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# I Want To: Multi-media Installation for Exploring our Desire

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## Abstract

'I Want To' is a multi-media art installation that explores how our desire is presented, negotiated and internalized in contemporary digital media. One hundred custom designed wooden toys, a television screen and speakers comprise the installation. The system extracts live Twitter messages that start with 'I want to.' The expression 'want to' becomes 'have to', and the newly composed sentence is displayed on the television screen while also being vocalized through speakers. With each sentence, the wooden toys respond by marching in unison. This paper explains its background, design approach, and technical detail.

## Author Keywords

Multi-media art; desire; social expectation, Twitter

## Introduction

When we say that we 'want to do' something, the desire might not be motivated by our minds, but created to satisfy social expectations in everyday social institution such as families and workplaces. As Foucault explains in *Discipline and Punish: The Birth of the Prison* [1], people in society may believe that they are under constant observation through such everyday social mechanisms, and as a result they regulate themselves. Furthermore, such self-discipline may

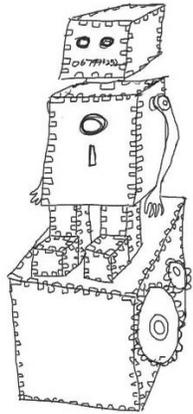
become internalized and make us think that those disciplines are our actual desires.

Take the following Twitter messages as examples: "I want to get married", "I want to study at Harvard", "I want to get pregnant soon and have a baby", "I want to glorify Jesus". Do these desires present something that they really wish to achieve or something that society makes them believe or present as if they have such desires (or something in-between)?

The project, I Want To, provides a techno-aesthetic space in which the audience can observe our presented desire in digital social media, and to think about such questions through computational, aesthetic and critical

ways. One hundred custom-designed wooden toys, a television screen and speakers comprise the installation, which is controlled by public live Twitter messages. The system extracts the most recent Twitter messages starting with the word 'I want to' every 15 seconds, then the expression 'I want to' is replaced to 'I have to.'(e.g. 'I want to get married' becomes 'I have to get married'). The television displays this newly formed sentence while being vocalized through speakers. With each new sentence, all of the wooden toys start to march in unison. Figure 1 shows a picture of the original installation. More pictures and video are accessible on the website:

<http://www.laewoo.com/iwantto/>



Each wooden toy includes a 5V 100rpm gear motor, a custom-designed circuit board and DC socket that creates a walking motion.



**Figure 1.** The first version of 'I Want To'

I WANT TO GO TO HARVARD  
HAVE TO

The installation extracts Twitter messages that start with "I want to" and change the "want to" to "have to." This converted message piles up on the screen with the vocalized sound.

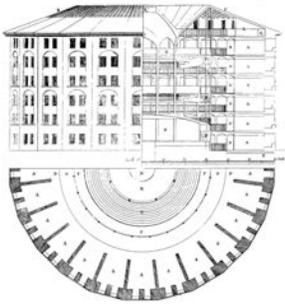


Figure 2: The blueprint of Bentham's Panopticon (drawn by Willey Reveley, 1791)

## Background

The topic of self-discipline, social expectation, and their internalization has been discussed in broad fields of study including philosophy, social science, media art and HCI. For example, Foucault's *Panopticism* [1] examines the social and theoretical mechanisms that control our perception, emotion and behaviors. Foucault employs the theatrical idea and architectural design of the jail called *Panopticon* (Figure 2), which enables a prison guard to observe (-opticon) all (pan-) prisoners without the incarcerated being able to tell whether they are being surveilled. Foucault likens our everyday social environments such as schools, workspaces, and families to this prison system, which require that our bodies must be individuated according to tasks, as well as for training, observation, and control. Foucault explains that such processes necessarily regulate themselves, and such self-discipline becomes "internalized" making individuals believe that those disciplines are their own desires.

Similarly, Erving Goffman's *Dramaturgy* [2] likens our world to the performing stage and explains that we protagonists (must) perform given roles or scripts to satisfy cultural value and social expectations. Goffman conceptualizes people's everyday behaviors as ritual exchanges, or "performances" in the "front stage", and explains that most of our social interactions are "conventionalized", which leave humans few options for patterns of verbal (language) and non-verbal (gestures) that they can adopt in a specific situation.

