INTERRUPTED SURFACES: INSTALLING THE PROJECTION

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This essay originates from a piece of research on the artistic and technological possibilities that may be involved in the suspension, interruption, or acceleration of the pulse of projection, the reorientation of its temporality, as well as the variation in the positions and movements (which are adjusted at any time) of viewer-participants in a given installation environment. To this end, we shall first set out various ways of disrupting installation and projection cadency. Then, we will offer a sustained reflection on a significant number of artists who have contributed to the originality of these discontinuities and truncations, whether with light beams for projecting images and signals, whether with the particular devices used, or with projection surfaces turned into screens, or even, from the ‘lure of glowing emanations’, in the words of Catherine Elwes (2015, p. 11).

We shall be considering types of installation that involve moving images (projected or emanated), but which become more complex with the interposition of other so-called analogue materials, introducing a particular ‘narrative’, whether linear, non-linear, self-evanescent or something else. In addition to the diaphanous materiality of light and careful sequences of images, it is possible to conceive of other ways to add installation and projective power to the environment in which we are immersed, through other artistic and visual devices such as intermission, interposing, overlay, interruption or interference. Therefore, these artistic disruptions (in the broadest sense) in terms of image and technology also belong to the language games that we often see associated with projection art practices or screen art practices. These manifest themselves in numerous ways, as can be seen if we consider, for example, the device, the projection surface and installation space, or the kind of aesthetic and participatory experience that is expected from the viewer. The screen and the projection in artistic practice have been the subject of much reformulation and remediation, not only because of the constant questioning of the aesthetic and perceptual experiences of the audience, but also due to explorations in the reach of visual effects via interference on the screen and projection in space, both with objects and people. Experiencing the installed image (by means of projections or monitors) carries with it a set of criteria relating to the internalisation of the environment around it, with the activation of spaces and surfaces, the communication of meanings according to the experiences of each person, and in particular with the relationship of the viewer’s body with the projected (or emanating) images and the immersion space within the installation.

Projection assumes a wide range of perceptual and reception modes for any given work, since what we see is always subject to any interference that may occur at a given moment or in a given location. This happens when we witness the participation of the viewer in the work of Rafael Lozano-Hemmer or in the interventions of Wodiczko in a public place, where the projection occupies and activates spaces, sculptures or buildings, and extracts symbolic functions from them that are different from those they hold in everyday life. On the other hand, projection has also been reformulated from a perspective that is
not necessarily immersive or interactive, as in the case of Rosa Barba, whose works speculate on the physicality, plasticity and materiality of the object and the device, closely related to their installation in the space. To this constant re-formulation of languages, projection devices and installations, we may also add the works of Laura Gozlan, which are unique perceptive experiences provided by the volumetric luminosity of interfered and disrupted projections that give a permeable and transient plasticity to the image. In the latter two examples, with the poetry of the device on the one hand, and the surfaces used on the other, the works become cinematic sculptures or sculptural films, often positioned between fictional narrative and experimental documentary. The dilution of boundaries between these artistic expressions, specific techniques and technological support, as well as the physical and material qualities of the cinematic apparatus and projective technologies, have always represented both for film-makers and for artists working in other media, a central problem to their achievements and reflections on them.

In 1974, Peter Campus and Michael Snow produced Shadow Projection and Two sides to every story, respectively, which featured bidirectional projection which presupposes a performative mode of the gaze full of dichotomous dynamics between the internal and the external, between the physical dimension and the psychological dimension of the viewer, between self and other, between past and present. Indeed, the question of projection (not the simple notion of projection technique) has a very broad and complex significance that encompasses natural and unique perceptions, as described by Giuliana Bruno: "Projection offers the possibility to sense this flow of time and to experience duration not only as an external but also as an internal phenomenon" (2014, p.8). The temporal and spatial potential of the projected image, and the immateriality of the projection, play on the idea of the reversibility of the image, that is, the possibility of putting the image in reverse, of looking inside and out, of generating an unfolding of views and a derivation of meanings. In addition to the ambulatory aspect of the projection space suggested by these works, the projective component is also evident as a device and a concept. While Michael Snow sought to confront the two-dimensionality of the image with the three-dimensionality of the space that surrounds it, in an attempt to activate the viewer’s critical ability, Peter Campus sought to explore the psychological dimension of projection, borrowing from jungian theories, in order to confront the viewer with their own identity and with the impossibility of seeing ourselves being seen. It is in this intertwined relationship between the viewer’s attention and the spatiality of the projection that interference has its place:

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1 For further reading on this issue see Ferreira (2016).
video artists have been using multi-screen installation art as a means to explore attention as a threshold phenomenon: attention as something that only occurs intermittently, when the endless stream of unobtrusive sense impressions change into a focused and conscious act of perceiving. (Petersen, 2010, para. 6)

The concept of projection, as pinpointed by Trodd, Païni, Campan and Connolly, has left its mark on the history of representation while also playing a decisive role in the development of seeing machines, whose process has evolved to find its place in the field of mechanics and geometry (the flow or trajectory of a point), optics (the immateriality of light rays), psychology and psychoanalysis (the transfer to others of attributes that belong to us).

