Jeffrey Shaw's Apparatuses: On the Virtual, in situ

Among Jeffrey Shaw's various artistic pursuits, some of the most significant involve explorations of the apparatus and of the new media forms that have developed out of the use of digital techniques and interactivity. To conceive of the production of images no longer simply as the process necessary for the genesis of those images but rather as both the result of a work, and to make the reception of images into an activity upon which the very actualization of those images depends: these projects involve: a rethinking of our contemporary relations to images and the transformations that those images and those relations have undergone.

There is neither representation nor experience outside of an apparatus. In fact, the apparatus is the very condition of their possibility. At once machine and machination [in the sense of the Greek mecha], the apparatus sets out to produce specific effects of an order which is just as much aesthetic as it is social. More than a simple technical organisation, the apparatus puts different instances of enunciation and figuration into play, weighs a position and a role to the subject of the scene, determines the functioning of the gaze and of specific behaviours and perceptual processes; it is the result of very particular economic and institutional constellations.

Artistic installations, above all those of experimental cinema and video, have had the task of analysing what constitutes those foundations of the dominant mode of representation since the Renaissance. To be precise: it isn't cinema or painting or the photo that is submitted to a meticulous re-examination but rather, it is the entire assembly of mythic and non-mythic apparatuses that is brought into consideration, from Plato's cave to Brunelleschi's tavoletta, from the camera obscura to Dürer's perspectival experiment, from panopticon to contemporary surveillance systems. The entire history of representations gets rehearsed every time in these theatres of seeing, whose heuristic function thus becomes quite clear.

This critical, analytic and reflexive dimension of the installation has been essential to Jeffrey Shaw's œuvre since he began working with it in the 1960s. In combining various elements of the cinematic apparatus in new ways so as to allow unique configurations to develop out of them, as well as by coupling that apparatus with other organical apparatuses of representation, the artist has repeatedly expanded the limits of the standard regulations of traditional cinema and as such, has created extraordinary configurations from the surface on which it is projected, and its pure condition of interference. Above all, it is the process of its materialisation that is at stake.

A Viewing-window. The Impression of Totality

At the very moment when the calculated image and interactivity are once more gaining control over the scene's three-dimensionality and allowing it to be revealed against the historic losses of the spectatorial, those present-day instrumental projections, interactive screens - the image is exceeded in every one of its dimensions, at every level of its fullness, and most complete nature. Since the installation, Emergence of Continuous Forms (1996), with its projected film onto a set of semi-transparent screens that were set up all at intervals over the length of the gallery, up to the series of panoramas in Place and the projection dome EYE, Jeffrey Shaw has re-imagined visual such dispositional unfoldings of the scene to explore various forms of an expanded cinema, as well as to explore other ways of seeing and other ways of making things visible.

The Event of a Screen

The screen is no longer this singular, fixed, and two-dimensional rectangle that one can displace behind the projection of the film. It now has an autonomy, it has taken on a life of its own, whose properties and transformations, or even possible movements, it confers onto the representation. The image is the screen, and this screen is event. The frame is often effaced, its own boundaries blurred with those of the different materials of which it is comprised, drowned in the curve of taking, taking on the forms of a gauzy liquid... As such, the flatness of the screen-image is also called into question. In Emergence of Continuous Forms for instance, the spectator can instate one of the screens and so can disturb the image and at the same time give it value. As for the opacity and the transformability of the screen, they are put to the test in this many works that experiment with the relative transparencies of different materials. In order to achieve visibility, one must "make a screen, produce an "arrest" of the image [arrêt de l'image] and not simply a freeze-frame [arret sur image] of it, or one must intercept the beam of light. The images of the film are in fact nothing other than this meeting of light and extremely diverse varieties of material. It is in this way that the film projection becomes the performance, a spectacle unto itself in the semi-transparent dome of Corporation (1987), the materials-turned-events that are produced by the various actions on the inside of the dome are what make the film and the projected imagery visibly on the surface. Using thighs, malleable screens and a minimal level of consistency (smoke, gelatin, blown-up tubes, inflatable screens...), Shaw gives back to the projected image, all the while highlighting its essential fragility, its ontological indissociability from the surface upon which it is projected, and its pure condition of interference. Above all, it is the process of its materialization that is at stake.

