



COMP313

Aesthetics

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Aesthetics

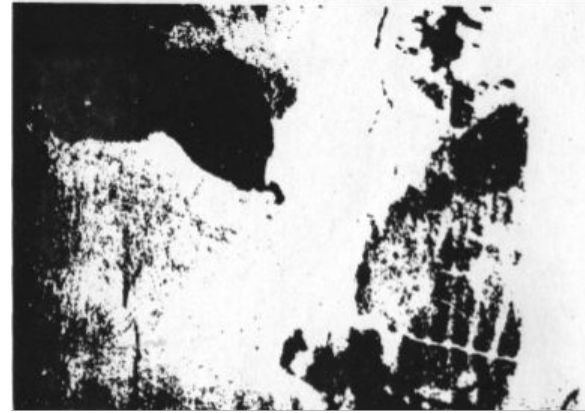


- The look of your game
- Game design is about shaping an experience
- The visual is part of that experience

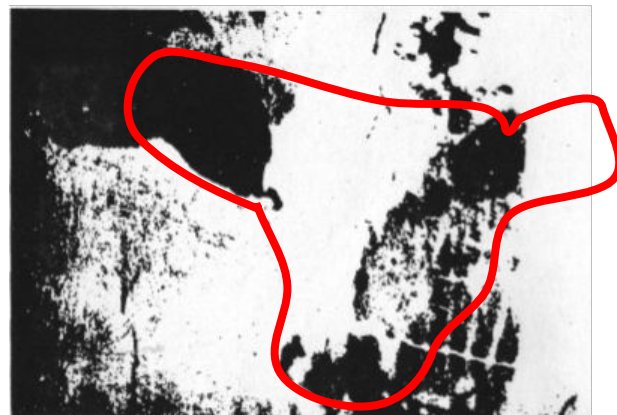
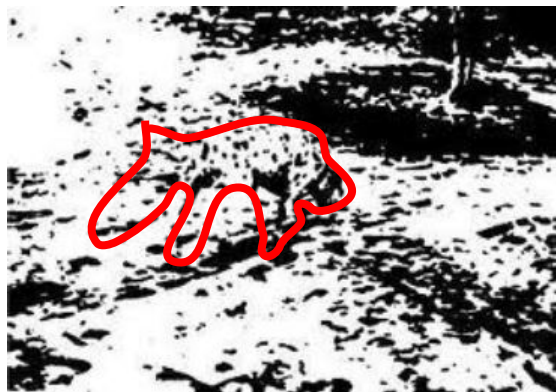
- Programmer art
 - Art is not merely about function
 - Art requires seeing

- Spend more time looking than drawing

Seeing



Seeing



Art types

- Concept art
 - Early stage
 - Help create vision
 - Wild, imaginative
- Placeholder (programmers)
 - Correct size
 - Often a simple coloured square
- Level of Detail
 - Art at different resolutions
 - Auto scaling can be an issue





Learn to draw

- You only get better by trying
 - Adult competent
 - Communication of ideas
 - The more you do the better you get
-
- Remember to look
 - Spend time looking at proportions
 - Understanding lighting
 - Seeing what things are - not how they appear



<https://2dgameartguru.com>





Vector

SVG - scalable vector graphics

XML markup description



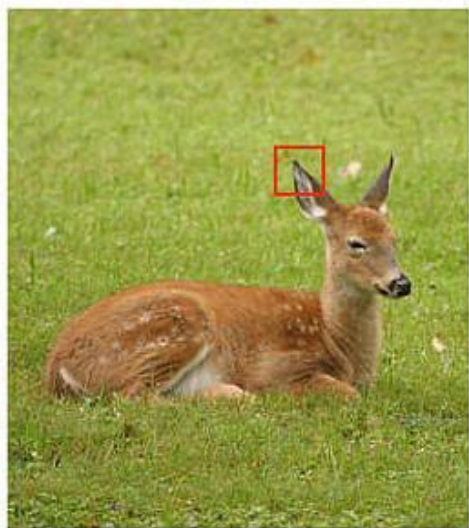
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<svg
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  .....>
  <g id="layer1">
    <path
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      d="m 28,259 v 20" style="fill:none;stroke:#000000;stroke-width:1;..." />
    <path
      id="leg1"
      d="m 28,278 1.5,8 -4,8" style="fill:none;stroke:#000000;stroke-width:1;..." />
    <path
      id="arm1"
      d="m 28,264 -7,4 4,7" style="fill:none;stroke:#000000;stroke-width:1;..." />
    <path
      id="arm2"
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    <path
```



Raster

Pixel based

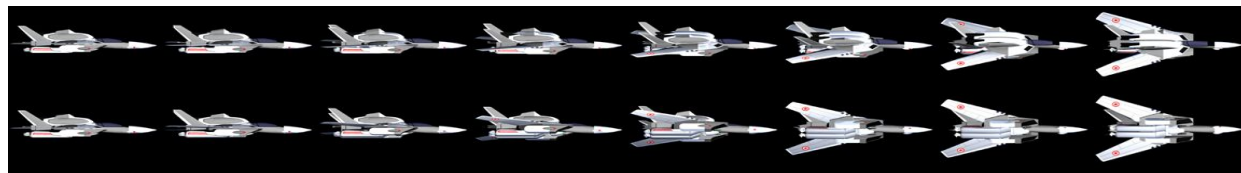
Each pixel defined





SPRITES

- Traditional 8-bit games
- A sprite is a small set picture that moves independently of the background
- Time pilot, Xervious, Golden Axe, Pacman, ...



TRANSPARENCY VS MASKING

- Blitting shapes other than rectangles

- Masking

- two copies, one real, one binary mask

- mask has just 1 bit per pixel

- Less storage than full transparency

- Colour key transparency - like used in GIF

- Select a certain colour to be transparent

- Copy operation ignores that colour

- You lose one colour





ANIMATION

- This is a sprite table
 - Each area is the next in a sequence
 - Like flip card book
 - Move the Blit rectangle over the
 - image after each frame
 - $(0,0,50,50)$ $(0,50,50,100)$ $(0,100,50,150)$ $(0,150,50,200)$
- Time pilot
 - Eight directions plane could face

