Artifacts

Slow Technology: Critical Reflection and Future Directions

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Enclosed are artifacts and descriptions intended to accompany the papers submitted to this workshop.

www.willodom.com/slowtech

Go slow and beware! A call for reflection on our computational surroundings

Christian Detweiler and Alina Pommeranz

In Alvin Lucier's piece "**I am sitting in a room**" we hear him saying saying:

> *I am sitting in a room different from the one you are in now. I am recording the sound of my speaking voice and I am going to play it back into the room again and again until the resonant frequencies of the room reinforce themselves so that any semblance of my speech, with perhaps the exception of rhythm, is destroyed. What you will hear, then, are the natural resonant frequencies of the room articulated by speech. I regard this activity not so much as a demonstration of a physical fact, but more as a way to smooth out any irregularities my speech might have.*

The text repeats 32 times, each repetition a recording of the previous iteration, played into the room. At the end of the 40 minute piece, all we hear are the harmonies of the resonant frequencies of the room. A number of things interest us about this piece. First of all, it exposes its own workings. The piece is transparent about its inner workings through Lucier's spoken explanation, and by exposing the resonant frequencies of the room. Second, it exposes the influence, or even destructive force of infrastructure (the room), something people are not usually aware of. What's more, the listener can only fully understand and experience what the piece is about over the entire duration of the piece.

Picture source: Flickr

Designing for Slow Technology: Intent and Interaction

John Fass

I argue in this paper for the value of adopting some specific design approaches when creating slow technology, how to create long lasting relationships with technology, and how to design reflective or slow digital interactions. The problem I have addressed is how to design for long lasting technologies with changing users. My approach is informed by activity theory, which provides a theoretical and methodological perspective while design principles inform ideas of process, structure and interaction. The contribution to HCI is in the view of slow technology as demanding a unique set of design skills.

Slow Technology to re-appropriate our lives
Sara Heitlinger

The Talking Quilt is a traditional textiles quilt augmented with digital technology to allow for enjoyable and reflective engagement. Audiences can wear an RFID-enabled glove to scan hotspots on the quilt and hear the voices of staff, volunteers and visitors at an urban city farm in East London talking about the connections between food, food growing and community.

WantEat and Reward: Slow Technologies for Food
Rossana Simeoni, Alessandra Marino, Amon Rapp, Fabiana Vernero

Reward artifact description. The here portrayed user, Silvia, represents a typical packaging-free purchaser. In our scenario we have represented Reward as a part of Silvia's life. Back from work, she finds her son, Luca, drawing in the living room: wanting to spend some time with him, she decides to involve him in the creation of a nice cap for the bottle she usually uses in her packaging-free purchases, using the mobile application of Reward. Some days later, they go to their trusted bulk store to pick up their customized object, and they have the opportunity to observe the printing process. Luca is gazing silently at the overlapping of small material layers, slowly realizing that what is going to be shaped is the object that he has virtually created with his mother some days before. Once this process is completed, Silvia gives this gadget to Luca who naively exclaims "It's released from your phone, mom!". Silvia, amused, explains to her child that it was not the phone but the 3D printer which created the object, through a process that takes so much time and a certain amount of material, and has an intrinsic value because of this.

The Impact of the Network Society upon a Social Temporal Consciousness
Chris Speed and Larissa Pschetz

In this paper the authors reflect upon the past thirty years since the emergence and public awareness of what Castells describes as the network society [1] with the shifts in a social temporal consciousness that are evidenced through popular cinema. The short paper contextualizes slow technology within larger societal concerns for time, before introducing four epoch's within recent cinema that give insight into the condition of a social temporal consciousness.