This critical, analytic and reflexive dimension of the installation has been essential to Jeffrey Shaw's œuvre since he began working with it in the 1960s. In combining various elements of the cinematic apparatus in new ways so as to allow unique configurations to develop out of them, as well as by coupling that apparatus with other organical apparatuses of representation, the artist has repeatedly expanded the limits of the standard regulations of traditional cinema and as such, has created extraordinary configurations from the surface on which it is projected, and its pure condition of interference. Above all, it is the process of its materialization that is at stake.

The Event of a Screen

The screen is no longer this singular, fixed, and two-dimensional rectangle that one can displace behind the projection of the film. It now has an autonomy, it has taken on a life of its own, whose properties and transformations, or even possible movements, it confers onto the representation. The image is the screen, and this screen is event. The frame is often effaced, its own boundaries blurred with those of the different materials of which it is comprised, drowned in the curve of taking, taking on the forms of a gauzy liquid... As such, the flatness of the screen-image is also called into question. In Emergence of Continuous Forms for instance, the spectator can instate one of the screens and so can disturb the image and at the same time give it value. As for the opacity and the transformability of the screen, they are put to the test in this many works that experiment with the relative transparencies of different materials. In order to achieve visibility, one must "make a screen, produce an "arrest" of the image [arrêt de l'image] and not simply a freeze-frame [arret sur image] of it, or one must intercept the beam of light. The images of the film are in fact nothing other than this meeting of light and extremely diverse varieties of material. It is in this way that the film projection becomes the performance, a spectacle unto itself in the semi-transparent dome of Corporation (1987), the materials-turned-events that are produced by the various actions on the inside of the dome are what make the film and the projected imagery visibly on the surface. Using thighs, malleable screens and a minimal level of consistency (smoke, gelatin, blown-up tubes, inflatable screens...), Shaw gives back to the projected image, all the while highlighting its essential fragility, its ontological indissociability from the surface upon which it is projected, and its pure condition of interference. Above all, it is the process of its materialization that is at stake.

A Viewing-window. The Impression of Totality

At the very moment when the calculated image and interactivity are once more gaining control over the scene's three-dimensionality and allowing it to be revealed against the historic losses of the spectatorial, those present-day instrumental projections, interactive screens - the image is exceeded in every one of its dimensions, at every level of its fullness, and most complete nature. Since the installation, Emergence of Continuous Forms (1996), with its projected film onto a set of semi-transparent screens that were set up all at intervals over the length of the gallery, up to the series of panoramas in Place and the projection dome EYE, Jeffrey Shaw has re-imagined visual such dispositional unfoldings of the scene to explore various forms of an expanded cinema, as well as to explore other ways of seeing and other ways of making things visible.

The Event of a Screen

The screen is no longer this singular, fixed, and two-dimensional rectangle that one can displace behind the projection of the film. It now has an autonomy, it has taken on a life of its own, whose properties and transformations, or even possible movements, it confers onto the representation. The image is the screen, and this screen is event. The frame is often effaced, its own boundaries blurred with those of the different materials of which it is comprised, drowned in the curve of taking, taking on the forms of a gauzy liquid... As such, the flatness of the screen-image is also called into question. In Emergence of Continuous Forms for instance, the spectator can instate one of the screens and so can disturb the image and at the same time give it value. As for the opacity and the transformability of the screen, they are put to the test in this many works that experiment with the relative transparencies of different materials. In order to achieve visibility, one must "make a screen, produce an "arrest" of the image [arrêt de l'image] and not simply a freeze-frame [arret sur image] of it, or one must intercept the beam of light. The images of the film are in fact nothing other than this meeting of light and extremely diverse varieties of material. It is in this way that the film projection becomes the performance, a spectacle unto itself in the semi-transparent dome of Corporation (1987), the materials-turned-events that are produced by the various actions on the inside of the dome are what make the film and the projected imagery visibly on the surface. Using thighs, malleable screens and a minimal level of consistency (smoke, gelatin, blown-up tubes, inflatable screens...), Shaw gives back to the projected image, all the while highlighting its essential fragility, its ontological indissociability from the surface upon which it is projected, and its pure condition of interference. Above all, it is the process of its materialization that is at stake.
take. But the immersion is permanently contradicted by the presence of a frame that, even when expanded, is affirmed as a cut and focuses the gaze. To be at the center of or within the scene and to find oneself displaced there is not necessarily to confuse the image and the world. Total vision is never more than a desire and in any case, one that falls within the purview of the scopic drive on which cinema is founded.

