

THE DARK SIDE OF LIGHT: ART AND SURVEILLANCE

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Resumen

En la mitología griega, Argus Panoptes era un gigante que todo lo veía con sus 100 ojos, un epíteto para Helio (el Sol, fuente de luz) y Argus. La vigilancia tecnológica refleja las mismas características que están presentes en cómo experimentamos y construimos información y conocimiento después del impacto de la electricidad y la luz en la sociedad. La vigilancia tiene una doble naturaleza: nos hace transparentes y se hace transparente para la sociedad. Por eso es difícil ver el mapa general y comprender los profundos procesos de control social basados en la tecnología. Estos procesos son alimentados por Internet de las cosas, sistemas de geolocalización por GPS, tecnologías móviles y por las aportaciones ingenuas de datos personales realizadas por las mismas personas.

Este texto enfocará estas cuestiones para analizar cómo la luz y la electricidad impactan el modo en que la sociedad está desarrollando el modelo de vigilancia: (1) cuáles son los agentes; (2) cuáles son las herramientas; (3) cuáles son las prácticas sociales e individuales; (4) dónde y cómo se produce la vigilancia; (5) qué tipo de aprendizaje es necesario para que aumentemos la consciencia sobre el problema y por último (6) cómo puede el arte contribuir para este aumento de toma de consciencia.

Se ofrecerá un marco general sobre agentes, herramientas, tiempos y espacios de vigilancia, y un breve mapa del impacto de las TIC sobre la privacidad. Se tratará sobre las cuestiones de investigación explorando cómo el arte, contribuye con una respuesta crítica a la emergencia de la vigilancia generalizada (Trevor Panglen; Ubermorgen; Paolo Cirio), haciéndola visible a través de distintos medios. Entre estas prácticas están vigilancia inversa (Steve Mann, 1998) y objetos Queer (Zach Blass). El texto concluirá con un mapa sintético de los principales aspectos del problema y algunas indicaciones sobre el papel del arte.

Palabras-clave: ARTE, VIGILANCIA, LUZ, INTERNET DE LAS COSAS, CONTROL

Abstract

In Greek mythology, Panoptes was an all-seeing giant, with a hundred eyes, an epithet for Helios (the Sun, source of light) and Argus. Surveillance processes reflect the very complex features of how information and knowledge are being processed in the global society after the impact of electricity and light. Surveillance has a double nature: it makes ourselves transparent and it makes itself transparent to us. Therefore, it is difficult to see the broad map and to understand the deep processes of technology-based control going on in society. These processes are fed by Internet of Things, GPS-based tracking systems, mobile technologies and by the very contribution of personal data from society in a naïve mode.

This text will focus on these questions to analyse how light/ electricity impacted the way society is developing the dominant surveillance model: (1) who are the agents; (2) which are the tools; (3) which are the individual and social practices; (4) where and when does surveillance take place; (5) which kind of literacy is required to raise awareness about global surveillance and lastly, (6) how art can contribute to raise awareness in society.

A general framework about the features, agents, tools, times and spaces of surveillance (a brief map of the impact of ICT and light on privacy) will be offered. Focusing on the core of the research questions we will explore how art is a critical response to the rise of surveillance and making surveillance processes visible (Trevor Panglen; Ubermorgen; Paolo Cirio), in different media (videos, installations, performances and critical objects). Among these art practices are inverse surveillance and reflexivity (Stephen Mann 1998) and *Queer Objects* (Zach Blass). The presentation will conclude with a synthetic map of the main aspects of the problem and a few indications about the role of art.

Keywords: ART, SURVEILLANCE, LIGHT, INTERNET OF THINGS, CONTROL

1. INTRODUCTION

In the book *Transparent Lives* (Lyon 2014) the author analyses nine key surveillance trends and explains why and how surveillance is expanding, mostly invisibly, into the fabric of our every lives. The author exposes the idea that although we are increasingly more visible through the use of social media and digital technologies, we are also losing control over our personal information and becoming more vulnerable. The dark side of light has marked the beginning of the XXI century and has been analysed by authors such as Manuel Castells, Noam Chomsky, Daniel Dayan, Umberto Eco, Timothy Garton Ash and Marta Peirano who have explained the importance of the problem that now is intensified by the big data phenomena and the social incidence of wikileaks and the impact of Edward Snowden statements.

