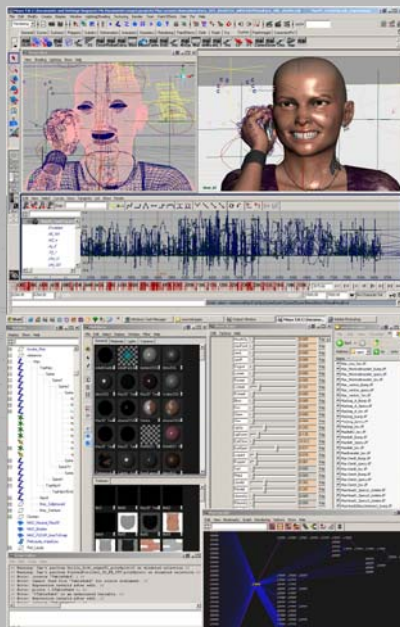


Virtual humans entering new area of applications



Why is it so hard to be simple ?



The 3D world complexity

The conquest of illusion

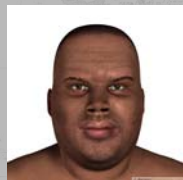
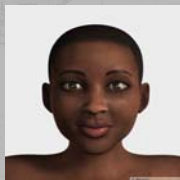
Cg artist the new artisans

Science->Art->Validation->Science

Virtual Humans



Virtual Humans



Virtual Humans



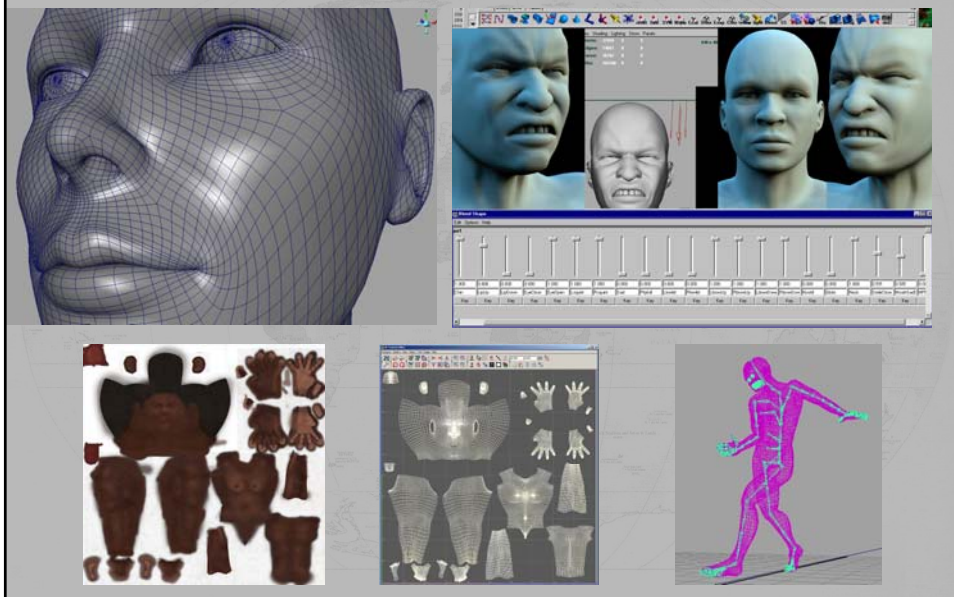
Virtual Humans



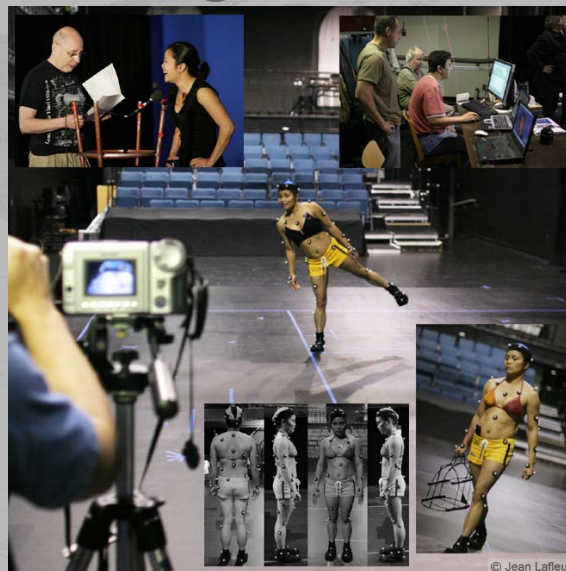
When you are close then it takes even more energy

Why ?

