Architecture in the Mediated Field: Glasshole

"Barry." "Barry." "BARRY!!!" Oh, nvm, he's glassed out, that explains it, ok." I love it. I love how it sounds so cyberpunky, so disturbingly druggy…

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GLASSHOLE

Recently the digital environment platform company, Infinity AR, caused controversy with a video demonstrating the potential of the augmented reality platform that they are developing. The platform, which is similar in concept to Google Glass, takes advantage of the overlay of digital content onto a user's perceptual field and allows control of that content through hand and eye gestures.

In the company's original marketing video,[1] a guy—appropriately called a bro-bot in the press—is depicted in his daily activities with the mediated advantage offered by his access to technologies such as Glass. His morning begins innocuously with the weather for the day provided on his glasses and a note that he is to compete in a pool tournament later that day. His glasses then highlight and summarize the news of the day for him while he thumbs through a paper.

Then things start to get weird. His virtual closet is shown. It enables him to select his clothing for the day and to virtually try it on to insure that he is stylish. Afterwards the audience follows him down the elevator and out to his Ferrari waiting for him in the *port cochère* of his building, which he jumps into to drive to his tournament. If the viewer is not annoyed yet, augmented pool will start to make her question the true purpose of AR as the bro-bot employs it to cheat his way to victory. His glasses overlay the perfect shots on the table so he can run it, and then Infinity AR's video gets downright creepy as he enters a bar.

In the bar, the glasses instantly call up the Facebook profile and astrological sign of the bartender. The bro-bot uses this information to hit on her at the same time that it analyzes her voice to determine if his augmented intuition has impressed her. With no clue of the guy's absolute creepiness, she is intrigued. They flirt. Later that day, he will set up a date with her.

The scene with the bartender created an uproar on youtube, reddit, media blogs and other sites tracking social networks and applications. Infinity AR's provided

the worst possible example for the potential of mediated reality technology. Their self-advertisement conveys that inauthenticity only of Glass wearers and within the disruptive technology movement.[2] The company did not want to be associated with the kind of sociopathic behavior the video suggested, so they pulled the video from the web. Eventually, they reposted it without the problematic bar tender scene. All good. Right?

Obviously, Infinity AR's projection of the future of mediated reality tapped into something troubling about the relationship between technology and privacy, but what does it tell us more generally about the post-industrial state of our cities? In this study, I examine how augmented reality technologies such as Google Glass threaten the traditional structure of the city as a *polis* at the same time that these technologies reveal how the public realm, the common ground of politics, might be reconstructed. In order to understand the public realm is undermined by mediated reality, I begin with an examination of Hannah Arendt's understanding of the common world. Arendt's use of the séance as a metaphor to describe the dissolution of the public realm aligns her critique with contemporary anxiety about Google Glass and similar technologies. As such, I follow her critique with an explanation of what augment reality is and how Google Glass fits within the range of realities presented by different types of mediation technologies. Finally, I revisit Heidegger's *Question Concerning Technology* to propose that the danger of Google Glass is the very condition that leads to the possibility of reconstructing the public realm in the post-industrial city.

WITHOUT THE COMMON TABLE

In her book, *The Human Condition*, Hannah Arendt deploys a metaphorical table to explain how humans live in the world together. The metaphor is part of her larger project dedicated to understanding the city, the polis, as the public realm, which humans hold in common. For Arendt, it is the world of things that humans make that splits humanity from the nature world at the same time that it creates a separation between humans that brings them together to relate to one another. It is critical that this world is fabricated. It is only, according to Arendt, when nature is thus transformed through work, craft in a sense, that it can fulfill this function of constructing a common ground. The transformation of nature into cultural artifacts causes chaotic nature to appear permanent. Fabricated artifacts, like the table around which humans can gather, are durable goods that stand up against humans as natural creatures, animals, and thus make them different. Humans, as unnatural beings in this sense, can thus join together as something other.

> It is this sense of durability which gives the things of the world their relative independence from men who produced and used them, their 'objectivity' which makes them withstand, 'stand against' and endure, at least for a time the voracious needs and wants of their living makers and users. From this viewpoint, the things of the world have the function of stabilizing human life, and their objectivity lies in the fact—in contradiction to the Heraclitean saying that the same man can never enter the same stream—men, their ever-changing nature notwithstanding, can retrieve their sameness, that is their identity, by being related to the same chair and the same table.[3]

Humans sit around the table that they have made. It separates them from one another, but it also brings them together to the table that they can share. It is the durability of the table, the manner in which it resists time, that sets it in opposition to the absolute lack of concern that nature has for the human. Nature could

care less about the human. The natural world constantly threatens humans with death. It is through the transformation of the natural world into culture that humans can measure themselves as humans and endure the chaos.

