Reflective Remediation as Critical Design Strategy: Lessons from László Moholy-Nagy and Olafur Eliasson

Marios Samdanis
Brunel University London
London, UK
marios.samdanis@brunel.ac.uk

Chrystalla Kapetaniou
University of Cyprus
Nicosia, Cyprus
kapetaniou.chrystalla@ucy.ac.cy

Yi Kyung Kim
National University of Science
&Technology, Seoul, Korea
clarakkim@gmail.com

Soo Hee Lee
University of Kent
Canterbury, UK
s.h.lee@kent.ac.uk

Abstract

Reflective remediation is an important component of contemporary media theory, which emphasises the creative efforts of avant-garde artists and designers to shape the evolution of media in a critical way. However, the critical capacity of reflective remediations may be compromised by commercial dynamics or conventions, such as the celebration of 'reflectivity for reflectivity's sake' that aims to construct an auratic experience for viewers. Because reflectivity is a critical media practice, it is vital to investigate reflective remediations in tandem with the critical intensions and creative visions of artists and designers. We investigate the critical media practices of the Bauhaus master, László Moholy-Nagy (1895-1946) who explored the concept of 'productive creativity', according to which creative experimentation should lead to design knowledge, redefining the relationship between what is known and unknown. We then scrutinise the artistic practice of the Icelandic-Danish contemporary artist Olafur Eliasson (b.1967), who contextualises reflectivity as an embodied experience, in terms of what he calls 'frictional encounters'. When applied together, the two concepts enhance our understanding of reflective remediation as a critical design strategy.

Keywords

Remediation; digital art; digital design; interactivity.

Introduction

Reflectivity – or hypermediacy – is a key concept in the theory of *remediation*, a theory that explains how new media forms emerge by borrowing representational strategies from older ones [1]. The process of remediation is key to an understanding of the drivers of interactive design development, as new media emerge by competing with older and contemporary media forms, to construct an authentic or 'real' experience for the viewer [2]. In particular, transparency – or immediacy – is a powerful driver for remediation which prioritises efficiency, simplicity, functionality and clarity in design which progressively improves due to technological innovations.

Reflectivity manifests resistance to the singular and deterministic vision of transparency, according to which advanced technology always leads to more nuanced, authentic and real experiences. As a design principle, reflectivity critiques the belief that good design should be transparent, functional, auratic and immediate [3]. By prioritising agency and pluralism, reflectivity provides an alternative vision of interactive design which is materialised in the form of radical experiments in art and technology. In addition, the notion of reflectivity highlights the agency of users in shaping their desired experience of media. Users do not simply consume experiences, but also construct cultural, social, economic and political practices through interaction with media, often in collaboration with other users [4].

We aim to refine the concept of reflectivity, by scrutinising the politics of remediation in digital art and design. To do this, we synthesise Moholy-Nagy's idea of productive creativity with Eliasson's concept of frictional experience. The design practices of Moholy-Nagy and Eliasson seem to contrast with each other, as the former aimed in his experiments in graphic design to make 'visual noise' invisible, and the latter attempts to enhance human knowledge and experience by using his interactive installations to make the invisible visible. By integrating the two concepts, we define critical reflective remediation: on the one hand, as a cultural practice in which artists and designers aim to deconstruct the 'real' by demonstrating the effects of immediacy on a cultural experience; and, on the other, as a political practice that positions art and design as critical forces which empower users to participate in processes of meaning-making and action through new media.

Reflective Remediation in Digital Art and Design

Remediation is defined as a process in which new media forms emerge through the borrowing of strategies of representation from previous media forms [1]. Bolter and Gromala identify two competing visions of new media evolution: "the pragmatic vision offered by Norman and other HCI experts, for whom computers are information appliances, and the vision offered by digital artists and interaction designers" who use technology to create compelling experiences for the audience [1:7]. In their book *Windows and Mirrors*, Bolter and Gromala introduce two powerful metaphors which define the antagonistic visions of the two communities: the metaphor of an interface as a *window* which demands clarity, efficiency, accuracy and simplicity; and the metaphor of the *mirror*, as technology can also shape aesthetic experiences for viewers, reflecting our technological, cultural and social contexts.

Transparency has received excessive attention in terms of its cultural effect: "Transparency was and remains a powerful media aesthetic that dates back hundreds of years. Certain media are potentially quite effective in promoting the aesthetics of transparency: painting, photography, film, television, and computer graphics. All of these media can also be used in other ways, but they are often, perhaps usually, designed to be transparent and present viewers with an unmediated view of the world" [3:42]. However, new media do not simply evolve within a linear and progressive fashion in which superior technological innovations replace previous ones. New media are also influenced by the creativity of digital artists and designers who radically experiment with media in their creative processes.