This work on the panoramic apparatus has its complete genesis in Shaw’s oeuvre, whether in the stills of The Virtual Museum, or again, in the photographic reflection of the surrounding gallery-space in the virtual installation Inventer la Terre for the “well-placed” spectator, the virtual image forms an exact substitution for the actual image and its spectator, as well as the requisite continuity in the apparatus between the exact place where the image was taken and that of its viewing. Thus for the “well-placed” spectator, the virtual image fulfills the effects of immersion.

These circular environmental installations place the spectator at their center. However, the overarching design that characterizes the traditional Panorama is replaced here by the dominance of expansion. With his camera is precisely what makes the image come into being. As such, the simulation of the conditions of the shot gives the spectator both the illusion of producing the scene on-the-spot as well as a certain amount of comfort, in a feeling of power, whereas traditional cinema simply allows him to be all-seeing. Virtual reality, a form of “heightened reality” wherein the spectator takes on the physical space of the performance together with a graphically flat, synthetic image that is superimposed upon that performance space. A principle that, he later develops with the sculpture Inverted Time.

At a mental or perceptual level but rather by adding/intervening different levels of reality, of heterogeneous spaces and times. Portion of space that it is representing, in a seamless continuity between the actual and the virtual spaces.

This assimilation of the location of the shot, of the source of the projection, and of the privileged point of observation is what is so exemplary in the apparatus of Place. A camera is situated on the round, motorized platform where the spectator is placed in front of three video projectors that are projecting a 360-degree image onto the screen. In this apparatus, the camera is made to depart from its usual function: from an instrument of appropriation and capture, it turns into the very interface that allows the platform to turn into the very interface that allows the platform to be all-seeing, at its center acts as a control tower that mediates and whose manipulation allows the viewer to observe the actual space of the Musee de la Cite des Sciences et de l’Industrie, as the same time as he views the overlapping images of a virtual panorama. In this way, it is about complicating our relation to representation, not simply by expanding the field of vision at a mental or perceptual level but rather by adding/intervening different levels of reality, of heterogeneous spaces and times.

We could just as well be discussing “heightened virtuality” in relation to these experiments. The Golden Calf for example again takes up the model of the panorama by inverting it to produce a subtle fusion of the virtual and the actual. The environment of the viewing space, previously photographed and then animated by a mobile digital viewing window. As its center, constitutes a virtual panorama on which the digital model of a golden calf onto which the panorama is reflected. Since the position of the small viewing-window coincides once again with that of the shot, one is able to explore the digital reflection of
Jeffrey Shaw's installations: autonomous micro-narratives in viewpoints—actions and events pre-recorded in the venue of the exhibition itself—which the spectator can access in no particular or pre-determined order. This enables the playful experience of recognition, of identification of certain urban areas of Melbourne in Australia. It is through Shaw's narrative interaction that spectators become aware that it isn't enough to be placed at the location of a fragment, without links but with passages and with possible leaps from one to the other.

For Place Urbanity, the spectator will move from one panorama to the other and in so doing, will become aware that it isn't enough to be placed at the center of space in order to take part, in it. Each panorama consists of a particular neighborhood district thereby the spectator finds several people who, hanging upside down, are all telling a story or joke that is well-known to the inhabitants of the place. The success of the joke presupposes this common understanding, this degree of the "well-known" a minimum of codes, of languages, and of shared experiences. So, the art-work itself becomes the place of a collective experience of recognition, of identification. This embeddedness of the various works in immediate contexts involves a level of interactivity that puts into play various narrative forms of address and of complicity through the gaze, a complexity that is not only on the order of form and technique, but one that is also based on a specific rhetoric, for example the ancestral rhetoric of the storyteller or of the witness.

