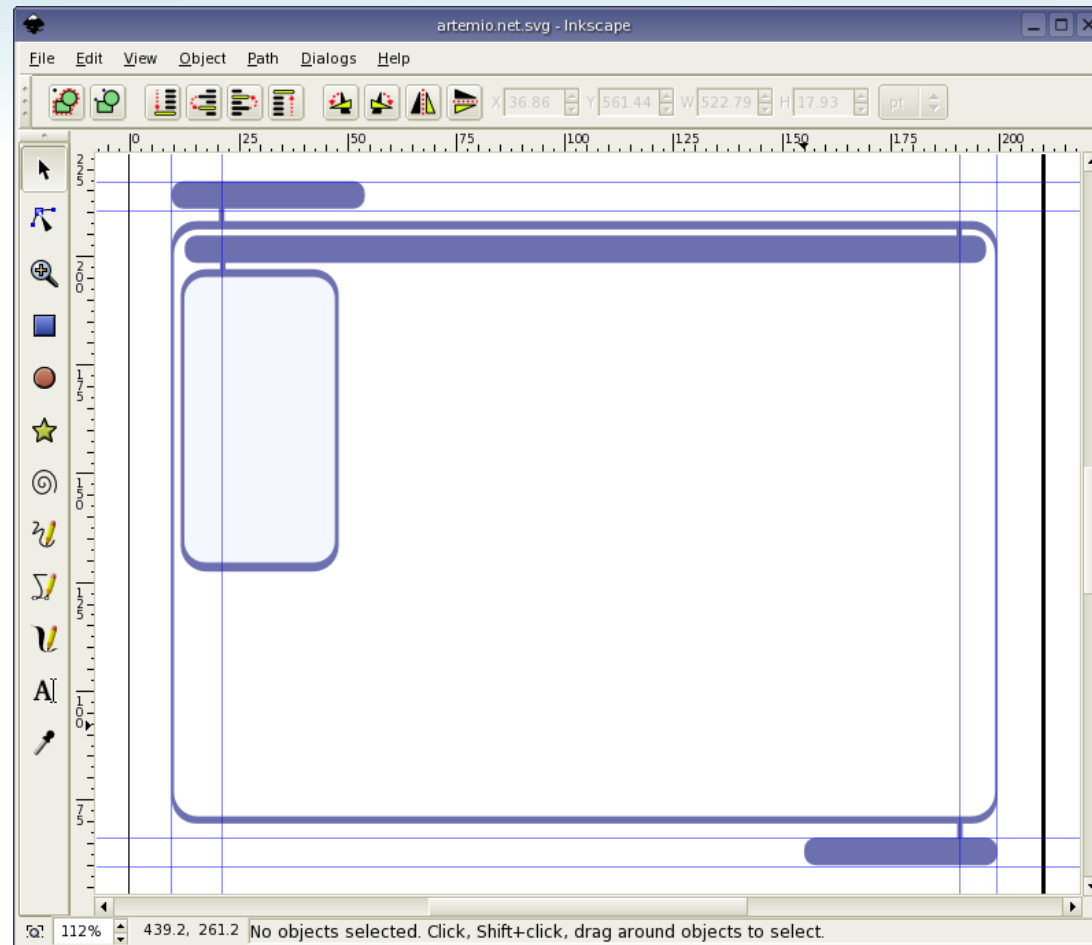
www.inkscape.org





# Inkscape for Fun and Profit

# ... for websites



[http://www.inkscape.org/showcase/web\\_design/index.php?lang=en](http://www.inkscape.org/showcase/web_design/index.php?lang=en)



INKSCAPE

[www.inkscape.org](http://www.inkscape.org)



# ... and databases

```

201 <g>
202   <path
203     id="path4801" d="M -2.5,-0.80913858 C -2.5,1.9508614
204     -4.7400000,4.1908614 -7.5,4.1908614 L -7.5,-5.8091386
205     C -4.7400000,-8.9908614 -2.5,-10.0000000
206     style="fill:#f0f0f0;stroke:#333;stroke-width:1px;"
207     transform="translate(0,0)"
208   </path>
209 </g>
210 <xsl:if test="$page <= 1" >
211   <rect
212     y="{124.621}"
213     x="{497.241}"
214     height="{40}"
215     width="{40}"
216     id="rect283"
217     style="fill:#f0f0f0;stroke:#333;stroke-width:1px;"
218   </rect>
219 </xsl:if>
220 <flowRoot
221   xml:space="preserve"
222   style="font-family:serif;font-size:12pt;"
223 <flowRegion
224   id="flowRegion1"
225   x1="0" x2="1000" y1="0" y2="1000"
226 </flowRegion>

