

From *Demos* to Data: Social Media, Software Architecture, and Public Space¹

In early 2014, social media sites and mainstream media outlets like were embroiled in a conversation about “Twitter feminism.” Prompted by Michelle Goldberg’s story in *the Nation* regarding “Feminism’s Toxic Twitter Wars,” writers from a variety of media outlets once again found themselves discussing the relative value of social media for democratic politics.² What could have remained a debate internal to feminist circles over the value of Twitter and other social media platforms for activist debate and organization instead became a referendum on social media more generally. Pieces like Goldberg’s lamented the wasted potential of online spaces such as Twitter. In it, she described the lost promise of “an insouciant, freewheeling place, [that was] reviving women’s liberation for a new generation,” betrayed by “social media’s climate of perpetual outrage and hair-trigger offense.”³ Meanwhile, critics like Suey Park and Veronica Arreola called attention to the more potentially-inclusive nature of sites like Twitter, likening Goldberg’s article to “[a]n effort to gentrify digital spaces in the name of safety and dignified discourse.”⁴ Still others like Jennifer Pan used the occasion to raise questions of labor and payment, questioning the practices that make up the very foundation of social media itself—

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² Though she is responsible for its most recent iteration, Goldberg did not introduce this issue or begin the debate. In many ways, her essay was a response to an ongoing conversation within feminist circles that had reached new heights with Hugo Schwyzer’s public meltdown on Twitter and Mikki Kendall’s popular hashtag, #solidarityisforwhitewomen, both of which took place in August 2013. See Mikki Kendall, “#SolidarityIsForWhiteWomen: Women of Color’s Issue with Digital Feminism,” *The Guardian*, August 14, 2013, <http://www.theguardian.com/commentisfree/2013/aug/14/solidarityisforwhitewomen-hashtag-feminism>. See also Arit John, “The Year in #SolidarityIsForWhiteWomen and Twitter Feminism,” *The Wire*, December 31, 2013, <http://www.thewire.com/culture/2013/12/year-solidarityisforwhitewomen-and-twitter-feminism/356583/>.

³ Michelle Goldberg, “Feminism’s Toxic Twitter Wars,” *The Nation*, February 17, 2014, <http://www.thenation.com/article/178140/feminisms-toxic-twitter-wars#>.

⁴ Suey Park and David J. Leonard, “In Defense of Twitter Feminism,” *Model View Culture*, February 03, 2014, <http://modelviewculture.com/pieces/in-defense-of-twitter-feminism>; Veronica Arreola, “The Color of Toxicity,” *Racism Review*, February 06, 2014, <http://www.racismreview.com/blog/2014/02/06/color-toxicity/>. Many authors in this vein also called attention to the structural inequalities that Twitter (and other social media) do little to alter—like the fact that Goldberg’s article was in a national publication, while many of her interlocutors are relegated to Twitter. For example, see Kenzo Shibata, “Breathe, Michelle Goldberg, It’ll Be OK,” *Kenzoshibata.com*, February 03, 2014, <http://kenzoshibata.com/2014/02/03/breathe-michelle-goldberg-itll-be-ok/>.

unpaid labor, often by members of minority groups.⁵ Yet while this episode was no doubt extraordinary in certain respects, the debate over "Twitter feminism" is not unique. Instead, the various issues raised by this instance of "feminist infighting"—the incivility, commodification, and transitory nature of virtual discourse, for example—reflect the varied and unstable condition of public space in the modern age.

Public space grounds democratic politics. In the most literal sense, public space is where the *demos* reveals itself, from the formal institutions of representation to the informal gatherings of citizens in protest or celebration. But public space, too, functions symbolically, providing reference points around which a civic consciousness is developed and maintained.⁶ Public space is a recurring feature of our most iconic images of democracy. From pictures of protestors in Tahrir Square, to images of voters waiting in line outside schools and churches to take their turn at the voting booth, public space frames and stages the various activities we understand to be quintessentially democratic.

Since the invention of the telegraph in 1844, however, networked technologies of the past 160 years have restructured our lives, disrupting and challenging the expectations of public space that ground political theory. To date, political theorists have largely addressed the ways in which the unique configurations of networked technologies have altered the “who” and the “how” of public life. By contrast, similar transformations to the sites (the “where”) of politics have been overlooked. Instead, the "public sphere" is more often than not treated as a concept in the abstract, with little or no scholarly attention paid to the differences between specific *sites* of

⁵Jennifer Pan, “The Labor of Social Media,” *Jacobin*, February 06, 2014, <https://www.jacobinmag.com/2014/02/the-labor-of-social-media/>. See also Astra Taylor, *The People’s Platform: Taking Back Power and Culture in the Digital Age* (New York: Metropolitan Books, 2014); Jessica Weisberg, “Should Facebook Pay Its Users?,” *The Nation*, January 14, 2014, <http://www.thenation.com/blog/177887/should-facebook-pay-its-users>.