Without the common ground of the things that humans make such as tables, chairs public squares there is no possibility of a common ground or a public realm, and Arendt perceives the modern human condition to be one in which the capacity for culture to persist has disappeared. Work, craft, artisanship—the activities by which nature becomes culture—have been superseded by labor. Instead of fabricating the world to persist and therefore to stand against the human, humans now labor to make products for consumption. Products of consumption are largely, in Arendt's terms, items that fulfill biological necessity. These things do not persist or only persist in terms of being set aside for future use, and as such they forfeit their objectivity. They are simply commodity values subject to whims of markets and private, subjective taste. Within this mass, undifferentiated, society, humans become laborers bound to machines that substitute for the real world, a *pseudo world* that only appears to fulfill the function of fabricated culture.[4]

GLASSED OUT
According to Arendt this pseudo world of humans that labor with machines is a séance.

> What makes mass society so difficult to bear is not the number of people involved, or at least not primarily, but the fact that the world between them has lost its power to gather them together, to relate and to separate them. The weirdness of this situation resembles a spiritual séance where a number of people gathered around a table might suddenly, through some magic trick, see the table vanish from their midst, so that the two persons sitting opposite each other were no longer separated, but also would be entirely unrelated to each other by anything tangible.[5]

Mediated reality appears to be just such a magical trick. Mediated reality expanded from Steve Mann's introduction to the concept, is the use of a device to deliberately augment, diminish or otherwise alter human perception.[6] It is the most expansive and total modification of perceptual reality with respect to current technological advancement. Two main subcategories exist within the container of the mediated, virtual reality and modulated reality. Modulated realities are fundamentally subtractive. Devices that modulate strip or reduce the appearance of things within the world. For example, researchers at the Technical University of Limineau developed software that would allow the user to select and remove objects from display within video editing software in real time.[7] The resulting perceived world seemingly exists with no influence of the removed objects.

Virtual reality exists across a spectrum from a total substitution of the perceivable world to a mixed condition of varying proportions of real and virtual world. Virtual reality most recently has been popularized through the Oculus Rift, a high field of view and low-latency video goggle display that allows a user to inhabit a digitally constructed image, animation or simulation. VR headsets like the Rift complete replace the world of the user with something else. Augmented reality devices are easily misunderstood. Augmented reality adds elements from real perception to virtual worlds to increase the apparent veracity of the simulation. Mixed reality, commonly misunderstood as augmentation, is a hybrid condition

of virtual simulation and real-world perception. The entire subcategory of virtual reality is additive in effect.

Mediated reality devices take advantage of the subtractive capabilities of modulated reality and the additive capabilities of virtual realities at the same time. Google Glass is the most infamous of the mediated reality devices today.[8] Glass combines a wearable computer with a small heads-up display screen placed in front of but not impeding the direct line of sight of the user. It is controlled through spoken commands and eye-based gestures. Google announced the Glass project in early April of 2012. Prototypes of the device were first seen later in the same month, and a version of the product was made available for pre-order by developers at the Google I/O conference in June of 2012. In March of 2013, Glass devices began shipping to developers, and the device's reputation, or more properly speaking, the reputation of Glass users began to precipitously fall. Around one year later, Google opens up the sale of Glass to the public, but quickly runs out of stock. At the same time, growing resentment toward users of the device appears to force Google to begin damage control to address negative perceptions of the technology.

Coming close to channeling Arendt the blogger, jennydeluxe, captures the essence of the Glass experience from the non-user perspective:

> The very best thing I learned this year at SXSW is that people in the Valley have coined a term for the weird, half-conscious expression that Google Glass wearers get on their faces when they are concentrating on doing things with the tiny little screen inside their glasses. They call it "glassed out," which you would use in a sentence like: "Barry." "Barry." "BARRY!!!" Oh, nvm, he's glassed out, that explains it, ok." I love it. I love how it sounds so cyberpunky, so disturbingly druggy…[9]

Despite jennydeluxe's enthusiasm, Glass wearers do not get much love from the public. Instead they appear just as Infinity AR depicted the bro-bot in their ill-conceived concept video, as disaffected and entitled assholes that only see other humans as objects to be consumed.

In the world of Glass wearers, it is not just the table between the humans that disappears. Even the humans go missing, and that presents a more extreme version of the problem for having a public realm that Arendt's human condition. This means that the very conditions, under which the city can function as a city, a space for the public, have radically been altered if not made impossible. Ian Bogost, the video designer and some time object-oriented philosopher, nailed the change to the city. In a recent essay for the *Atlantic*, he compared the rising ubiquity of Glass wearers in California to an outbreak of zombies, Google Zombies, overtaking San Francisco by munching on everyone's brains.[10] Revisiting Heidegger's *Question Concerning Technology* is useful in understanding why Arendt's modern human condition devolves into a horror film when mediated reality is at play.

