- the SuperCollider synthesis engine (but not its programming language)
- hsc3, the Haskell bindings to SuperCollider
- the xmonad window manager
- the vim text editor
- the tmux terminal multiplexer
- the tslime plugin for vim

Other open-source tools are essential for the performance, including:

- an Arch Linux computer
- jackd
- the Calf Jack Host
- patchage

RENICK BELL I improvise music performances through live coding using a software library that I have written called Conductive. Live coding, or the performance through programming, enables a performer to manipulate symbols rather than use physical gestures to carry out a performance. For me, physical gesture is more limited in expressivity than manipulation of symbols representing abstractions; while humans have learned to use a complex vocabulary of gestures to produce art, the realtime manipulation of text-based symbols may increase the range of what is expressible. I also feel it is more convenient than typical graphical software that a user manipulates with a mouse. Through live coding, I achieve a text-based control center. I can specify complex parameter changes to be executed simultaneously while using a variety of existing programming tools to increase efficiency. From another perspective, live coding extends algorithmic composition and turns it into a live performance rather than a write/compile/run loop from traditional software development or electronic music composition. Because the music is generated algorithmically, I am often suprised and challenged by the resulting output. With these tools and methods, I can explore combinations of sounds and rhythm patterns, most of which I could not achieve without the use of my software. I am seeking such experience for myself in performances. At the same time, I want to continually make the code that I use more expressive. Exploration of these areas fascinates me.

## GREGORY BENNETT PANOPTICON I



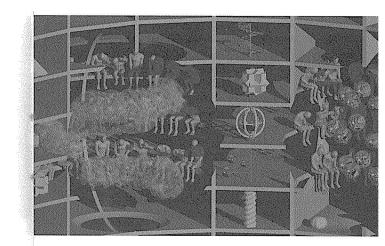
Single-channel video 2015

14'33"

WWW.GREGORYBENNETT.NET

"Panopticon" is a continuation of an ongoing series of digital still and moving image works which feature groups of digitally generated and animated groups of figures engaged in often complex activities, frequently in relationship to specifically created digital environments. These works create views of intricate digital colonies from elements which are produced in a professional 3D animation software program. Here an endlessly rotating point-of-view of a circular panoptic structure is presented, exploring conceptions of the utopian and dystopian, constructs of order and control, and the spaces between human and technological agency. The panoptic construction is populated by an ever-expanding taxonomy of animated figures, plants, objects, and architecture which interact, assemble and re-assemble, simultaneously fixed and unstable, trapped in ceaseless loops and cycles in a form of animated stasis.

The Panopticon was an institutional design concept created by 18th century English philosopher Jeremy Bentham, wherein a single watcher is able to



observe all the inmates of an institution simultaneously. Inmate knowledge of this surveillance would be an effective means of self-monitored behavior control. Originally considered a progressive and enlightened solution to societal problems, the Panopticon has come to be read as a central metaphor for modern "disciplinary" societies and their pervasive inclination to observe and normalize, most notably by French philosopher Michel Foucault in his work Discipline and Punish (1975).

A generic animated figure is employed as a building block in this creation. The replicated figure is assembled and reassembled into units of performed actions, loops and cycles, creating ongoing series of patterns of movement vocabulary. These bodies' movements are brought to a form of uncanny life using two methods, activated either by hand using key frame animation, or by the use of digital motion capture whereby a live performer's bodily motion is recorded as 3D movement data, and then applied to a digital character's skeleton. The combination of fluid captured motion with the generic digital form can lend an eerie 'liveness' to the figures, creating ambiguity around their status as performers with inherent agency.

Natural elements such as plants are animated using dynamic simulation tools whereby natural phenomena such as wind, gravity, bounce and friction are generated algorithmically, and can be customized by altering numerical values via software interface controls, replicating a convincing realism in natural movement which is extremely challenging and time-consuming via traditional key frame methods.

The corporeal body is transformed into proliferating avatars whose resistance to the panoptic structure seems negligible – they exhibit a range of responses from resignation, to ecstatic ritual, to enacting seemingly mindless and/or compulsive repetitive actions, and small acts of resistance to this order seem futile. Here structuring principles of cycles, loops and modularity can be seen as resisting ideals of linear progression, and time and space become ambiguous factors here – the environment rotates past the viewer situated in a kind of metaphysical 'nospace' reminiscent of a video game environment.

