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## Materiality in Site Responsive Media Art

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1 Krzysztof Wodiczko, *Arco de la Victoria, Madrid*, 1991. © Krzysztof Wodiczko. Courtesy Galerie Lelong, New York



2 Richard Serra, *Tilted Arc*, 1981. Image: © G. Lutz.



## Materiality in Site Responsive Media Art

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Krzysztof Wodiczko's projection work established an early and influential approach to site-specific public media art. Since the 1980s, there has been a rapid expansion in the number, variety and technical sophistication of outdoor media art. Today there are a number of artists who engage in projection-type work but operate with different models for site specificity. This chapter investigates three groups of media artists and collectives who create work that make use of site in innovative ways, but in configurations differing from the examples previously examined. In contrast to the previous chapter's focus on site specificity in media art, I employ the term site responsive to characterize the works discussed in this chapter. Site responsive is intended as a more inclusive notion of how media art responds to location. While site-specific art exhibits the characteristics that were discussed in Chapter 4,<sup>138</sup> site responsive media art, by contrast, may exhibit some (but not all) of these characteristics. Site responsive, in other words, is used here as a more openended category for media art that includes both site-specific art and work that is agnostic about site specificity.

An investigation of the variety of site responsive models for media art will support the discussion of the material and the media's role in constituting knowledge about it. The works examined here include ones ones that critically investigate the material to those that blur or hybridize viewers' perception of their physical surroundings in such a way as to extend the virtual out into site. By examining projects that engage site in a multiplicity of ways, we can extend the utility of a concept of the material in the examination of media that frames a relationship to one's physical surroundings.

JANET CARDIFF AND GEORGE BURES MILLER: AUDIO AND VIDEO WALKS

We are all searching for the real, for the authentic experience... that we are actually on this earth ... We are building a simulated experience in the attempt to make people feel more connected to real life.<sup>139</sup>

> Cardiff and Miller have been creating artwork since the early 1990s, and their projects span a wide variety of forms, from gallery installations and sonic environments to outdoor media pieces. I focus on a body of work they refer to as audio and video walks, because, in light of the site-specific work discussed in the last chapter, they make use of comparable sensory and media elements. The manner in which they have spoken about their intentions for the work, furthermore, resonates with the discussion of the material found in Wodiczko's projections. As suggested in the quotation above, Cardiff and Miller characterize their own work as an effort to "make people feel more connected to real life" or inspire a "renewal of a sense of place."<sup>140</sup> In an examination of a selection of their audio and video walks, I argue they can also produce an opposite effect: the extension of mediated experience out into the material, which blurs the

boundary between the real and the invented. While Wodiczko's site-specific projections foreground the sociocultural conditions of site and its materiality, Cardiff and Miller's extend the virtual out into the participant's interactions with site. I begin with an examination of one of Cardiff and Miller's gallery based projects, which illustrates a preoccupation with the virtual and its relation to the material that is central to their audio and video walks.

Originally created for the Canadian Pavilion at the Venice Biennale in 2001. Paradise Institute (2001) consists of a plywood structure 17 x 36 x 10 feet with two doors that grant access to viewers (see Figure 1). When viewers enter, they find themselves on a theater's balcony with 16 seats. It is a model of an old-fashioned movie theater in extreme forced perspective and crafted in miniature to give the illusion that one is in a full-sized movie theater despite the sturcture's actual scale (see Figure 2). A movie is screened and participants listen to the soundtrack on headphones provided at each seat. Cardiff and Miller constructed the soundtrack in such a way as to confuse viewers about which sounds are part of the movie's storyline and which are recorded ambient sounds that are outside the movie's narrative, such as the sounds of coughing, chit-chat and rustling, a ringing cell phone, and a woman who whispers intimately into one's ear. In interviews, Cardiff and Miller have said that there are, in fact, three discrete soundtracks to the piece. "One level gives you the experience of the film soundtrack. The second level is... a 3D

soundtrack of an audience around you. The third is a... sound environment of scenes that unfold around you in the darkness."<sup>141</sup>

The audience strains to distinguish between the movie's soundtrack and external noises, real and fake audience noises, between sounds occurring inside or outside the structure. The piece unsettles conventions surrounding spectatorship in theatrical settings, which makes the experience discomforting. The audience's attention jitters between the film's soundtrack and the recorded audience noises. This shuffling of attention thwarts one's ability to settle into the immersiveness of a cinematic experience. Paradise Institute is less about the narrative content of the film being screened than this struggle to comprehend the multiple soundtracks. In other words, the piece examines the audience's positionality as spectators in the constructed environment of the theater by unsettling the expectations that normally govern it.