THE AUTONOMOUS MACHINE

Heidegger begins his famous essay on the essence of technology by questioning toward what the essence of technology might be. He begins by asserting the correctness of technology as a means to an end and as a human activity. Relative to mediated reality devices such as Google Glass it is necessary to suspend, for a while, the latter to attempt to get a better sense of what the essence of Glass is.

It seems obvious from the Infinity AR video that Glass is instrumental, but with respect to what? What is the end of Glass? Infinity AR and Google would like everyone to believe that the goal of mediated reality is to make our world more easily navigable and accessible. The complex information that defines how we inhabit what we perceive to be reality is more easily manipulated and directed. In this sense, Glass is a means toward an end. It allows us to better grasp our concepts of the world. But as Heidegger would note, this is not the essence of Glass.

Mediated reality reveals something else. I am not going to reconstruct Heidegger's entire argument in the terms of Google Glass. The public reaction already speaks volumes about what Glass reveals and enframes, puts into the standing reserve. Glass places our humanity in reserve. This presents a problem when trying to understand what the essence of Glass as technology is through Heidegger because it is something that he precisely states cannot happen.[11]

> Yet precisely because man is challenged more originally than are the energies of nature, i.e., into the process of ordering, he is never transformed into standing reserve. Since man drives technology forward, he takes part in ordering as a way of revealing.[12]

Returning briefly to Arendt's discussion of labor superseding work and thus making things in the world, the very things that create our public realm, disappear; a sense of why Heidegger is wrong can be gleaned. Technologies like Glass, those that mediate reality, do not sit between us and other humans. They sit between us and our conceptualization of our selves.

As Steven Mann has noted, the ends of mediated reality devices is as virtual memory. If you have searched Google to reinforce or support that reference you just made, you have experienced this condition of the mediated reality device, even when in the guise of a smart phone, as your externalized memory. In this odd Arendtian version of a Heideggerian situation, the human wearing the Glass disappears in Arendt's terms and is placed in the standing reserve, another kind of disappearance, in Heidegger's terms. Heidegger's dismissal of Hegel's notion of the autonomous tool is upended. In Hegel's definition the machine is a tool set free of the artisan, which Heidegger accepts only within the context of craft but not as a general rule. In this sense, the machine does not operate from out of the essence of technology to which it belongs as a tool. But Heidegger does not anticipate a technology whose end is the revelation of human memory and conceptualization where the device stands up against itself, its own essence. Mediated reality devices operate from out of their essence on their essence in a tautological masterwork.

Following Heisenberg's assertion that humans never encounter themselves or their own essence, Heidegger believes humans reveal everything real as the standing reserve.[13] Heidegger is correct in identifying this condition, of the totality of the world held in reserve as a danger that, hopefully, can be overcome. It is also the realization of Arendt's worst nightmare and at the heart of why labor makes the world of things disappear shattering the common. Everything in reserve is what makes the public space of the city impossible for her.

However a fabricated thing does sit between and relate humans when someone wears Glass or a similar device. There is a machined-object in play. Arendt would argue correctly that Glass as a product is not properly a thing, and she would be correct. Glass as an artifact disappears, but it also leaves something behind that truly gathers, separates and relates humans. Glass is not really the thing or even

the technology. It is more of a simple intuition or representation of something more dangerous.

Recalling that in effect mediated reality devices are virtual memory machines helps clarify what the essence of Glass is. It is our conceptualizations and our memories. Glass reveals and thus challenges us with our own memories, the things that humans perceive as being the things that make humans human. This challenging of us by our own memories is why the bro-bot and the Glasshole are so offensive. Mediated reality devices objectify us. They even more profoundly objectify their users, the Google Zombie horde.

FROM DANGER TO DESTINY

Even if Heidegger misses how radically contemporary technology constructs and simultaneously undermines humanity, *The Question Concerning Technology* continues to offer hope. In the concluding section of his essay, Heidegger explains how humanity might be saved from the danger of technology. He notes that the true danger of technology, relative to its essence as that which challenges forth and then holds in reserve, is our instrumental representation of it. In this sense, it is our will to master technology that betrays us and brings about its danger. "When, however, we ask how the instrumental comes to presence as a kind of causality, then we experience of coming to presence as the destining of a revealing."[14] The change that Heidegger is identifying that transforms danger into destiny is one through which the instrumental is pointed toward a future condition.[15] It is with this future in mind that technology's enframing is also a granting that lets humanity endure.[16] But it is important to remember that this is not the potential destiny of technology such as Google Glass. How does mediated reality transform from danger to destiny and what does this tell us about the public realm where the city might reform?