Behind the 3D scene



The challenge of mouvement



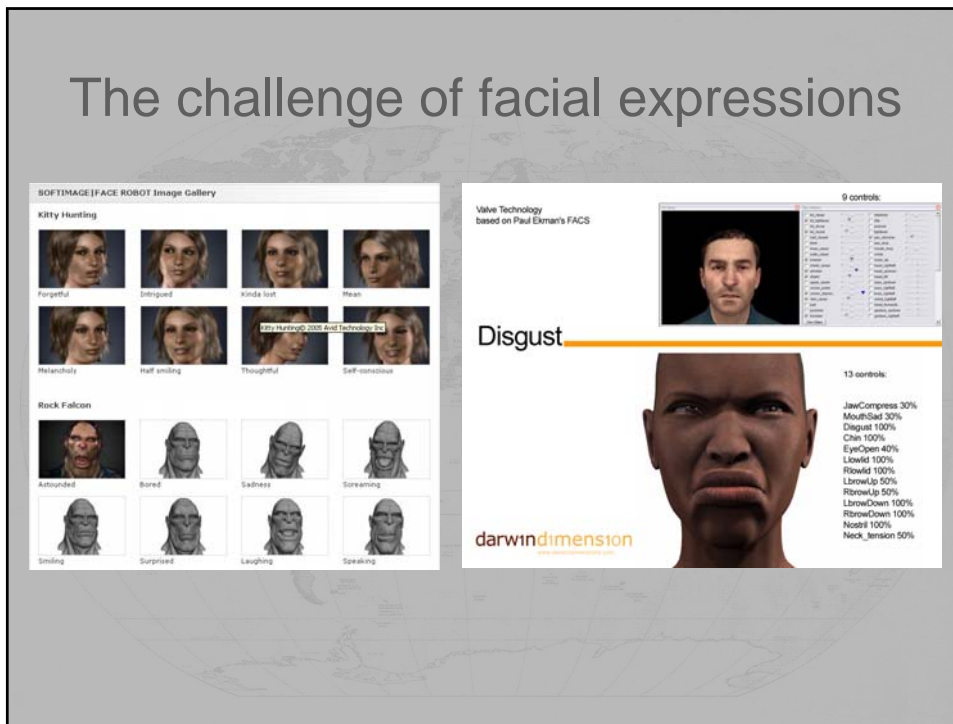
Motion Capture



The challenge of 3D productions



The challenge of facial expressions



Validation Process

First Validation and Second Validation for Virtuals Humans

Paul Ekman : FACS

Gary Faigin : The artistic complete guide to facial expressions

Reflex System Inc

Softimage Face Robot

Validation by experimentation



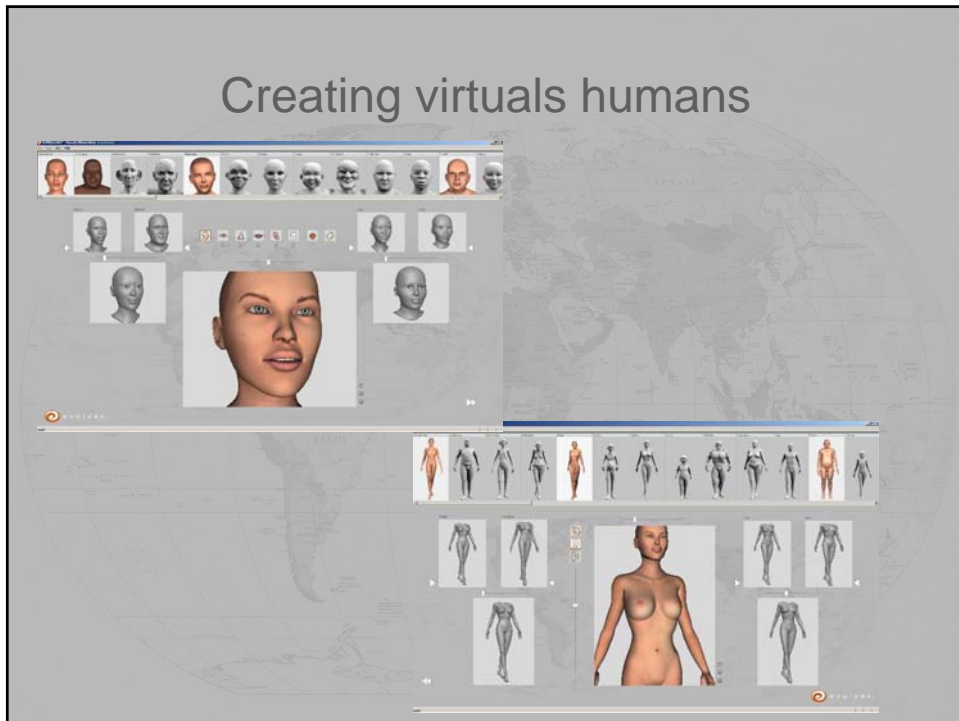
Validation by experimentation



The challenge of simplicity

- creating virtuals humans
- animating virtuals humans
- sharing attributes of virtuals humans

Creating virtuals humans



Animating virtual humans



Sharing attributes of virtual humans

Sharing facial expressions

Emotional Recipes	Barbara	Venus	Elin	Maple	Emotional Recipes	Papa	Miguelina	King	Lylan
Seriousness					Seriousness				
Head-Cam 0.2					Head-Cam 0.2				
Head-Left 0.2					Head-Left 0.2				
Head-Right 0.2					Head-Right 0.2				
Eye 0.2					Eye 0.2				
Mouth 0.2					Mouth 0.2				
Smile 0.2					Smile 0.2				
Pride					Pride				
Eye 0.2					Eye 0.2				
Head-Cam 0.2					Head-Cam 0.2				
Head-Left 0.2					Head-Left 0.2				
Head-Right 0.2					Head-Right 0.2				