What makes Shaw's approach so innovative from a cinematic viewpoint does not so much lie in his exploration of some of the most advanced techniques available, as it does in his invention of interfaces that operate and direct the most varied of systems from traditional optical apparatuses (mirror, periscope, etc.) to the most sophisticated of interactive processes (flight-simulator platforms, virtual-reality systems, etc.) as well as Shaw's innovation lies in the hybridization of the entire gamut of audiovisual techniques as well as everyday objects like bicycles or armchairs with different kinds of cinematic machines. It is by conceiving of unique combinations of apparatuses that pertain to various modes of representation, both old and new, that Shaw is inventing amazing machines for seeing. Thus, the mill of Revolution marks out images like so many photographs, recalling the glazing of the film in the movie camera. Finally, just as in the nineteenth century the rediscovery of the Panoramas were invented as a generic proposition, Jeffrey Shaw creates architectures systems that respond both to the exigencies of the particular project, as well as to the perceptual conditions of the new works that the virtual environments are...
Situation
The Jahrhunderthalle was built on the grounds of the former Ruhr steel factories in 1902 as an official exhibition hall. Later, it was used as a power station, and then as a workshop and warehouse for Krupp. In 1994/1995, now under a preservation order, the building was renovated as a venue for public events as part of the IBA project "Stadtpark West." Most of the buildings on the disused industrial site surrounding the hall were pulled down and an urban leisure park is being created.

Scenography
Two locations in the area surrounding the Jahrhunderthalle have been composited in this scene—one is in the original industrial condition, the other is in the new recreational park.

A West Lights advertising poster is attached to a wall—a man offering a cigarette to a female window cleaner who is dangling on a harness outside his window. Thick red smoke is surging out of the roof and windows of the former porter's cottage, causing a red haze to drift across the landscape.

Situation
The Kaiserstuhl coking plant, situated on the grounds of the "Westfahrahn" steel mill, went into operation in 1992. It was a "future-oriented" plant, using the latest in process-engineering equipment and environmental technology, and was one of the most efficient coking plants in existence. Despite this, it was closed again in September 2000 for private company reasons. Now a tourist site, it has been retro-fitted with new features such as a vast solar cell installation, planted grass, and theatrical nighttime lighting.

Scenography
On one side of the roof of the furnace, fires are burning along the two parallel rows of furnace lids that are now hidden under a cover of grass. On the other side, a worker is re-enacting one of the former procedures of the coking plant—dressed in his trade uniform, he is pouring gray sealant around one of the still exposed furnace lids, causing smoke to billow up.

Situation
Within the confines of the small cemetery in the Dortmund district of Huckarde there are rows of memorial stones set in the grass to commemorate a tragic mining accident in the Hansa Mine on 16 March 1944. Ninety-four miners died as a result of a fire at one explosion, in some cases, their remains were not retrieved until 1952. The bronze figure commemorating the dead men was unveiled in 1952.

Scenography
A flock of white doves fly down and individually settle on each of the memorial stones before flying off again.
**Situation**
The old cycle racing track in Hoesch Park was built around 1939 as part of a Third Reich job-creation scheme. No races of any consequence were ever held here. Today, the track and the stands are in a state of disrepair; trees are growing through the cement.

**Scenography**
A Dortmund football star walks around the grassed area of the cycle track in a large, transparent inflatable football. Black-and-white geometrically patterned flags flutter on the flagpoles at the entrance.

---

**Situation**
This "welfare building" - a social center with a swimming pool and other facilities including a public school of domestic sciences - was built in 1906 for the miners of the Minister Stein pit and their families in the district of Eving. From the 1960s on, it was used as a day-care center for mentally handicapped children, and later as a school. Between 1989 and 1992 it was restored as a building of public heritage. Most of the surrounding houses and other buildings were renovated likewise. A large immigrant population now lives in this area.

**Scenography**
One of the vegetable gardens is full of ripe watermelons, an unlikely sight in central Europe. The garden owner, ethnically recognizable as being of Turkish or North African origin, pulls one from the ground, cuts it in half in his hands, and proudly presents its juicy red flesh to the camera.

---

**Situation**
The Dortmund docks, the starting point for the Dortmund-Ems Canal, were built between 1895 and 1899. They were opened in August 1899 by Emperor Wilhelm II and extended between 1907 and 1924. After being damaged during the war, they were restored and later modified to accommodate changing modes of bulk transportation. Most of the surrounding houses with their orchards and vegetable gardens were renovated likewise. A large immigrant population now lives in this area.

**Scenography**
A group of cheerful young Muslim women come around the corner and walk along the pavement past the camera. Behind an opposite wall, a claw arm is lifting and sorting pieces of scrap metal. It is Sunday, except for a fire engine passing in the distance, there is no traffic.

