

SECURITY GATE 26.11

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Security Gate 26.11 is an electronic artwork that detects wireless emissions given off by individuals, including cellular transmissions, wifi, RFID, and others. By our participation in informational networks, we actively volunteer information about ourselves to forms of surveillance. Security Gate 26.11 renders visible these invisible mechanisms of discipline and control and documents our participation in possible tyrannies of our own creation.

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Conceptual rendering of Security Gate 26.11 by Molly Reichert.

Metal detecting security gates, such as those used in airport screening, are the sites of discipline leveled against the body. As recognized by Michel Foucault, on our bodies converge different mechanisms of control, as issued by the State, biomedical technologies, and capitalist pressures. For your average traveler, airports have become sites of inconvenience and embarrassment, because of full body scanners, “enhanced” pat-downs and lengthy waiting times. But for those who are profiled because of their ethnicity or political views, airports are sites of humiliation and indignation. This discipline is justified because airports are liminal spaces where the normal right to privacy is increasingly in suspension.

Security Gate 26.11 is an Arduino-based, interactive, electronic art work that detects wireless emissions given off by individuals, including cellular and smartphone transmissions, wifi, Bluetooth, RFID, and others. Security Gate 26.11 produces individualized audiovisual responses to these transmissions. Our lives are subjected to daily forms of micro-level surveillance via mechanisms that are not recognizable to us as such precisely because they are not visible. Today, wireless transmissions are the corpus of control and repression, as evidenced by sophisticated governmental systems of mass surveillance and snooping (Carnivore and its variants) and corporate monitoring (data-mining and software recommendation systems).

The internet provides us with indispensable communication tools in exchange for the ruthless commodification of our lives. Online we constantly volunteer intimate details about ourselves to capitalist appropriation and governmental surveillance. Facebook, for example, is a tool to share and communicate with your closest friends and family, but it constitutes one of the most extensive and detailed records of personal information ever collected about people. The disastrous political consequences of online disclosure have been demonstrated too many times in the last few years. Even when they pay lip service to privacy rights, corporations are in the business of making money and have with only with token resistance handed over private information about its users to governments out of fear of jeopardizing their bottom line.

Many of us know this already, and yet we continue to voluntarily subject ourselves to this pervasive scrutiny. Mark Andrejevic has referred to our knowing participation on networks of surveillance as the ideology of interactivity. It is personal self-disclosure as entertainment. Nineties’ webcams have become today’s social networks. The difference is that we no longer have a choice but to join these networks. They are tools that do not just enhance our ability to communicate with others, but have become integral to what constitutes human contact. To some, the fact that I do not post regular status updates on Facebook might imply that I do not have a complex social or emotional life, but to others, it simply means I do not exist. Our lives are the informational traces that we leave for others to browse.

We’d like to reflect further on details about the particular design of Security Gate 26.11, in particular, its detection of electromagnetic frequencies and the shift from analog to digital wireless transmission of information.

From an Electromagnetic Spectrum to Digital Presence

Access to information networks is increasingly done wirelessly (e.g. cellular networks and wifi), that is, transmitted via electromagnetic radiation. Since the explicit formulation of the laws of electromagnetism over a hundred and fifty years ago, scientists and thinkers have accepted the existence of electromagnetic fields as a natural phenomenon, despite the fact that they are not visible to the naked eye.

That is to say that the existence of electromagnetic fields is now acknowledged just as we accept the existence of atoms or stars.

The advent of digital signal processing has both abstracted information and also enabled a rapid expansion of the amount of data that can be wirelessly transmitted. Instead of analog's continuous signal, digital data is quantized and sent as discrete pulses; a signal, in effect, becomes independent of the medium in which it is transmitted and becomes simply information. Because data is abstracted in this way, digital signals are no longer legible in the same way as analog's modulation of frequencies. Each frequency can be used as a carrier of binary information, dramatically improving the capacity of electromagnetic waves to carry information. This change has facilitated the development of pervasive and always on wireless digital communication devices.

Conclusion

We are not in control of our digitally enhanced lives. We are unaccustomed to thinking about the informational traces we leave about ourselves. Many of us have yet to wake up to the realization of how extensive and pervasive our lives are subjected to constant monitoring through our use of communication technologies. Security Gate 26.11 renders visible the invisible information that we give off about ourselves. The Gate confronts us with our digital presence in the form of aural and visual feedback to the electromagnetic frequencies that we give off.

A second reading of this situation, already implied in this paper, is more pessimistic: we already recognize our predicament, yet we have no choice but to participate. In April of this year, for example, Apple was forced to admit that it collected and stored a year's worth of information about our physical location and movements, a database constituting a record of unprecedented micro-level surveillance. The public's shock at this revelation seemed disingenuous. That Apple was doing this wasn't at all surprising (it is well known that many of the electronic devices that we carry around in our pockets facilitate extensive monitoring), but the public, nevertheless, registered shock as a kind of toothless protest at the disclosure of this level of fine grained monitoring. Apple's response, that it needs to collect this information in order to provide the services we demand, is, to some degree, accurate. Heightened disciplinary monitoring is necessary for the functioning of pervasive and always on digital communication technologies.

In both these readings, the conclusion is the same: we have no choice but to participate and render our lives transparent to pervasive surveillance. Security Gate 26.11 brings to light the costs of our participation in digital networks by rendering visible these invisible mechanisms of discipline and control. The Gate demonstrates our voluntary participation in possible tyrannies of our own creation.

Short video of Security Gate 26.11: <http://bit.ly/q07SX8>