Reflectivity – or hypermediacy – is concerned with creating a compelling experience for a viewer who interacts with new media. According to Bolter et al., "designers in any media form, old or new, are making a claim that their particular representational practices can provide an experience that is authentic, auratic or 'real'" [2:32]. Remediation is the outcome of digital creativity as a cultural practice, according to which artists and designers borrow representational practices from earlier media and claim to be improving on them. However, remediation is not a new phenomenon, as art and media forms evolve through processes of imitation, assimilation and antagonism. For instance, early photography and film at the beginning of the twentieth century introduced the element of time in art, challenging the timeless dimension of painting [5:12]. Among the first artists who experimented with time in art was the pioneer photographer Eadweard Muybridge, who introduced motion using sequential photographs, as evident in his famous studies of locomotion.

The appearance of the first 'new media', such as photography and film, initiated cross-fertilisation between different art forms, as artists started to borrow representational strategies from other art forms. For instance, the Futurists Giacomo Balla and Umberto Boccioni, together with Marcel Duchamp, incorporated Muybridge's photographic studies in order to capture the dynamism of real movements on canvas [5]. In addition, the Russian film director Sergei Eisenstein transferred the fragmented shapes of Cubism into film through dynamic images, "accomplished by varied camera angles and sophisticated montage" [5:19]. New media have also given rise to hybrid art and design forms, such as digital sculpture, integrating software generating objects with conceptual and installation art [6]. Hence, the mediations of artists take place on two levels: on the one hand, digital artists intervene between software and the creation of an object, and therefore, remediation takes place as a creative practice, in interaction with a software interface. On the other hand, artists, often in collaboration with curators, also mediate between the object and its viewers, staging and orchestrating their interactive, spatial, or embodied experience [6].

Whether it be a contemporary art gallery or public space, the exhibition context of digital art and design is also considered as a medium. Among the first who experimented with the exhibition context as a medium was the French post-modern philosopher, Jean-François Lyotard, who curated the monumental multimedia art exhibition 'Les Immatériaux' (1985) at the Centre Pompidou in Paris. Lyotard conceptualised the exhibition space as an interface: acting as a programmer, he invited the spectator to 'run the program' and interact with multiple media forms [7]. Lyotard's reflectivity was manifested in the remediation of the exhibition medium, in order to make the post-modern condition visible in the information age: humans no longer control material, but are immaterialising into message and information when interacting with technology. According to the scholar of new media, Jorinde Seijdel, "by making this, Lyotard wanted to create a 'reflexive unease' in the viewer regarding the implications of the information age" [7:n.p.].

Bolter and Gromala address reflective remediation as a critique of transparency that reflects the politics between the computer scientists and digital artists [1]. This critique, aligned with Lyotard's post-modern condition, aims to deconstruct the power of media to create singular versions of the 'real', through a revelation of the effects of immediacy on a cultural experience. By embracing this post-modern critique fully, our intention in the following sections is to move beyond it, and identify the roots of reflectivity in modernity, revealing its role in the vision of artists such as László Moholy-Nagy, who aimed to create art and design for social change. Reflectivity is evident in contemporary art too, as artists like Olafur Eliasson experiment with new media forms in order to create embodied experiences that push the aesthetic and intellectual boundaries of viewers. The design thinking which originates from modernity reveals a version of reflectivity which is not restricted to the use of new media to stage compelling aesthetic experiences, but positions design as a critical force that allows users to become participants in processes of political and socio-cultural of meaning-making and action through new media.

