Transcoding the Aesthetics of Activism

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Abstract

The *Aesthetics of Activism* (2014) is an artwork that aggregates visual material from social networks into image and video collages. Visitors within an interactive zone can explore playback and correlation between images. The authors' approach to transcoding aesthetically is grounded in their interpretation of both design and theatrical practices. They provide a detailed analysis of the artwork's operation boundaries (e.g. spatial layout and themed structure) to support insight into the new roles and processes employed to translate code and aesthetics. Their approach to *transcoding* is a process that undermines the commercial platforms that rank, sort and filter the information on the Internet. Rather than enact document agency the artwork demonstrates the artistry required to transcode the representation of real world activism.

Keywords

Interactive Art; Aesthetics; Code Literacy; Activism.

Introduction

On Sunday, September 2, 2007 at 1:24AM, forty-seven thousand people watched *Crude Awakening* at the Burning Man Festival in Nevada, USA. The near hour long performance was an epic pyrotechnical masterpiece produced by artists Dan Das Mann and Karen Cuolito. The artists stated, "the work was meant to dramatize the worshipful relationship and dependence modern man has toward oil." [12] At the height of the performance, four cannons placed at each corner of a larger-than-life oil derrick released nine hundred gallons of jet fuel, forming a giant mushroom cloud. [12]

In a study analyzing the event's social media researchers investigated the dates, duration, and composition of the videos posted to YouTube. [10] The study adapted Charles E. Osgood's [11] semantic differentials to measure the face-to-face performance and its video documentation. Of the eighty-seven videos analyzed, the researcher observed that 61% of the people publish video footage much like a snapshot (videos under thirty seconds). Fewer then 10% of the people used their video footage to remix and produce unique artworks that extended the aura of the live performance. Based on patterns detected programmable associations were conceptualized. [11]
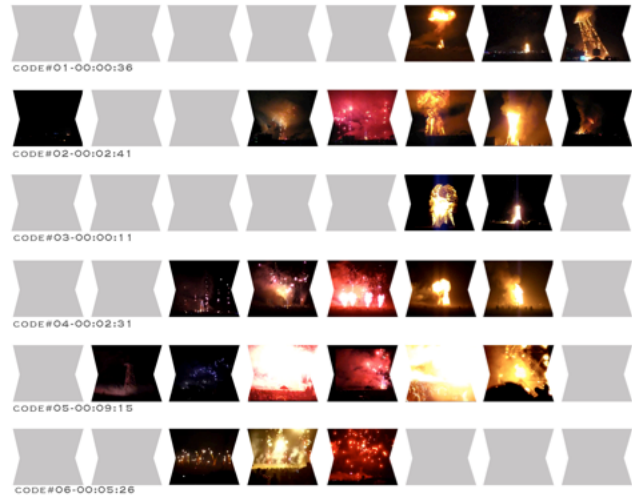

Figure 1. This illustration demonstrates the analysis of six *Crude Awakening* videos, 2010.

Many YouTube videos with a similar title were posted within seven days of the live performance in Nevada. Therefore a conceived group of algorithmic associations could be designed to look for clusters of similar video titles posted within a seven day span (i.e., X [title] + D [date span] = Y [performance documentation.) We define the artistry involved in detecting these patterns as transcoding place.

In 2014, a researcher (the second author) reviewed the study and initiated a collaboration to translate some of the patterns encountered into functional computer programs. These combined efforts resulted in the *Aesthetics of Activism[1]*. Existing internet-based systems and platforms distribute attention according to algorithmic logic that typically remains hidden from sight. The artwork's way of employing visual semantics to equip these structures with visibility might be linked to Ranciere's notion of a novel "distribution of the sensible." [5] This type of proto-social interaction modeling introduces a new set of political and cultural implications, far too broad for the scope of this paper. Instead, we employed the use of practice-based research methods to demonstrate how formal elements of theatre design and computer science can inform the operational boundaries in the making of an artwork. In the proc-

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[1]Read more abou the *Aesthetics of Activism* artwork and research details http://interactionart.org

ess, we have developed these research questions: Is code a purely instrumental enterprise? How does performance inform digital art practices? What are freedom-enhancing technologies? In the sections to follow we briefly introduce the key concept "transcoding" as it relates to HCI. We reflect on the making of the *Aesthetics of Activism* by describing the operational boundaries within the virtual and physical interactive zone. We conclude with a discussion on the influence of theatre design and future work.