```

```

$report = new $class( $respondent, $survey->id );

// This needs to run in a loop, for each page. We pdfkit to a si
foreach( $report->pages as $i => $page ) {

    $args['xml'] = $page->xml();
    $args['xsl'] = file_get_contents( sprintf( "%s.xsl", $page->t

    $x = xslt_create();
    xslt_set_encoding($x, 'UTF-8');

    $svg = xslt_process( $x, 'arg:/xml', 'arg:/xsl', null, $args
    if( xslt_errno( $x ) ) die( "XSLT Error : ". xslt_error( $x )

    // PHP's tempnam() uses mkstemp(3). Settle down, Beavis.
    $pdf_tmp = sprintf( "%s.pdf", tempnam( TMPDIR, APPNAME ) );
    $svg_tmp = sprintf( "%s.svg", tempnam( TMPDIR, APPNAME ) );

    $fp = fopen( $svg_tmp, "w" ) || die( "Argh! Can't write {$svg_tmp}" );
    fwrite( $fp, $svg );
    fclose( $fp );

    exec( "/usr/bin/inkscape -z -A {$pdf_tmp} -f {$svg_tmp} > /dev/nul
    unlink( $svg_tmp );
    $pages[] = $pdf_tmp;
}

```

# what I mean<sup>®</sup> Anonymous Respondent

## How to read your profile

In this summary report, your profile is illustrated by the ColourGrid® pattern on the right. In this case, this Grid is a reflection of you in your Household. In other words the people you live with will have had an influence on the resulting pattern.

The ColourGrid matrix is visually depicted as 4x4 ColourTiles®. Each ColourTile represents a distinctly different combination of drivers of behaviour, change and choice, otherwise known as Mindsets.

The position of each ColourTile reflects similarities and differences between patterns of behaviour, some of which are outlined in the "Critical Consumer Issues" ColourGrid below.

The size of each of the Colour Tiles indicates their relative influence when you are making choices in life. Crosses indicate the Mindsets that you are less likely to employ and the greytiles show where you are neutral compared with other Australians.

As a trial experience, we have provided you with a Critical Consumer Issue for each of the 16 Mindsets. The largest ColourTiles in your profile represents your "critical issues" as a consumer. In other words, if you were the target customer, the most effective key-points of engagement and influence that combine to shape the reasons you buy and the reasons you don't.

It's these differences that make each of us uniquely different, and rather than typcast you in a "box" we believe that engaging any consumer effectively requires a true understanding of these

Invoice Date: 16 Nov, 2007  
Invoice No: 30369 / 100489

Attention: Donna Benjamin  
Creative Contingencies  
PO Box 13272  
Law Courts VIC 8010  
donna@melbourne.org

## Tax Invoice

Linux Australia Inc.  
ABN 56 987 117 479

PO Box 13272  
Law Courts  
VIC 8010  
Australia

+61 3 9235 5454  
payments@melbourne.org

This invoice has been issued as a result of an application to attend linux.conf.au 2008

Description	QTY	Cost	Total (Inc. GST)
Professional Registration	1	\$748.00	\$748.00
Total			\$748.00

Includes 10% Commonwealth Goods and Services Tax

\$68.00

**PAID**

linux.conf.au is a project of Linux Australia Inc.

# Inkscaping for Fun and Profit

# ... for games

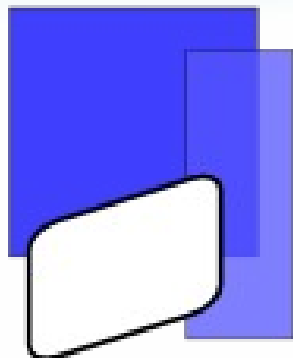
## KMahjongg

The background  
was created by  
Eugene Trounev  
and the tilesets  
by Raquel  
Ravanini...

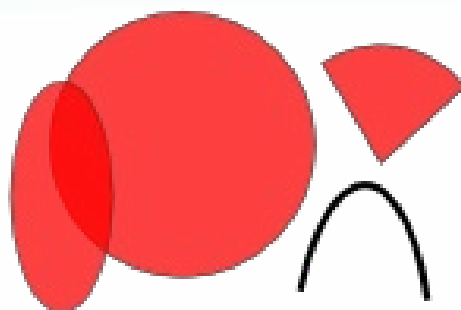
Thanks Ian :)