However, different from the Panopticon (which presumably may watch performer all the time),

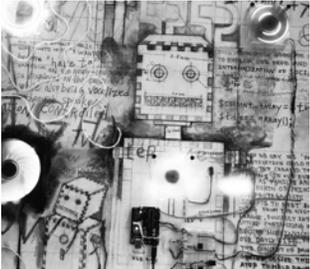
Goffman additionally suggests a more personal, unwatched, and reflective space called "backstage" where performers are present without audience, so "the performer can relax; he can drop his front, forgo speaking his lines, and step out of character (280)". Goffman argues that individual identity is not stable, but continuously re-defined and reconstructed by multiple roles that he/she plays in both front- and backstage. In other words, one's true identity might exist in the place where diverse identities projected in different stages are intertwined and influenced by each other.

Recent studies in the field of communication and HCI have started to explore how users present, reflect and negotiate their identity and desire in various digital and social media services (see, inter alia, [3,6-8]). For example, Marshall & Shipman's study [4] based on Mechanical Turk survey of Twitter users explores how users deploy Twitter as a window onto their current social attitudes and beliefs. Zhao et al. [9] explains an implicit negotiation between users and the Facebook system in the terms of how personal data on social media platform should be "exhibited [3]"

In media art, Listening post (figure 3) by Hansen & Rubin involves dynamic collage of live conversation drawn from online sources in a room-sized installation that feature 232 text displays generating sound and voice [5]. Another piece by the author, Mirror in the Backstage (2014), provides a two-way mirror where users can observe their old Twitter messages while looking into the mirror.

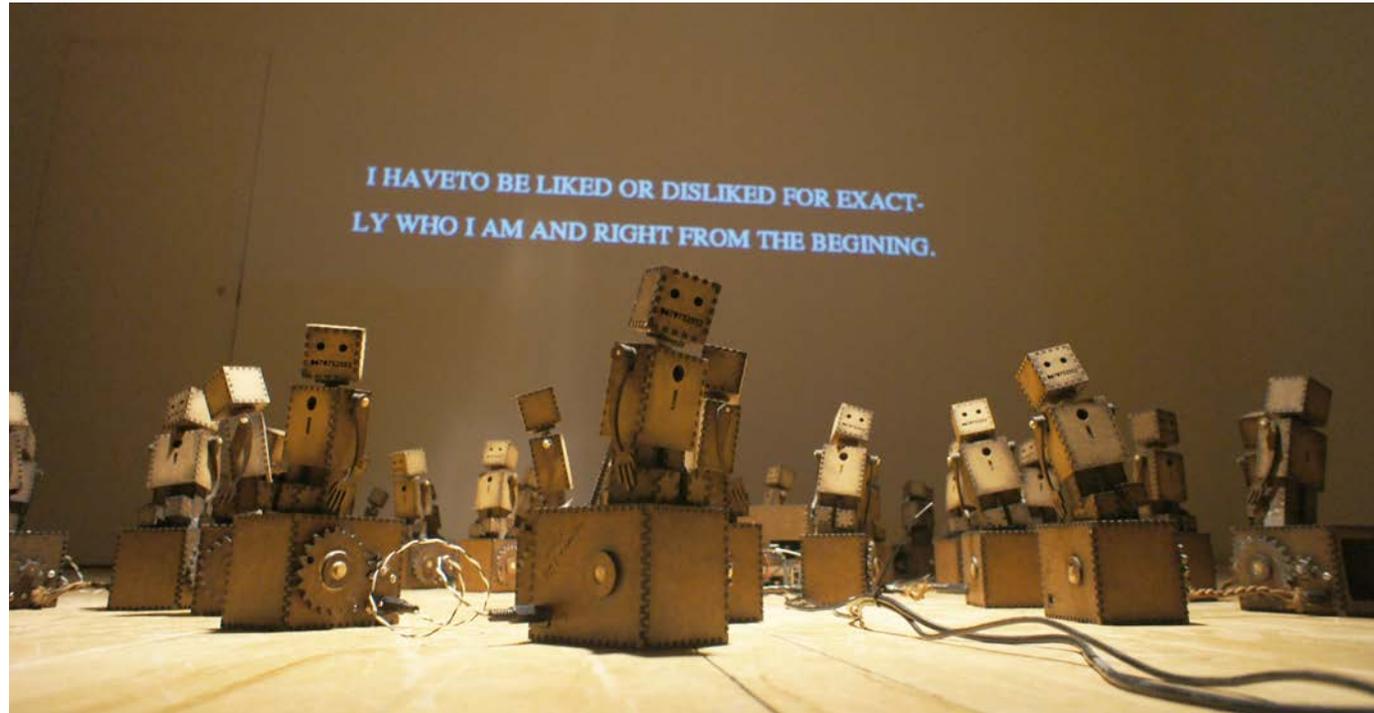


Figure 3: Listening Post (Hansen & Ben)



