

Exploring the Metahuman Through Inverse Biotelemetry

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Introduction

Over the past ten years, SWAMP (Studies of Work Atmospheres and Mass Production) has produced a body of work examining various socio-political phenomena. Through this process we have come to define a certain subset of our studio practice as *inverse biotelemetry*. The term biotelemetry is borrowed from ecological fieldwork where scientists track the migratory patterns and vital statistics of animals outfitted with portable transponders. The data collected from these devices is used to determine the health of a species: the health of many is determined by analyzing a sample. SWAMP's *inverse* biotelemetry methods utilize similar portable technologies (ubiquitous and wearable computing) for more expressive purposes. In our performance, web and installation-based artworks, a single subject endures the effects of the many, or more specifically, the effects of the *metahuman*.

The metahuman refers to the extension of our bodies, through technology, whose manifestation has resulted in something that behaves on its own volition. Many systems of agglomeration could be described as metahuman, although the best example, and one that SWAMP artwork frequently addresses, is the present-day corporation: they compete for resources, mutate and evolve, espouse ideology, internalize and emote feelings, reproduce and die. Instead of bones, organs and DNA, they have human resource offices, doctrines, religions, cultural trends, boards of directors and immigration policies. Indeed, their origin in the United States is based upon legal proceedings that vivified the inert parts of business into the living corporation. Bestowed with corporate personhood (Allen 256), the inertia of metahumans is sometimes so great, that even humans serving in high positions within their structure are powerless to alter their emergent patterns of behavior. With circulatory and limbic systems comprised mainly of profit escalation, and no other feedback mechanisms

to ensure such basic existence requirements as ecological homeostasis, it is through the lingua franca of persuasive media that dissenting individuals may hope to deliver feedback into culture. The collective processes laboring within SWAMP's inverse biotelemetry unpacks the physical and information architectures of the metahuman. These unit operations are then converted into an individual expressive gesture (Bogost, "Unit Operations" 1), arriving at what Ian Bogost defines as procedural rhetoric; a persuasive argument relying on the meaningful translation between processes ("Persuasive Games" 29, 43, 46). SWAMP's processes are not merely a means to an end, but reflect the ontogeny of the digital age: the global operations of economies of scale, war conducted through telepresence, and the general milieu of mass media communication. Metahuman's are often in command of these processes and SWAMP's inverse biotelemetry artwork is used to probe and outline their amorphous forms — like the effects of snow upon the invisible man.

The human within the metahuman

In 1848 Phineas Gage, a railroad construction foreman, suffered an accident. While blasting away rock, an iron rod shot out of the earth, through Gage's jaw, exiting the top of his head, carrying bits of brain and blood along with it. Surprisingly, not only did Gage survive this accident - he also retained full memory, motor functions, and language ability. But as time went on, subtle symptoms of his injury became obvious, generally playing out as capricious and self-destructive behavior. The notes of his case would later be integral in building our contemporary understanding of the complex interconnectivity of the brain functions supporting cognition and consciousness (Damasio 11-19). Ironically, while Gage's accident has served as a platform for scientific inquiry towards understanding the human mind, it also serves as a symbol for understanding the metahuman mind, and Gage himself,

as a casualty of the nascent railroad metahumans of the 19th century. Gage's injury was work related — it occurred while expanding the railroad in New England. And railroads were more than a new rapid means of travel, they were the focus of historically significant law making. Railroad legal battles, such as the Santa Clara vs. Southern Pacific Railroad, were the incubation chamber from which corporations were declared to be people (Allen 256-260). Bestowing abstract business ventures with the legal powers of human beings was the precedent for enabling corporations the global influence they have today — their stature as metahuman.

SWAMP Art Projects

When Mihaly Csikszentmihalyi wrote *Flow: the Psychology of Optimal Experience*, he based the text on careful observation and research into our leisurely activities, such as dancing, rock climbing and basketball. By analyzing what people get out of their pastime investments, he arrived at a range of human values devoid of pecuniary reward. Csikszentmihalyi later establishes his famous Flow model that encourages living with a greater focus on inner wellbeing (Csikszentmihalyi 5, 49).

