

Story Wearables: An Alternative Autobiography

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My project is an autobiography told through wearable computing.

What is a wearable? Smart clothing/accessories that have technology embedded within the fabric and/or design. According to Massachusetts Institute of Technology's *Wearable Computing at the MIT Media Lab* website:

A person's computer should be worn, much as eyeglasses or clothing are worn, and interact with the user based on the context of the situation. With heads-up displays, unobtrusive input devices, personal wireless local area networks, and a host of other context sensing and communication tools, the wearable computer can act as an intelligent assistant, whether it be through a Remembrance Agent, augmented reality, or intellectual collectives.

While MIT's focus is on aiding the wearer to complete certain tasks, my wearables focus on aesthetics and ways to carry and tell stories. My project is a search for storytelling nuggets in wearables. Interactivity will be studied, experimented with, and implemented within the wearables. Stories will be embedded and revealed through interaction with the clothing.

My project is directed towards post-linear moviemaking and the creation of a communion between stories and wearables. What's unique about my project is its unusual marriage: autobiography/storytelling, a traditional convention, is reinvented when combined with the emerging field of wearable technology.

Background

I've been fascinated by storytelling ever since I was a kid. I used to direct my village friends in musicals and plays that we staged. I loved playing with costumes, props, and "actors." In grade school and middle school, I loved dancing. Music and movement became very appealing to me. I liked the way music has the power to move the body and how the body has the power to convey strong emotions and suggest narratives. In college, I studied film and TV because I wanted to tell stories. But I find the space constraints within which the audience is confined when watching a movie, and the passivity of movie-watching, limiting.

I want to challenge my audience. I want viewers to get physically involved. I want them to discover the story, as though they are playing a game, or getting to know an interesting person slowly, unexpectedly, beat by beat, discovery by discovery—each discovery wrapped in the rewards of thrill and satisfaction.

Concept Overview

I've divided content into three parts: emotions, architecture/sounds and people. These three elements are categorized as mental space, environmental space and kinship connection. They are integrated within three wearables items: necklaces incorporate the emotions, movie bags house architecture/sounds, and skirts are embedded with portraits.

One of the challenges with which I'm confronted is in ensuring that my non-linear stories are both engaging and cohesive. I need to deal with the timeframe, character introduction order, sequences and structures. I need to find a structure that will satisfy my viewers, and allow for multiple viewings of the autobiography. In addition to narrative, I must also explore where and how I can insert and display my tales within the wearables. I want people to experience my autobiography in a fresh new way. I want them to find and ponder the hidden narratives as they interact with my autobiography wearables. I want them to leave with sensations of awe, excitement, pleasure, mystery, and satisfaction, as well as a sense of who I am and where I am from, the nature of my city. I want technologists, scholars and inventors, to rethink storytelling and physical computing in clothing. I want to trigger people's imaginations and take my inventions further.

PROTOTYPE DESIGN TREATMENT

The Form/Structure

WEARABLES	STORYTELLING
Necklace	Emotions
Movie Bag	Architecture/Sound
Skirt	Portraits/People

The three pieces will each carry one or two components from the storytelling mode. The form for the piece is through wearables. The content is divided into three categories.

The Content

The necklace carries my childhood memory. My hometown, Taishan, is close to the sea, so shells were childhood toys and they remind me of past playtimes. I remember a time my cousin brought me the most beautiful shells from her mother's beach house. I've always imagined magical things happening by the sea. The beautiful patterns on the shells captivate me. Because of this, I want to use LEDs to bring out the shape, patterns and colors in the shells. As a result, this necklace is about memories, happiness, admiration for natural beauty, and the fantasy of magical happenings. The design is a simple necklace that resembles an amulet. The PIC programming on the breadboard will illuminate the shells. Ideally, the PIC chip will be embedded inside the bigger shell. As of now, the breadboard will be externally hooked to the skirt.

