

Memoirs of the Blind: surveillance, speed, and interaction

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Abstract

This paper presents the interactive installation *Memoirs of the Blind*, using it to reflect on the impact of surveillance technologies in contemporary and future society. The installation consists of an acrylic box containing a screen showing a desaturated face with its eyes closed.

When the visitor blinks, the installation detects it and photographs them at the exact time of blinking, replacing the face displayed with the new photograph. The artwork subverts the subject-object relationship between itself and its visitors, while reflecting on our relationship with technology, providing a contemplative reflection on its aesthetics.

The paper discusses our relationship with automated surveillance, and the impact of the difference between machine time and human time exploring the role that artistic production can play in the analysis of contemporary socio-political issues.

Keywords

Interaction, blinking, surveillance, computer vision.

Introduction

“The task of a philosophy of photography is to reflect upon this possibility of freedom –and thus its significance– in a world dominated by apparatuses.” Vilém Flusser. [1]

Memoirs of the Blind is an interactive installation, part of an on-going series of artworks that explore spatial augmented reality, non-verbal communication, and their relationship with interactive technologies and new media art, focusing on their socio-political impact.

The presented artwork aims at reflecting on these subjects as well as at exploring the poetics of digital manipulation of our relationship with physical space.

Even if the relationship between art and politics has always been a contentious one, in spite of the self-evident impact of the political context in artistic production, the creation of art (regardless of a ‘new materialistic’ setup) is able to offer orthogonal constructions able to escape the dichotomy of policy-making vs social analysis. This research proposes a contemplative ontological strafe that reclaims the sensible as a cognitive tool with which we can, if not better comprehend reality, at least understand it differently.

The piece

Memoirs of the Blind (Figure 2) is an interactive installation consisting of a screen showing a black-and-white picture of a face with its eyes closed. This image at first remains still, however, when the interactor blinks, the installation detects it and takes a photo at the exact time of the blinking. Once the new face is obtained, it is processed (cropped, desaturated, and adjusted), the installation then substitutes the displayed face with the new one.

This way, the artwork becomes a testimony of its visitors interacting with it, but not seeing it, captured in a moment where the visitor becomes at the same time subject and object of the artwork.

The piece reflects on the power asymmetries that technology crystallises, providing a contemplative reflection on the aesthetics of our relationship with it, while simultaneously showcasing the advancements in computer vision that allow for supra-human abilities. In effect, the piece highlights the differences between what Paul Virilio called “metabolic speed”–the speed of the living being–and “technological speed”, the artificial speed of machines.

Implementation

The installation comprises an Apple iPad Pro (2018) together with an acrylic laser-cut case.

Using Apple’s computer vision API, the installation is able not only to track the face in low illumination conditions but also to track the users’ eyes and detect their blinking. The software, after the interactor has been tracked for a random-length short interval, enters into blink-detection mode. When a blink is detected, the piece extracts a bitmap corresponding to the user’s face, desaturates it and further processes it. It then substitutes the existing face.

Art as research

Arts-inflected research has proved being very successful in creating design alternatives, with artists not only contributing at keeping things culturally relevant but also offering original approaches that expand the scope of existing analysis [2].



Figure 1. The piece runs on an Apple iPad

This approach is particularly valuable in the context of *Memoirs of the Blind* for it simultaneously offers axes of theoretical exploration in both the technological aspects and their social impact.

In effect, new media art allows researchers to escape the re-creation of existing forms of human-computer interaction, allowing to taking advantage of the complexity and expressiveness of technology as a new medium [3].

If new interaction schemas are capable of affecting users' life, it follows the soundness of reflecting on what design strategies permit a better understanding of the possibilities of augmented environments? What are their aesthetic possibilities and constrains?

Memoirs of the Blind offers an alternative approach to investigating these questions, focusing on interactivity underlying phenomenology. It instantiates the digital realm in the crystallization of our helplessness with respect to the contemporary ubiquitous exposure to digitality. By making explicit the communication between an architectonic space and its users, it allows for a reclaiming of the underlying artistic and interaction languages.

This phenomenon (the construction of an artistic language from a making-explicit) appears systematically in new media art (with interaction, randomness, politics, etc. being made explicit and thus becoming part of a new, original artistic language) [4]. In *Traces*, it is in this aesthetic reclaiming that we can start searching for different modes of relation between ourselves, the spaces we inhabit, and the technologies that form part of those spaces.



Figure 2 Two pictures of *Memoirs of the Blind*

This explicitation brings into the conversation phenomenological aspects otherwise hidden that may play a fundamental role in our understanding of the involved technology and on our analysis of their potential success.

Picture 8 For example, *Memoirs of the Blind* directly makes explicit, and therefore reflects on, the differences between machine time and human time; what Paul Virilio called “metabolic speed”—the speed of the living being—and “technological speed”, the artificial speed of machines. [5]

In Virilio's terms, *Memoirs of the Blind* is a dromological piece, or, better put, it's explicitly dromological.

The interactor blinks and is momentarily blind. We all blink and experience an imperceptible moment of blindness that is imperceptible for it is too short for the metabolic speed. The piece's explicitation brings this into its language, the blindness becomes relevant in the technological speed, with the piece bringing this otherwise invisible reality into light.