In Jonathan Crary's analysis of modern spectatorship, he charts how our capacity for attention is the outcome of over a century and a half of construction.<sup>142</sup> That we can sit in fixed attention for the duration of a Hollywood movie hardly seems a feat of disciplined self-control, but when understood alongside myriad ways in which focused attentiveness is demanded in contemporary forms of consumption and labor, such as full-time computer work and assembly line manufacturing, the importance of the construction of attentive subjects becomes clear.<sup>143</sup> As part of his analysis of the modern attention economy, Crary also notes the rise of psychological disorders associated with an inability to properly embody attentiveness, including forms of schizophrenia and Attention Deficit Disorder.<sup>144</sup> Symptoms associated with these disorders can include hyperactivity, disorientation, confusion, inability to concentrate or focus, and others. These are precisely the kinds of effects that Cardiff and Miller produce in Paradise Institute. The disruptions to the narrative make it impossible to focus on the plotline, creating a disorientation akin to the disorders associated with inattentiveness. What an interloper whispers into your ear, for example, becomes part of the unfolding sequence of events occurring on the screen. The screen does not define the entirety of the audience's experience of the piece, for the outside breaks in as a constitutive element.

This preoccupation with the inside and the outside, the constructed and the real, sets up a discussion of Cardiff and Miller's audio and video walks, which cultivate similar tactics. In contrast to their gallery-based work, the walks draw on a tradition of recorded driving and walking audio tours.<sup>145</sup> At the start of a walk, participants are given portable audio players with headphones (in later video walks people are given portable video players, such as digital video cameras or video iPods). Prerecorded narrators (frequently Cardiff herself) entreat listeners to follow their voice to various locations around the site. At stops along the way, listeners pause to look and listen to particular details about their surroundings. The walks are site-specific in that the stories

are created for these precise locations, yet unlike walking tours, Cardiff and Miller's pieces tell a story about the place that is frequently fictional, but at times contain fragments of factual details.

To date, Cardiff and Miller have made over 25 audio and video walks and have developed a number of techniques to deepen a listener's involvement in the narrative. Given the large number of walks, it is difficult to generalize the techniques that they employ. I focus on a particular example, Her Long Black Hair (2004), an audio walk commissioned by the Public Art Fund for Central Park in New York City, to exemplify some of these techniques. The piece has the sensibility of a detective story, because listeners are given a packet of photographs at the start of the tour, which includes images of a mysterious woman with long black hair (see Figure 3). Cardiff's narratorial voice also has a conspiratorial tone to it, making it seem like we are in pursuit of someone or something. There is no discernible narrative structure to Her Long Black Hair, which consists mainly of the narrator's recollections and thoughts about various locations. In Cardiff and Miller's own words the piece is an immersive "investigation of location, time, sound, and physicality, interweaving stream-of-consciousness observations with fact and fiction, local history, opera and gospel music, and other atmospheric and cultural elements."146

Both *Her Long Black Hair* and *Paradise Institute* cultivate disorientation about what is happening inside and outside the structure of the work. While participating in Her Long Black Hair, listeners hear gunshots in the distance, which the narrator claims. implausibly, is the sound of wild goats and pigs being slaughtered. (This claim is only slightly credible. There were pig farms on the land that eventually became Central Park, but it is doubtful that wild goats or pigs were ever shot in the park). Music drifts in-its origin unclear-the sound could be coming from within the park or it may be part of the recording. One of the photographs provided for the walk has the semblance of a historical snapshot of a crowd sitting in the park, further confusing participants about the walk's basis in fact or fiction. This continual shifting between the real and virtual, invented and factual. pre-recorded and live, is typical of Cardiff and Miller's audio and video walks.

Underscoring their recognition that the walks blur the real and the invented. Cardiff and Miller have variously referred to their audio and video walks as "physical cinema," "virtual reality," "3D narrative experience," and "film soundtracks for the real world." Though Cardiff and Miller refer to their work as virtual reality, it is a term they use knowingly as a metaphor, for none of it employs head mounted displays or computer-generated virtual environments. What they mean is that their work is a kind of immersive cinema in which our perception of reality comes to be experienced as mediated. As virtual reality substitutes the material with computer simulation, in Cardiff and Miller's work it becomes difficult to distinguish between what is occurring in one's physical

environment and what is pre-recorded, simulated and virtual.

