

Expressing Intent

An exploration of rich interactions

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01/ INTRODUCTION

When we consider Smart Objects today, they tend to be servile, and still embody a master/slave relationship, where users directly express their intent through control.

By deliberately endowing objects with their individual, distinct values and designing them to act according to their own self interest, we investigate how this might inflect the complex nexus of interactions between object-object, human-object and object-human relations and possibly shape human behavior. For illustration purposes, we have chosen the three objects – bookshelf, radio and window to explore these themes.

02/ FOCUS OF EXPLORATION

OBJECT ANIMISM

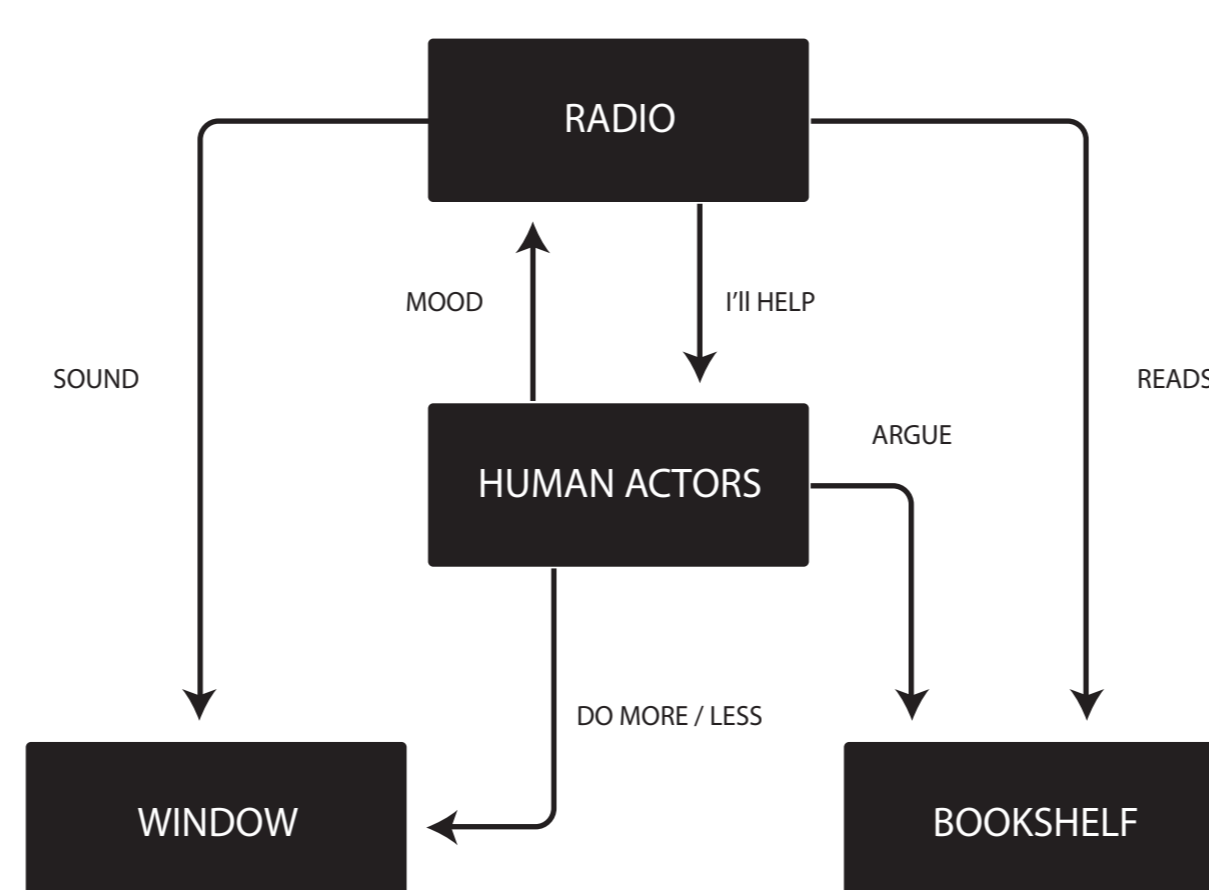
Increasingly, objects, machines and technology is infused with anthropomorphic elements that help enhance human interaction with them. These additions are not merely functional, but incorporate the dimension of empathy and enchantment that makes human-computer interactions alluring.