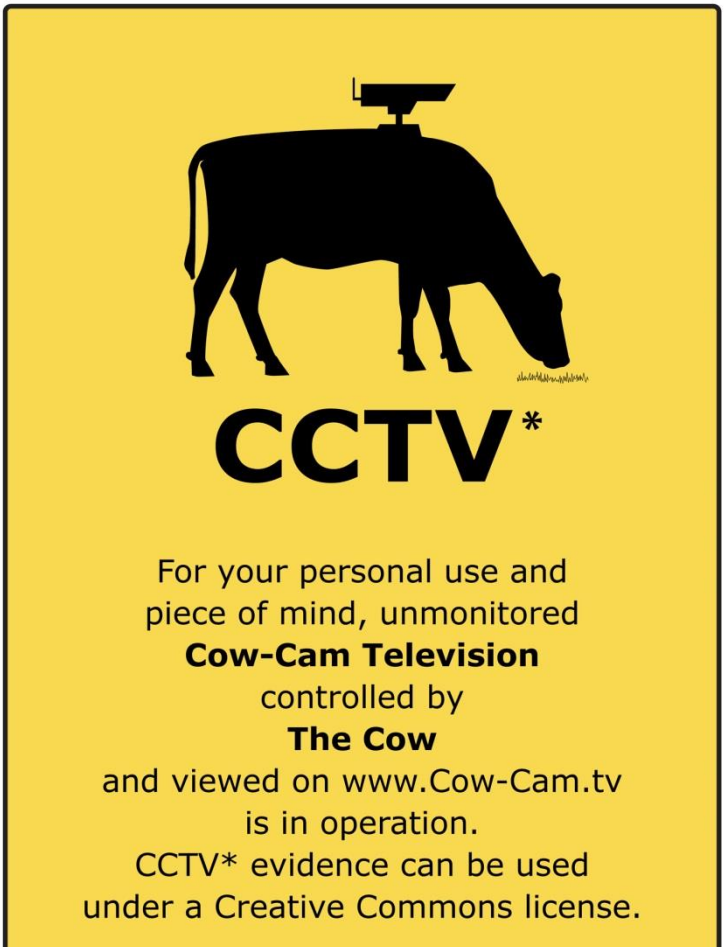
Slow Technology for Well Being
Steffi Beckhaus

GranulatSynthese is an interactive tabletop installation for the intuitive and haptic creation of ambient, meditative audio-visuals. It uses granules distributed over a surface with projected visuals and generated sound. A haptic, visual, and auditory landscape can be explored and composed intuitively. This installation is calm in that it supports a meditative experience and fosters mental rest and self sufficiency.

Beckhaus, S., Schro¨der-Kroll, R., and Berghoff, M. Back to the sandbox: playful interaction with granules landscapes. In TEI '08: Proceedings of the 2nd international conference on Tangible and embedded interaction, ACM (New York, NY, USA, 2008), 141–144.

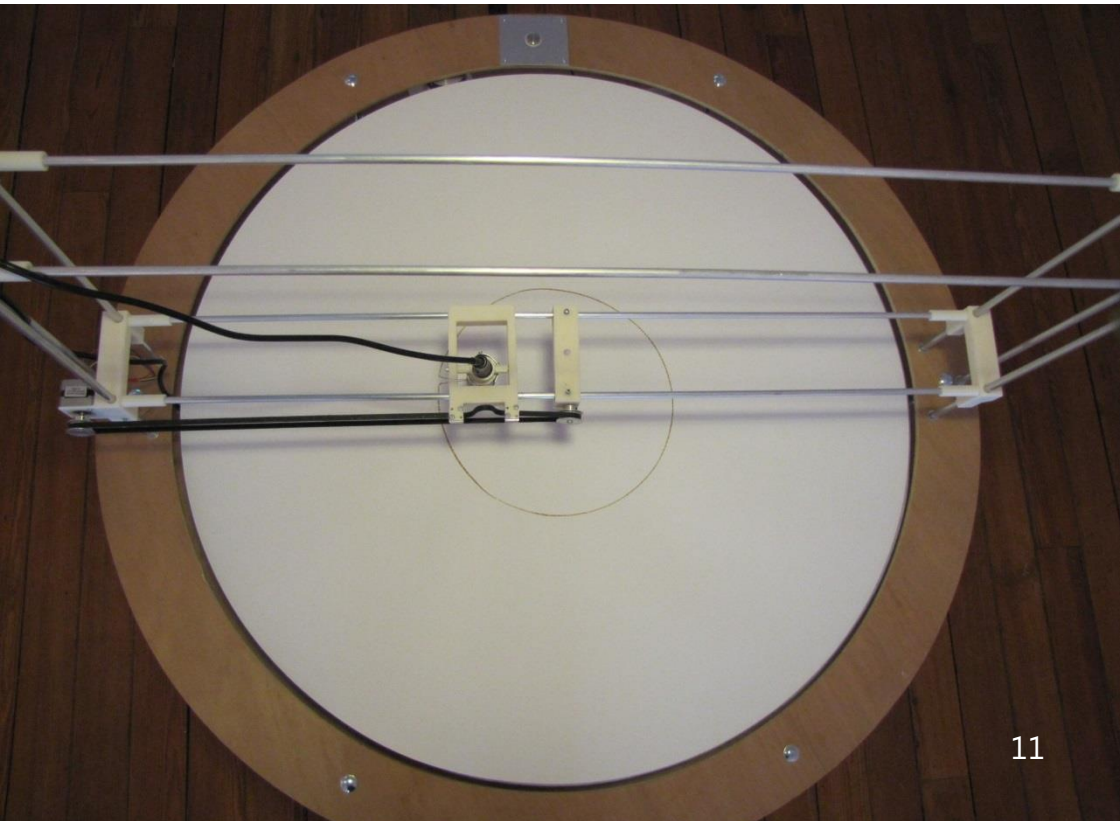
Cow-Cam.tv: An experiment on Slow Technology
Costas Bissas and Stefan Agamanolis

