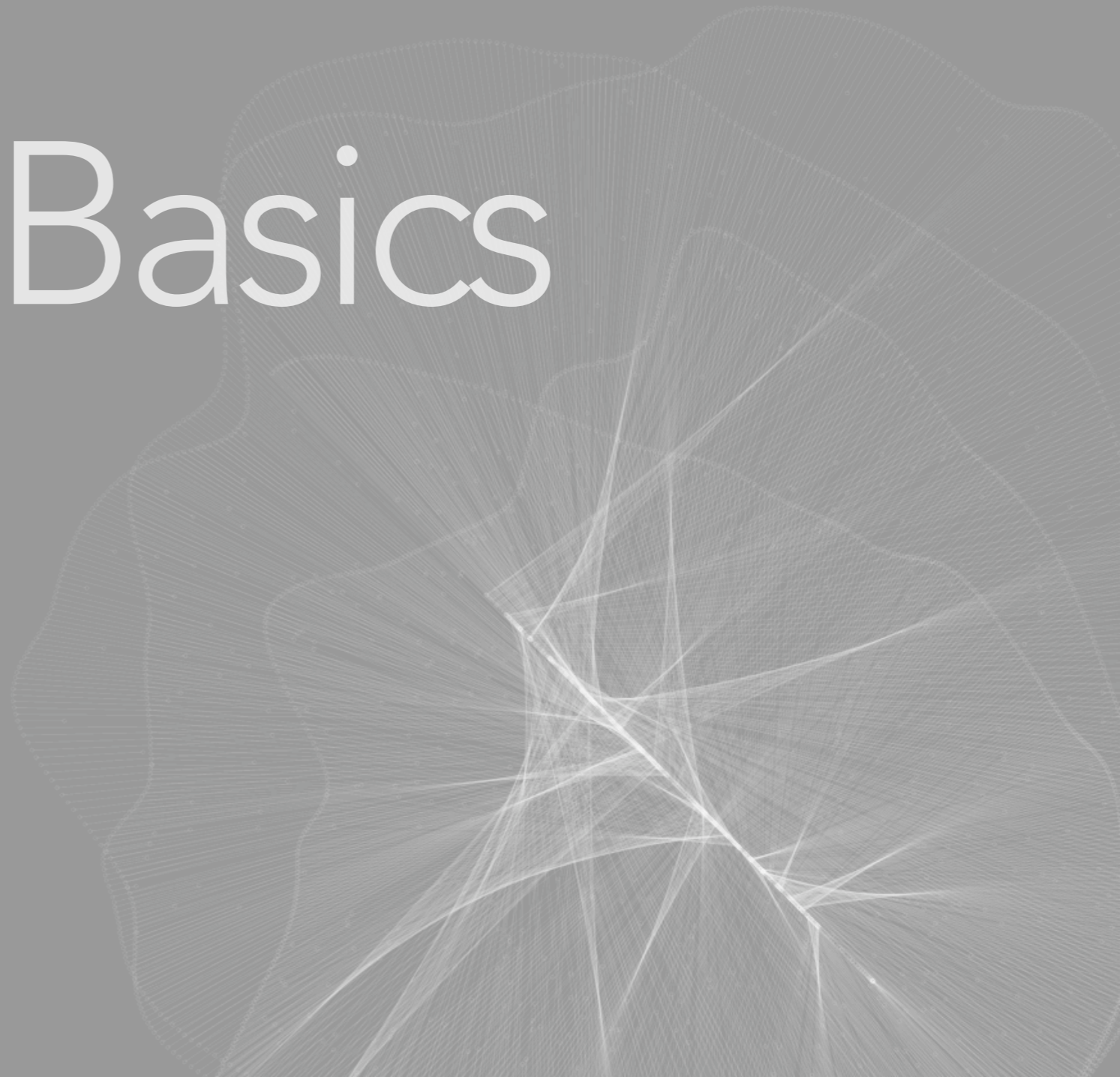


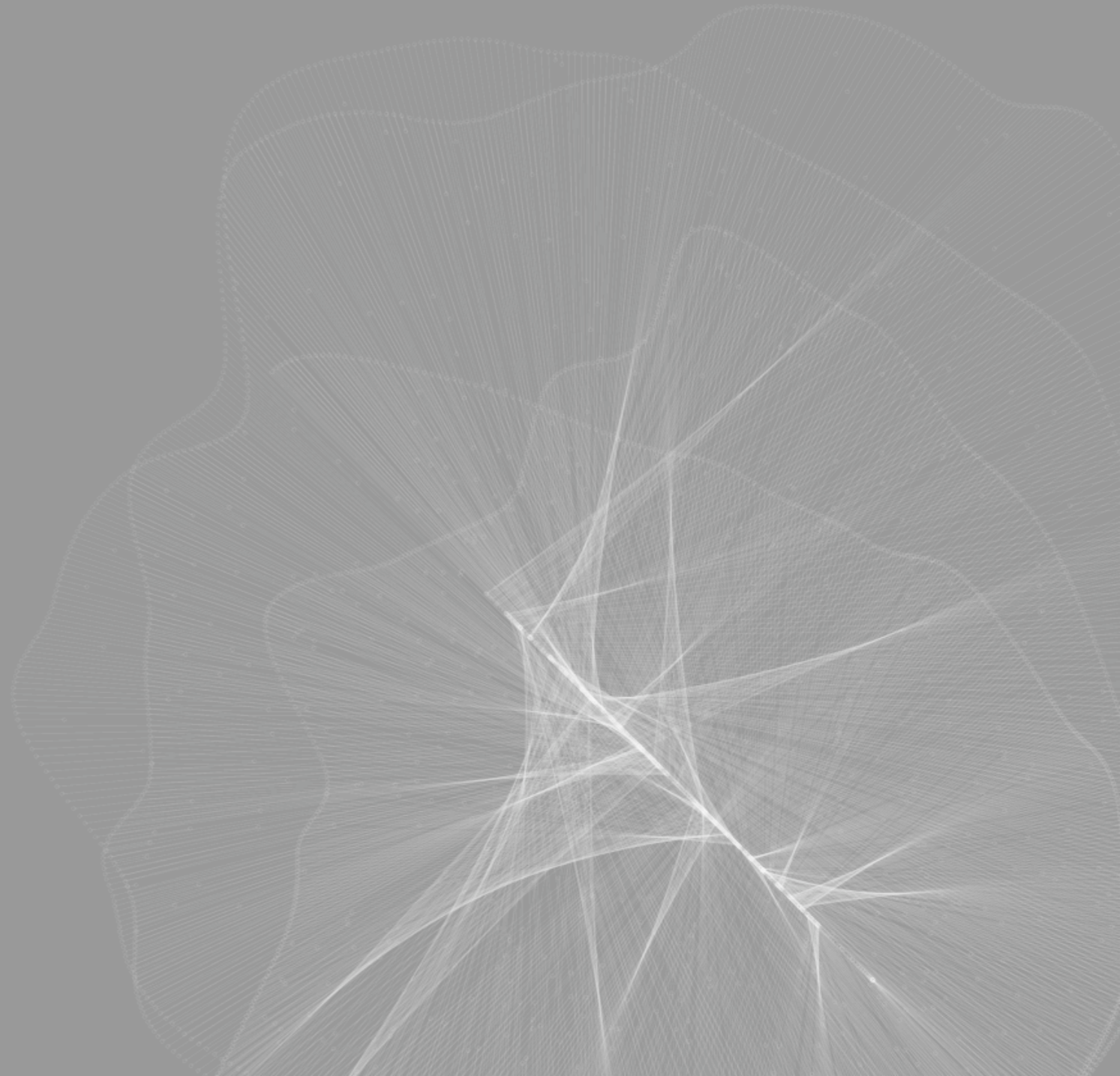
Canvas Basics





- Introduced by Apple in 2005
- Now in HTML5
- Patents? What patents?

Where is Canvas

Useful?