In Greek mythology, Panoptes was an all-seeing giant, with a hundred eyes, an epithe for Helios (the Sun, source of light) and Argus. Surveillance processes reflect the very complex features of how information and knowledge are being processed and experienced in the global society after the impact of electricity and light. Surveillance has a double nature: it makes ourselves transparent and it makes itself transparent to us. Therefore, it is difficult to see the broad map and to understand the deep on-going processes of technology-based control.

Surveillance processes reflect the very complex features of how information and knowledge are being processed and experienced in society. Surveillance has six main dimensions that are present in every situation in which control emerges, and this complexity makes it difficult for us to see the big picture. These six main dimensions are (1) social, (2) institutional, (3) legal, (4) scientific, (5) technological and (6) personal. The fragmentation of scientific analysis fails to explain and tackle surveillance problems the integrated, interdisciplinary, way that is necessary.

These processes are fed by Internet of Things, GPS-based tracking systems, mobile technologies and by the very contribution of personal data from society in a naïve mode.

This paper will focus on these questions to analyse how light/ electricity impacted the way society is developing the dominant surveillance model: (1) who are the agents; (2) which are the tools; (3) which are the individual and social practices; (4) where and when does surveillance take place; (5) which kind of literacy is required to raise awareness about global surveillance and lastly, and (6) how art can contribute to raise awareness in society. The hypothesis is that surveillance can be understood as a form of capillary collective action.

The paper will start by offering a general framework about the impact of ICT and light on privacy. Secondly, it will focus on the core of the research questions (the features, agents, tools, times and spaces of surveillance). Thirdly, the text will explore how art, as a transformation-reflexion- action tool, is a critical response to the rise of surveillance and to making surveillance processes visible through media such as videos, installations, performances and critical objects. Among these art practices are inverse surveillance and reflexivity (for example Stephen Mann, 1998, when he uses technology to mirror and confront organizations), or sous-veillance art practices (for example LifeGoogling sensor cameras neck worn), Queer technologies (Zach Blas and the critical applications, tools and situations for queer technological agency and intervention), and Queer Objects (Face Cages and Facial Weaponization Masks, Zach Blas). The text will conclude with a brief but comprehensive map of the main aspects of the problem and a few indications about the role of art.

2. SURVEILLANCE AS A SOCIAL SHADOW

In 1838, social theorist Jeremy Bentham (1838) designed the 'Panopticon', a type of institutional building that enables a single person to completely observe everything around without being seen. It was meant as a penitentiary, where a single watchman would observe all inmates without them knowing whether or not they were observed. What made this kind of total control effective was the "state of conscious and permanent visibility [...]" (Foucault 1977, 201) to which they were submitted.

In the history of surveillance there are at least four relevant points. These four historical surveillance 'types' can be listed as: (1) Panopticon: one controls many and many feel controlled all the time; (2) Cold War Period: surveillance between countries (home x abroad); (3) Globalization, Internet of Things: pervasive surveillance; blurred internal-external boundaries, military and telecommunication companies have immunity. A hybrid private-public surveillance; (4) Digital Persona: surveillance capillarity that relates to how governments, companies and society in general are part of the surveillance process in which our society is immersed (eg. Snowden's declarations). Nowadays the personal sphere is where the consequences of this process is more strongly felt:

"The Digital Persona (Clarke 1994) is a part of the individual identity that has been extended into the online sphere to which corresponds a digital unconscious (de Kerckhove 2012) structuring a digitally divided self (Quartioli 2011). It has personal, social, institutional, legal, scientific and technological aspects that have to be reconsidered to allow for new ways of understanding and managing identity" (de Kerckhove & Miranda de Almeida 2013).

