# Vector vs Raster Graphics

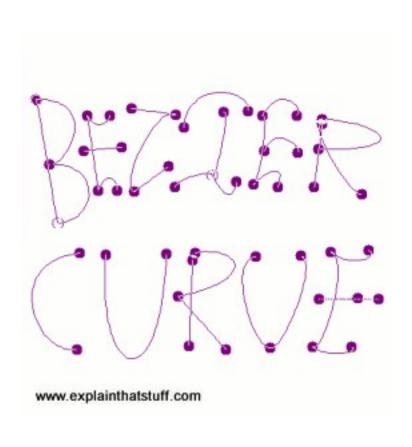


Vector Graphics

Raster Graphics

#### **Vector Graphics**

= Geometrical (mathematical) representation





# **Raster Graphics**

= Rectangular grid of colored elements



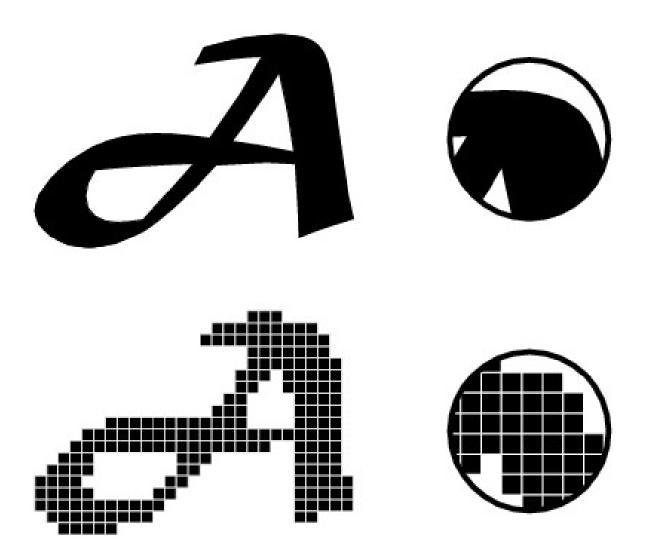


VECTOR VS RASTER

# Style



#### Zoom



#### **Arbitrary Content**

- Vector graphics is hard to make
  - General
  - Fast on hardware

- Raster graphics is hard
  - To edit meaningufully
  - To store efficiently



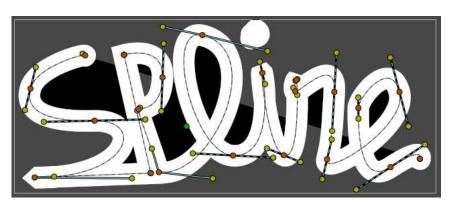


### Vector Graphics is used by Software

True Type Fonts

Illustrator

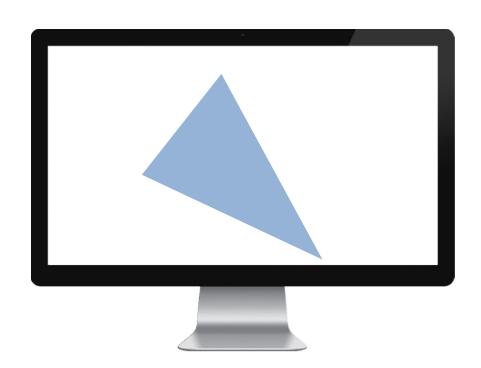
Maya

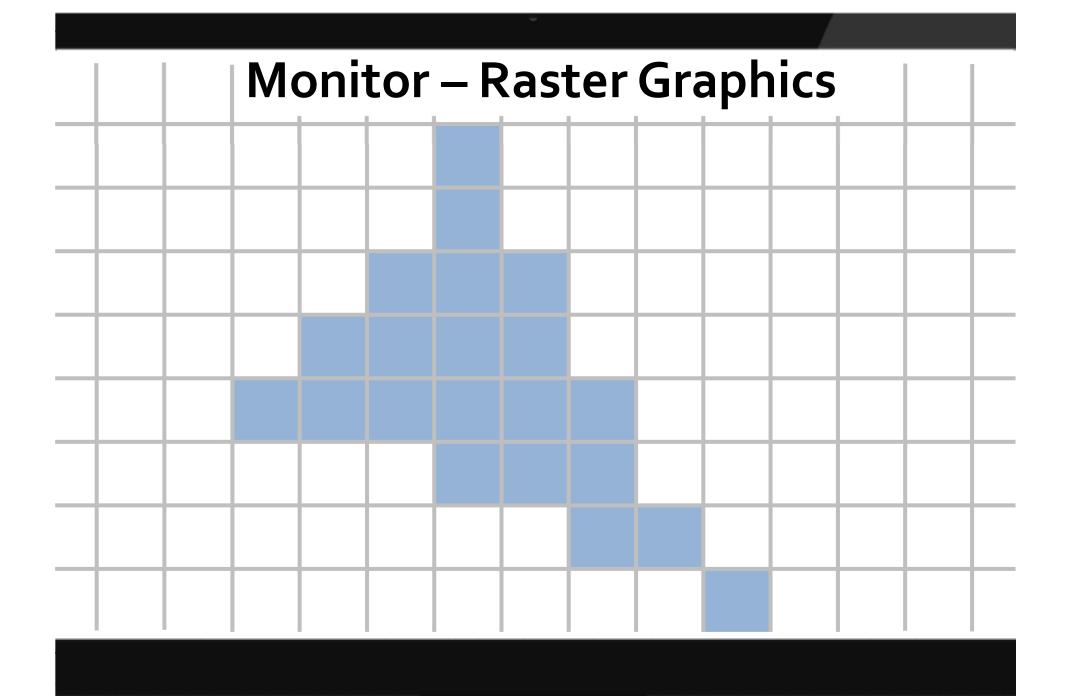






## Monitor – Vector or Raster Graphics?





### Raster Graphics is used by Hardware

- Monitor
- Handy
- TV
- Digicam
- Printer
- Scanner
- VR/AR
  - Google Glass
  - Holo Lens
- Mouse
- •









## Why is it used by hardware?

- Easy and cheap to produce
- Very fast
- Arbitrary content





#### From Software to Hardware

Conversion from Vector Graphics into Raster Graphics