Despite the virtual reality of their audio and video walks, Cardiff and Miller have also claimed that they offer a "renewal of a sense of place"<sup>147</sup> or a sense of "connection" to a participant's environment. Cardiff and Miller have spoken about how their work is driven by an impulse to reconnect people to the physical world:

Walkmans have always been criticized for creating alienation, but when I first discovered the walking binaural technique I was attracted to the closeness of the sound and the audio bridge between the visual, physical world and my body. To me it was about connection rather than alienation. I think it's partially because the audio on the CD meshes with the audio in the "real" environment but it's also because sound does come into your unconscious more directly than visual information.<sup>148</sup>

> Following up on this discussion of connection, Cardiff discusses a possible confusion between the invented and the real in the walks:

"There's a green door to your right, turn left at this corner, around the post. Watch out for the bike!" Some of what I say reinforces what you see in front of you so that my description parallels the voice inside your own head: "Yes there is a green door, yes there is a corner, I'll turn left." You are lulled into a complacency but then Bam! There is a disjunction: "Where is the bike?" I'm not sure why this technique interests me, but I think it works to push and pull people in and out of the experience.<sup>149</sup>

> What Cardiff might be describing here is a version of the concept of salience, which is used to describe objects and ideas that take on heightened importance or fascination

relative to other things in one's environment. When a narrator speaks knowingly of a "green door," for example, it gives listeners a sense of that object's heightened significance within the context of the story. (The next time a green door appears in the story, it is encountered with anticipation.) What is problematic about Cardiff's claim, then, is that a thing's salience primarily exists relative to the particular narrative in which it is told or contained. (All green doors do not take on heightened importance in one's life; only those in the story.) Because the walks are closed narratives, the objects and themes highlighted within them are salient only within the semiotic structure in which they are contained. Though Cardiff and Miller might wish that their walks produce a recognition or "renewal" of place and things outside of the walks' confines, the salience of objects exists only within the semiotic closure of a narrative and does not extend beyond it.

This semiotic closure is further evidenced in passing details found in some of Cardiff and Miller's walks that occur in public spaces outside the protective confines of parks, buildings or forests. In them the narrator reminds the listener to look both ways before crossing the street. (In a similar way she reminds listeners to close a door gently when on a library walk.) Participants are so immersed in the closed narrative of an alternate reality that they forget the rules and dangers by which this one operates. Cardiff and Miller's claim that they are interested

in renewing a sense of place echoes Wodiczko's preoccupation with encountering the material. Instead of producing an awareness of site in ways that were discussed with regard to Wodiczko's site-specific work, Cardiff and Miller's audio walks make use of one's material surroundings as the site for the creation of an invented narrative. The audio walks are narrative structures that reference site and create salience surrounding particular objects within the work. The walks are thus site responsive, because they respond to and refer to one's surroundings, but they create a sense of disorientation about what is inside and outside, the invented and the real. To the extent that we can refer to Cardiff and Miller's media walks as virtual constructions, this disorientation is an effect of the blurring of the virtual with the material. The material is enfolded as salience into the closure of the virtual.

MINNEAPOLIS ART ON WHEELS Since the early 2000's, a number of art groups have been exploring outdoor mobile projection as an artistic medium. Wodiczko's early projections were necessarily stationary, because they utilized large, high wattage slide or video projectors. Newer groups have made use of advances in projection technology, such as lightweight, lower wattage projectors that can be run off of batteries and deployed as mobile projection units. The rise of a DIY software programming culture has also led to the creation of tools to enhance forms of interactivity and immersion in outdoor projections. From virtual graffiti to bicycle-based mobile "happenings," there has been a proliferation in models for mobile outdoor projection, which provide additional insights into site specificity and site responsiveness considered here.