In general terms, the trends that appear in surveillance reflect the process of construction of knowledge that is taking place in society nowadays. Knowledge is also associated as enlightenment a process that is characterized by a profound dependence on electricity, light and on digital technologies. The main features of the digital process of knowledge construction now are: (1) immersion in the flow of geo-localised information; (2) active participation in the construction of narratives and knowledge; (3) bottom-up mixed with top-down construction of knowledge; (4) tagging and merging of expert and non-expert forms of classification of knowledge; (5) audience and content mobility; (6) the emergence of new kinds of digital divide, and (7) the integration of knowledge in public space (internet of things, smart cities). Knowledge is usually related to and to enlightenment. Knowledge nowadays is deeply dependent on light and electricity (e.g. real time, interactivity), what impacts on who creates and manages meaning (e.g. new digital narratives), and on what type of content is added or developed (eg. expert and non expert), also require us to adapt the existing systems of archiving art so as to include new types of experiences. Against this backdrop, society has moved from a situation of passivity to one of interaction. Knowledge is no longer solely constructed by means of hierarchical classifications but rather through 'folksonomies', a term coined by Thomas Vander Wal to describe knowledge that is built from the bottom up (Peters 2009, 154). Folksonomies are forms of ontology that allow us to tag the data. They are a phenomenon of the social web, based on the actions of non-experts on a mass scale. Folksonomies are becoming essential parts of the web through RFID tags, airtags, qr-codes, and so on, and they are part of the power of social networks such as Del.icio.us, Flickr and Facebook. Folksonomies influence the way we archive, access, recover and distribute information, and affect the design of new kinds of software and hardware. In this process data ceases to be private and becomes public; people become transparent. This is an essential aspect of the surveillance process, as each person is contributing data that can be tracked, controlled and mined.

This is particular relevant in relation to Internet of Things that enable devices, things, and living beings to communicate, sense information and generate data flows and streams, a phenomenon that has been exponentially increasing lately, transforming itself into what is called big data phenomenon. In Internet of Things everything is put in touch not only with its electronic aura but also with its shadow: this is the dark side of electricity and light. These characteristics have a profound effect on how we find and experience knowledge when knowledge is enlightenment.

Electricity and light are the essential elements on the constitution of our digital identities and of the configuration of the dominant surveillance model. To understand this model we need to map (1) who are the agents in the surveillance process; (2) which are the tools; (3) which are the individual and social practices; (4) where and when does surveillance take place; (5) which kind of literacy is required to raise awareness about global surveillance and lastly, (6) how art can contribute to raise awareness in society. These questions are better understood when we consider that the surveillance model is directly linked to the knowledge model and reflects its structuring

characteristics previously pointed out and that can be synthesized as expert and non-expert (folksonomies + expert knowledge), hybrid (internet of things), interactive, personalised, tracked, geolocalized, mobile, remediated (transmedia, content remediation), capillary, synchronic + diachronic, rhizomatic, networked, connected.

Making use of these characteristics social actors self-organize and produce information and knowledge about themselves and others and act as surveillers of themselves (example in the quantified self platforms in which people volunteer to upload their biometric data captured by different devices like bracelets, running shoes, for health care and habit building). This is the 'light' side. On the other side, the shadow-based one, these self-surveillance actions contribute to the social surveillance process and constitute the surveillance big shadow.

Surveillance happens everywhere, is performed by each person and collective, by institutions and by peers. It happens all the time and in any environment that is mediated by light and electricity. Nowadays all our environments, from urban to educational to personal, are mediated by electricity and light, therefore surveillance is pervasive, omnipresent, in the physical and in the electronic spaces of our lives. It is invisibly being embedded in the core of our material environments by the implementation of internet of things, near field communication systems, GPS, sensors. Our mobile phones, smart cities and institutions are tracking our geotagged movements; drones are offering each person a bird-eye kind of view that frees our fixed terrestrial point of view. Corporate surveillance (like the one performed by Google in Gmail, data mining or face recognition software in Facebook) is benefitting from the great quantity of free personal data, or metadata, we share or retrieve in our social environments. Our bodies are scanned in airports in intrusive searches that challenge the limits of personal privacy. The profile of the digital persona grows and anything turns into a gate for surveillance, as each person shares data. Light and shadow merge when surveillance is capillary, hybrid, embedded into our skins and invisible.

Saskia Sassen considers that surveillance and, drone-based security technologies, are founded on the assumption that all citizens are suspect what puts at risk the basis of liberal state:

"What we are facing is a profound degradation of the liberal state. Drone killings and unlawful imprisonment are at one end of that spectrum of degradation, and the rise of the power, economic destructions and unaccountability of the financial sector are at the other end.!" (Sassen 2013)

2. ART AS CRITICAL LIGHT

The increasingly importance of mass surveillance triggered the interest of different artists and art events to foster and make public available *sous-surveillance* and anti-surveillance processes (art as resistance, pedagogy and counteractions).