László Moholy-Nagy and Productive Creativity

László Moholy-Nagy, the Hungarian Bauhaus master, experimented in his art and design with elements including geometry, light and transparency, and media, such as photography, film and typography [8]. His design practice was based on what he termed 'productive creativity', as he aimed to create designs that establish "new relationships between the known and the as yet unknown optical, acoustical, and other functional phenomena" [9:31]. Moholy-Nagy's legacy within the Bauhaus is connected with his experimental work in graphic and industrial design [10]. The concept of productive creativity is epitomised by a series of experiments that Moholy-Nagy conducted in the 1920s, in which he filmed and photographed everyday life in order to capture the rhythms or *tempo* of the modern metropolis. The dynamism captured in media reflected his thinking on graphic design, which, in his view, had to shift from two-dimensional black-and-white into a three-dimensional aesthetic. In the words of Moholy-Nagy, graphic design should be functional and transparent: "Printed matter today will have to correspond to the most modern machines; that is, it must be based on clarity, conciseness and precision" [10].
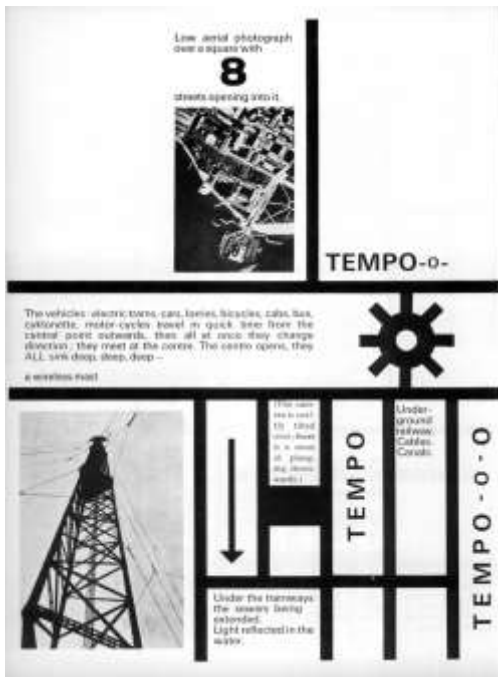
Figure 1. László Moholy-Nagy, *Dynamic of the Metropolis* (1925/28) © László Moholy-Nagy.

His experimentation with film and photography in *Dynamic of the Metropolis* (Fig.1) led to the invention of new forms of typography and visual communication, in order to meet the needs of people in the modern metropolis, "adequate to the new conditions of attention, perception and thought" [10:405]. In *Painting, Photography, Film*, Moholy-Nagy wrote of: "a state of increased activity in the observer, who – instead of mediating upon a static image and instead of immersing himself in it … is forced … simultaneously to comprehend and to participate in the optical events. Kinetic composition … enables the observer … to participate, to seize instantly upon new moments of vital insight" [10:411]. Interestingly, his reflective vision of graphic design contextualised the viewer in movement, creating meaning within an embodied situation. Graphic design for Moholy-Nagy was about constructing optical events as compelling experiences for viewers, who created meaning in interaction with media. Borrowing techniques from a discipline described at the time as 'psychotechnics', Moholy-Nagy instigated a new form of experimental design that appropriated the principles of applied psychology to demystify the laws of visual attention [10]. The charismatic designer experimented with these laws of visual attention in order to strip away the powerful symbolic effect of images, as well as improving visual hygiene within an emerging and chaotic urban landscape [9]. Ironically, Moholy-Nagy, an artist who passionately subscribed to the values of Constructivism, which aimed to create art with social impact, applied these techniques later in the advertising industry, working as an illustrator to construct new images and symbols in the mind of the consumer [10].

Olafur Eliasson and Frictional Encounters

Olafur Eliasson is a contemporary artist known for his large-scale installations, sculptures and public artworks, using elements such as light, temperature, water and digital media, in order to create embodied aesthetic experiences for viewers. The elements of transparency and reflectivity are manifested in his work: transparency in his immersive total works of art (Gesamtkunstwerke) aiming to unify art forms and "the senses of seeing, hearing, palpation, taste" [11:9]; and reflectivity, in terms of deliberatively creating context-specific and situated 'frictional encounters': "interactions between viewers and artworks, or subjects and objects, that are always riven with tension, conflict, and misunderstanding" [11:7]. According to Kuo, "Eliasson himself has often invoked the total work of art, constructing immersive and multisensory environments in order to elicit and perturb our impressions of colour, light, sound, and material" [11:9].

For Eliasson, to create a reflective experience for the viewer requires two elements. First, it requires empathy, "the aesthetic encounter as a psychological projection of the self into the object of perception" [11:7]. As Eliasson explains, a frictional encounter occurs when psychological projection of the self into the object of perception is interrupted: "You never look at something as if for the first time. Your gaze is essentially old, even though the artwork might be new to you … Encountering a work of art is, to a great extent, about recognition and identification, about feeling listened to – and then there's the element of surprise and uncertainty where identification collapses. As an artist I work actively with this – I integrate what I expect people's expectations to be into the artwork. I am keen to make works that exist to be seen while also inviting reflection on how they are seen" [12:I].