"I think the toys visualize me, my friends, and furthermore, all of us in the society. Basically, I wanted to design it to represent the life that I have experienced, just following social norms and expectations. The toys make repetitive movements and march in unison with each desire shown on the TV screen, which intends to asks the question: *Aren't we just following desires to satisfy social expectations rather than trying to achieve our own dreams?*"

Interview from 'Make: magazine', 2012



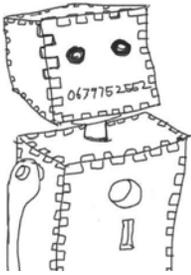
**Figure 4:** Alternative version of 'I Want To' that uses a beam projector, Tjaden Gallery, Ithaca, NY, 2011

### **Design Approach**

The purpose of the installation 'I Want To' is to invite audiences to this discourse and ask them to consider whether our desires come from our internal mind or external social mechanisms. For this, we set the design approach as follows: First, the system observes our "presented" desires in social media. Second, the desires are viewed as "regulated" desire to help people to reconsider the possibility that they are not created by

their minds. Third, numerous wooden toys visualize the controlled crowd and provide visual stimulus to the audience.

In order to watch our presented desires, the system monitors live Twitter messages. This system extracts Twitter messages that start with "I want to" and changes the "want to" to "have to." In other words, the installation intentionally converts the message from

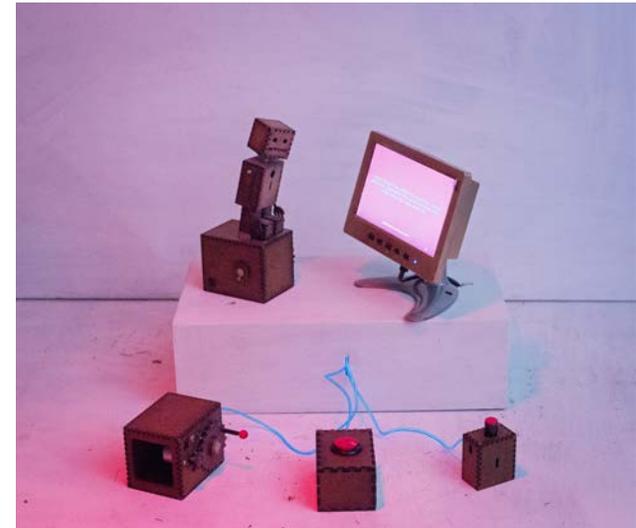


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(presented) desire to self-regulation in order to make audience confused whether it is his or her real desire or self-regulation. This conversion emphasizes the cadence and the rhythm of the before and after sentences. In other words, the meaning changes, but the sentence structure remains the same.

In addition to displaying these converted sentences to the audience, numerous automata wooden toys visualize controlled people. The toys make repetitive walking movements in place like an army and a prisoner, which are representative of a controlled institution. In addition, the toys mimic a walking-motion, but do not actually go forward. This also expresses the idea that we often think we are moving towards our dream when in fact we are only marching in place within the dreams that the boundary of our society will allow.

The project, I Want To, currently involves three different versions of design. In the original version, 100 toys are placed on a 80" x 60" custom-designed stage with the tube TV screen. The size of each toy is 3 inch(W) x 3.5 inch(D) x 8.5 inch(H). Each toy is placed with a 1 inch to 3-inch difference to the other toy. The second version involves a bigger exhibition space (figure 3). A beam projector has been used instead of the tube screen for this version. The third version involves three different tangible interfaces (crank, button, sound) where users can individually and collectively enable wooden toy's marching and visualization of Twitter message in the mini LED screen (figure 5).



**Figure 5:** Third version of I Want To and its tangible interfaces.

### **Technical Details and Floor Setting**

Arduino, DC gear motor, TV signal converter (TellyMate) and NPN transistor are utilized in the installation. The software is implemented by Processing, a Java-based open source platform with Twitter API and Java Text Voice Synthesizer. In version 3, Raspberry PI 3 and Amazon Text Voice Synthesizer have been used.

### **Conclusion and Future works**

How do we present, reflect and negotiate our desire especially through digital communication and human-computer-interaction? The project, I Want To, explores this research inquiry through the form of multi-media artwork. This artwork suggests a heuristic space where the audience can think and engage this topic through

computational, aesthetic and critical means. This artwork also intends to open up the broader discussion regarding how the field of HCI and design can employ such techno-aesthetic objects and installations for alternative forms of knowledge representation through which core research questions can be explored in more playful, critical, and speculative ways.

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