The next two studies are drawn from a burgeoning media art scene in Minneapolis, Minnesota, where I have worked since 2009. Minneapolis has become a hub of creativity around outdoor media arts. Steve Dietz, former curator of new media at the Walker Art Center and the founder of the SJ01 Biennial. has had a significant role in this. Since 2011, he has organized Northern Spark, a nuit blanche (dusk-to-dawn) outdoor art festival, which focuses predominantly on outdoor media art.<sup>150</sup> The two artist groups discussed next have both been commissioned by Northern Spark. Minneapolis Art on Wheels (MAW) and Mobile Experiential Cinema (MEC), which was founded by MAW members, explore the possibilities in outdoor media projection. Though both groups work with site-specific media projection, MAW has generally been less concerned about issues concerning site specificity while MEC continues to refine and explore new possibilities for immersive, mobile video projection in site responsive and site-specific ways.

MAW draws from a flexible group of collaborators.<sup>151</sup> Inspired by a visit to the Graffiti Research Lab in New York City, which had recently unveiled its Mobile Broadcast Unit (MBU), Ali Momeni founded the group in 2008. The MBU is a utility tricycle outfitted with a toolkit of technologies for mobile outdoor video projection; the basic setup includes a laptop, video projector, amplified speakers, battery power to provide electricity to all of this equipment (see Figure 4). The MBU became a platform for the creation of a wide range of outdoor projections, such as L.A.S.E.R. Tag, software that allows participants to draw on walls with swaths of projected color using only a laser pointer.

MAW's version of the MBU was built during a class on mobile projections at the University of Minnesota in 2008 (see Figure 5). They began "outings" with the unit that spring. Initially, they created the content using a mixture of digital video files and employed off-the-shelf tools, such as Flash. By the summer, Momeni had written a preliminary version of the software that came to define MAW's projection work, Livedraw. Originally written in MaxMSP (a newer version is written in C++), Livedraw is a software package that provides users with real-time video performance tools for mixing hand-drawings and real-time keying, layering and sequencing (see Figure 6). This allows users to create in real-time a wide range of projected content, including short video loops, hand drawings, and playback of prerecorded video.

MAW has organized hundreds of bicycle outings. Each one varies in content and duration, and as the following examples demonstrate, they are often guerilla in nature. The group does not seek permission to project on public walls, and because of this, outings generally take place in out-ofthe-way locations (i.e. under bridges and on commercial buildings that are closed for the night) in order to avoid attention from the authorities. Despite the potential for run-ins with authorities, they have also organized outings in public, high traffic areas, where they can attract large audiences. As is the nature of MAW's work, the projectionists actively seek and encourage participation by pedestrians, soliciting short poems, drawings, etc. They have also asked the public to perform in the projections. This content gets composed into a collage-like video piece.

In conversations with Ali Momeni, he highlighted a handful of outings he thought were most successful. He recalled a series of projections on a building located at the intersection of 26th Street and Lyndale Avenue South, a busy stretch of the Uptown neighborhood in Minneapolis during 2008. The guerilla nature of these urban projections gave rise to unexpected and impactful encounters. What made this Uptown performance especially memorable for Momeni was the arrival and response of the Minneapolis police, which came in response to MAW's activities. In the ensuing conversation between the officers and the group, one member of MAW, using the MBU projected on a public wall, wrote the phrase, "I've lost everything, and I feel great." This prompted a conversation between the police officers in which one remarked how a friend had recently said something similar. The phrase became a disarming gesture that got the officers to become participants in the work and to recognize the value of MAW's public projections. The officers allowed MAW to continue their projections and left the scene.

A second memorable public projection, in October 2010, was more orchestrated. MAW has worked with institutions to create large-scale, public projections. "Seaworthy" was a multiple projection piece commissioned by the University of Minnesota for their Twin Cities campus (see Figure 7). Like the Lyndale projection, "Seaworthy" was participatory, consisting of wireless projections of audience members' faces, who were asked to close their eyes while reflecting on the prompt, "Think of the last time you were at the sea."

As both of these examples demonstrate, participation is central to the construction and experience of MAW's outdoor projections. Audience interaction is actively cultivated in the design of their work. What made these projects particularly successful was the public's unforeseen levels of surprise and interaction. For MAW, site is the location for social encounters and participatory interaction with a public that is drawn into the work. In this sense, MAW's engagement with mobile outdoor projection has more in common with relational art, what Nicolas Bourriaud has defined as "a set of artistic practices which take as their theoretical and practical point of departure the whole of human relations and their social context, rather than an independent and private space."152 In MAW's work, the material becomes a screen for projections that facilitates active social interactions and participation.