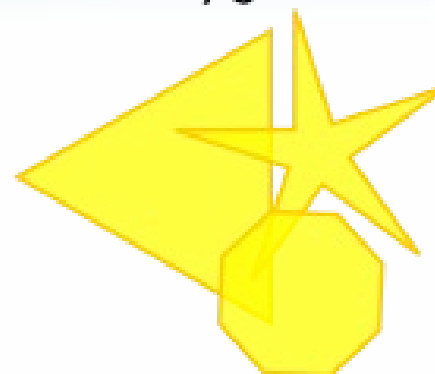
Squares &  
Rectangles



Circles, Wedges  
Arcs & Ellipses



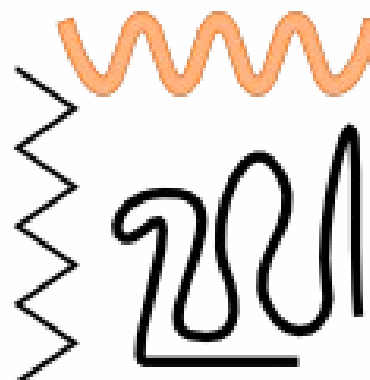
Stars &  
Polygons



Spirals



Freehand lines



Bezier Curves  
& Straight lines

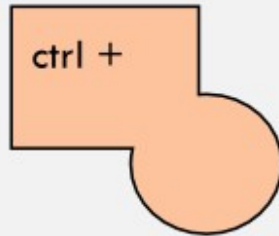


Calligraphy

