SURVEILLANCE, MCLUHAN, AND THE SOCIAL PROSTHESIS: EXAMINING THE CONSTRUCTION AND PRESENTATION OF IDENTITY

by Leo Selvaggio

In 2014, I launched *URME Surveillance,* an artistic intervention that protects the public from facial recognition surveillance systems by allowing them to wear a photo-realistic 3D printed prosthetic of my face. When a user dons the prosthetic, cameras equipped with facial recognition are likely to identify the wearer as myself, thus attributing all of their actions in surveilled public space to the identity known as "Leo Selvaggio." In this way, wearers of the prosthetic safeguard their identities by convincingly performing my own in surveilled areas.

In addition to protecting the wearer, *URME Surveillance* also subverts and confounds large systems of surveillance through the creation of disinformation, primarily through asserting the presence of my identity to surveillance systems in various areas of public space simultaneously. For example, if multiple users were to wear this prosthetic and become "Leos" in different areas of the same city at the same time, facial recognition systems would have conflicting locative information: the identity "Leo Selvaggio" would be inhabiting Main St, Carmen Blvd, Michigan Ave, and so on. Additionally, as the body of each individual wearer is different, there may also be inconsistent or contradictory data gathered about my height, weight, and gender. When done on a large enough scale, these conflicting data sets call into question facial recognition systems' ability to accurately determine the true identity of any face captured in camera-based documentation. This subversion becomes all the more relevant as surveillance practices traditionally conducted by human beings are increasingly being turned over to automated systems under the false supposition that such systems are accurate and free of bias, which we will see is not the case.

URME Surveillance successfully corrupts digital surveillance networks through an analysis and exploitation of the way those systems function. Facial recognition technology, as it is applied for practical use, operates on the assumption that faces are unique and inherently tied to individual persons. This assumption of stability when collecting data on faces (and their respective identities) is what produces our confidence in statistics and lends that data enough credibility to be considered incriminating judiciary evidence. Rather than attempting to subvert this system through digital means, *URME Surveillance* takes an analogue approach, turning the system's assumption of stability into a weakness by producing conflicting data sets in facial recognition databases.

Compared to several other digital interventions, such as Julian Oliver's "No Network" piece, *URME Surveillance* is a relatively low-tech project. Though the *URME Surveillance Identity Prosthetic* is not a digital interface, its effect and execution are digital to some degree. Within the logic of *URME Surveillance,* one is either performing "Leo Selvaggio" or they are not. Functionally, *URME Surveillance* is similar to a computer virus. As each wearer becomes a part of the *URME* worm, "Leos" multiply and replicate, confounding data sets about the "Leo Selvaggio" identity. In this way, *URME Surveillance* engages and empowers the public as active collaborators and components of a larger network of human interaction.

This idea of writing and rewriting my identity like code within a social network has been a thematic component of my work over the past five years. Recent digital technologies have changed the models of both production and distribution of contemporary popular media. With the advent of smart phones, affordable software like iMovie, and social networks like Facebook, LinkedIn, and Vimeo, the amount of user-generated media is at an unprecedented high. The larger aim of my work, even outside the scope of surveillance, is to explore how this shift in technologies relates to the construction and presentation of identity in the social arena, an increasingly prevalent practice that sits at the core of our culture.

Perhaps Marshal McLuhan said it best when he coined his prophetic term the "global village" in his 1962 book *The Gutenberg Galaxy*. McLuhan states:

> The next medium, whatever it is – it may be the extension of consciousness – will include television as its content, not as its environment, and will transform television into an art form. A computer as a research and communication instrument could enhance retrieval, obsolesce mass library organization, retrieve the individual's encyclopedic function and flip it into a private line of speedily tailored data of a saleable kind. [1]

Especially eerie is McLuhan's prediction of this "private line of speedily tailored data of a saleable kind." Recent news is flooded with reports of companies such as Google, Facebook, and Microsoft selling user information to marketing firms. For example, in section three (titled "privacy") of the terms of use for Xbox Live, a Microsoft affiliate, we find:

> In particular, we may access or disclose information about you, including the content of your communications.... Personal information collected by Microsoft may be stored and processed in the United States or any other country or region in which Microsoft or its affiliates, subsidiaries, or service providers maintain facilities. You consent to any such transfer of information outside of your country or region. [2]

What Microsoft makes clear is that personal information – or aspects of identity – can be digitized, collected, and distributed via McLuhan's theory of the global village network.

In fact, a recent 2013 study from Cambridge University claims that key aspects of an individual's personality can be determined through an analysis of the "like" button:

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[1] Marshall McLuhan. *The Gutenberg Galaxy; the Making of Typographic Man*. Toronto: University of Toronto, 1962
[2] Xbox.com. *Xbox LIVE Terms of Use.* 2011

We show that easily accessible digital records of behavior, Facebook Likes, can be used to automatically and accurately predict a range of highly sensitive personal attributes including: sexual orientation, ethnicity, religious and political views, personality traits, intelligence, happiness, use of addictive substances, parental separation, age, and gender. [3]

While it should be noted that one of the researchers is associated with Microsoft, and therefore stands to profit considerably from this study as a shareholder of Facebook, what is at the center of the study is the notion that the choices we make on social media sites are predictive indicators of how we are perceived by both corporate America and by everyone in our global village network. Our identities are no longer products of our own doing. They are no longer constructed by the choices that we made growing up, reflected upon and affirmed by the infinitesimally small percentage of people in the world with whom we spent the majority of our time. Identity is now created through the perception of millions by what we like or don't like on Facebook. How can one possibly navigate this change? How can we talk about the self when its creation is now proliferated via a faceless conglomerate workforce of hashtags, retweets, and reposts?