⁶ See Benedict Anderson, *Imagined Communities* (London: Verso, 1991); John Parkinson, *Democracy and Public Space* (Oxford: Oxford University Press, 2012).

public activity. And as instances of public space, social media sites differ in the ways in which they gather users, relate them to one another, and incentivize certain activities. Place matters, no less for the virtual spaces of social media than it does for the built environment of the physical world.

To that end, this chapter takes up the question of the relationship between software architecture—the principles of design for a system's elements, relationships, and usage patterns—and public space, making the claim that the underlying architectures of social media sites are an important component in their function as aspects of the modern public realm. I argue, in other words, that certain changes to social media site architecture can help to facilitate—or foreclose—the possibility for politics. Drawing on Hannah Arendt's concept of "work," I first explain how and why public space, as part of the "world of things," is a necessary condition for politics. I then discuss the role of architecture in building and maintaining the public realm, using receptions of Arendt's concepts in architectural theory. Turning from this focus on the built environment to the virtual spaces of social media, I show how differences in specific site architectures clarify the stakes of reclaiming meaning, beyond mere instrumentalism, for *homo faber's* work of building and maintaining the modern public realm. Finally, I end the paper with some concluding remarks as to further implications of this attention to the public space(s) of social media.

The “World of Things” and the “Work of Our Hands”

The political importance of public space is evident in the work of Hannah Arendt. Those who read Arendt with an eye towards her agonistic politics often focus on those passages in her

work in which she emphasizes the heroic, extraordinary and distinctive nature of action.⁷ Yet in focusing on action, on the revelation of actors' unique individualities and the spontaneous greatness of bringing something new into the world, these readers of Arendt often minimize the importance of work. And yet, despite the scholarly focus on action, the heart of Arendtian politics is really "the world."

In contrast to the earth, which is tantamount to the natural life processes, "the world" is wholly man-made. Work, *homo faber's* capacity to fabricate objects for use, "provides an 'artificial' world of things, distinctly different from all natural surroundings."⁸ By virtue of its stability and durability, this human artifice separates the world held in common from the state of mere nature. It creates a space that can stand against the cyclical demands of nature while also affording actors some structure and protection from the boundless unpredictability of their action. For unlike the fleeting and unpredictable nature of action, man-made objects and institutions have a durability that lends the human artifice a "stability and solidarity without which it could not be relied upon to house the unstable and mortal creature which is man."⁹ In so doing, it "becomes a home for mortal men, whose stability will endure and outlast the ever-changing movement of their lives and actions."¹⁰ The stability of the human artifice makes possible the formation of a community that connects with the past and extends into the future.¹¹

And yet, as the "home for mortal men," the human artifice does more than simply act as a barrier, protecting the space of appearance from the demands of nature and the unpredictability of action. It also structures and gives meaning to the relationships of those within the public

⁷ See Jeremy Waldron, "Arendt's Constitutional Politics," in *The Cambridge Companion to Hannah Arendt*, ed. Dana Villa (Cambridge: Cambridge University Press, 2000), 201–219.

⁸ Hannah Arendt, *The Human Condition*, 2nd ed. (Chicago: University of Chicago Press, 1998). 7.

⁹ Ibid. 136.

¹⁰ Ibid. 173.

¹¹ See Arendt's footnote about *polis* as "ring-wall" and *urbs* as "circle" likening the city to a fence which "harbored and inclosed" political life. Ibid. 64.

realm. As politics can only take place when in the company of one's peers, the human condition of plurality requires the introduction of a "conventional and artificial" political equality.¹²

This equality, according to Arendt, is derived from "the products of human effort and qualities of the man-made world."¹³ Serving as an objective reference point, the human artifice binds a diversity of unique individuals into a community of equals by allowing them to "retrieve their sameness, that is, their identity, by being related to the same chair and the same table."¹⁴ In so doing, the world of things not only serves as a condition of possibility for action, but also gives content to action's principles.¹⁵ In the "speaking of great words and the doing of great deeds," then, political actors are acting and speaking into, and about, the world.¹⁶

Here, then, it becomes clear why these "speakers of words and doers of deeds" cannot sustain the human artifice on their own. Without objects which testify and give permanence to its words and deeds, action has no content and no anchor. Not only does action require the "worldly objective reality" which "lies between people and can therefore relate and bind them together," but also requires the stability of the world in order to realize the space of appearance.¹⁷ This is why "public space does not become political until it is secured within a city, is bound, that is, to