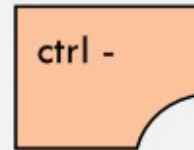




union



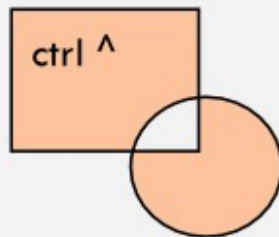
difference



intersection



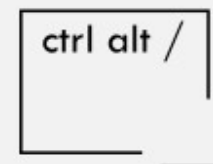
exclusion



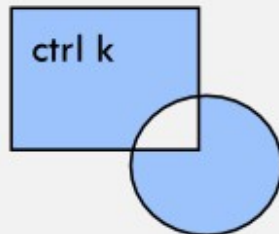
division



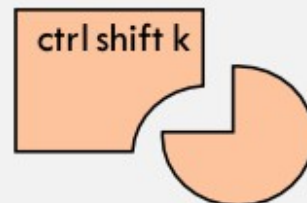
cut path



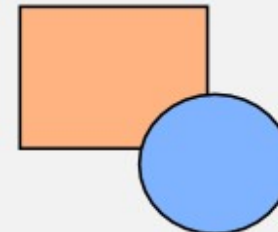
combine



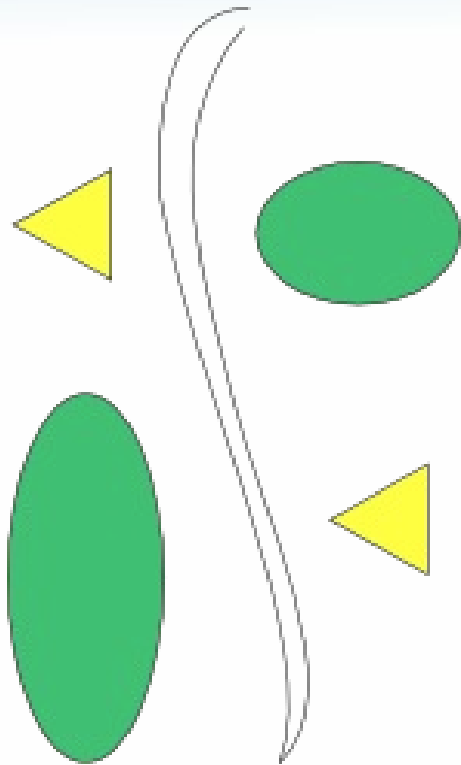
break apart

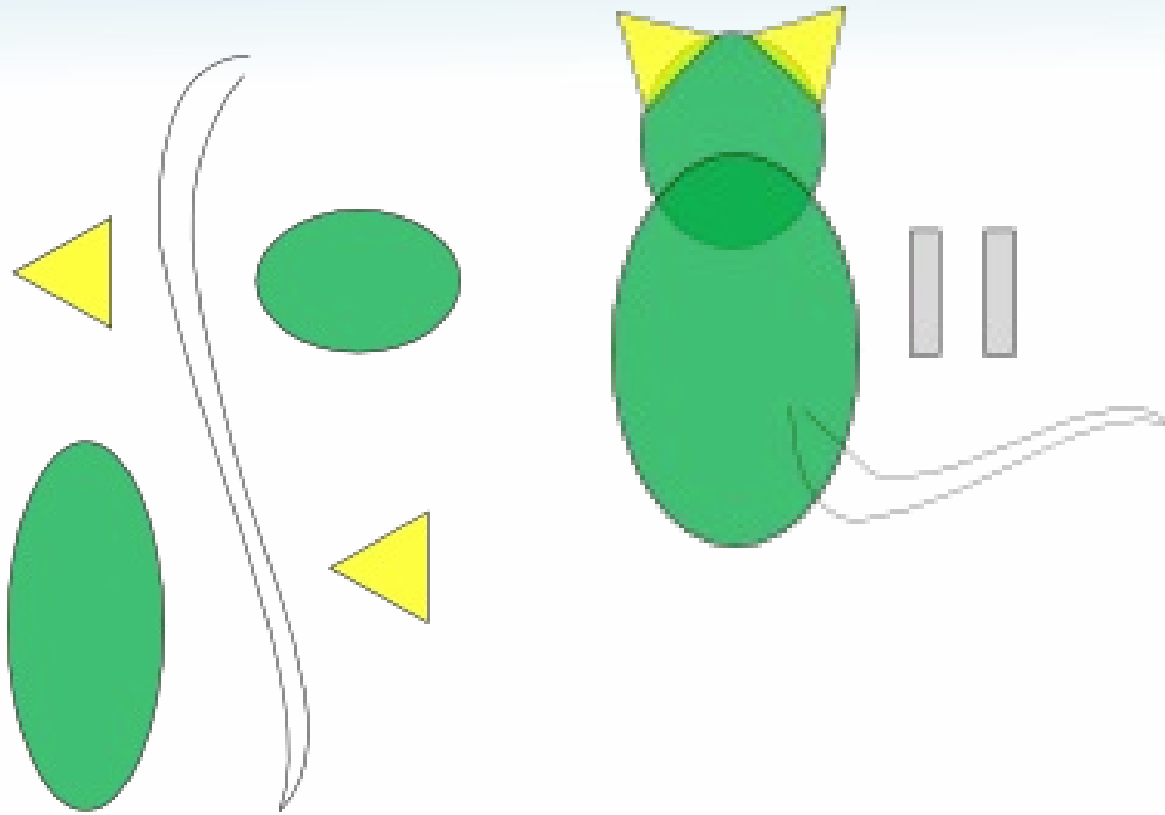


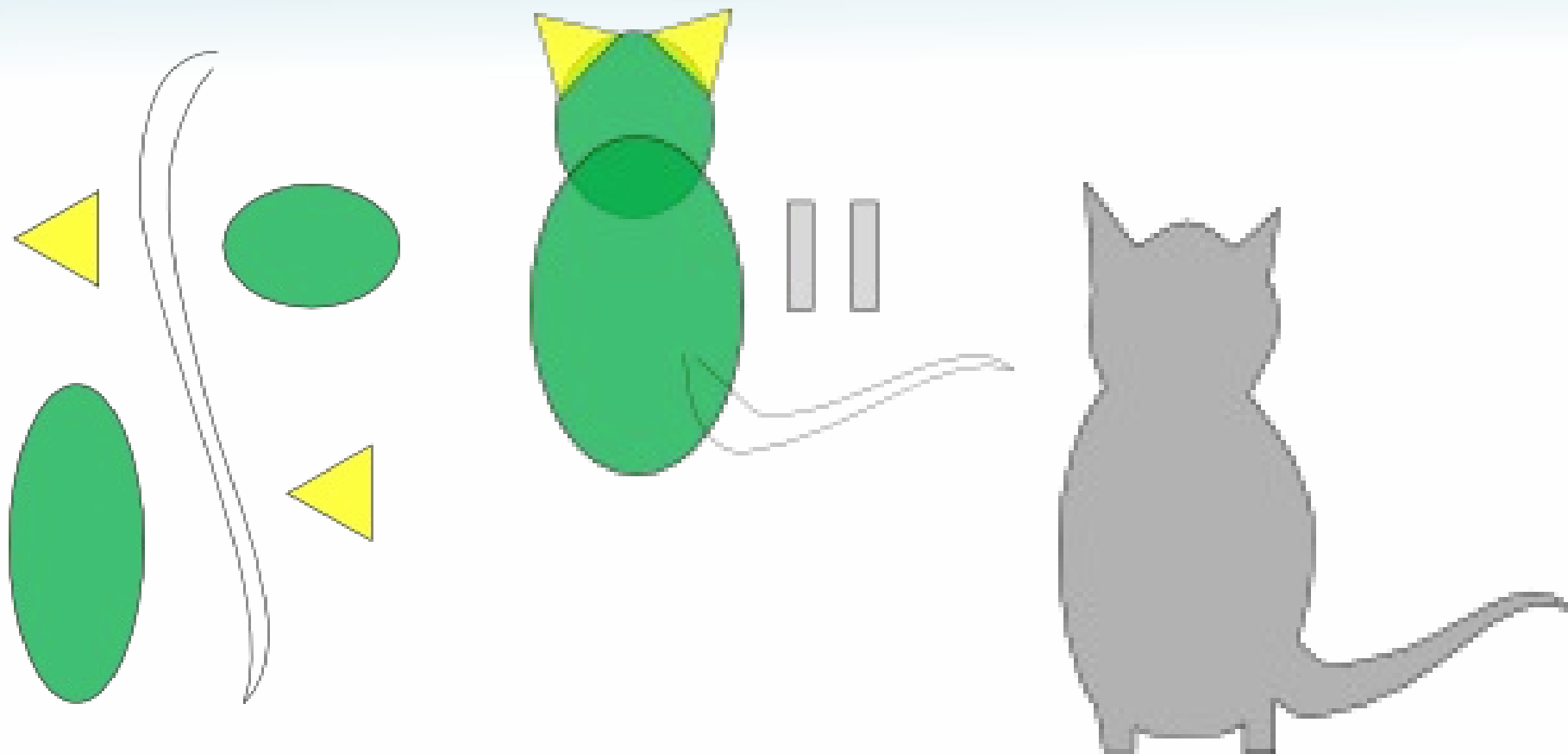
original

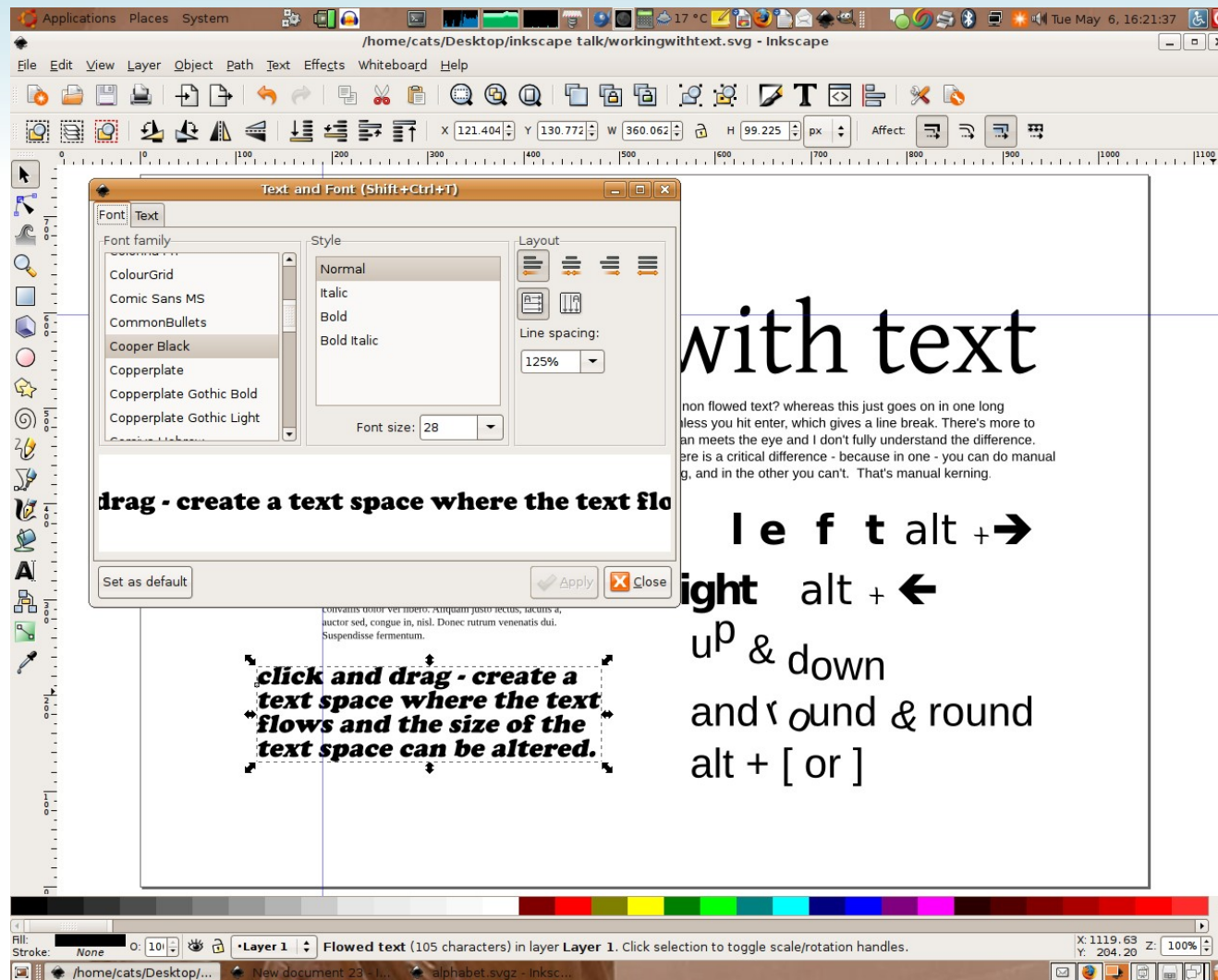












original



brightness cutoff



edge detection



