

Di-Simulated Crowds (2018)

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Voice-over transcript

Italic: Online tutorial enacted by a robot speech voice

Normal: Anna Ådahl

You can use the default pedestrian (kan komma att ändras till character)

He is a lowres polygon mesh guy all set up for you to use.

Once a character is in the Crowd FX system it's called an actor.

Actors are often bipeds but they can also be quadrupeds or any type of single polygon mesh object that skin to a rig

Greetings my name is Mason. And I am a new breed of Iclone character complete with my own manerism detailed characteristics

The crowd agent is artificially intelligent acting within a multi-agent system. It cannot write or read. It only simulates. It leaves no traces of physical presence.

An extra of limited capacity acting in the periphery.

Canetti describes a simulation as a transitional stage between imitation and transformation. Where the intention is to conceal what one is rather than to pretend to be what one is not.

Crowd simulations are today's digital visualizations of a programmed collective body.

Algorithmically organized humanoid corpuses. They propose a choreography of mute bodies programmed intelligently to act collectively.

You can quickly create crowds with large numbers of characters that react intelligently to each other and to their environment.

In the behaviour tree is where you can make the actors do what you want.

This mass choreography is flawless in its coordination.

It appears as a puddle of mercury and petrol shimmering in rainbow colours. A perfect swarm avoiding any collision.

We operate according to X and Y

it is the Z that differentiates us from the birds and fish.

Avoiding collision keeps the crowd's flow.
Avoiding each other preserves the flow.

*The actors move from one goal to the next so you can move the goals around as you like to define the crowd's flow.
After actors reach their final goal, they just generally keep moving around it unless you tell them to do something else.*

Our collective gestures need to be continuous for the efficiency of the given system. Digital fluidity is a resolvent strategy of managing peoples' lives. A flow enabling continuous production modes.

Which crowds are represented? Who needs to be programmed or systematized?

Where is this camp? A very clean campsite. Perfectly ordered.

I get closer but they dissolve. I want to zoom in be part of the crowd, see the people, but am stranded on a materia.

An image of the crowd seen from afar, as a moving mass, a faceless bound materia, refers back to early crowd theory of the crowd as a mob where the individual ceases to exist.

I am in the crowd I can nearly touch the others. The physicality and dynamics are palpable.

You see the actors are all moving towards the goal object that was created automatically with the new pedestrian crowd command. Goals are special objects that actors always move towards like a magnetic force.

When creating a crowd, there are laws bound to the collective behaviour which need to be applied. These laws determine the politics of the given crowd.

Programming a crowd is a political act

Most crowd simulation software emerged from the search to create a warrior, a destructive force. The digital representation of the crowd becomes part of a violent form. It is produced to kill or be killed or damaged. It is then used in crowd management for safety purposes: to avoid stampedes, collisions, catastrophes, vital loss.

Crowd simulation proposes a crowd's behaviour while the human tracking device studies it.

The focus is the same but human and physical factor differ.

In both cases humans and bodies are referred to in boxes.

Multitarget tracking applications wants to bridge the gap between humans and computers.

We are all part of a digital web of data that connects us. Used to predict and model our collective behaviour.

Online in a digitized crowd you are atomized, isolated within the physical collective.

We navigate a world we do not apprehend, creating a sense of alienation, a phenomenon which increases the possibility of polarisation and division.

Our body defines how we understand our environment and our actions. It cooperates with others to create collective gestures and patterns. As herds we originally defined the dependence, we have of each other for our co-existence. To simulate this intellectual, emotional, and functional collective dependence mathematically is yet to be done.

When observing today's crowd simulations we see subjects, agents in organized patterns correctly negotiating space and others. The cooperation is impeccable.

We are not impeccable. The algorithms programming the ideal digital crowd do not encompass our defaults. On the contrary they use default settings to reproduce us virtually.

We cannot but understand the representation of us as crowds through our own physical experience and senses. When we enter a crowd we encounter people, each with their smell, aura, personality, and history. The crowd is not firstly defined by its dynamics but by its people.