Let us consider projection as a way of ‘transporting’ something that traverses the space, in which the trace of this movement has the ability to transmute during this process, and the surface, the object, the receptacle, in fact the screen onto which this projection is cast also plays a major and unique role in the whole installation, including the interference caused by this wandering of images and in this ‘conflict’ of devices. Projection implies, therefore, an act and an impression, a cast and an imprint, which always presupposes a reminiscence of that impulse. In turn, we can also see the screen as a membrane or pellicle which is sensitive to any act exerted upon it, but is not necessarily passive. In other words, the screen can also be an agent which acts upon the image, using it technologically and artistically, as well as the temporality that the image carries according to the artwork in question. Indeed, Dominique Païni reminds us that although projection does not produce an image, it “incarnates the image as an infra-thin skin of shades or colours on the surface of the screen”2 (Païni, 1997, p.12). The projection stages the representation of the images and restores to them the movement of reality: "[...] to project images is to project time"3 (Païni 1997, p.12). Projection has a spatial dimension, but also a temporal one associated with the wandering and movement tensions, since it implies a bodily relationship with space (throwing forward) and an anticipation of time (in the precise sense in which it refers to the desire and expectations of each individual).

Thus the projection is thus something that displays a trajectory, a means of transport, as mentioned above, and implies a relation between the inside and the outside, between physical and mental perception. The screen intervenes in how the projection is to be seen, but equally, the circumstances in which the projective flow occurs, the interference it is subject to and its origin also influence the way the screen receives and reconfigures this information. Nevertheless, this trajectory also may be the screen itself, that is, the location in space and time where there is a collision between the projection and the screen, between

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2 Translated from the original: "La projection incarne l’image telle une peau infra-mince d’ombres ou de couleurs sur la surface-écran".

3 Translated from the original: "projeter des images, c’est donc projeter du temps".
the flow and the membrane. It is worth recalling *Line Describing a Cone* by Anthony McCall, in the itinerant exhibition *The Projected Image in American Art 1964-1977*[^4], in which the viewer could be part of the screen and the projection at the same time. It was possible to touch the misty conical surface as if it were a web, with smoke giving the light a thickness and solidity to form a geometrical shape from the projection, making it almost tangible. The viewer’s body could interfere with the projected light, and become an extension of the projected surface. On another surface of the cone, the base, a projected circumference was inscribed from the opposite side of the light projector. It took 30 minutes for the light beam to emerge in the form of a line, sometimes continuously, sometimes intersected by the shadow of the visitors’ fingers or bodies until the light had formed a complete cone. This is a film about the present. In this example, there is no narrative, no memories or expectations from the video; the experience is the projection in real time:

[… this film exists only in the present: the moment of projection. It refers to nothing beyond this real time. It contains no illusion. It is a primary experience, not secondary: i.e. the space is real, not referential; the time is real, not referential. (McCall, 2003, p. 42)

This plasticity of light and screen is also visible in another lesser known work by Imi Knoebel, *Projektion X*, in which a huge luminous ‘X’ is projected in urban areas from a moving vehicle during a nocturnal excursion through the city of Darmstadt. The projected letter ‘X’ or cross appears and disappears in the dark, according to the distance of the random surfaces that it encounters and the luminous intensity of the location, pulsating from object to object, size to size, changing its shape and texture in a continuous and successive transformation of the screen rather than the image that is projected. This is a metamorphic screen, flashing on and off intermittently, interrupted and corrupted by the urban forms it encounters. The sculptural dimension of the projected image highlights the notion that light is the element that alters the surface it encounters, and at the same time is reconfigured in accordance with movement in the projection space, as can be seen in Anthony McCall’s *Light Sculptures*, in which projected light is continuously intersected by movement in the space and by its actual configuration.

This attempt to explore the screen’s surface through planes, textures and overlays is reminiscent of the avant-garde movements of the 1920s.[^5] Think, for example, of Moholy-Nagy’s works in which he expressed an interest in exploring forms of projection that could bring alive any surface; he imagined power

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[^4]: The exhibition led to a book of the same name, written by Chrissie Iles, which is still a seminal work in terms of video art, installation and the projected image in contemporary art.