Artworks by Trevor Panglen, Ubermorgen and Paolo Cirio are good examples to show that art is a tool to develop critical awareness and a critical response to the rise of surveillance. The video installation *Code Names of the Surveillance State* (Trevor Panglen, 2014) displays more than 4,000 National Security Agency (NSA) and Government Communications Headquarters (GCHQ) surveillance program code names onto public buildings. Ubermorgen's actionist approach use bodies as the ultimate connection to the surveillance network, by developing physical manifestations of data and *serlsurveillance* (eg. artwork *Superenhanced, A Parallel Universe*, 2013). In *Overexposed* (2015) Paolo Cirio shows snapshots of NSA, CIA, and FBI officers obtained through social media hacks and disseminates these misappropriated photos onto public walls. The project relates to Edward Snowden's revelations to satirize mass surveillance and to reverse propaganda as a kind of *sous-veillance*.

Awareness is understood as the capacity to learn, to observe with all senses, in a multidimensional trans-disciplinary mode and from an attitude of detached awareness. Artists use different media and processes to raise social critical awareness, to make surveillance visible. The

number of paradigm installations, artworks, objects, performances, videos and films around this theme is increasing. Many of these are based in sous-veillance (sous meaning below) processes. Sousveillance is carried out when artists use life-logging cameras to capture one's entire life.

Steve Mann (1998) developed an apparatus for self-sousveillance to mirror and confront organizations (inverted surveillance) a precursor of Google Glass.

'Queer technologies' is an organization that produces critical applications, tools and situations for queer technological agency, interventions and social actions. These actions are based on the principles of queer theory, that identities are not fixed and determining (Butler 1990, 1993). Zach Blas is one of the exponent artists in Queer technologies. His artwork '*Facial Weaponization Suite*' is a syntheses made from faces of many individuals, designed to avoid face recognition by facial-recognition algorithms. The materialization of a virtual biometric diagram into a mask (Face cage, 2013-present) difficult to wear resonates with torture devices and prisons. Another example about facial-recognition technology is *Fag Face Communiqué* (2012; HD video; 8:10 minutes).

'Anti-Drone' Hijab, Burqa, Hoodie and T-Shirt (by Tate Ashley), Anti-Drone Hoodie (by Sergio and Heidi Lee) and Burqa and Hoodie (by Adam Harvey and Johanna Bloomfield) are critical transformations of burgas into anti-drone suits. Harvey said: "I'm frustrated by the imbalance of power between those who are surveilled and those who are doing it" (Harvey 2013). With the same intention to trick surveillance, Ben Grosser developed 'ScareMail', a provocation to data mining NSA scanners by introducing random keywords into normal email text.

3. CONCLUSIONS

The accelerated impact of Internet on matter, time, identity, self and environment is still not clearly understood by society regarding its different dimensions. Although these ways to deal with data are starting to be pervasive, urban administrations and other local and regional institutions are not fully aware of all actors interacting with data and how data is being produced, mined and represented by different kinds of actors.

On the same way there is a lack of transversality in relation to fields of activities, what reflects the fragmentary approach mentioned.

In synthesis to conclude, here are a few of the most important points to be addressed with the participation of all fields including art:

1. Lack of awareness about current surveillance features;
2. Lack of awareness regarding the ethical management of technologies;
3. Technological illiteracy;
4. Lack of a European or International policy;
5. Fragmented treatment of the problem;
6. Lack of full legal protection; and
7. Stereotyping profiling (eg. concerning gender, ethnic origin, age).

Such issues have impact on all social sectors, from individuals and corporations, to institutions, triggering the need to develop tools for trans-disciplinary actions, collaboration, policy-making and creative explorations.

As a conclusion, society can get inspiration from art to challenge the invisibility of the surveillance system and of our personal role on the process. A few essential issues need to be addressed so that basic human rights are not violated and our digital persona counts on the same levels of protection of our traditional 'persona'. The tendency to develop fragmentary solutions and management tools exposes the digital persona to a fragile situation without legal protection. More comprehensive legal frameworks, complemented by education and literacy tools and support towards a deep understanding of how we are dealing with the shadow of digital technologies are necessary to be developed now.

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