The City as a Projection Space

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Abstract. Contemporary viewers' reception of moving image based performances is undoubtedly affected by traditional cinematic experience [which refers to a dark, sound insulated room with fixed seats and a rectangular screen]. Since the beginning of the 20th century artists have explored the artistic possibilities of the cinematic medium and attempted to re-invent its projection space. At night, the urban fabric may be used as a locus for image-based performances and thus transform into an ephemeral cinema space. The performances only survive in the viewers' memory, as the spaces will quickly regain their previous use. This new type of "projection space" may be public (squares, parks, disused industrial buildings), private (houses, art spaces, dance clubs), or semi - private (terraces, communal gardens). Through public art, urban voids become a center of social and cultural interaction. Viewers are not fixed in their seats, as in a typical cinematic space. They are dispersed and interact visually, being fully aware of each other's presence. The artwork itself may be interactive, in an attempt to increase the viewer's engagement. The accessibility of a public space is a paramount concern, as it broadens the number of people who can participate. This paper will explore, through a series of case studies, the effect of image-based events in changing people's familiar relations with urban space, focusing on the role of new media technology in facilitating common experiences and encouraging people to express themselves in a public context.

Keywords: Public art, public space, new media, image, city, screens, expanded cinema, interactivity, audience

Introduction

The screen is becoming a central element in artistic events that take place in disused areas of the contemporary urban fabric, which are increasingly being used as a projection space by new technologies. Public image-based events are constantly developing, which force people to rethink their relationship with the city. Since the nineteenth century cities have been the mediated spaces for advertising and its language of the bill board, hoarding, animated lit signs and-latterly- the large urban screen. Audiences are therefore familiar with consumer-oriented interventions on such screens, but not necessarily with public artworks. The new ecology of public art and the screen which is emerging has three major aspects: The most important is the attempt to expand and multiply screen space. The second is the tendency to hold the audience responsible for completing the artistic proposition, encouraging active intervention. Audience participation is the forerunner of interaction, which is the third aspect in the changing relationship between the viewer and the screen. This argument will be presented through a series of case studies, dating from the beginning of the 20th century until the present.

The evolution of urban projection

The history of screen technologies in modernity, particularly the way they have been integrated into the spatial dynamics of the modern city, has been dominated by the production of new forms of spectacle. Large screens are oriented towards collective forms of engagement, unlike cell phones or MP3 players, which tend towards individual forms of consumption. In the Modernist movement, the new urban space of the 1900s was epitomized via the dividing line of electrification: for example Berlin was regarded as an 'electropolis'.

"By the turn of the century its social landscape was altered almost beyond recognition, and Berlin had become arguably the most modern city in Europe. In honor of its central place in the nation's electrical industry and its illuminated streets, flashing signs , movie theatres and streetcars...contemporaries referred to it as an electropolis" (Killen , Berlin Electropolis, University of California Press 2005)

Electric lighting can be understood as a forerunner to the appearance of large screens in the city: lighting undermines the solidity of buildings, and creates a sense of movement in the image of city. The Modernist avant-garde regarded moving neon signs as a hallmark of the industrial city and an attack on the academic painting aesthetic. Walter Benjamin, in his essay The work of Art in the Age of Mechanical Reproduction analyzes how film is impossible to be appreciate while in a state of immersive contemplation, in contrast to academic art, and underlines its space expanding quality, which releases the individual from the borders of urban life. In his 1916 manifesto The Futurist Cinema, F.T. Marinetti declared film to be the supreme art as it enabled painting to break out of the limits of the frame and embrace all other art forms through the use of (then) new media technology.

In the years following WW2, the rise of broadcast TV and home-based electronic media replaced the social interactions that once took place in public space, leading to an increasing retreat to the private. Events once experienced collectively in the sphere of public culture became familiar as a spectacle - passively consumed by increasingly greater numbers of people from the privacy of their individual homes. Now in the digital era, media consumption is increasingly reoccurring in public, marking the re-emergence of the screen in public space, as media technologies are becoming ubiquitous, mobile and scalable, and are commonly embedded in urban infrastructure. The public domain now reemerges through a complex interaction of material and immaterial spaces, displacing the architecture which accreted around fixed media. The cumulative impact of these developments on the relation between media space and urban space has been profound. Architects such as Nouvel, Venturi and Ito have coined the vision of "media buildings".