select invert image

... or options off



Multiple Scans: 6

Colors



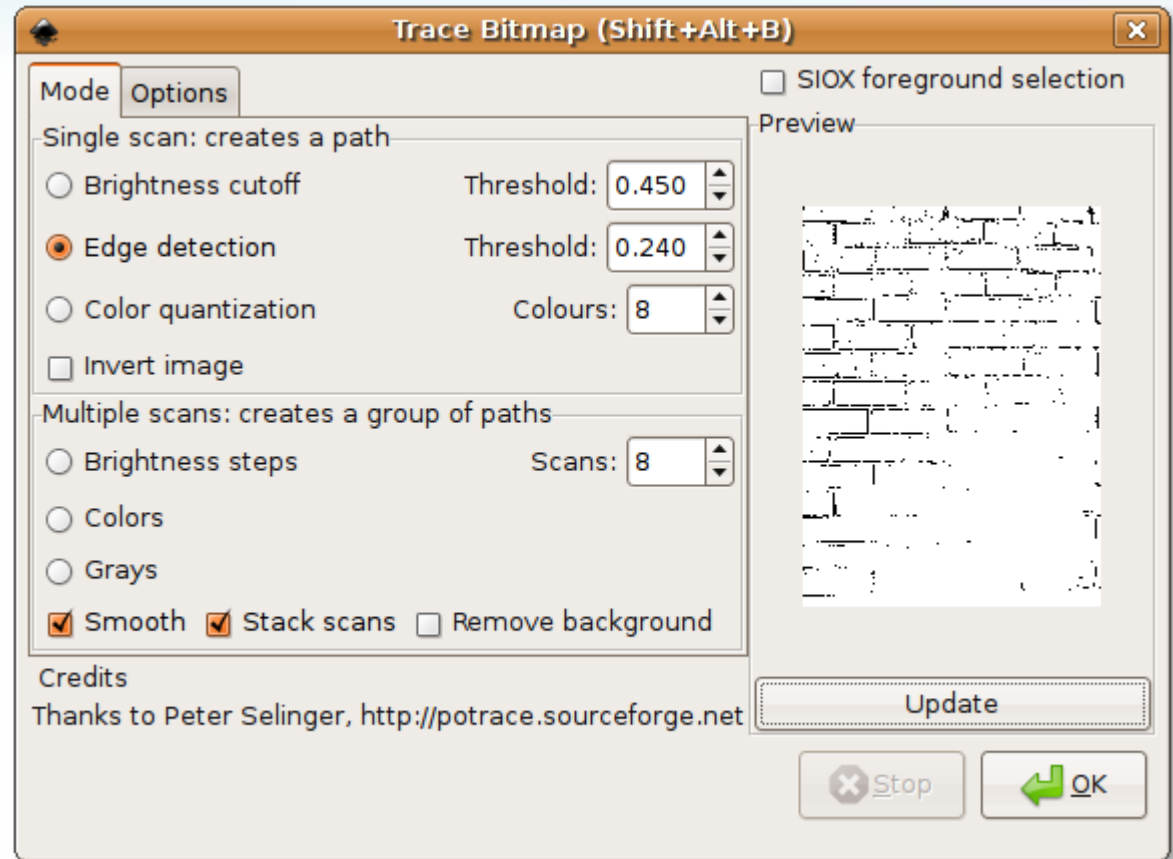




## Inkscaping for Fun and Profit



# Trace bitmap



- Take photo of bricks
- Trace bitmap
- Add
  - text and rotate
  - logos
  - box
- Make the text white
- Add vector grime