¹² In addition to binding together those within it, this artificial equality also limits and encloses the public realm. Equality, for Arendt, "is by no means a universally valid principle but, again, applicable only with limitations and even within spatial limits" (OR 267). Because equality is bound to the political activity of discussing and caring for the common world, it is an artificial "equality of those who had committed themselves to, and now were engaged in, a joint enterprise" (OR 270). The walls and laws of the polis are built not only to stave off the instability of human relationships and the cyclical demands of nature. They are also constructed as ways of separating citizens from noncitizens and drawing strict limits on who can participate in the public realm. This joint commitment to the common world can occur only with a limited number of participants and within well-defined spatial confines. Arendt is explicit on this last point, claiming that "[f]reedom, wherever it existed as a tangible reality, has always been spatially limited." See Hannah Arendt, *On Revolution* (New York: Penguin Books, n.d.). 267

¹³ Ibid. 21.

¹⁴ Arendt, *The Human Condition*. 137.

¹⁵ In this sense, "the principles that she claims both inspire political action and provide criteria for judging action concern primarily our shared public space and the ways in which we appear to each other in this space." See Lucy Cane, "Hannah Arendt on the Principles of Political Action," *European Journal of Political Theory* (2014), <http://ept.sagepub.com/content/early/2014/02/24/1474885114523939>. 10.

¹⁶ Arendt, *The Human Condition*. 25. Here, Arendt is using a line from Homer's *Iliad* to describe those who undertake action.

¹⁷ Ibid. 182.

a concrete place that itself survives both those memorable deeds and the names of the memorable men who performed them and thus can pass them on to posterity over generations.”¹⁸ Without the original foundation, the equality created from the ties of mutual promise and the "joint confidence... in each others fidelity and resolution," public space lacks the continuity and remembrance from which action's radical spontaneity breaks.¹⁹

Based on the triumvirate of authority, tradition, and religion, the stability provided by the human artifice is derived not only from the physical objects of the built environment, but also from the laws, customs, and mores that help to bind the present and future to the past. In so doing, these institutions provide citizens with “self-evident standards of behavior” that frame and contain the otherwise unpredictable intersubjective relationships that occur in public.²⁰ The human artifice thus creates "rules of the game" which help to form a community identity through individuals' relationship with the original act of foundation. In other words, the “world of things” serves as an objective reference point upon which newer generations can augment and build upon, instead of starting anew with each endeavor.²¹ This human artifice is therefore co-constitutive with the practices of those within it, as "men constantly create their own, self-made conditions" and "things that owe their existence exclusively to men nevertheless constantly

¹⁸¹⁸ Hannah Arendt, “Introduction into Politics,” in *The Promise of Politics*, ed. Jerome Kohn (New York: Schocken Books, 2005), 93–200. 123. See also Arendt, *The Human Condition*. 201 for Arendt's discussion of the fact that cities are the foundation of power because of the way they gather people to live together.

¹⁹ Arendt, *On Revolution*. 164. Arendt here is (approvingly) quoting from the Mayflower Compact. She elsewhere describes this moment by saying, "The really astounding fact in the whole story is that their obvious fear of one another was accompanied by the no less obvious confidence they had in their own power, granted and confirmed by no one and as yet unsupported by any means for violence, to combine themselves together into a 'civil Body Politick' which, held together solely by the strength of mutual promise... supposedly was powerful enough to 'enact, constitute, and frame' all necessary laws and instruments of government." (158).

²⁰ Hannah Arendt, “What Is Authority?,” in *Between Past and Future: Eight Exercises in Political Thought* (New York: Penguin Books, 2006). 141. These institutions are not necessarily all expressly political, like laws and constitutions, but can also include customs (private), conventions (social). See also Arendt, “Introduction into Politics.” 162: “...this system of relationships established by action...can exist only within the world produced by man, resting therein its stones until they too speak.”

²¹ See Waldron, “Arendt’s Constitutional Politics.” Esp. pages 212-215. See also Cane, “Hannah Arendt on the Principles of Political Action.”

condition their human makers."²² Arendtian politics requires public space in the two-fold sense that "the world" is common is attributable to both "the human artifact, the fabric of human hands, as well as to affairs which go on among those who inhabit the man-made world together."²³ This man-made world of things, the human artifice which houses humanity, is comprised of the both physical objects and institutional interpersonal relationships that give structure to our lives.