MOBILE EXPERIENTIAL CINEMA Daniel Dean and Ben Moren are both longtime contributors to MAW. Sharing an interest in experimental filmmaking, they formed Mobile Experiential Cinema (MEC) in 2011 for a Northern Spark commission to explore site-specific projection. They have subsequently collaborated on several works that explore comparable themes and ideologies. MEC makes use of the Mobile Broadcasting Unit developed by MAW as a platform for their own work, but Dean and Moren make significant changes to the outfit to facilitate their divergent approach to site-specific, responsive projection.

The last section highlighted how site was not a central concern in MAW's public projections. It is this relative disinterest that was one of the inspirations for the formation of MEC. Dean and Moren maintain a more consistent interest in site responsiveness and site specificity in their work. In an interview with Dean and Moren. Moren stated that in addition to a meaningful engagement with site, they were interested in examining three elements through their work: the urban environment, story and narrative elements, and live action sequences. In contrast to the earlier case studies, MEC's work explores the ways in which the virtual and the material intersect in media interactions. Site can be the screen for projection that extends the virtuality of a narrative cinematic experience. Their site responsive work explores the blurring or hybridization of the virtual and the real, presence and simulation, live and pre-recorded in media performance and art.<sup>153</sup>

Second Bridge is Wider, But Not Wide Enough is the title of Dean and Moren's first

site-specific, mobile cinematic work. The narrative structure of the piece is organized around a small group of young adults who are discussing a missing friend. In the structure of the piece, the pretext for moving from site to site is to follow the group's recollections about their friend at the exact locations in which they occurred. At each site, the audience views a series of pre-recorded video shorts, which are projected directly onto the materiality of site. The opening sequence of Second Bridge is Wider, But Not Wide Enough, for example, occurs under the Hennepin Bridge, where the audience discovers the namesake for the piece on a memorial plaque (see Figure 8). A video sequence is projected directly onto the concrete bridge supports: a recording of the characters, in the exact same location, recounting their memories of their missing friend.

From the bridge, the audience is led by bicycle around Minneapolis to various locations where additional pieces of the story unfold. Even Minneapolis natives are unfamiliar with many of the sites. Dean said that their selection of sites was informed by an interest in "non-places" or "unprogrammed" locations. Moren added that the Situationist dérive was an inspiration for the identification of these non-places.<sup>154</sup> In a mix of technological savvy and ludic psychogeography, Dean and Moren first scouted sites by scouring Google Street View. Because Street View would often show buildings that were no longer standing or contain other digital mistakes, they would explore the areas in person in order

to select specific sites that fit their criteria of unprogrammed non-spaces.<sup>155</sup>

The final sequence of The Second Bridge is one of the most memorable of the piece, because it contains the most intriguing sequences from the perspective of the site-specific filmic and narrative effect that they've created. While in front of an abandoned building close to the Mississippi River, the audience is shown a disorienting short video. The video is projected onto the building's facade, which has two staircases. Because the recorded video is of the same facade, when the video is projected onto the wall, it is misaligned with the actual staircases. This produces a sense of visual feedback, a visual disorientation that is accentuated in multiple physical and temporal dislocations that occur during the segment. A man, who might be the missing person who dominates the storyline, picks himself off of the ground in front of the projection wall. Is it a homeless person accidentally caught in the wrong place at the wrong time, or an actor planted there in advance? A cameraman steps out into the audience, and his footage is transmitted live into the video. This adds a layer of temporal dislocation to the piece, because it blurs the line between the pre-recorded and the live.

Dean and Moren expand upon their repertoire of techniques for site responsive cinema in a second project, *The Parade* (2012). Whereas *Second Bridge*'s had a loose narrative construction organized around a series of recollections, *The Parade*, by contrast, has a clear and conventional "Hollywood style" narrative structure.<sup>156</sup> The story concerns a kidnapping and attempted ransoming. Similar to the *Second Bridge*, there is a hybridization of the virtual and the material, the simulated and the real. The audience witnesses the kidnapping as a live-action sequence at the opening of the piece and over the course of the work becomes involved in an attempt to recover the kidnapped person by collecting a ransom and giving it to the kidnappers (see Figure 9).