The expansion and multiplication of screen space

In relation to emergent urban media art, two underlying currents may be identified. The first can be described as an audiovisual experience still constrained by a bounding border, which still separates fictional from real space i.e., the proscenium arch of a theatre, the casing of a television, the border of a cinema screen. The second group of artworks is characterized by the attempt to lose the frame, so that the created space is released as an immersive experience. This quest for the expansion and multiplication of the cinematic frame can be traced back to avant-garde movements in the 20th century. Challenges to the fixed rectangular format of the cinematic frame are found in the work of L. Moholy - Nagy, who proposed large spherical screens and simultaneous projections in a poly-cinema (Themerson, "The Urge to Create Visions," 42). In 1930, Eisenstein proposed the "dynamic square," a screen with changeable proportions of the projected picture (Friedberg, 2006, 131). The quest for the expansion of the cinematographic frame is also depicted in Abel Gance's Napoleon, (1927), which was filmed with three interlocked cameras. The final composition created either an expanded panoramic view or a triptych of two separate actions framing the central one. The resulting complex spatial and temporal relations were in line with the Cubist quest for depiction of a subject through multiple viewpoints.

The independent filmmakers of the 1960s were very conscious of creating a quite new branch of art. In the autumn of 1965, a survey entitled "Expanded Cinema" was screened at the Film Maker's Cinematheque in NY, initiating its development as an artistic genre. Extensive experimentation had led to a complete deconstruction of the cinematic apparatus: the camera, the projector, and the projection surface. Mainstream cinema was constrained by an industrial system of mass production and distribution, the physical interface of a movie theatre and the interface of film itself. When the experimental filmmakers of the 1960s started to systematically attack the conventions of traditional cinema, these attacks were aimed its physical interfaces. The projection screen was exploded and multiplied, either through division into multiple images using split-screen techniques or by placing screens in several different walls (Henry Jacobs, Jordan Belson, the Whitney Brothers, The Vortex Concerts, 1957-59). In experiments with the projection surface, films were projected on curtains of steam with running water (Robert Whitman, Shower, 1964) or on human bodies (Robert Whitman, Prune Flat, 1965). As to projection events outside the controlled indoor environment: in the 1960s Wolf Vostell created Happenings in which already broken, destroyed, damaged, or otherwise derelict elements of the environment are the central subjects. In Notstandbordstein (1969), the streets, sidewalks, and buildings of Munich became the "screen" on which a film was projected from a moving automobile. In MovieMovie (1965) by Jeffrey Shaw, Theo Botschuyver and Sean Wellesley Miller, films and light beams were projected onto a pneumatic sculpture which spectators could move in an outdoor event at the 4th Experimental Film

Festival, Knokke le Zoute, Belgium.

Throughout the 1960s, the screen became, multiple and mobile, as well as flat or curved, or was replaced by unusual materials like buildings, geodesic domes, plastic balls, helium-filled inflatables and so on. The notion of variable and dynamic screen space was used in mainstream projects, such as corporate pavilions in international Exhibitions, or on the interior of the building envelope as a projection surface, as in the Philips Pavilion by Le Corbusier and I.Xenakis , where the architectural design of the pavilion, composed of hyperbolic paraboloids, was used as a projection surface.

During the 1970s, video artists made use of other inherent properties of the new video medium, namely the closed-circuit installation which allowed the spectator to see himself in the video monitor, thus making the spectator part of the system (Bruce Nauman, Live-Taped Video Corridor, 1970). Direct interaction with the video screen image was also possible in that decade (Nam June Paik, Magnet TV, 1965). Video installations anticipated the observer-relative and time-delayed interactive computer installations of the 1990s, in which one finds parallels both in terms of content and motif.

