



Anthropomorphic Things: Disrupting the Boundary Between Subject and Object

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Abstract

This poster presentation displays visual documentation of my practice-research investigations into the forms and materials that evoke the uncanny with the illusion of presence. I found that such uncanny experiences of presence are evoked by objects that are human in form and proportions, by objects that are placed within a narrative structure, by objects that move autonomously, and by objects whose motion is responsive to the viewer. I also argue that uncanny experiences are an important subset of aesthetic experiences because such experiences challenge us to face our fears and deep-rooted assumptions, thus forcing us to question our presumptions about what it means to be human. The question that informs my practice is: what elements push an object toward forming a seemingly sentient identity? This question is addressed through theoretical investigations, through experimentation within studio practice, and through observations of the artwork and its viewers. The culmination of this study is a series of human-sized uncanny objects (which I describe as sculptural puppets or minimal robots) that disrupt our perception of lifelikeness.

Keywords

Figurative Sculpture, Puppetry, Robotics, Uncanny, Lifelikeness, Presence, Human Condition

Introduction and Overview

This project integrates knowledge and methodologies from sculpture, puppetry, and robotics to create aesthetic experiences of 'presence'. The artistic outcomes are relatable freestanding humanoid creatures, with human dimensions, and some autonomous motion, that convey the illusion of a living presence, as well as personality and character. The intent is to instigate reflection on how we emotionally connect with lifelike objects within a cultural context in which robots (objects with presence) are starting to become commonplace across society. I describe my works as minimal robots, with just enough motion and response to create a momentary illusion of life. In my investigation into how to create the illusion of lifelikeness, I found that this sensation is evoked by objects of human scale with anatomically correct proportions, by objects with autonomous motion, and by objects that mechanically respond to the viewer. I also explored how to convey personality and character, and found that while maintaining neutral facial expressions, I can convey personality through materiality,

costumes, and (minimally simple repetitive) behaviors. I position my artistic output somewhere between puppetry, an ancient art that has always relied on the illusion of a living presence as a means of expression, and figurative sculpture, which uses the visual language of the human body to create an experience of contemplation. In the process of creation, I review studies in robotics that reveal how to design lifelike creatures that communicate specific emotions, as well as studies that examine how humans interact with affective robots. My artistic output is further informed by documenting observations of the creation process and of viewer's interactions with the artworks. I found that I was able to create playful situations for those who encountered my creations.

Motivation

The desire for 'presence' is a fundamental human craving, as we are social animals, and uncanny experiences of 'presence' with objects can be pleasurable or thought provoking or playful. My artistic production intends to create these types of experiences, and to instigate reflection on the boundaries between subject and object within a contemporary cultural context in which objects (such as robots) are becoming increasingly personalized and personable. With advancing technology, there is an ever-increasing use for robots in applications that involve personal interaction with humans. [1] [2] [3]

This arts-based study intersects with the field of human-robot interactions, addressing the question of how an object can evoke a sense of presence and take on a personality. I also address the uncanny valley [4] [5] – the point at which the illusion of lifelikeness provokes feelings of discomfort; I examine how to avoid it as well as how to use it to instigate reflection about our presumptions of humanness. [6] The study of human-robot interaction is becoming very important as technology moves towards the use of robots for companionship, and this is a scientific field in which aesthetics will play an increasingly important role. [7] [8]

This work looks beyond human-robot interactions with a review of the history of puppetry and a survey of figurative sculpture, which reveals that uncanny objects with presence play an essential role in aesthetic social criticism. [9-19] The act of looking at and reflecting on images of our

selves, of our fellow humans, is the most fundamental way by which to contemplate the human condition.

Anthropomorphic Things

Suzana Jofre

Suzana Jofre, shown in Figure 1, is a 6-foot tall marionette with articulation at her head, shoulders, elbows, wrists, and knees. She has been in performances in which I am manipulating her strings, and performances in which her strings are drawn by motors (<http://youtu.be/eI7njlHzLUA>). A sensor triggers her head to turn towards the viewer when standing beside her.

Suzana's style of dress is inspired by the canon of Camp aesthetics, which includes women's clothes of the twenties, feather boas, and short bangs. [20] Susan Sontag's 1964 seminal essay "Notes on Camp" equates an appreciation of camp with an appreciation for the arts of the masses or 'folk art'. [20] My references to Camp and to puppetry (a folk art) point to the pragmatist view of aesthetics I hold.

I left the face artificially white, in part to reference the artificially heavy make-up of Camp glam, but also to allude to Suzana Jofre's own artificial nature (is it less uncanny if it doesn't try to 'fool' us?). I also used intentionally visible and decorative strings to directly state her marionette nature.



Figure 1: Suzana Jofre ©2014 Ana Jofre



Figure 2: Joana Jofre. ©2014 Ana Jofre

Joana Jofre

Joana Jofre, shown in Figure 2, is a 5-foot tall figure with articulation at her head, shoulders, elbows, wrists, hips, and knees. Her face and postures are intended to look naturalistic, so as to almost 'pass' as human, and when placed in a gallery setting, she gently taps her hand on a table (<https://youtu.be/zXZvZ6wsRAw>). This character was used for public interventions/performances, in which she was placed in public settings, such as bars, cafes and parks.



Figure 3: Joana makes friends at the park. ©2014 Ana Jofre

This poster documents interactions with the public during interventions. For example, figure 3 shows one of many episodes that occurred when taking her out to a public park. I found that people were quite eager to engage in playful acts upon encountering her, and that taking selfies was a particularly popular form of engagement.

Monster Jofre

Monster Jofre, shown in Figure 4, is a 5-foot tall minimal robot that exhibits a breathing motion (her chest rises and falls), and she turns her head towards the viewer when the viewer stands next to her. (The following two videos document her motion: <https://youtu.be/kLqnFAuyzAE> and <https://youtu.be/LBNugZP7bds>). Her arms are free to move at the shoulders, elbows, and wrists. Here I explore the notion of the uncanny by means other than creating a human double. I challenge preconceived notions of the feminine by covering her body in fur, while giving her a clearly female form. There is a playful ambiguity in her fur, since she is also wearing furry boots, and this implores the viewer to question whether she is a weird topless creature or a human wearing a furry costume.

The unexpected is also an important element of the uncanny, and so Monster Jofre has a third hand that appears on her left breast. I added this extra hand because I found that almost everyone who saw her wanted to touch her large furry breasts. So the hand is placed such that it appears to be holding her left breast, addressing the viewer's possibly repressed thought of wanting to touch it. [21]



Figure 4: Monster Jofre ©2015 Ana Jofre

Conclusions

I used a reflexive methodology to produce a series of objects in which I evoked the illusion of a living presence, and generated a site for uncanny experiences. I found that

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the illusion of presence was invoked by objects of human scale with anatomically correct proportions, by objects with autonomous motion, and by objects that mechanically respond to the viewer. Furthermore, my characters, despite all having a rigid neutral facial expression, each have a personality that was expressed through their materiality, through their costumes, through their limited actions, and through how I performed with them.

I was able to use my humanoid sculptures to create playful interactive experiences, experiences that hinge on the uncanny: engagement often started with a startled utterance that breaks into laughter. The uncanny here is provoked by the illusion of presence, and illusion is accepted and sustained through deliberate acts of play.

The contribution to sculpture offered by this work is an integration of puppetry and robotics into the discipline so as to introduce a new way of seeing sculptural objects, not just as forms that interact with space, but also as personalities that interact with people.