Cow-cam.tv is a web experience created in the wilds of Scotland during 2009 where Grace, a 14-year-old Highland cow was fitted with 2 different custom built cameras. She obtained videos from her viewpoint which are shared online with the website visitors, who in turn can offer their thoughts through a 'comments' section. The experiment highlights the timeliness of the discussion on Slow Technology, the desire of many technology users to connect in their daily lives with a slow haven, while it illustrates how 'slow' is a state of mind with beneficial effects, which design can help to induce.



Engaging With Slowness: A Temporal Experience of Climate Change
Rachel Jacobs, Mark Selby, Steve Benford

The Climate Machine was created to visualise recordings of global Carbon Dioxide taken between 1959 and 2011. Using a soldering iron, the Climate Machine scorches a visual representation of the data onto paper discs, the scorch marks are intended to be reminiscent of a singular tree ring. Each paper disc is hung in the gallery, the full set of prints show a temporal historical context of atmospheric Carbon Dioxide over time.



Hacking, Tinkering & Practical Jokes On Orbital Space Stations – Notes On Slow Technology Aspects
Regina Peldszus

A Do-It-Yourself Christmas Tree made of discarded food containers by the crew of Skylab 4, astronauts Carr, Gibson and Pogue, during their 84-day mission on the US space station Skylab between November 1973 and February 1974. Other DIY activities – from rigging equipment for practical jokes, or para-utilising onboard materials to hack and tinker – have been part of the limited off-duty time of astronauts and cosmonauts until today. They appear to instill a sense of flow and enjoyment for the user, and playful modification of onboard items often result in insightful scientific experimental set-ups or enhanced hardware. (Image: NASA Johnson Space Center Collection).