This is why, for Arendt, "at the center of politics lies concern for the world, not for man."²⁴ In caring for the world, humanity must work to preserve the public realm as the "in-between space" in which equality and distinction are manifest, as it is only here where individuals can appear to one another in their unique individuality.²⁵ Communities are forged through the exchange of unique opinions about the common world, and Arendtian politics is "the drawn-out wearisome processes of persuasion, negotiation, and compromise" that is required to care for and preserve the human artifice.²⁶ As the space within which individuals can act, the human artifice is the condition of possibility for meaningful human life and the public realm is the space of freedom.²⁷

Care of the common world is therefore important because it is tantamount to the intersubjective condition of human plurality, the twin characteristics of equality and distinction that make politics possible. Without the world to act as an in-between, and driven by the impulse to seek an objective explanation that lies outside one's own experiences, modern individuals find

²² Arendt, *The Human Condition*. 9.

²³ Ibid. 52.

²⁴ Arendt, "Introduction into Politics." 106.

²⁵ See Ibid. 106; See also Hannah Arendt, "The Tradition of Political Thought," in *The Promise of Politics*, ed. Jerome Kohn (New York: Schocken Books, 2005), 40–62. 61-62.

²⁶ Arendt, *On Revolution*. 77. See also Waldron, "Arendt's Constitutional Politics."

²⁷ see: Arendt, "Introduction into Politics." 170. Freedom is found "in the space between human beings, which can arise only when distinct individuals come together, and can continue to exist only as long as they remain together. *Freedom has a space, and whoever is admitted into it is free; whoever is excluded is not free.*" Emphasis mine.

themselves in the uniquely modern condition of mass society, facing the desolate isolation that stems from the loss of the world.

***Homo faber* and the Modern World**

Because of this fundamental importance of "the world of things" to Arendtian politics, it is even more devastating that the modern condition is, according to Arendt, marked by the loss of the world and the corresponding victory of *animal laborans*. Under this uniquely modern condition of mass society, the public space of appearance has been overrun by "the social," those private concerns of the household.²⁸ Lost are the ideals of *homo faber*—those of permanence, stability, and durability that once maintained the human artifice. Instead, they have been replaced by those of *animal laborans*: abundance and consumption.

Though guided by the standards of utility, the products of work should exceed their existence as mere use-objects. This is why, for Arendt, the human artifice performs its function as a "home for mortal men" *only* insofar as it "transcends both the sheer functionalism of things produced for consumption and the sheer utility of objects produced for use."²⁹ Instead, *homo faber* must relate his products to the activity of "acting and speaking men," to reify and give permanence to the "doing of great deeds and the speaking of great words."³⁰ In so doing, the instrumentalism of *homo faber* must be augmented by the values of the public realm. In other words, the purpose of work is not solely instrumental. In addition, it " implicates larger questions

²⁸ Mass society is the "kind of organized living which automatically establishes itself among human beings who are still related to one another" but who have lost their common world ("The Concept of History: Ancient and Modern," 90). Instead of preserving the distinctive individuality necessary for action, mass society's scientific language of economics "expects from each of its members a certain kind of behavior, imposing innumerable and various rules, all of which tend to 'normalize' its members, to make them behave, to exclude spontaneous action or outstanding achievement" (HC 40). For more, see Hannah Arendt, "The Concept of History: Ancient and Modern," in *Between Past and Future: Eight Exercises in Political Thought* (New York: Penguin Books, 2006), 41–90.

²⁹ Arendt, *The Human Condition*. 173.

³⁰ *Ibid.*

about, as Arendt would later say, 'how [the world] is to look' and 'what kinds of things are to appear in it.'"³¹ When at their best, the products of work are to be judged not only for their usefulness, but also for their beauty.

And yet, subsumed by the modern concept of process, the emphasis of work has shifted away from the finished product and towards the fabrication process. In so doing, this shift "deprived man as maker and builder of those measurements which, prior to the modern age, have always served him as guides for his doing and criteria for his judgment."³² With new emphases on reproduction and life imposed by *animal laborans*, the standards of efficiency and happiness—not utility and beauty—govern work in the age of *animal laborans*.³³

With the modern fate of *homo faber* in mind, it seems easy to read the popularity of social media as a testament to the continued dominance of *animal laborans* and the accompanying destruction of the political realm by means of "the social's" invasion into the public light. Under this reading, sites like Facebook are, at best, spaces of conspicuous consumption, devoted to nothing but securing the happiness of their users. At worst, they are sites of anonymous production which reduce individual users to data points, aggregate individual activities into standardized norms, and sell the resulting products back to be consumed by their users. In many ways, social media sites testify to our modern condition of mass society of which Arendt was so wary. Governed by automatic algorithmic processes and limiting users to a specific set of inputs, it is no interpretive stretch to claim that a site like Facebook *does* expect "of each of its members a certain kind of behavior, imposing innumerable and various rules, all

³¹ Patchen Markell, "Arendt's Work: On the Architecture of The Human Condition," *College Literature* 38, no. 1 (2011): 35. Markell is here citing Hannah Arendt, "The Crisis in Culture: Its Social and Its Political Significance," in *Between Past and Future: Eight Exercises in Political Thought* (New York: Penguin Books, n.d.), 220.