- Hmm.
 - Flash replacement?
 - Vector graphics?
- 

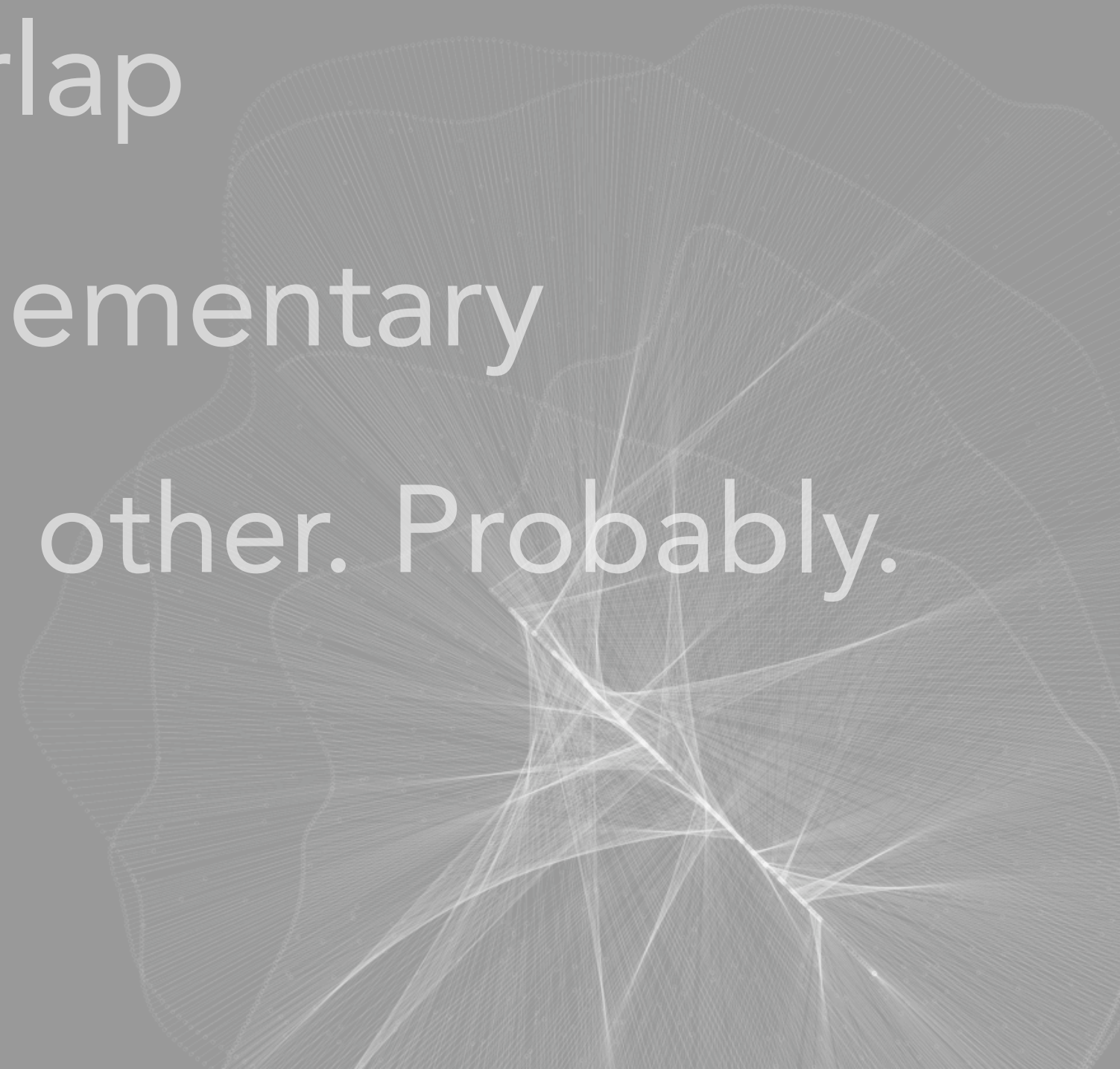
- Graphs, Charts, Live data
 - Generated graphics
 - Pixel manipulation
 - Basic Vector + Animation
- 
- An abstract background graphic consisting of several overlapping, semi-transparent circles. Within and around these circles, there are numerous thin, light-colored lines that create a complex, web-like or network-like structure. The overall effect is a subtle, technical, and data-oriented aesthetic.

Should I use

Canvas or SVG?

An abstract graphic in the bottom right corner consisting of numerous thin, overlapping lines that form a complex, organic shape resembling a flower or a stylized leaf. The lines are light gray and create a sense of depth and movement.