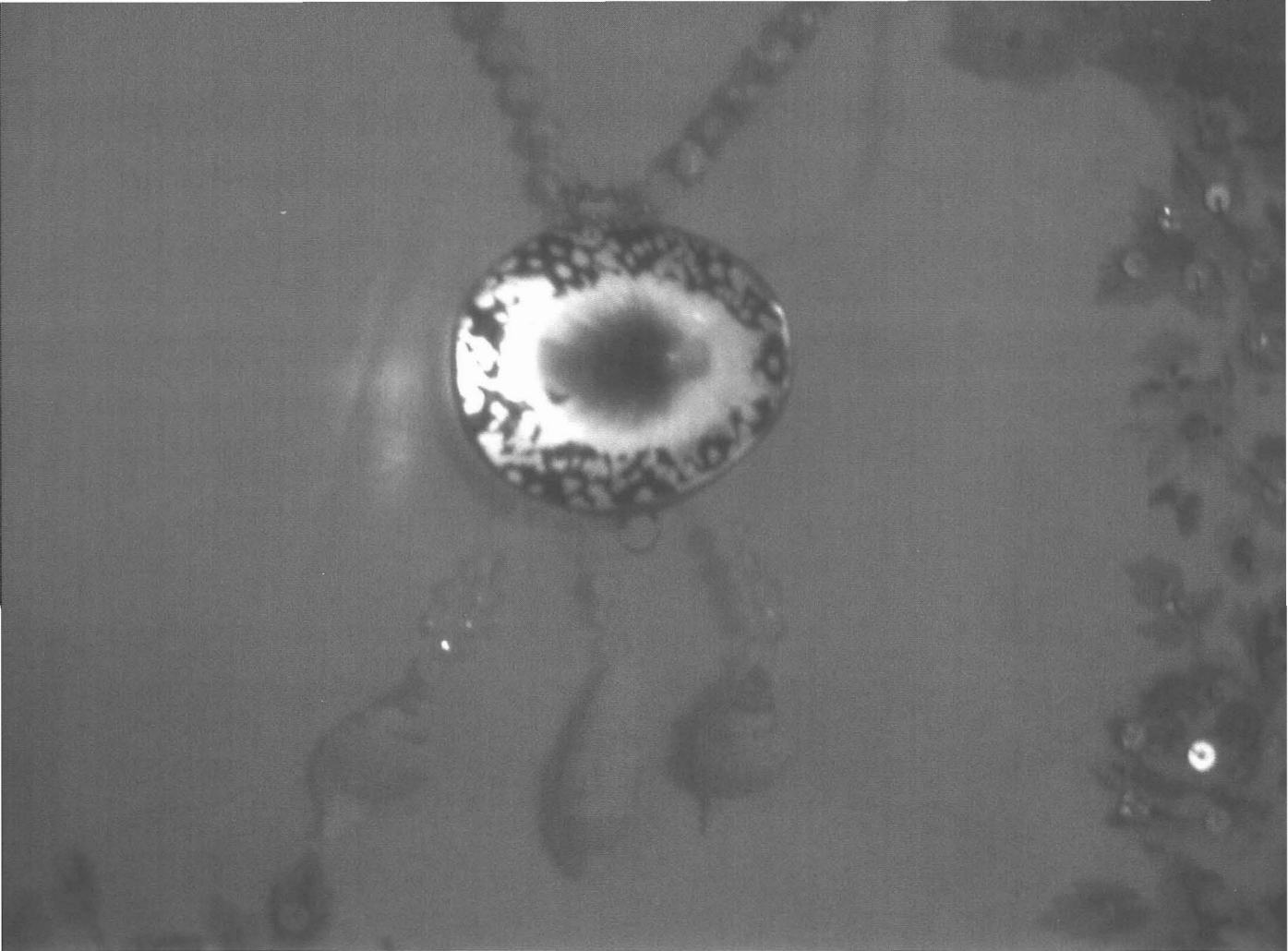
The movie bag has a portable multimedia player sewn in, which shows an LCD screen. On the LCD screen are pictures and videos showing the architecture of my town. By picking up the headphone, the viewer can listen to the sounds from my city.



The skirt is of '50s vintage, full-circle style, decorated with prints of vintage poster-ladies, each of whom wear veils. Underneath each veil, viewers will find removable stickers bearing the faces of my relatives. On the reverse side of each sticker is a bio and website link with which the viewer can learn more about the person in question.

The Function

The wearables will be displayed on a mannequin. The necklace is eye-candy, offering a sensual, visual experience. The bag is also a visual display but it carries more content than the necklace. The skirt requires physical interaction. The viewer must lift up the veils on the skirts to find the biographies of my relatives. I, the creator, serve as a live director for the autobiography. The viewers will experience a rewarding discovery that touches their aural, visual and emotional senses. I will lead them through by allowing them to feel free to experiment and touch the various parts of the clothing. Each person's experience will be unique because of



the sequence of discovery of different parts of the garment. A group experience will be unique because people can converse and discuss the pieces as they explore. The overall interaction is non-linear; there's no sequential preference for the biography.

The Look

The overall look is nostalgic: all of the elements are organic and glorify aesthetics from the past. I want a recycled look that blends smoothly with technology. The project is feminine since it consists of a necklace, bag and skirt. The computation will be as hidden as possible. I want the technology to be present but also inconspicuous.

Visual Elements

Photographs – printed on old paper and manipulated to look vintage

Video – raw, very few cuts, with little or no manipulation

Audio – raw, short 15-30-second clips

PIC Chip – as invisible as possible

WORKS CITED

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Wearable Computing at the MIT Media Lab. Massachusetts Institute of Technology.
<www.media.mit.edu/wearables/index.html>

Meshes of the Afternoon. Dir. Maya Deren and Alexander Hammid. 16mm. 1943.