Interaction

The concept of the spectator's active involvement in artworks that made use of the moving image was present long before the emergence of computer technology. In regards to interaction within the realm of public space Andreas Broeckmann (2000) has argued:

"The challenge to the creative use of media technologies is fostering the diversity of public actors and terrains and to develop strategies of articulating the new public domains that connect physical urban spaces and the potential public sphere of the electronic networks. This public sphere will only come into being if there are complex forms of interaction, of participation and learning, that use the technical possibilities of the new networks and that allow for new and creative forms of becoming visible, becoming present, becoming active, in short, of becoming public" (Broeckman, Public Spheres and Urban Interfaces, quoted by Scot McQuire)

Scot McQuire, in his essay The Politics of Public Space in the Media City (2006) refers to David Rokeby's argument that digital aesthetics are about creating relationships rather than finished art works. He also mentions Nicholas Bourriaud's term of "relational aesthetics", according to which the basic aim of the work of art is the construction of social relationships. Thus, new forms of public interaction may play a vital role in challenging the dominance of public space by commercial billboards or surveillance systems.

Lev Manovich has marked the sea-change in the way we relate to information space, through the advent of public and ubiquitous computing:

"...the previous icon of the computer era - a VR user travelling in virtual space - has been replaced by a new image: a person checking her e-mail or making a phone call using her PDA/mobile phone combo while at the airport, on the street, in a car, or any other actually existing space. But this is just one example of what I see as a larger trend: Applications that dynamically deliver dynamic data to, or extract data from, physical space - and which already are widely employed at the time of this writing: Video surveillance, cell-space technologies (also referred to as mobile media, wireless media, or location-based media), publicly located computer / video displays present the same visible information to passers-by." (Manovich, 2006)

If we follow this logic, augmented space can be thought of as the next step in the trajectory from a flat wall to real space, which has animated modern art for the last hundred years. For a few decades now, artists have dealt with the entire space of a gallery: rather than creating an object that a viewer would look at, they placed the viewer inside the object. Now the artists have a new challenge: placing a user inside a space filled with dynamic, contextual data with which the user can interact. In an art historical perspective, the intermedia approach of Fluxus artists such as Wolf Vostell has fed directly into contemporary media interventions

in the city fabric using mixed tactics of intervention often inspired by the original Happenings of the 1960s.

Defining Contemporary Practice

While a number of video artists continue the explorations of the 1960s "expanded cinema" movement by pushing moving image interfaces in many interesting directions, outside the gallery space we can now find a much richer field of experimentation. We would categorize these activities under several denominations

1. Ephemeral Cinematic projections within the urban fabric (re-inventing the cinema screening space);

2. Alternative uses of the urban information screens (subversion of the commercial or surveillance spaces)

3. Interactive use of image projections within the urban fabric (Constructing new audiences and forms of engagement with the city)

4. Urban Screens and Telematic displacement (interpenetrating virtual spaces, distanced spaces or historical era)

Ephemeral screens

These can range from examples such as Secret Cinema - a movie house that moves around the city of London, where viewers are electronically informed about the location of the new screening (which could take place anywhere in a public or private place, creating the trajectory of a moving screening event within the city, in opposition to the stability of the typical movie house), to Michelle Teran's Friluftskino (2007) experiments in open-air surveillance cinema. This installation captured illicit views from the swirl of electronic signals which invisibly create "Hertzian" space. By intercepting private images and live surveillance broadcasts from wireless CCTV cameras with a video scanner, it conflated the idea of private and public space, and by the re-projection of these pirated signals on the external walls of the buildings from which they are captured, it creates a public spectacle , making those tangible boundaries transparent. The spatial boundary conventions of private and public, inside and outside were challenged by the reality of a public projection on the street. In accessing these images audiences were offered a view into how the public represents itself through the use of these readily available technologies. It amounted to an insight into the ways the city itself is being redefined and restructured through intangible technologies.