Key Concept

In simple terms, to *transcode* something means translating it into another format. [8] Within human computer interaction (HCI), *transcoding* is a form of content adaptation. With the emergence of mobile and social technologies, transcoding has become a necessity for bridging the incompatibility of devices. For example, when sending a high-resolution photograph via Multimedia Messaging Service (MMS), the image might be transcoded to a lower resolution image with fewer colors in order to better fit the target device's screen size and/or colour limitations.

Lev Manovich introduced transcoding as the last of five principles in new media. He suggested that transcoding should be recognized as containing the cultural and computer layers of new media. [3] Manovich explained how these binary relations functioned separately and within their own category. Manovich suggested that the ontology, epistemology and pragmatics of the computing layer influenced the cultural layer for HCI practitioners. [3]

Other researchers recognize culture as a distinct layer mediated by technology, thus presenting models for *trans-surface* interactions. Kerne et al. claimed "that by adopting a culturally-based approach, the design process is inverted and relies less on technology solutions and instead draws on the customary manipulations of non-digital technologies." [8] These insights have encouraged HCI practitioners to think beyond system requirements, towards associated behavior patterns, processes, and movements, to design embodied interaction based on cultural practice. [8]

With the emergence of social computing, Jeff and Shaowen Bardzell described transcoding as a point in time where the cultural layer (e.g., stories, compositions, mimesis, and tragedy) converged with the computer layer (e.g., functions and variables, data structures, packets, etc.). [7] Bardzell agreed with Manovich's overall interpretation of transcoding, while expanding the terms "cultural" and "computer" to include categories, such as: creator, artifact, consumer, and social context. [7] They stated, "The benefit of this adaptation is that it bridges two hitherto separated discourses—HCI (including psychology and engineering) and criticism (including design and the liberal arts)—and potentially enables their overdue cross-pollination." [7: 2467] In this paper we use the term transcoding to describe the artistry involved in detecting patterns in social web resources that define the operational boundaries of real-life events. This may include the face-to-face encounters and the technology mediating the experiences.

The Aesthetics of Activism

In the UK, the Arts and Humanities Research Council defined research primarily in terms of research processes rather than outputs. The report author, Linda Candy stated, "In the context of creative artwork, practice must be accompanied by documentation of the research process, as well as some form of textual analysis or explanation to support its position and to demonstrate critical reflection." [14:2] Thus, knowledge may be demonstrated through creative outcomes in the form of designs, music, digital media, performances and exhibitions. [14]

Operational Boundaries

The *Aesthetics of Activism* is meant to be portable and projected on a frosted glass or white surface at any size. In this section we discuss the artwork's operational boundaries in terms of how it aggregates visual material from social media resources and can be explored jointly within a physical and virtual interactive zone.

The interactive physical space is situated in front of the projection, spanning an area of roughly five by six feet. If two people are present, the shown projections reflect the relative positions of both bodies within the tracked radius. As long as the interactive space is populated, the collages are updated more quickly. The effect is engineered to invite spontaneous communication between people viewing the artwork. When a single person is present, the distance between body and the projection is the sole determinant of the output. In the absence of people or in the case of non-interactive operation, the system operates as a purely ambient display, showing aggregated content according to general formal aesthetic principles including colour harmony, typographic style and modular scale. [2]

Figure 2. Demonstrates how a person with Internet connection could use a portable device and a pocket projector to display system imagery.

As seen in Figures 3 the virtual composition is shaped by these compositional elements: a) the event context, b) the opposing elements, c) real-life documentation, and d) text related to event theme. Social web resources are continuously scavenged for contributions pertaining to the themes chosen by the system makers. To this end, continuous statistical analyses are performed on gathered material in order to prepare the compositional framework.