[^5]: Fernand Léger and Marcel Duchamp were also great enthusiasts for ways of altering the projected image, and even explored anamorphic effects, projection through mirrors and surfaces that were translucent or made of rubber that could be folded to deform the image.
projecting into the air, clouds or steam through spotlights and searchlights, luminous and reflective screens (Moholy-Nagy, 1936). For Moholy-Nagy any material, substance or texture was a potential projection screen: concave and convex planes, coated with various substances and materials such as galalite⁶, troilite⁷, chromium or nickel (Moholy-Nagy, 1936). Moholy-Nagy tried, therefore, to connect painting, architecture and film by theorizing on how light, projection and the screen provided new pictorial forms and ways of seeing and experiencing where the surfaces, reacting to images and light, are in constant motion and transformation (Moholy-Nagy, 1967). The surface was for Moholy-Nagy a working material which could be manipulated in a creative way. The screen is not only an image-receiving surface, as we have seen with other artists. The screen may be reconfigured, act upon these images and produce or subtract images — another possible form of interference during a projection. The arrangement of several screens in space, rotated or skewed, can become a ‘landscape of mountains and valleys’ and the overlaying of films in the same projection allows to display two or more events that start independently of each other, which later combine and present parallel and coincident episodes (Moholy-Nagy, 1967). This ability to release the projection from its invariability and explore the screen in multiple forms is associated with an interest in simultaneity, juxtaposition, fragmentation and multiplication, aspects broadly explored by artists such as Fernand Léger (Ballet Mecanique), Man Ray (Emak Bakia) or Abel Gance (Napoleon or Danses, Galops et Marine).

On another note, it could be said that, in the letter to František Kalivoda, Moholy-Nagy makes a projection, a preview of a contemporary work (which he doesn’t believe is possible) by Rafael Lozano-Hemmer:

[…] have you ever witnessed a large search-light with its vast cones of light flashing wildly across the sky and searching further and further afield into infinite space? (...) although the chances that these dreams will assume a concrete shape in the near future are remote, it is possible even today to envisage the basic system of the future architecture of light. (Moholy-Nagy, 1936, p. 30)

It was from the work of Moholy-Nagy that Lozano-Hemmer produced Vectorial Elevation, an ephemeral intervention in public space without any linear narrative, since the movement of light is never repeated or sequenced, and is only controlled by 3D simulation programs and activated by a website (created especially for this purpose) from which the users gave instructions to the projectors to move in a particular direction. This light sculpture could be seen within a radius of 10 km and once again highlights one of the central concerns

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⁶ A natural protein-based plastic obtained from organic substances such as milk casein.  
⁷ A mineral from meteors with a reflective sheen.
of the artist: the relationship of the individual with architecture and of architecture with connectivity between people. This is a work that reflects on urban interdependence, deterritorialisation and collective representation, a clear association to the authoritarian regimes of the two world wars, where this kind of searchlight was often used to detect and shoot down enemy planes — in this sense the website works as a control room operated by a citizen/common user.

Fig. 1 — Vectorial Elevation, Relational Architecture 4, 1999, by Rafael Lozano-Hemmer. Haunch of Venison, Vancouver, British Columbia, Canada, 2010. Photo by Doug Farmer, courtesy of the artist. Licensed under Creative Commons Attribution -Noncommercial-Share Alike 3.0.

Lozano-Hemmer both produces works where the human body is amplified to an urban scale (Emperors, Body Movies, Two Origins), and produces situations in which the body becomes the actual screen. In other cases, the human body activates the work of art (Double Standards, Level of Confidence). In the example shown, the body does not have the same prominence as in the works mentioned above. However, it puts into perspective the notion of projection, in that it proposes the idea of remote control; the idea of interfering remotely in a work without the interference being evident, through light beams that sometimes turn away and sometimes intersect at the users’ command. This tacit behaviour of remote projection, if we can call it that, complies with the principles of interactivity, widely explored throughout this century, but in this particular case it assumes an anonymous interactivity which results in the absence of the participant’s body.
It is from this set of possibilities, in which the projection and the image projected are explored artistically, either in pictorial terms or spatial terms, that Laura Gozlan works with light and projective devices. Gozlan does not use the projected image as a two-dimensional surface. She is interested instead in giving the image a certain depth through duplication, specularity or relief either transparent or opaque, using shards of glass, metal, crystals, mirrors, wax and other materials. The projected image invades the space in a fragmented and disruptive way. The projected images are no longer flat, but become refracted and reprojected through materials that fragment the light and images and acquire the form of a dematerialised sculpture. Laura Gozlan uses the image as if it were an alchemical process — her body of work is actually influenced by physicists and chemists — to refer to the image-material as an interactive field between our world and an inside-out world. This transition to another level of reality does not occur by means of the virtual, but from an agitation, an incessant transfiguration of the material, of the screen as substance and the image as substance.