## LUV poster

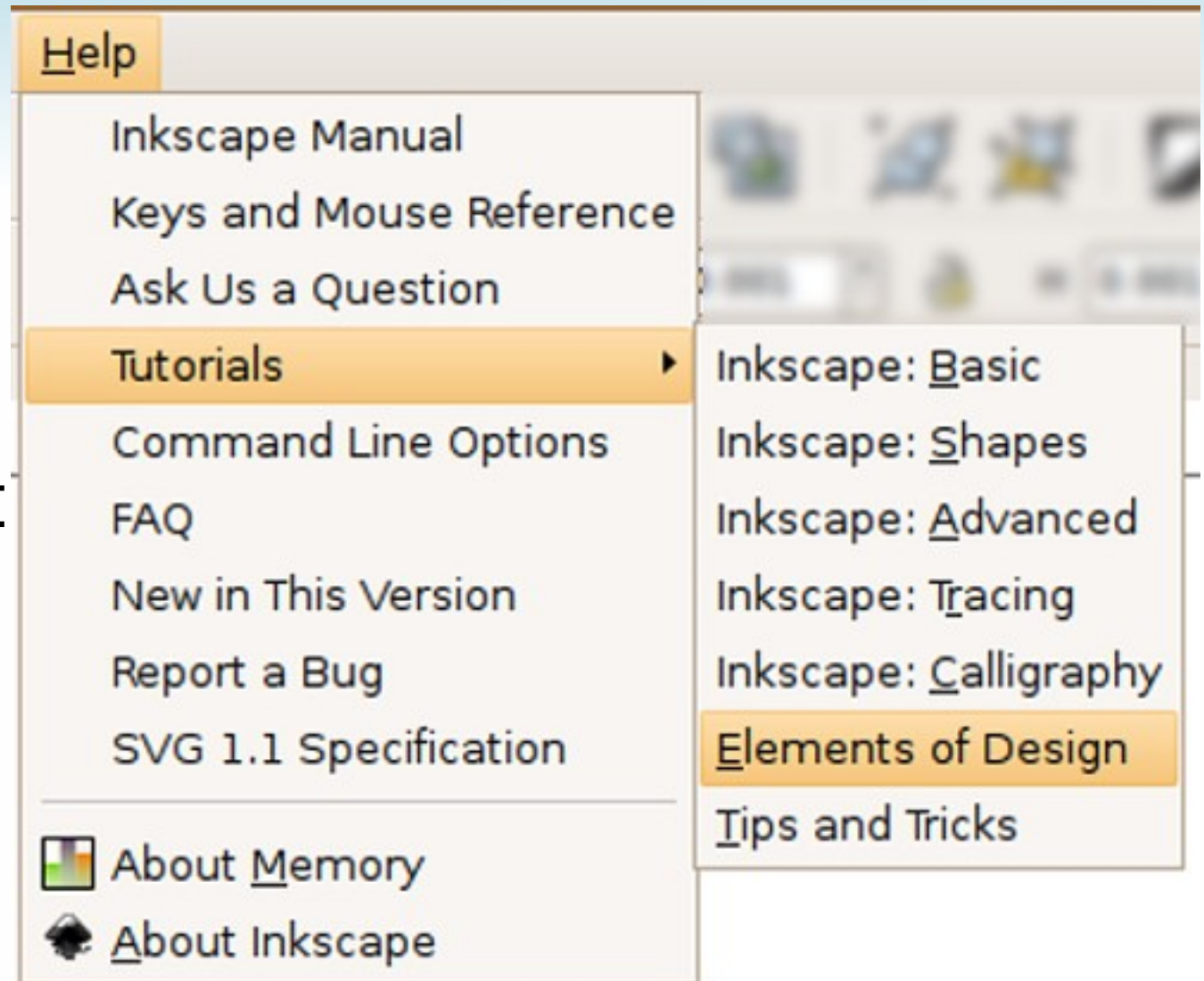


- You can clone anything...
- time for a live demo?
- **cross fingers, hold breath**