RICH INTERACTIONS

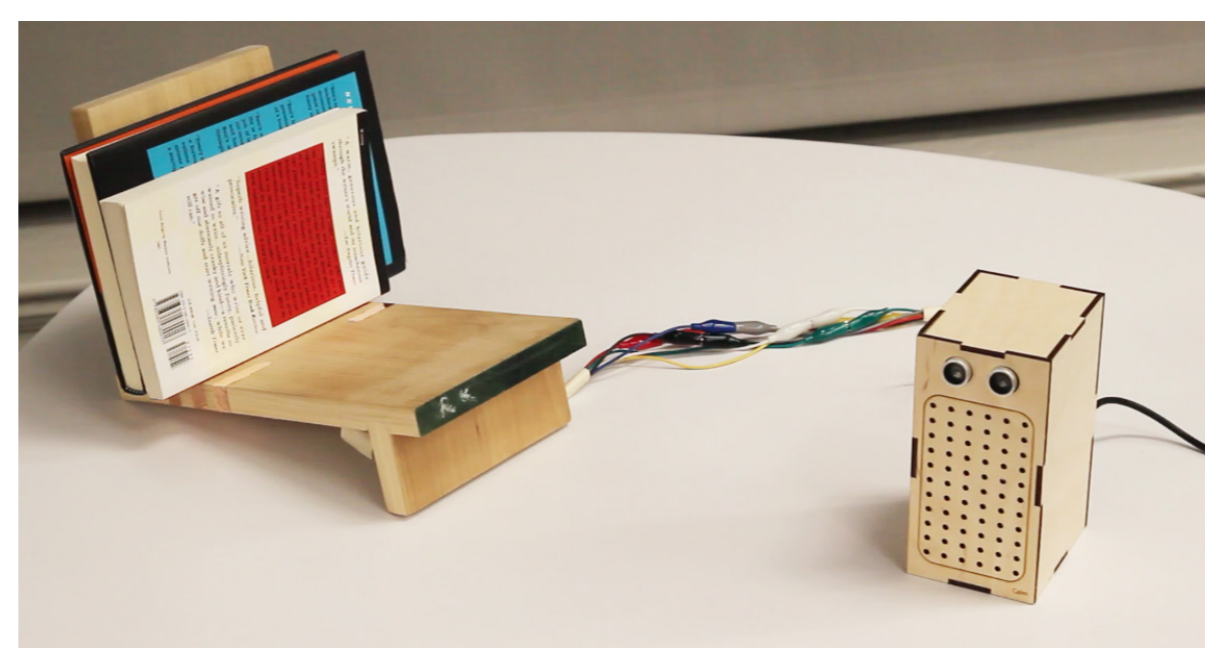
We have chosen to explore dimensions such as audio output, distance between objects by extending objects' natural affordances with digital abilities, thus creating opportunities for more expressive interfaces.

HETEROGENEOUS ECOSYSTEM

As we gradually transit from such systems towards a more a platform-agnostic Internet of Things with more sophisticated abilities, it also raises a plethora of questions about the nature of interactions that these objects constitute.



03/ OBJECTS



BOOKSHELF

The bookshelf wants to be the ultimate purveyor of excellent culture, taste and art. By prioritizing a constant, diverse diet of books, its interaction helps guard against stagnation and increasing filter bubbles.

RADIO

All the radio craves is peace and harmony. Empathy is the radio's strong suite and it constantly gauges the mood atmosphere of the room, and responds to it via music. Its repertoire of songs is influenced by the bookshelf's current book collection.

WINDOW

The window fancies itself as an anarchist graffiti artist – his duty to society is to tell the truth; his truth, no matter what it looks like, with honesty. The window pulley was fitted with a rotary encoder that enables you to 'dial it up' or 'dial it down' between Augmented Reality.

04/ FINDINGS

Progressively, we see the introduction of personified smart objects into heterogeneous ecosystems inflecting human behavior in a series of stages.

LEARNING

In this phase, objects take a passive role and absorb as much information and data as possible.

PERFORMING

In this stage, objects have a pretty thorough grasp of human actors' intent, likes and preferences, and act accordingly.

MISALIGNMENT

At this stage, objects continue talking to each other but are so self-interested in pursuing their own values that they resort to deceitful strategies to get what they want.

05/ FUTURE WORK

Looking ahead, this initial exploration enabled us to gain a glimpse of how cascading interactions within a heterogeneous system might look like, and also highlighted several areas that are worth exploring.

First, a significant area we intend to explore further is the effect of animism and object intent on human actors have.

By including multiple human actors in the mix, the objects form an interesting matrix for each actor's preferences, intent and interactions to be interpreted and harnessed in multimodal outputs. The negotiation of which actor's preferences get expressed more strongly or frequently is an interesting one, with the objects acting in accordance to their own priorities.