SWAMP taps into a similar sentiment. For the most part, we feel metahuman systems offer individuals a lifestyle based on pecuniary and extrinsic rewards; a way of life that does a good job at generating profits, but offers little in the way of satisfying personal fulfillment. By being aware of metahuman systems, people can be more discriminate in their actions as a consumer. Spore 1.1 (Figure 1), is a SWAMP artwork that promotes this thinking. Formally this project can be described as a portable ecosystem for a rubber tree plant purchased at Home Depot. An onboard computer uses data scraping software to access Home Depot stock quotes, keeping a database of the ensuing stock values. Fluctuations are determined at the end of each week: increases activate the electronic water pumps, injecting water into the soil; decreases activate nothing. Progressively, the relationship between the corporation and individual is

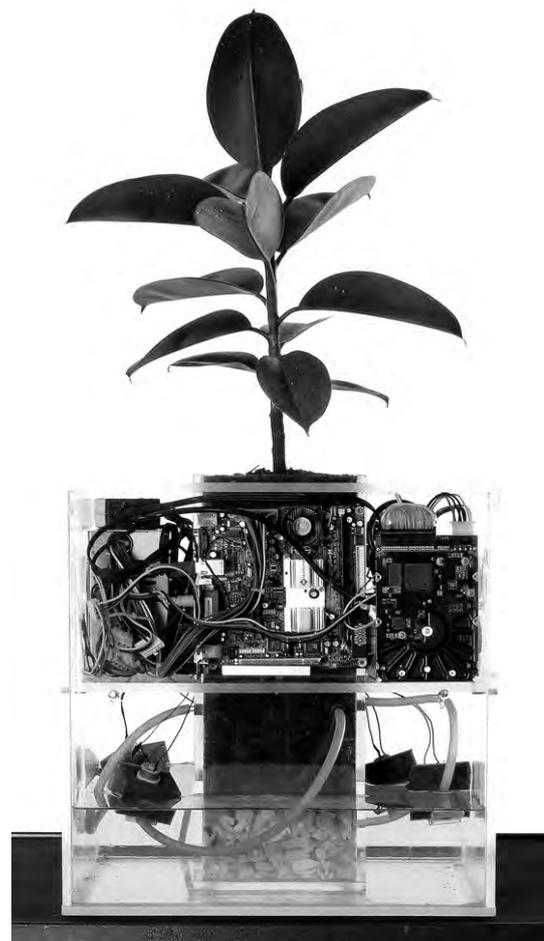


Figure 1: Spore 1.1 (2004).
Photo courtesy of <http://www.lukehoverman.com>

revealed upon the plant's vitality. If the plant dies during this routine, it is returned to Home Depot and replaced at no additional cost. Jacob Ward has perhaps the best summary of how this artwork's procedural rhetoric exposes Home Depot as a metahuman organism.

They're calling attention to the policies that corporate competitors spend decades formulating — policies that end up shaping the American lifestyle (... Easterly and Kenyon, in their small way, are touching Home Depot's Achilles' heel). (Ward 47)



Figure 2: Consumer Index (2008 -)

A more recent SWAMP artwork is *Consumer Index* (Figure 2), which features SWAMP co-founder Matthew Kenyon as the performer. While Phineus Gage accidentally pierced his head with a railroad implement, inviting advancement of neuroscience, Kenyon has purposefully pierced his head — or, more precisely, his cheek, advancing a procedural rhetoric. But this is not a form of cosmetic body-modification. Kenyon's cheek hole is required for a customized piece of hardware we refer to as the *scanmera*: a hacked-together miniature digital camera and bar-code scanner adhered to the roof of Kenyon's mouth. The data and power wires route through the hole in his cheek to access power and data modules carried in a backpack. The on-going performance takes place at a local Walmart where Kenyon works towards iteratively scanning every product. He does this by picking up products and holding them up to his open mouth. Uttering a short grunt activates custom circuitry on the scanmera, taking a picture as well as logging the product. After an hour or two of work, Kenyon leaves, picking up where he left off upon each return visit. The scanner module on the scanmera is no ordinary scanner, but a ubiquitous computing device from Nielsen Media Research called the Homescan. This portable scanner is given to member-subscribers of The Nielsen Family, tracking their shopping patterns through place and product.

What the Nielsen Media Research produces is human biotelemetry, and it is perhaps the most explicit example (other than Gage's brain necrosis courtesy of

the Burlington Railroad) of the human relationship within the metahuman. *Consumer Index* exploits this situation by adapting the Nielsen Homescan into a tool for inverse biotelemetry. Through devices like the Nielsen Homescan, companies like Walmart are able to determine how to serve a complex array of shoppers. But these monitoring systems and corporations do more than survey our needs and desires; they actively shape them. *Consumer Index* diffuses the metahuman into unit operations for building a procedural rhetoric: the demographic becomes the individual, and our contoured needs and desires are reflected back to expose humanity's reduced syntax as customers of big-box retail, as with the metahuman called Walmart.

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