But in the rhetorical fictions of the computer, speed brings something else: a future not only more fully integrated with technology, but a promise to recover precisely that which had been destroyed by modernity in the first

place. Claims are made for the recuperation of community, self, political space, precision craft, and local identity.
– Stan Allen. [6]

There is, however, an ontological difference between what we have evolved to perceive as the human universe, the universe which directly interacts with us, a universe that exists in human time, at human speed, and the universe that exists at technological speed.

The machine-speed universe exists in a new metaphysical realm, which allows for a trans-humanity resulting from the translation of the metabolic speed into an inherently non-human universe. The machine-universe does not offer a meta-humanity vantage point but instead constructs a “parallel humanity” where what defines us is stripped of its humanity.

This ontological fracture, however, is not absolute: the technical-speed-universe resonates with ours; while only obeying its internal rules, it reflectively mimics the human realm, hubristically void of purpose.

This clash between human and non-human is fractally present in the artwork, and the mimicry surfaces in the piece’s interaction design.

It is here, perhaps, where the most interesting aspects of the piece reside. The work reminds us that the very concept of interaction is always anthropocentric. There is interaction only because there are humans. We create a virtual space not by the manipulation of atoms but by a conceptual labelling. Again, an ontological metamorphosis that is emulated by the piece.

This labelling, however, is bidirectional. What makes us humans is our labelling gaze, the anthropomorphisation of the universe. The piece makes this explicit, the interaction allowing the physical object to communicate it back to us.

What does, then, the piece grant us? Who are we that now exist under its gaze? *Memoirs of the Blind* creates a mirror that is not a mirror. If a mirror exists when we look at ourselves, the piece instead offers an anti-mirror, a reflection of blindness, a subversion of the subject-object relationship. It reminds us that we are fragile, helpless, when we are seen by our creation, yet blind to it.

And this is not a metaphor but a direct recreation of all human activity. The social structure that we call culture, automatically becomes invisible when we, unfailingly, interiorise it as a natural order. Every instantiation of applied scientific knowledge creates a new world where the power asymmetries it introduced are self-replicated.

We, then, propose a reflection on this and on its constant evolution. The piece aims at reclaiming the poetics of these relationships: if we are doomed to be oppressed by our creations, it becomes fundamental to understand the aesthetic components of this oppression.

Artistic surveillance

Art is intrinsically deregulatory for it exists on its own epistemological framework, on its own ontological

universe. Art that appropriates scientific and technological processes stands on an advantageous situation, with a unique position to reflect on contemporary political issues.

New media art, then, is able to explore the relationship between art, technology, and politics, subverting existing canons, simultaneously expanding the poetic dimension of technology while hinting potential alternatives.

If we are to explore the political significance of new media art, we should frame it in terms of the general intellect. That is, the cognitive faculties common to the species, which constitutes a new kind of richness: *cognitive wealth* [7] arising from the cognitive dimensions of labour.

It is no accident that new media art co-exists with cognitive capitalism: both are result of the valorisation of knowledge. What capitalism does in terms of commoditization, art does in terms of re-definition and re-edition of its own praxis, and it is in this duality where the dialectal relationship new media art–politics exists: in the orthogonal (if not antagonistic) approaches to knowledge creation and societal administration.

Conclusions

The paper presents an interactive installation that, using blink-detection, proposes a contemplative philosophical reflection on our relationship with technology and physical space.

In particular, the piece investigates the power relationships between technology and its users.

The paper also holds that artistic research can provide new perspectives on technological and social developments. In Wyndom Lewis words (quoted by Marshall McLuhan) the artist is “engaged in writing a detailed history of the future because he is the only person aware of the nature of the present” [8].

As mentioned, the relationship of art and politics has always been complex. On one hand, Kenning argued that art betrays itself if it is too direct in its opinion, especially in its political opinion, while Rancière stated that “an art is emancipated and emancipating when it renounces the authority of the imposed message, the target audience, and the univocal mode of explicating the world, when, in other words, it stops wanting to emancipate us.” [9]

If politics refers to large global structures that imply cultural or symbolic power in knowledge practices García Canclini, 2007, #11813, it is then a problematic field, and we need tools that allow for an informed reflection.

Moreover, as Emile Devereaux puts it some works, like Derrida’s “extend the framework of the symbolic and destabilize spatial locations through demonstrating the postal principle” (how a letter may not arrive to its destination). Our proposal, whose title is inspired by Derrida’s book “Memoirs of the blind: the self-portrait and other ruins”, artistically appropriate this principle, proposing a poetic dimension of the power choreography in human interaction.

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Author Biography

Tomas Laurenzo, PhD, is an artist, computer scientist, and academic working with both physical and digital media. His work explores the artistic construction of meaning and its relation with power and politics. Laurenzo's production spans across different practices, including installation, interactive art, music, live cinema, creative machine learning, and digital lutherie. His artworks and performances have been shown globally. He is Assistant Professor at the School of Creative Media, City University of Hong Kong and has published extensively in the areas of New Media Art, and HCI.