³² Arendt, *The Human Condition*. 307.

³³ See Markell, "Arendt's Work: On the Architecture of The Human Condition."

of which tend to 'normalize' its members, to make them behave, to exclude spontaneous action or outstanding achievement."³⁴ It would seem that *animal laborans* reigns supreme.

And yet, to say that social media are exclusively the arena of the social activity typical of *animal laborans* is to ignore Arendt's own attentiveness to the overlapping and simultaneous nature of the *vita activa*. This reading is not wholly without merit, however. In a characteristic move, Arendt continually changes her tone when discussing *homo faber* in the *Human Condition*, where the extended discussion of work occurs. Notably, throughout the text, she continues to make claims that imply a hierarchical relationship between the three capacities of the *vita activa*: labor, work, and action. This hierarchical interpretation comes out most clearly in the chapter on "Action." Here, Arendt sets out a relationship between the three human capacities using the language of redemption. *Animal laborans*, claims Arendt, can be redeemed from the imprisonment of natural cycles "only through the mobilization of another human capacity, the capacity for making, fabricating, and producing of *homo faber*."³⁵ *Homo faber*, however, finds himself in the "predicament of meaninglessness, the 'devaluation of all values,'" from which he can be redeemed "only through the interrelated faculties of action and speech."³⁶ While *homo faber* can save *animal laborans* from the totalizing consumption of the life process, in other words, he is simultaneously reliant on action to prevent the total reduction to pure, and meaningless, instrumentalization. By contrast, action needs no external redeemer. Instead, the solution to the problem of action's inherent unpredictability "is one of the potentialities of action

³⁴ Arendt, *The Human Condition*. In some cases this is more evident—Twitch, a streaming video platform used primarily to share real-time video gameplay, was deliberately altered to prevent these kinds of unregulated use after a couple used the network, and their Playstation 4, to host a live call-in talk show that gained an audience of over 200,000. See Dan Crawley, "Couple Uses PlayStation 4 to Stream... a Call-in Talk Show on Twitch? Yes-- and 200K Tuned in," *VB: GamesBeat*, November 22, 2013, <http://venturebeat.com/2013/11/22/couple-stream-call-in-show-on-playstation-4/>; Rory Young, "Twitch.tv Update Imposes Delay of up to 60s in All Streams, Viewer Interaction Severely Affected," *Neoseeker: News*, December 16, 2013, <http://www.neoseeker.com/news/24328-twitchtv-update-imposes-delay-of-up-to-60s-in-all-streams-viewer-interaction-severely-affected/>.

³⁵ Arendt, *The Human Condition*. 236.

³⁶ *Ibid.*

itself."³⁷ As specific examples of action, then, the capacities to promise and forgive are remedies for the unpredictability and irreversibility of action.

Elsewhere, however, notably in the final sections on work and in *On Revolution*, Arendt highlights the interdependence of these three capacities—especially that of work and action.³⁸ Instead of framing action as work's "redeemer," Arendt claims instead that "acting and speaking men need the help of *homo faber* in his highest capacity, that is, the help of the artists, of poets and historiographers, of monument builders or writers because without them the only product of their activity, the story they enact and tell, would not survive at all."³⁹ The importance of *homo faber's* capacity to work, to fabricate objects that testify to the existence of speakers and actors is especially evident in Arendt's discussion in *On Revolution*. Here, she lauds the American revolutionaries for their innate understanding that "they had to found and build a new political space," that the revolutionary spirit that motivated their actions required the permanence of reification if it was to be sustained beyond the act itself.⁴⁰ Thus the American Revolution, according to Arendt, failed on its own terms. Despite their "preoccupation with permanence and stability," the founders were unable to secure the "lasting institutions" and "provide a space" to continue to exercise public freedom.⁴¹

Arendt and Architecture

This complicated, reciprocal relationship between labor, action, and work, is evident in architecture. As one of the more public arts, architecture holds an important position in Arendt's

³⁷ Ibid.

³⁸ For a more detailed account of work's unique position in the *Human Condition*, see Markell, "Arendt's Work: On the Architecture of The Human Condition."

³⁹ Arendt, *The Human Condition*. 173. It is interesting to note that Arendt, in the same paragraph, refers to the ways in which *animal laborans* also requires the help of *homo faber* "to ease his labor and remove his pain." This once again disrupts the hierarchical understanding of these three capacities, and indicates their interdependence.

⁴⁰ Arendt, *On Revolution*. 117.