Fig. 2 — Remote Viewing, 2014 by Laura Gozlan
Video Installation, video loop 16 min, glass, wood, mirror foil, crystals, wax, gelatin252 × 160 × 120 cm. View from Group Show Ce qui manque, La Panacée CCC, Montpellier, France — 2014. Curator and photo credits : Thierry Fournier. Courtesy of the artist.
This relationship of reciprocity between the viewer and the work, the work and the space, and the space and the viewer defines, according to Julie Reiss (1999), one of the central aspects of the installation as an artistic domain, and presents us with the difficulty of categorizing this territory:

What does the term ‘installation art’ mean? Does it apply to big dark rooms that you stumble into to watch videos? Or empty rooms in which the lights go on and off? Or chaotic spaces brimming with photocopied newspapers, books, pictures and slogans? [...] as Gillick observes, to speak of its ‘end’ is extremely difficult, as the term describes ‘a mode and type of production rather than a movement or strong ideological framework’. (Bishop, 2005, para. 1-11)

More recently, Graham Coulter-Smith sees the installation as a series of three-dimensional pictorial projections that create an image through which one can walk in a non-linear way (Coulter-Smith, 2006). This non-linear narrative provided by three-dimensional images installed in space is, for Coulter-Smith, one of the most striking aspects of contemporary installations, so that it is important to reflect on the context of the projected image in artistic practice.

Concerning projection-based installations, the surface is essentially a constitutive element of the projection and plays a key role in the construction
and articulation of meanings. The vibrant changes of the act of projecting (or of the light projection) as well as the simultaneous variety of mental states find in the surface (regular or irregular, two-dimensional or three-dimensional, opaque or transparent) a place of confluence, of consonance, a place of dwelling:

It is a mobile place of dwelling, a transitional space that activates cultural transits. It is a plane that makes possible forms of connectivity, relatedness, and exchange. Such a surface, far from being superficial, is a sizeable entity: it is a space of real dimension and deep transformation. Conceived as such a space of relations, the surface can contain even our most intimate projections. (Bruno, 2014, p. 8)

A dwelling-place of profound transformations in which the projection or emanation surfaces become, in fact, voluble, pulsating materials, with light and shadows disseminated to change their volume and plasticity, triggering a fragmentation of images through multiple interferences in the projection, in the space, or in the viewer. As suggested at the beginning of this essay, simultaneity, juxtaposition, interposition, overlap, fragmentation or multiplication of the projected image, indeed all the discontinuities produced by these disturbances of the cadency of projection and of the installation placement are issues that require us to reformulate how contemporary artistic practice explores the screen and the screened surface in the context of projection art practices or screen art practices.

The series of works presented here are just a few examples of large-scale experiments that have been carried out by starting from the conventional use of the screen and deconfiguring or reconfiguring it, but also by dematerialising and dissolving the screen, in accordance with the artistic intent in question. The interposition of materials and recreation of ‘transits of light’ can be viewed as an inter-illumination between the diversity of the visual arts and the productive world of moving images, salvaging certain dimensions of those who remained to explore, or rather, which were certainly unexplored due to the previous lack of this possibility of interchange.

As Catherine Elwes suggests:

[…] artists retain the desire of an object-oriented (human) relationship with the materials from which they fashion a work. Where Ken Jacobs confesses to an erotic attachment to the filmic dispositif, Mark Street is drawn to ‘the texture of it… when you shoot a roll of film, it becomes a specific entity and it’s unlike any other thing. It has its own weight and characteristics’. When contemporary artists gather different objects, mechanisms, individuals and moving image mediums in a spatialised environment with prescribed dimensions and conditions, they not only re-invoke the material presences of the analogue age but also satisfy a need, literally and metaphorically, to get their hands dirty. (Elwes, 2015, p. 492)
From an approach related to the ‘clean’ technologies of projection and emanation of images, but ‘dirtying’ hands by interposing surfaces that may be somewhat alien to the sequences of images, or to directed bursts of light, we hope to have contributed to this new way of appreciating the installation of moving images, in which we have attempted to disrupt the notion and expectation of pulse and continuity, by means of language games and the repurposing of devices, materials and surfaces in this vibrant area of artistic production and reflection that is post-screen practice.

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REFERENCES