Tethered to the endless cycle of looped actions these figures resist the conventions of linear narrative progression, trapped in a kind of compulsive

stasis with no clear beginning or end. They also form discreet units of action, which can be arranged and rearranged at will in the creation and construction of the work. The loop forms the most elementary form of the structures of programming language, which involves the altering of the linear flow of data structures through control structures such as the loop. Lev Manovich champions the loop as 'a source of new possibilities for new media', and conceptualises it as an 'engine' which puts narrative in motion. Loops retrieved from the 'database' are a 'multitude of separate but co-existing temporalities' - units which do not so much replace each other in a ordered flow, but are rather are already-activated elements which are composed in one of any possible sequential chains. This condition of the loop and its apparent inability to achieve resolution, or perhaps the illusion that it creates of some kind of perpetuality, recalls animator Robert Breer's comments on metamorphic transformation.

Drawing on and remediating a range of sources including the photographic studies of Eadweard J. Muybridge, nineteenth century optical toys, and the contemporary digital video game, this work presents figures which occupy a space between the animate and the inanimate, between automata (devices that move by themselves) and simulacra (devices that simulate other things).

Another touchstone is the elaborate geometric 'choreography' of 1930's Hollywood musical director Busby Berkeley which featured armies of women whose individualism is also radically reduced – as though

forward, things are going, but sideways, obliquely, down and backwards, not necessarily ahead. The sense of motion is the issue. That idea seems hard to defend, because our locomotion drives us forward with our faces looking at new things. But since that movement is toward oblivion, in my philosophy anyhow, it might as well be backward. It's a delusion to think you are getting anywhere." Robert Breer

all cast from the same mold. Here 'their identities are completely consumed in the creation of an overall abstract design'. It is not so much choreography on display, as Lucy Fischer describes, but 'kinetic designs' and 'mechanical decor', they are 'elaborate pre-programmed machines for action' and 'repetitive movement'. In the creation and execution of this work a hybrid space is explored where human and natural agency are uncertain: phenomena of nature

are simulated algorithmically, human activity is seems essentially passive and annulled, where gesture does not follow thought or emotion, but instead is generated zombie-like by another's will.

**GREGORY BENNETT**'s art practice has been a direct engagement with high-end industrial 3D animation software since 2003. As an artist he was instantly struck by the possibilities of this medium - particularly its ability to create a fully realized and navigable 3D 'world', and it's as yet unrealized potential as an expressive artistic tool beyond the commercial and aesthetic imperatives of mainstream entertainment. Bennett works directly into 3D modeling and animation software, taking the actions of a generic male figure as a point of departure to explore conceptions of the utopian and the dystopian. His animations are created in a modular fashion, building up units of performed movements, loops and cycles (both animated and motion-captured), creating a sometimes complex movement vocabulary. Formally Bennett is interested in embracing the inherent qualities of 3D digital production and the virtual, and of the operations of the 'database' as a pliable creative tool. He also became interested in how the image making process could be characterized as a creative interface between artist and complex software, raising the question: how might the practical interaction with digital authoring tools impact the rendition of a final work? Digital moving image making tools offer infinite possibilities for image generation and manipulation. Thus, the creative relationship between artist and software can be seen as increasingly requiring a series of negotiations between the possibilities of unlimited potential and the need for productive boundaries and constraints, and the lure of the generic and the predetermined versus the challenge of the original and the particular.

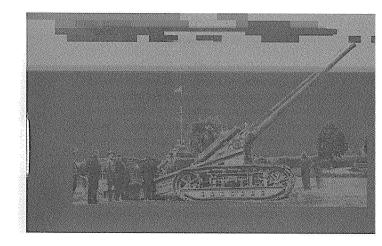
## **ALINE BIASUTTO** ECSTASIS I

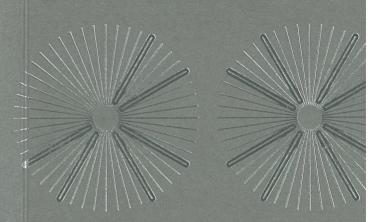
4-channels video 2005-2014

614

WWW.ALINEBIASUTTO.COM

"Ecstasis I" is a video on 4 screens featuring the correlations between film, the war and the rides in the amusement parks and the logistics of perception in popular culture. The rides are framed, cut: only appear on the screen some parts, fragments of the machines operating in the sky. These vessels, these articulated arms of catapults, these spears, those big wheels, trimmed with electric colored lights moving in the sky sometimes as a hypnotic tool, sometimes as a menacing machine, then sink into the horschamp. We distinguish on some pictures, the body of viewers taken in the movement of the machine. Footages of the First and Second World War are juxtaposed to these images that evolve to a contemplative, hypnotic pace. These extracts from a documentary show the handling of weapons: machine guns, artillery and other guns. The soldiers come in. They no longer suffer the movement but they initiate it. The mechanisms of these war machines fit directly related to those used in the manufacture of rides. Modeled colored 3D images are displayed on a fourth





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