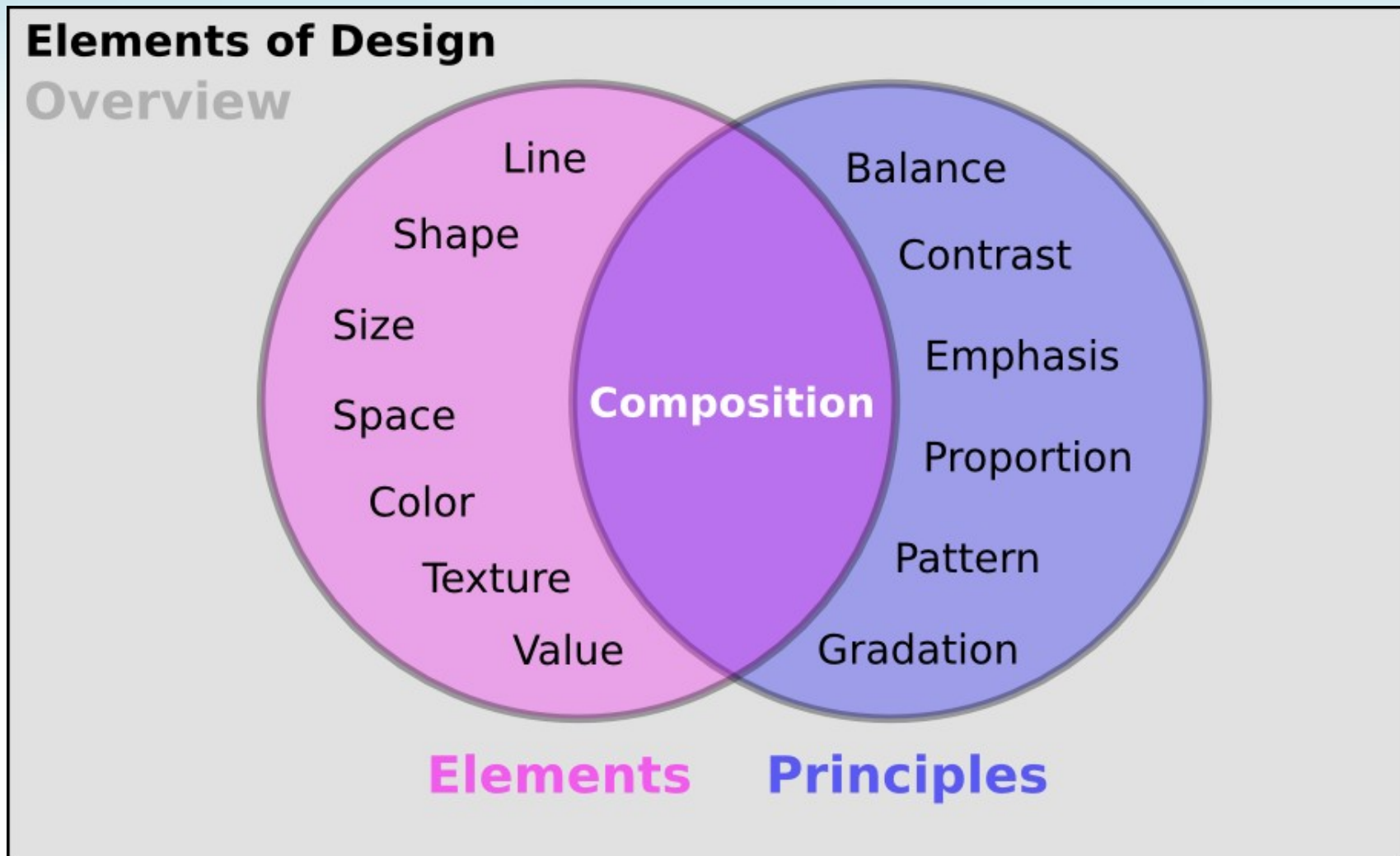


- There are Tutorials in the help menu.
- SVG format so you can work with them directly.





# Elements of design



From the Elements of Design Inkscape Tutorial



## Basic Info (and some examples)

<http://commons.wikimedia.org/wiki/Inkscape>

<http://en.wikipedia.org/wiki/Inkscape>

## Techniques, Tips, Tricks & Tutorials

<http://www.ffnn.nl/pages/articles/media/inkscape-text-tricks.php>

<http://inkscapetutorials.wordpress.com/>

<http://kalaalog.com/2007/11/01/inkscape-path-operations-basic-tutorial/>

<http://redhathigh.pbwiki.com/Illustration+with+Inkscape>

<http://screencasters.heathenx.org/>

## Tiled Clones

<http://inkscape.teekoo.com/index.php?select=bar>

## Bezier curves

<http://raikardesigns.blogspot.com/2007/10/fascinating-bezier-curves.html>

[http://en.wikipedia.org/wiki/B%C3%A9zier\\_curve](http://en.wikipedia.org/wiki/B%C3%A9zier_curve)

## Network Diagrams

<http://www.lynychconsulting.com.au/blog/index.cfm/2008/2/12/Pretty-network-diagrams-and-flow-charts-with-Open-Source-software>

<http://www.ioncannon.net/utilities/123/10-tips-for-creating-good-looking-diagrams-using-inkscape/>