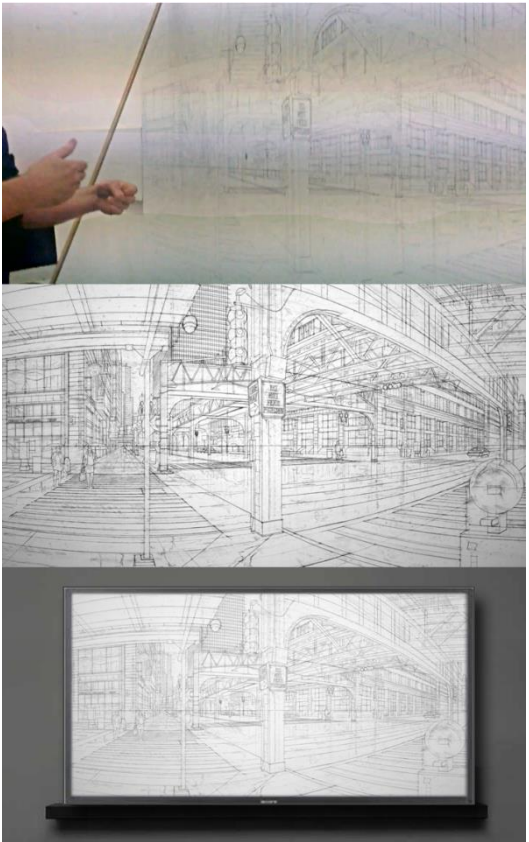
Ethnographic account: NASA Astronaut Donald Pettit's 'Saturday Morning Science' (ISS Expedition 6, 2002/03).

Slow Technology is Inefficient but Resilient
Peter Bennett and Mike Fraser

ChronoTape is a digitally augmented paper timeline that allows family historians to create a physical representation of their family tree. The ChronoTape reader (shown), is used to view data on a ChronoTape, with digital information being projected onto the paper tape and merging with the handwritten notes. The ChronoTape project has been developed to work within the timespan of family history research, where information is passed down from generation to generation. This long term outlook has led us to consider many of the challenges of designing slow technology whilst developing the ChronoTape system.

No Oil Painting: Digital Originals and Slow Prints
Jo Briggs and Mark Blythe

Ewan's Slow Print. A digital camera positioned in the painter's studio will record the painting as it develops over the four-month period. Several images will be captured daily during periods of studio inactivity and digitally-relayed to a server. We are still in discussion as to how the images will be made public (although this is likely to involve a screen display) and the role of the artist in vetting images in what will otherwise be an automated documentary process. The image aims to signify the process from artist's hand to material form (on paper and as data) to public display.



Engineering Slow Technologies
Tim Regan

Looking back at the history of HCI we see a change in stance towards peoples' (users') interactions with the computer systems under our investigation. We started out concerned with efficiency and looked for predictive models to help us design fast and accurate user interactions. Then we concerned ourselves with the users' experiences and took a more holistic approach to designing experiences that were enjoyable and engaging. Now we turn our attention to meaningful interactions, meaningful in terms of human values. These include interactions that occur infrequently with days, weeks, months, or years between interactions. When engineering the systems that support these interactions we cannot rely on human interaction by users to troubleshoot potential problems. We need to take a new set of constraints into account.

Or do we?

This note, in submission to the DIS 2012 Workshop "Slow Technology" explores these **engineering challenges** through our (well my) experiences building a version of the Photobox system.

```
static void Main(string[] args)
{
    try
    {
        doStuff();
    }
    catch (Exception)
    {
        shutdownAndRestartApplication();
    }
}
```

From Hardware to Wetware: How Sericulture Could Shift our Manufacturing Attitude in an Age of Biotechnology
Veronica Ranner

This paper examines Slow Technology in the context of biotechnology, design and craftsmanship in order to speculate on the potentiality of innovation. The overlap in disciplines will be demonstrated through the example of **Biophilia - Organ Crafting**. Genetically modified silkworms, raised by organ craftsman, would weave individual scaffolds for human replacement hearts. Such novelty in the silk industry could establish high-tech applications - not solely in the biomedical field, but also in the consumer products market, allowing for the development of biodegradable products. The example of future craftsman is used as a lens through which we may understand the value of, and today's potential for, manual work as well as its importance for our communities.

Slow Technology as an Analytical Lens
Daniela Rosner

A painting that has hung in my parents' house since I was young. It was painted by my grandmother (who first taught me to paint with oil when I was seven) and depicts my great grandmother as a child (rendered from a photograph). As documentation of my grandmother's skill, the painting has become an example of my heritage (particularly since my grandmother motivated my interested in design and art). As an image of my great-grandmother, it brings my family history to life. Prompting reflection and pause, and recalling work of the hand, the painting has become an emblem of slow practice – a treasure for my family that will likely get passed down across generations.

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