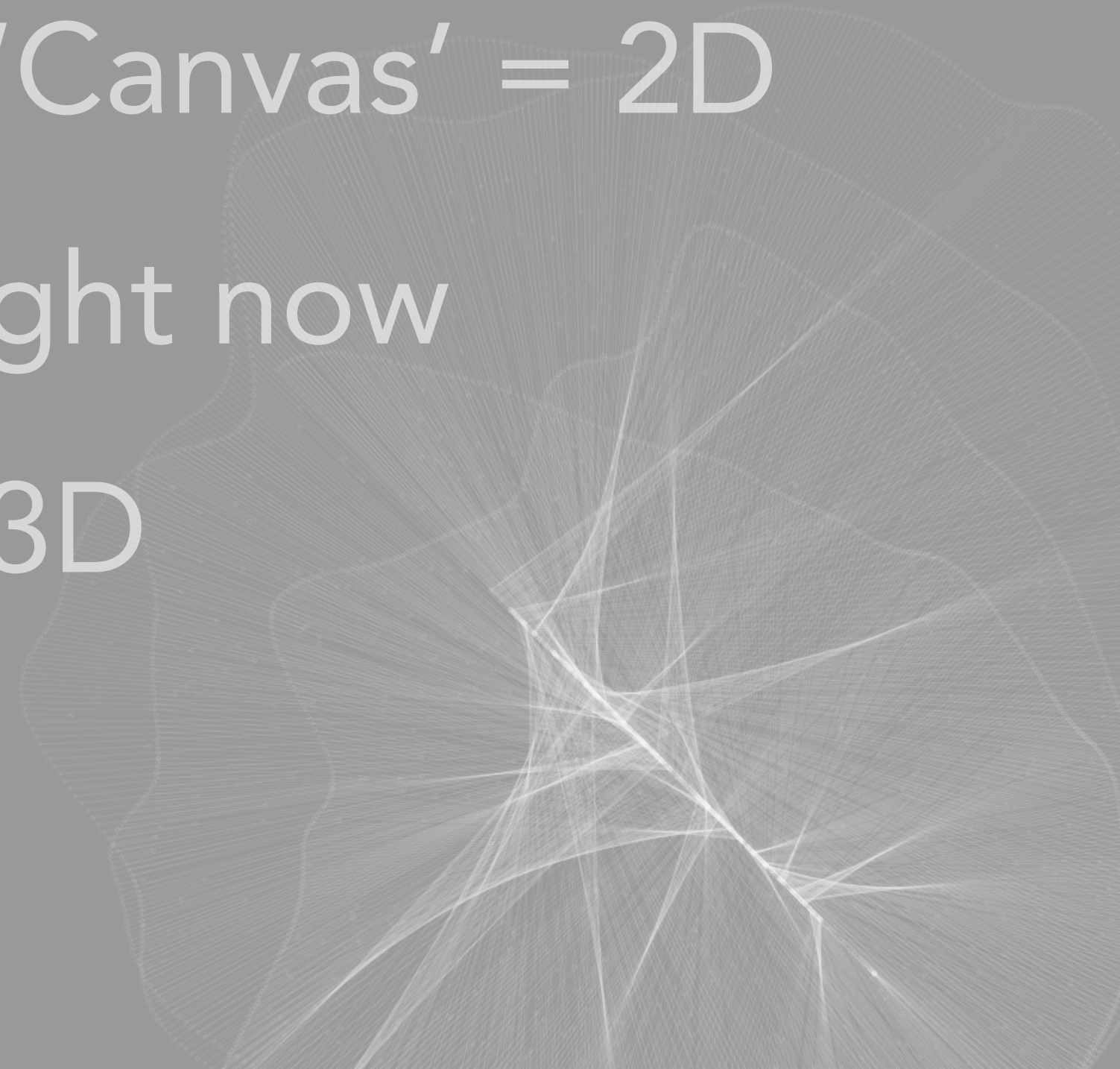
- SVG is DOM-based
- Canvas is procedural

- Some overlap
 - Not complementary
 - One or the other. Probably.
- 
- The background features a complex, abstract graphic on the right side. It consists of several overlapping, semi-transparent, wavy-edged shapes that resemble organic or liquid forms. Overlaid on these shapes is a dense network of thin, light-colored lines that intersect and connect various points, creating a web-like or neural network structure. The overall aesthetic is modern and technical.

- Canvas widely implemented
 - Has the mindshare
- 

2D or 3D?




- Generally 'Canvas' = 2D
 - At least, right now
 - WebGL = 3D
- 

What about IE?



Screw IE

The image features a solid grey background. On the right side, there is a complex, white wireframe pattern that resembles a stylized flower or a dense network of lines. The text "Screw IE" is centered horizontally and rendered in a clean, white, sans-serif font.