Within the proposed setup, the installation allows system makers to present themes related to a real-life event. While the technical infrastructure can be adapted at will, the choice of topic is not arbitrary. The thematic structure of the artwork is designed so that it can spontaneously report on emerging issues. For example, in our demonstration of the system we projected images, video and text related from the Kinder Morgan[2] protest on Burnaby Mountain in British Columbia, Canada. [9] As activists uploaded video and images from the protest site as seen in figure five, the system created multiple views of the generative compositions aggregated from social web resources. Reflecting on the aesthetic aspects of the attention economy might prove especially important regarding issues such as wildlife protection where a certain level of urgency is required. The installation thus does not want to 'admonish' its viewers. Instead, it invites playful modes of interaction that interrupt the communal experiences of everyday life.

Discussion

Concepts from theater design have influenced and shaped our reflection of the *Aesthetics of Activism* as a virtual and physical design space. French author Antonin Artaud (1938) introduced the concept of the "virtual arts" as the imaginary world of theatre. [1] According to Artaud, the virtual arts or theatres' "double" was similar to that of Jung's notion of the shadow a projection of one's unconscious self onto the world. Artaud stated, "…some artists have the ability to draw on repressed beliefs and emotions; and to channel these experiences through theatre". [1:8] Artaud suggested that when a performer skillfully represents a theatrical event, the audience is transformed and culture-in-action occurs. We think that Artaud may have interpreted theatre as both an artistic medium and a responsibility.

In the virtual mapping of the *Aesthetics of Activism,* the artistry was in the design of the system's ability to filter, rank, and sort social resources. This process was necessary because most of the data that is posted to commercial platforms are difficult to access and/or authenticate. In many ways, this part of the installation will require continuous reworking unless the images, text, and video are coming from one non-commercial platform.

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[2] Kinder Morgan Trans Mountain pipeline project is discussed in more detail on the David Suzuki Foundation's web site at this location http://davidsuzuki.org/blogs/panther-lounge/2012/07/we-are-the-kalamazoo/
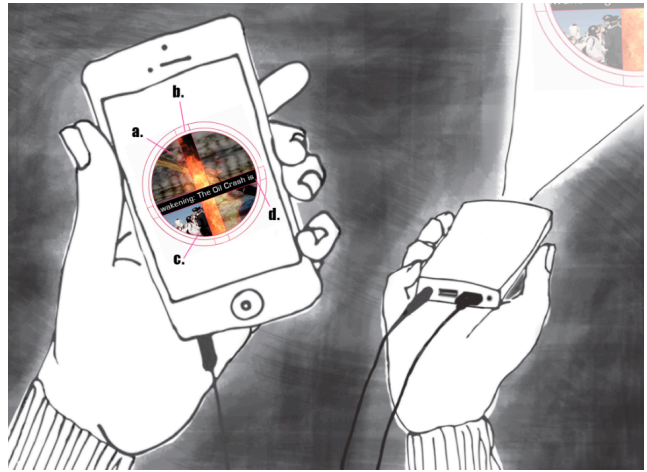

Figure 3. Generally a person would have 90-minutes of projection time using this type of mobile setup.

Figure 4. Demonstrates how people gathering at an event could view and interact with the artwork

Figure 5. Demonstrates how people at a protest site could document a person.

Considerations and techniques used to shape the physical layout were influenced by what Bertolt Brecht (1936) described as the "defamiliarization effect" sometimes called *Verfremdungseffekt* (translated as "distancing effect", or "estrangement effect." [6]

Defamiliarization, Willett explained, was Brecht's way of using theatrical staging to reposition the audience. In Brecht's ideal theatrical space, the audience would be lulled into a non-real (fictional) event that would turn into a real event. Brecht hoped that by constructing performances in this way, the audience would then be able to identify real threats to humanity and not the imagined. [6]

In the design of the *Aesthetics of Activism*, Brecht's theatrical staging principles offer a way to reposition audiences who may not be aware of the types of risks people are taking to promote healthy and sustainable environments. We see opportunities in the design of *Aesthetics of Activism* for people to take action by either attending a protest to document the event or by projecting the protest imagery in places like on the side of a building that would disrupt everyday life for people passing by.

Conclusion

In this paper we have introduced "transcoding" as a key concept and discussed how it can be adopted fruitfully as an approach to practice-based research. We describe the *Aesthetics of Activism* as a set of operational boundaries that define its virtual and physical interactive zones. We then discuss the nuances of this design space including aspects of theatrical practice as a means to reposition the audience. Our future work will be to continue to prototype versions of this artwork and in the process, refine design strategies while working with activist groups.

Acknowledgements

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