---

**Situation**
In 1996, as part of the Ruhr Triennial, a design competition for the development of the Schurenbach slag heap was launched. The artist Richard Serra won the commission for the final design of the location, conceived a leveled-off summit of black rubble and a 15-meter-high, 50-tonne steel plate that is widely visible as a landmark. It refers to the two elements that once dominated this landscape: coal and steel. The Schurenbach slag heap was opened as a site of artistic interest in 1998. Serra's object has also attracted the activity of graffiti artists.

**Scenography**
A golfer, standing on the summit of the slag heap at some distance opposite Richard Serra's sculpture, swings his club and hits a golf ball that strikes the steel plate.
Situation
Villa Hiigel was built from 1870-1872 as the Krupp family residence according to plans by Alfred Krupp. Until 1945, it served several generations of the Krupp family—later Krupp von Bohlen und Halbach—as a domicile and venue for official functions. During this time, it underwent many alterations. Alfred Krupp also planned and laid out the surrounding parks and woods from 1870 on. The Villa remained largely undamaged, and after 1945 was at first used by the Allies as the headquarters of the "Coal Control Commission." Later it was put into service as a museum and is, among other things, the headquarters of the Alfred-Krupp-von-Bohlen-und-Halbach Foundation. The Krupp logo flutters on a flagpole in front of the building, while two black sphinxes guard its rear entrance.

Scenography
A group of elderly men and women are picnicking on the lawns behind Villa Hiigel. The tablecloths spread out over the grass have various black-and-white patterns printed on them (the same as those used for the flags at Hoesch Park]. Two children suddenly appear out of nowhere, a boy dressed as a cowboy chasing a girl dressed as a Red Indian. They run between the picnickers, then vanish into the background again.

Situation
The urban enhancement project CentrO, located on the former Thyssen industrial site, forms an integral part of plans for a "New City Center" in Oberhausen. CentrO consists of a shopping center ("Experience Shopping"), the Coca-Cola Oasis, the Oberhausen Arena, a promenade, a leisure park, and a business park. It was opened in 1996. Further projects are planned, including one for environmental technology, the "Indoor Exhibition Center." With investments totaling one billion euros, CentrO is the largest structural-transformation project to take place in the Ruhr since the Opel factory was built in Bochum in the 1960s.

Scenography
An inline skater circling around the camera shows off his skills. He is wearing the latest in wearable computing—a head-mounted display, a miniature computer on his belt, and a keyboard strapped to his arm. He is also wearing a T-shirt sporting an advertisement for the Jahrhunderthalle Bochum panorama and on its back the slogan "God's Back."
Melbourne is noted for its ethnic diversity, and it also has the reputation of being the comedy capital of Australia. Place Urbanity presents fifteen 360-degree panoramic video recordings made in various suburban locations in Melbourne where many of these ethnic communities are concentrated: Chinese, Macedonian, Greek, Italian, Vietnamese, Turkish, Russian, Jewish, Aboriginal, African, Serbian, Indian, Australian, Egyptian and Lebanese.

The work allows the viewer to rotate the projected image within a surrounding 9-m-diameter projection screen, and in a virtually reconfigured Melbourne landscape navigate between fifteen cylinders on whose interior surface these panoramic recordings are viewable. In each of these suburban situations a comedian who is hanging upside-down tells a joke. The jokes of the comedians, as members of the various ethnic communities represented in their panoramic surroundings, critically comment on their identities within the Australian social and geographical context.
FUTURE CINEMA
The Cinematic Imaginary Beyond Film

Edited by Jeffrey Shaw and Peter Weibel

Future Cinema is the first major international anthology of current video, film, and computer-based work that embodies and anticipates these new cinematic techniques and modes of expression. Based on the exhibition of the same title, the book for the first time brings together a large number of highly significant installations, multimedia and Net-based works produced in the digital field by both young and established international artists exploring algorithmic procedures and immersive and technologically innovative environments such as multi-screen, panoramic, and dome projection, shared multi-user and online configurations, and multi-location virtual environments. Another focus is on works exploring creative approaches to the design of interactive, non-linear, modular narrative content. The book also documents the historical trajectory of those many and varied experiments in cinematic form that prefigure, inform, and contextualize our current cinematic condition: the cinematic imaginary beyond film and beyond the digital.