Alternative use of the urban information screen

These were pioneered by Jenny Holzer in her Truisms (1977-). Historically, large screens have primarily been used in two ways: as relays for live events: (rock concerts, sports) or to provide flexible platforms for information and advertising. These uses largely comply with spectacular public space, with the appropriation of the city as spectacle, but there is also a history of alternative content: e.g. the text based installations by Jenny Holzer in the 70s. Holzer's work suggested that a key issue for large screens in public space remains the traditional issue for all media forms: control, access and the filtering of content etc. Holzer compiled a series of statements and aphorisms ("truisms") and publicized them in a variety of ways: listed on street posters, in telephone booths, and even, in 1982, or on one of Times Square's gigantic LED billboards. Later artists such as Stefhan Caddick with Storyboard (2005) continued in this tradition. Commissioned for the contemporary Cardiff gallery g39 for May You Live in Interesting Times, 'Storyboard' allowed members of the public to post their mobile phone text messages to a Variable Message Sign, a now common sight in city centres, (often displaying news of traffic jams and safety messages). Here, the VMS became the platform for a public display of often intimate or very personal text messages, posted from the people of Cardiff, and from the internet.

Interactive use of image projections within the urban fabric

Public engagement can be highly interactive, famously Rafael Lozano-Hemmer's Underscan (2005) was an interactive video art installation for public space. In the work, passers-by were detected by a computerized tracking system, which created video-portraits projected within people's shadows. Over one thousand video-portraits of volunteers were taken in Derby, Leicester, Lincoln, Northampton and Nottingham by a team of local filmmakers. For its London presentation in Trafalgar Square, Tate Modern filmed over 250 additional recordings. In the installation, people were free to portray themselves in the manner of their choice and become integral to the performance of the work. Portraits would appear to wake up at random locations, creating eye contact with a viewer as soon as his or her shadow "revealed" them. As the viewer walked away, the portrait reacted by looking away, and eventually disappeared. In Blinken Lights (2001) the famous "Haus des Lehrers" building at Berlin Alexanderplatz was occupied by Chaos Computer Club to become world's biggest interactive computer display: The upper eight floors of the building were transformed in to a huge display by arranging 144 lamps behind the building's front windows. A computer controlled each of the lamps independently, to produce a monochrome matrix of 18 times 8 pixels. During the night, a constantly growing number of animations could be seen. There was an interactive component as well: the public invited to play the old arcade classic "Pong"(on the building using their mobile phones but, as with Caddick's installation, could also place love letters on the screen via their mobiles). The reaction to this piece was enthusiastic and it ran continuously for 23 weeks.

Urban Screens and Telematic displacement

Kit Galloway and Sherrie Rabinowitz launched Hole-in-Space on a November evening in 1980. People walking past the Lincoln Center for the Performing Arts in New York City, could see life-sized, television images of people in Los Angeles. They could see, hear and speak with each other as if casually encountering each other in the street. No explanation at all was offered. This artwork suddenly collapsed distance between both cities and created a unique telematic interaction. In Liberate Your Avatar (2007) Paul Sermon recreated All Saints Gardens on Oxford Road Manchester within Second Life, allowing both members of the public and virtual inhabitants ("avatars") of Second Life to coexist via green screen overlays, and share the same park bench in live interaction. The installation transformed the large "Urban Screen" situated in All Saints Gardens into a portal between two parallel worlds, relocating the Manchester Suffragette Emmeline Pankhurst as an avatar within Second Life. Here she remained locked in protest to the railings of the park, reminding the audience of the need to continually evaluate the political implications of new media and the resonances of history.

Conclusion

As we hope we have shown, this new taxonomy of Urban screen artworks is a continuously evolving in its attempt to both expand the cinematic surface and to simultaneously critique the advance of technology into both public and "private" domains and their intersections, transforming our concept and experience of the city. As Virilio says: "The screen abruptly became the city square" (Virilio, 1987, pp.14-31) The contradictory expansion of brands and surveillance technologies across the urban surface and the exhibitionist nature of public engagement with media via mobile and other devices, has confused our notions both of decorum and ownership of public space. What the artist can bring to the city through their experiments is an open questioning of these trajectories and also give back a context and meaning for new forms of public interaction, which are rooted in the knowledge and history of a particular place and time.

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Endnotes

ging people's familiar relations with urban space, focusing on the role of new media technology in facilitating common experiences and encouraging people to express themselves in a public context.