The offence and the danger of mediated reality that is threatened by Google Glass and made evident in anecdotes like the Infinity AR concept video is the absolute objectification of human beings and their total master by what appears to be another human. Of course, the Glassed Out guy across the bar is not truly present as human or master, thus the zombie metaphor. The danger holds. It just happens to hold out for the Glasshole and his target, albeit in slightly different ways. Each is objectified and placed into reserve to be consumed at some point in time other than now. What places humans in reserve in this situation is not Glass, the technological artifact, however. It is the memories and the concepts, the self-reflection that makes us human that place us, not as humans but as others—objects—in reserve.

This presences something rather odd. It is almost the inverse of Arendt's table. Objects (the remainder of humans without their humanity) gather around the memories and concepts that make them human. They are related and separated by means of those memories and concepts that appear as the common ground. Therein lies the causal directedness of mediated reality and the future possibility for the public realm. Mediated reality technology remakes not the world but the memories and concepts that presence us as human, but in being made present our humanity is revealed to be ours only in common as the shared ground of the possible *polis*. This common can only be maintained while our memories stand against us and deny us both our subjectivity and our objectivity—the objectless condition of inhabiting the standing reserve. Heidegger describes life toward destiny as a temporal stay in a roadside inn.[17] Reading between the lines of *The*

Question Concerning Technology and Arendt's *Human Condition* while pondering what Google Glass does to our humanity, I can't help but think of *Canterbury Tales*. The open city, the one we encounter we engage in the fabrication of memories to stand against us as our humanity might be just a gathering to tell possible tales of our selves that may or may not be true and are likely a bit bawdy, but offer some respite from the chaos of our wandering.

ENDNOTES

1. The original concept video was released in August 2013 on Infinity AR's website: www.infinityar.com. The video was edited to remove the bartender scene. Captures of the original can still be found on Youtube. For example see, "The Infinity Augmented Reality Concept Video," YouTube video, 3:12, posted by "Cabbar37i," June 27, 2013, http://www.youtube.com/watch?v=ihGQcUrdSwY.

2. Characteristic of both is an entitlement, which is masqueraded as a mythological public good offered by the technology. See for example, Rebecca Greenfield, "The Rise of the Term 'Glasshole,' explained by linguists," *The Wire: What Happens Now*, April 22, 2013, Accessed July 14, 2014. http://www.thewire.com/technology/2013/04/rise-term-glasshole-explained-linguists/64363.

3. Hannah Arendt, *The Human Condition* (Chicago: The University of Chicago Press, 1998), 137.

4. Ibid., 79-92.

5. Ibid., 52-53.

6. Steve Mann, "Mediated Reality with Implementations for Everyday Life," *Presence-Teleoperators and Virtual Environments* (August 6, 2002), online companion, Accessed July 14, 2014. http://wearcam.org/presence-connect.

7. See "'Diminished Reality' software removes objects from video in real time," October 14, 2010, *Kurzweil:Accelerating Intelligence*, Accessed July 14, 2014. http://www.kurzweilai.net/diminished-reality-software-removes-objects-from-video-in-real-time, and http://www.tu-ilmenau.de/journalisten/pressemeldungen/einzelnachricht/newsbeitrag/5784.

8. Competitors include the Meta Pro—www.spaceglasses.com, Vuzix's smart glasses—www.vuzix.com—and the iOptik contact lens/glasses system—innovega-inc.com.

9. Ninakix, March 19, 2013, "Relationships with (and around) Google Glass," *jennydeluxe: It's mine I spend it* , Accessed July 14, 2014. http://jennydeluxe.tumblr.com/post/45774163915/relationships-with-and-around-google-glass.

10. Ian Bogost, "Google Zombie: The Glass Wearers of Tomorrow," *The Atlantic*, May 20, 2013. Accessed July 14, 2014. http://www.theatlantic.com/technology/archive/2013/05/google-zombie-the-glass-wearers-of-tomorrow/276007.

11. Martin Heidegger, "The Question Concerning Technology," in *The Question Concerning Technology and Other Essays*, (New York: Harper Perennial, 2013), 18.

12. Ibid.

13. Ibid., 24. Heidegger quotes Heisenberg on page 27 from W. Heisenbeg, "Naturbild in der heutigen Physik," in *Die Künste im Technischen Zeitalter* (Munich, 1954), 60.

14. Ibid., 32.

15. I have written about the problematic of the future and directedness toward it in Heideggerian metaphysics in an essay published in the ARCC Conference Proceedings from 2014. See Jason Crow, "The Future is Fixed," *Beyond Architecture: New Intersections & Connections* (Honolulu: University of Hawai'i at Manoa, 2014), 463-469, and Jason Crow, "Time is a Drag" (paper presented at *The Virtue of the Virtual: Cultural Mediations and Technology Program Conference*, McGill University, Montreal, Quebec, May 18-20, 2011).

16. Heidegger, 33.

17. Heidegger, 29-30.

URBAN ENVIRONMENTS + NEW REGIONALISM: INTERVENTIONS FOR PUBLIC + PRIVATE SPACES

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