The answer may come from McLuhan when he states in his 1972 book *Take Today: The Executive as Dropout*:

Paradoxically electronic man has no choice but to understand processes, if he is to be free…The only method for perceiving process and patterns is by inventory of effects obtained by the comparison and contrast of developing situations. [4]

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[3] Michal Kosinski, David Stillwell, and Thore Graepel. "Private traits and attributes are predictable from digital records of human behavior". In: *Proceedings of the National Academy of Sciences of the United States of America (PNAS)* (2013)

[4] Marshall McLuhan and Barrington Nevitt. *Take Today; the Executive as Dropout*. New York: Harcourt Brace Jovanovich, 1972

Here, I would propose that McLuhan is advocating a subversion of digital technology's reduction of our identities into quantifiable and categorical information by using the very same infrastructure for our own purposes. If the Internet is going to send our "data" to and fro, then let it do what it does best, but we must control the content of that data. We, the users of the web, the public, must be the generators of the messages sent through our networks. We must write the software of our identities rather than settle for being its referential hardware.

How we go about doing this comes from the second portion of the McLuhan quote above, in which he describes the method for "perceiving process" as an understanding of the cause and effect of actions in "developing situations." When applied to the presentation of our identities in our digitally mediated world, we are looking not at a passive understanding of networks like Facebook, but rather the development of a viable skill.

To understand this, let's look at common social practices on Facebook. Facebook gives to our identities what texting and email gave to our verbal communication: a chance to edit our messages. Rather than reacting in the way a personal physical interaction requires, email allows us to parse through our thoughts and craft carefully constructed responses. In a very similar way, Facebook gives the time required to present our best self. Whether it be rewriting posts for maximum humor, choosing which photos of ourselves to upload and which to discard, detagging ourselves from others' posts and photos, or most recently, using the "groups" function to dictate our content's audience, Facebook is an intermediary between our full selves and the expression of ourselves that we put out into the world. In other words, it is a curatorial practice. It is this skillful social editing that facilitates the creation of networks of influence: "friends," in Facebook terms.

Klout.com provides us a useful example of this influence through their unique "scoring" system:

Klout's vision is to enable everyone to discover and be recognized for how they influence the world. With the rise of social media, the ability to impact others has been democratized. Klout measures your influence based on your ability to drive action on social networks. The Klout Score is a single number that represents the aggregation of multiple pieces of data about your social media activity. [5]

A shocking example comes from the comparison of the Dali Lama and Perez Hilton's Klout scores. The Dali Lama, beloved spiritual leader recognized around the world for his influence, has a Klout score of 86 (out of 100), with which he influences 758,000 followers via social media [6]. His score is pretty good – twice my own. However, self-made blogger Perez Hilton has a score of 90. The fact that Perez has a higher Klout score is just spectacle, but it does highlight the different spheres of influence that lend each figure his authority. While the Dali Lama's influence is attached to his station as a spiritual leader, Hilton's influence comes entirely from his skill at controlling social media. Hilton has a standard education – a BFA in theater. He did not come from money, and he represents a marginalized community as an openly gay, albeit white, man. His success comes solely from his ability to network within the blogosphere and to influence not only others' perception of himself, but others' perception of others as well.

The presentation of identity is not only an invaluable skill, but an active task. It requires maintenance and constant production and distribution. As we have examined within this new context of a technologically and socially mediated identity, if one does not control the content of the message, others will. The *URME Surveillance Identity Prosthetic* exemplifies this by transforming my identity into tangible material for others to present. Who I am, in part, becomes based on the surveillance data

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[5] Klout.com. *Klout Score*
[6] Mythreyi Krishnan. *"Influence Metrics for B2C Brands." The JamiQ Blog.* 2011

collected about me which is produced by others, much in the same way "likes" on Facebook are collected to produce marketing profiles. In doing so, the work exposes the underlying systems threatening the authorship of individual identity, by allowing others to challenge the authorship of my own.

In doing so, what *URME Surveillance* highlights, as do several of my other works, is the malleability and vulnerability of identity within a technological context, and it empowers its audience to consider how they construct, present, and author their own socially mediated identity. Lastly, it is important to note the opportunity to produce and present identity as a means of harnessing collective power. Identifying that opportunity as a cultural practice that can be formulated into a skill is perhaps the most important development in understanding how to resist and defend our individual authorship. To the conglomerate effect of this production and distribution of content as it refers to the presentation of our identities via digital networks for the purpose of, as McLuhan states, "being free", I offer the term social prosthesis: the total manifestation of one's creation, navigation, and maintenance of relationships that comprise the web of that individual's network of influence.

Leonardo Selvaggio (USA) is a Chicago based interdisciplinary artist whose work examines the intersection of identity and technology. He has shown work internationally in France and Canada; domestically in New York, Chicago, Florida, and New Mexico. He has been awarded an Albert P. Weisman grant for his work, *URME Surveillance* and a DCASE IAP Professional Grant to present supporting research. That artistic intervention invites users to wear a photo-realistic prosthetic of his face as protection from pervasive facial recognition surveillance systems. URME has been selected for the Art Souterrain festival in Montreal, the ISEA conference in Vancouver, and the Saint-Etienne Design Biennial in France. In 2015, *URME Surveillance* was also adapted for television in an episode of CSI: Cyber titled "Selfie 2.0".