⁴¹ Ibid. 223, 224, 227.

work, though she rarely explicitly discusses it. In architecture, the stability and durability of the human artifice are made readily apparent. Drawing parallels between the walls and laws of the city—and the architect and legislator who build them—Arendt, following the Romans, understands the acts of foundation and augmentation to be quintessentially political.

With the transition to the virtual spaces of social media, however, the question of architecture gains new valence. Since the 1980s, when programmers Kent Beck and Ward Cunningham applied the architectural concept of “patterns” to their own practices of software design and development, software developers have been using the language of architectures to describe the most basic relationships between hardware, software, users, and data.⁴²

Instead of focusing primarily on the relationships between user and computer, the architectures of social media are constructed around relationships *between* individual users and computers, as well as between different networks. In other words, “[w]eb 2.0 is not just about the static architecture of the Internet, it’s about the patterns of usage between a variety of things, whether human or machine, that uses the internet as a platform.”⁴³ The work that goes into creating social media architectures, then, is largely in identifying and collecting “raw” data and building a system to capture and augment it—to put it to use.⁴⁴ By (re)mixing, altering, and

⁴² There is not any clear consensus within the developer community as to precisely what the different architectures are or how they relate to one another. Website architecture, software architecture, information architecture, and systems architecture, for example, all denote similar—though not identical—aspects of the development of software systems. For all these different “subfields,” however, architecture refers to the “fundamental concepts or properties of a system in its environment embodied in its elements, their relationships, and in the principles governing its design and evolution.” ISO/IEC/IEEE, “‘Systems and Software Engineering--Architecture Description,’ ISO/IEC/IEEE 42010:2011 (E) (Revision of ISO/IEC 42010:2007 and IEEE Std 1471-2000),” December 01, 2011, doi:10.1109/IEEESTD.2011.6129467. See also “Modern Software Architecture Definitions,” *Software Engineering Institute, Carnegie Mellon University*, accessed March 24, 2014, <http://www.sei.cmu.edu/architecture/start/glossary/moderndefs.cfm?location=quaternary-nav&source=19118>.

⁴³ James Governor, Dion Hinchcliffe, and Duane Nickull, *Web 2.0 Architectures* (Sebastopol, CA: O’Reilly Media, Inc., 2009). 7.

⁴⁴ See Tim O’Reilly and John Battelle, *Web Squared: Web 2.0 Five Years On*, 2009. Esp. page 4. Facebook, for example, is built on the idea that offline friend relationships is the foundation for a “generalized social graph,” whereas Google is built on the acknowledgement that every link to a website is equivalent to a vote of confidence in

creating new patterns of usage or sources of data, social media sites create a variety of spaces that users act with, and react to, differently.

As these sources of data are drawn directly from the activity of social media users, these sites further collapse the boundaries between actor, producer, and consumer. While this can be read as a testament to the victory of *animal laborans* and the subsuming of work and action to labor, it can also be understood as bringing to light the inherent entanglement of these three capacities. Just like the physical spaces of buildings and cities before them, the spaces of social media are multifaceted sites of potential human activities. As products of *homo faber*, these sites are use-objects that can easily slide into products of consumption, but can also be used to secure a home for mortal men as an element of the human artifice. While they may display certain feature of labor and, perhaps, action, this ambiguity is best understood not as a failing of social media, but instead as an expression of the fundamental tension within work, and the products of work, itself.

While the architectures of social media sites are no doubt less traditionally durable than the physical objects of Arendt's human artifice, they are no less important in housing and giving content to the various modes of human engagement—labor, work, and action, in Arendt's schema. While Arendt, in many places, vacillates between looking to the walls and laws of the *polis* to perform this function, the architectures of social media all but collapse this distinction entirely.⁴⁵ In this sense, the architecture of social media sites functions in much the same way as *both* the man-made world of things and the "web of relationships" that overlays it. Site architecture both constructs the spaces within which users interact with one another and also lays

the site's content. Both sites, as well as other successful social media, "turn what at first appeared to be unstructured data into structured data." 4.

⁴⁵ Arendt, at time, both conflates and separates these two aspects of the *polis*'s structure—but she does not ever really address the important differences in the ways these two modes perform similar functions.

down the rules through which users' relationships with one another are regulated, making it more or less likely that users are able to engage in activity that transcends mere consumption.