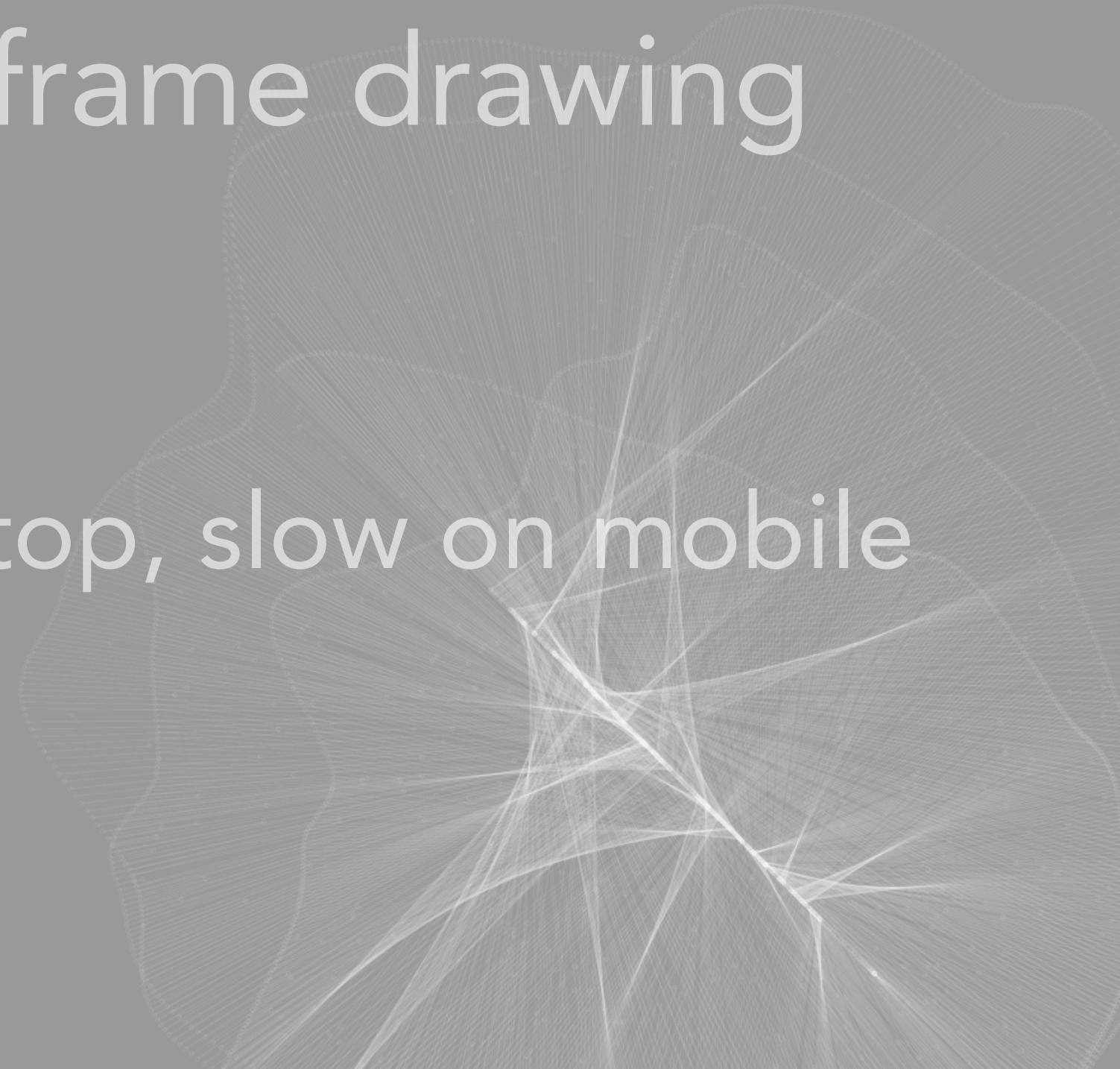
- ieCanvas
 - Chrome Frame
 - IE9 rumour...
- 

● Just use ExplorerCanvas

<http://code.google.com/p/explorercanvas/>

Animation



- Frame-by-frame drawing
 - CPU hog
 - Fast on desktop, slow on mobile
- 

Interaction





● Bring Your Own Events

Getting illustration / vectors

Into Canvas



- Not easy

- Opacity (<http://likethought.com/opacity/>)

- CS5, sorta



● Save as SVG first

● SVGCanvas (<http://svgkit.sourceforge.net/SVGCanvas.html>)

● My blog post

(http://www.mezzoblue.com/archives/2010/01/14/illustrator_/)

Pixel Manipulation



- Methods to access any pixel
- Adjust HSB, colour, etc.
- Realtime image filters

Resources



- <http://raphaeljs.com/>
- <http://processingjs.org/>
- [https://developer.mozilla.org/en/Canvas tutorial](https://developer.mozilla.org/en/Canvas_tutorial)
- <http://diveintohtml5.org/canvas.html>
- <http://www.canvasdemos.com/>

[mezzoblue.com/
presentations/2010/vanjs](http://mezzoblue.com/presentations/2010/vanjs)