Figure 2. Olafur Eliasson. *The Weather Project* (2003), Tate Modern, 2003. © Tate, Andrew Dunkley & Marcus Leith.

Perhaps his most popular installation is the *Weather Project* (2003) in the Turbine Hall of Tate Modern, which invited the spectator to become part of the large site-specific installation. This immersive installation demonstrated aspects of transparency by creating the illusion of a sun and weather system using monofrequency lamps projected onto a screen, together with controlled humidity and mist [11]. This installation created a compelling social experience for the audience, as many people treated the museum as a social space for interaction and relaxation. In other words, the audience's reflectivity emanated from the creation of an auratic and transparent experience, something which is often institutionalised by contemporary art museums, galleries, biennials and corporate lobbies, which use immersive experiences to attract attention. More broadly, a reflective experience is no longer the exception but an expectation, and when it is not accompanied by critical design thinking, it risks being reduced to a form of entertainment and spectacle.

Reflective Remediation as an Auratic Experience

According to Bolter et al., "the strategy of transparency aims to evoke aura in the viewer, while hypermediacy [reflectivity] calls aura in question" [2:33]. Walter Benjamin coined the concept of 'aura' and claimed that in its immediate form it can only be experienced in nature. In works of art and media, the notion of aura is constructed using rituals and politics that constitute the real and authentic. An auratic experience, therefore, constructs an illusion of the real through immediacy based on the design principle of transparency. The role of reflectivity is to challenge and expose the cultural and media mechanisms that construct the real.

Designers have long questioned the responses of viewers to aesthetic stimuli, with the aim of understanding their perceptions, cognitions and behaviours, in order to create less or more disturbing experiences. "For [Walter] Benjamin, distraction was the ability to register stimuli, to think and to act; for the psychologists, it was the refusal or resistance to do so" [10:421]. Reflectivity is a critical concept that aims to make visible to the viewer the use of new media as ideological devices that promote the hegemony of specific transparent strategies and messages. Transparent media tend to create an illusion of the 'real', themselves becoming the message, as Marshall McLuhan predicted.

Artist	Transparency	Reflectivity
László Moholy-Nagy	Graphic design: clarity, conciseness and precision	Productive creativity: media experiments for social change
Olafur Eliasson	Immersive work: total work of art as illusionary space	Frictional encounters: empathy to create aesthetic experiences

Table 1. Remediation of the Creative Practices of László Moholy-Nagy and Olafur Eliasson. Source: The Authors.

As Bolter and Gromala claim, every design is both transparent and reflective [1]. Indeed, Moholy-Nagy's experiments in graphic design and Eliasson's immersive installation oscillate between transparency and reflectivity (Table 1). They both embarked on reflective creative processes in order to create compelling experiences for their audiences. However, when it shifts from the avant-garde into the mainstream and gains cultural acceptance, a reflective experience runs the risk of becoming a transparent auratic experience. Bolter et al. are right to argue that new media have not led to the demise of aura, as Benjamin (1936) predicted in *The Work of Art in the Age of Mechanical Reproduction* [2]. However, in the age of new media, aura is not always in a state of permanent crisis due to reflectivity, as reflective designs also have the potential to construct an auratic experience, as they may be reduced to entertainment and subjected to the commercial forces of capitalism. The selection of certain representational strategies is influenced by the broader socio-cultural, technological and economic context, as that is much broader than the interaction of an individual artist or designer with an interface, as Bolter and Gromala argue. In the case of Moholy-Nagy, this context was the rise of the advertising industry and the appropriation of psychotechnics by commerce. In the case of Eliasson, the context is the establishment of exhibition-making as the dominant medium for the representation of contemporary art within a gallery context that aims to attract a wider audience.

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Authors Biographies

Dr Marios Samdanis is a Lecturer in Strategy, Entrepreneurship and International Management at Brunel University London. His research focuses on remediation, artistic innovation, media convergence, sociomateriality and digital creativity.

Dr. Chrystalla Kapetaniou is a Special Scientist at the Economics Research Centre at University of Cyprus. Her research interests focus on automation technologies and employment, 3D printing ecosystems, and the role of institutions in influencing start-ups.

Yi Kyung Kim is Adjunct Professor at Seoul National University of Science and Technology. She is an acclaimed scenographer, choreographer and costume designer, featuring digital dance performance works in Korea, Spain and the UK.

Soo Hee Lee is Professor in Organization Studies at University of Kent, UK and the Director of the Creative City Forum in Korea. His research focuses on behavioral underpinnings and organisational dynamics of digital convergence and creativity.