Social Media and the Spaces of Appearance

If the modern victory of *animal laborans* is, as Arendt claims, due in no small part to the large-scale deprivation of *homo faber's* "permanent measures that precede and outlast the fabrication process and form an authentic and reliable absolute with respect to the fabricating activity," then it remains to be seen whether these can be recaptured while building and maintaining the sites of social media.⁴⁶ Certain architectural patterns that govern social media—especially the ceaselessness of virtual work—echo the processual and cyclical domain of *animal laborans*. And yet, the simultaneous move towards open- and crowd-sourced foundations for social media also expand the ranks of those engaged in the "process of making." Sites like reddit and Wikipedia, for example, where users are tasked with the responsibility of building and augmenting both the sites' framework and content, are better understood as comprising a number of discrete production processes, "judged in terms of suitability and usefulness," than they are examples of "automatic processes "outside the range of wilful and purposeful interference."⁴⁷ Users of these sites can, and do, do more than purely consume content.

The fate of the modern political realm, then, whether it is to be found (at least in part) on social media, comes down to a question of higher ends, for Arendt. The perplexity of utilitarianism—"the philosophy of *homo faber* par excellence"—stems from its inability to distinguish "between utility and meaningfulness," or the difference between "'in order to' and 'for

⁴⁶ Arendt, *The Human Condition*. 307.

⁴⁷ Ibid. 153, 151.

the sake of."⁴⁸ It is this inherent vulnerability of instrumentality that, ultimately, leaves work open to be colonized by labor. Easily trapped in a circular means-end relationship characteristic of labor, *homo faber* surrenders higher standards of utility and beauty to those of efficiency and happiness that govern the mass society of the modern age.⁴⁹

The effect of this absence of meaning—"for the sake of" which things are useful—is again evident in the architectural differences between social media sites. Facebook and Twitter, for example, have mission statements that speak to the sites' uses, with no mention of their meaningfulness beyond this utility. For Facebook, the use-value is clear. The site is built "to give people the power to share and make the world more open and connected. People use Facebook to stay connected with friends and family, to discover what's going on in the world, and to share and express what matters to them."⁵⁰ On Facebook, users are presented with an (increasingly) personalized Newsfeed, a constant stream of activity from those within one's network. With over 1,500 pieces of content posted to Facebook daily, the site uses an algorithm to determine which items—and in what order—to show users.⁵¹ Using both the unique characteristics of the post—the number of likes, shares, and comments, as well as any reports of spam or abuse—and the individual habits of the user, including one's relationship with the poster and the specific kind of content, the Newsfeed's algorithm chooses to feature those items it thinks the user is most likely to enjoy and to interact with.⁵²

⁴⁸ Ibid. 154.

⁴⁹ See Markell, "Arendt's Work: On the Architecture of The Human Condition." 28. Meaning, for Arendt, "must be permanent and lose nothing of its character, whether it is achieved or, rather, found by man or fails man and is missed by him." See Arendt, *The Human Condition*. 155.

⁵⁰ "About," *Facebook*, accessed March 24, 2014, <https://www.facebook.com/facebook/info>.

⁵¹ "News Feed FYI: A Window Into News Feed," *Facebook Business*, 2013, <https://www.facebook.com/business/news/News-Feed-FYI-A-Window-Into-News-Feed>.

⁵² For example, if a particular user has previously interacted with a lot of pictures, she is more likely to have posts with pictures appear more frequently in her Newsfeed in the future. Ibid.

Recent changes to the Newsfeed have continued this trend towards hyper-personalization. Downplaying chronology, the newest iteration of the Newsfeed highlights older, but more active, posts, meaning users may continue to see the same content while newer and different content may be hidden.⁵³ By privileging posts from users with whom one has interacted previously, Facebook guides users to interact with certain friends and content to the exclusion of others, evident in Facebook's recent decision to reduce the number of "meme photos" and increase the number of "high-quality articles" that users see in their Newsfeeds.⁵⁴

Because Facebook retains the point-to-point individual relationships that mark the private realm where individuals interact as members of the family instead of equal partner in a common world, there is little possibility for collective action. Facebook.⁵⁵ Instead, users are presented with a stream of discrete posts, and encouraged to respond to each in turn, as an individual. There is no sense of recognition of oneself as a member of a world held in common with others. It is not evident even to the poster who, in fact, will see their posts.

Similarly, Twitter's mission is "to give everyone the power to create and share ideas and information instantly without barriers"—a mission reflected in the site's architecture.⁵⁶ A user's Twitter timeline is presented more or less chronologically, with newer tweets appearing at the top of the page.⁵⁷ By presenting tweets based on chronology, Twitter's users are not asked to

⁵³ Kurt Wagner, "Facebook Tweaks News Feed for More 'High Quality' Content," *Mashable*, December 02, 2013, <http://mashable.com/2013/12/02/facebook-news-feed-high-quality-content/>>[.

⁵⁴ The full quote also discusses hosting of link content, implying that Facebook has some stake in directing users to certain sites and not others. Varun Kacholia and Minwen Ji, "News Feed FYI: Helping You Find More News to Talk About," *Facebook*, 2013, <https://newsroom.fb.com/News/768/News-Feed-FYI-Helping-You-Find-More-News-to-Talk-About>," See also Wagner, "Facebook Tweaks News Feed for More 'High Quality' Content."

