Professor Fox

Spring 2013

2D/3D Graphics

**Lesson 1: Animation Introduction**

**TODAY WE WATCH CARTOONS!**

**1) Attendance**

**2) Achievements**

**3) Class Census**

**4) History Notes**

1. 2D vs 3D
	1. **History of 2D Animation**
		1. EXAMPLES of Ancient Art
			1. 5,200 year old bowl from Iran
			2. 4,000 year old Egyptian burial murals
		2. People have long tried to tell stories, via sequential images
		3. EXAMPLES of More Recent Developments
			1. Jump forward a few millennia and you find items like
				1. Late 1800’s – Magic Lantern

First used to show scary images (devil, etc.)

* + - * 1. Zoetrope

While early forms existed c. 180AD china, the “modern” zoetrope came about in 1833, and was eventually named the Zoetrope (meaning “wheel of life”)

* + - * 1. 1879 – Eadweard Muybridge’s Zoopraxiscope
				2. Other forms include

Flip books

* + 1. CORE THOUGHT: X & Y axis only
		2. Not necessarily 2-tone flat art thought
		3. Can fake perspective to create and illusion of depth using lines, size and other cues, but still flat
		4. Think about paintings. Flat canvas, depicting geometric shapes
	1. **EXAMPLE**
		1. Animated in flash, but you can see how a 2D animation functions
	2. **CORE CONCEPT: Keyframes & Tweening**
		1. Keyframes: Most important images
			1. Traditionally drawn by lead artist
		2. Tweening: Frames that fill in animation to complete smoothness
			1. Done by assistant or “inbetweener”

**SIMPSONS OPENING**

* + - 1. OR by outsourced labor!!
			2. Lucky for us, the computer will be doing most of the work!
	1. **3D Animation**
		1. CORE THOUGHT; X,Y & Z Axis
		2. Frequently based on scalable textured models moving in space.
		3. Similar to a virtualization of Stop Motion tecniques
	2. **EXAMPLE**
		1. Show balance (Hungary 1990)
		2. Stop Motion vs 3D
			1. Armatures react to real light and motion,
			2. 3D Models react to virtual environment
			3. Perspective is automatically accounted for
	3. **BLENDING OF THE TWO**
		1. Beauty and the Beast Clip
		2. Compositing
			1. We will be doing tons of this in after effects.