Eye 0.2					Eye 0.2				
Mouth 0.2					Mouth 0.2				
Excitement					Excitement				
Head-Cam 0.2					Head-Cam 0.2				
Head-Left 0.2					Head-Left 0.2				
Head-Right 0.2					Head-Right 0.2				
Eye 0.2					Eye 0.2				
Mouth 0.2					Mouth 0.2				
Smile 0.2					Smile 0.2				
Head-Cam 0.2					Head-Cam 0.2				
Head-Left 0.2					Head-Left 0.2				
Head-Right 0.2					Head-Right 0.2				
Eye 0.2					Eye 0.2				
Mouth 0.2					Mouth 0.2				
Concern					Concern				
Head-Cam 0.2					Head-Cam 0.2				
Head-Left 0.2					Head-Left 0.2				
Head-Right 0.2					Head-Right 0.2				
Eye 0.2					Eye 0.2				
Mouth 0.2					Mouth 0.2				
Surprise					Surprise				
Head-Cam 0.2					Head-Cam 0.2				
Head-Left 0.2					Head-Left 0.2				
Head-Right 0.2					Head-Right 0.2				
Eye 0.2					Eye 0.2				
Mouth 0.2					Mouth 0.2				
Fear					Fear				
Head-Cam 0.2					Head-Cam 0.2				
Head-Left 0.2					Head-Left 0.2				
Head-Right 0.2					Head-Right 0.2				
Eye 0.2					Eye 0.2				
Mouth 0.2					Mouth 0.2				
Smile 0.2					Smile 0.2				

Sharing facials animations



The Darwin Agency Project



evolver.

The university tour

Sharing IP with students

The benefits of topological equivalence

Completed actors in the Darwin Agency