Dean and Moren's work with MEC exists alongside other media artists who explore the relationship between the virtual and the real through their intentional blurring and hybridization. In an extended examination of British new media performance and the art group, Blast Theory, Benford and Giannachi note how the group's performances unsettle our distinctions between the virtual and real, live and the mediated, and the physical and simulated. In Blast Theory's performance piece, Can You See Me Now?, the group create a mixed reality game that blurs online play and real action. Groups of participants are divided into two, one seated at computer terminals and the other navigating the city using handheld computers with wireless network connections and GPS.<sup>157</sup> One group tries to track down the other who moves avatars through a virtual model of the same town. In light of Blast Theory's work and others like it, Benford and Giannachi argue that artists are making use of mobile and ubiquitous computing in order to "span physical environments and virtual worlds."158

When understood in this context, Dean and Moren are similarly engaged in the creation of work that hybridizes space, time

and presence. But as a broad-stroke account of some of the transformations taking place with the use of mixed reality in performance and art, Benford and Giannachi's thesis about hybridization fails to capture some of the nuance in Dean and Moren's work. Dean and Moren's curation of non-places in their work, for example, suggests a fascination with physical environment in site responsive media that goes beyond hybridization. In choosing sites with which the audience has few associations, the environment becomes a "blank" site/screen for their work. This allows them to reimagine site as a screen for the projection of the virtual for the duration of the performance.

The hybridization of site is also in evidence in other details, especially in their use of Hollywood-style narrative in their second piece, The Parade. David Bordwell has described classical Hollywood style as an "aesthetic system" that includes a number of filmic and narrative conventions, including storyline development, cinematographic techniques, film length, color correction standards, etc.<sup>159</sup> As the dominant filmic convention, the Hollywood-style has led to the cultivation of what Bordwell, drawing on cognitive psychology, refers to as "schemata,"<sup>160</sup> or cognitive shorthands the brain uses to filter, process and interpret sensory information. These schemata facilitate ego-identification with a film's dramatic content. Schemata aid in imaginative integration into the piece, because viewers unconsciously rely upon them when forming impressions of a film. The *Parade* draws on these conventions to aid in the construction of the viewers' perception

of site, especially those with which viewers have little or no familiarity.

In sum, *The Parade* is comparable to Cardiff and Miller's site responsive work in that it offers a constructed narrative about site. Site, in other words, becomes the screen for projections. The virtual imagery blurs the distinction between invented and real history, actors and real action, projection and the conditions of site. Dean and Moren hybridize the material with the virtual through the projection of images onto the materiality of site. This approach to outdoor media art contrasts with the site-specific work discussed in Chapter 4.

This examination of alternative artistic practices that make use of outdoor projection highlights the variety of site responsive work possible with the medium. The technologies do not predispose art making towards particular aesthetic practices. There are, however, "real" stakes in art making, particularly in work that strives to open an encounter with the materiality of site. The next chapter argues that while outdoor media projection may not incline art making toward particular forms of site specificity, the expansion of the virtual into the material is compatible with existing social and capital relations. Thus, site-specific artwork that strives for an encounter with the material is a resistant engagement with the medium that attempts to mount critical opposition to these relations.

1 Janet Cardiff and George Bures Miller, *Paradise Institute*, 2001



2 Janet Cardiff and George Bures

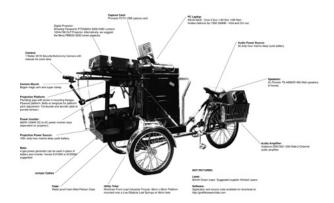
George Bures Miller, *Paradise Institute* [alternate view], 2001



3 Janet Cardiff and George Bures Miller, *Her Long Black Hair*, 2004



4 Graffiti Research Lab's Mobile Broadcast Unit

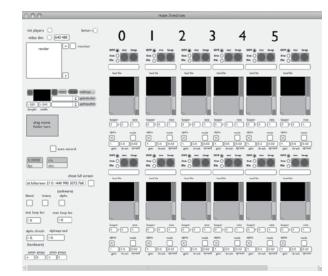


5 Minneapolis Art on Wheels' iteration of the Mobile Broadcast Unit



6

A screenshot of an early version of the custom-written software package, Livedraw.



7 Minneapolis Art on Wheels, *Seaworthy*, 2010

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8 Mobile Experiential Cinema, Second Bridge is Wider, but not Wide Enough, 2012. Image: Ben Moren



9 Mobile Experiential Cinema planning diagram, *The Parade*, 2013. Image: Trevor Burks