⁵⁵ This is true now more than ever. In making the site more openly-accessible, Facebook has moved away from the foundation in larger (initially collegiate) networks. Instead, when one joins the site, one is joining a collection of individual friendships; the larger networks one is embedded in are all but irrelevant.

⁵⁶ Caroline Moss, "Twitter Just Filed For Its IPO, and Its Mission Statement Is Super Short," *Business Insider*, October 03, 2013, <http://www.businessinsider.com/dick-costolo-twitter-ipo-2013-10>.

⁵⁷ See Jennifer Van Grove, "Twitter Flips the Script with Timeline Conversations," *CNET*, August 28, 2013, http://news.cnet.com/8301-1023_3-57600500-93/twitter-flips-the-script-with-timeline-conversations/.

make judgments on behalf of a community as to what is worth elevating, discussing, or sharing with others. Instead, all content is presented as equally valuable or relevant.⁵⁸

In August 2013, however, the algorithm was changed to allow for "conversations" to be presented together, connected by a thin blue line that indicated their relationship as such.⁵⁹ Such seemingly small change to the site architecture, however, merely disrupting the strict chronology of the site, caused a stir through the ranks of Twitter's most dedicated users.⁶⁰ Nevertheless, the change remained in place. Twitter CEO Dick Costolo justified the change in terms that speak to the influential nature of site architecture, saying that the original design was "confusing" to new users.⁶¹ This architectural change in Twitter's sorting algorithm was introduced as a way to "make it easier to discover and follow conversations" on Twitter, as an attempt to capitalize on Twitter's popularity as a source for "real-time, global, public conversations."⁶² In so doing, Twitter puts (up to three) individual tweets back into a larger discursive context. Yes despite this move towards emphasizing the importance of the larger Twitter community, Twitter ultimately lacks the boundaries necessary for a functioning public realm. While users can decide for themselves whether to retweet content, these acts are more similar to broadcasting information indiscriminately than they are a part of the ongoing judging, persuading, and negotiating that

⁵⁸ This equality of presentation means that often Twitter is the best platform for minority voices, perspectives, and opinions to be rendered visible (hence, "Twitter feminism" at the heart of the debate that opened this paper.) However, this equality of presentation can also have seriously problematic effects—evident in the extreme racism on Twitter. For a study on the use of slurs on Twitter, see Jamie Bartlett et al., *Anti-Social Media* (London, 2014), http://www.demos.co.uk/files/DEMOS_Anti-social_Media.pdf?1391774638.

⁵⁹ Jinen Kamdar, "Keep up with Conversations on Twitter," *Twitter Blog*, 2013, <https://blog.twitter.com/2013/keep-up-with-conversations-on-twitter>.

⁶⁰ Jennifer Van Grove, "Code Red? Twitter's Blue Line Brings out the Bile," *CNET*, August 29, 2013, <http://www.cnet.com/news/code-red-twiters-blue-line-brings-out-the-bile/>.

⁶¹ Jennifer Van Grove, "Twitter Too Complicated for Newcomers, Says CEO," *CNET*, May 29, 2013, http://news.cnet.com/8301-1023_3-57586696-93/twitter-too-complicated-for-newcomers-says-ceo/>.

⁶² Kamdar, "Keep up with Conversations on Twitter."; See also Van Grove, "Twitter Flips the Script with Timeline Conversations."

mark Arendt's public realm.⁶³ As the "audience" of the posts for both Facebook and Twitter is an impersonal algorithm, there is little room for the type of human judgment that marks the public realm.

By contrast, popular link-sharing site reddit's has a statement of purpose (though the site does not describe it that way) that is oriented away from use. Instead, the site claims "we power awesome communities."⁶⁴ The self-ascribed "front page of the internet," reddit is built around the idea that users (self-identified as "redditors") are active participants in building and maintaining the site's 5,500 active communities, all dedicated to a specific topic ranging from the mundane (e.g. r/movies) to the extremely specialized (e.g. r/grilledcheese).⁶⁵ Redditors are responsible for all aspects of reddit's existence, from providing content to keeping up with site maintenance and introducing new subreddits. The name of the site, as well as its self-identity, consciously reflects the duality of work as both the fabrication process and the final product. Reddit is both a noun, "a type of online community where users vote on content," *and* a verb, "to take part in a reddit community."⁶⁶ In so doing, reddit self-consciously calls attention to the simultaneity of the site and the various capacities which one can exercise on it.

Perhaps the most important architectural element of reddit, however, is its system of upvotes and downvotes. The choice to vote a post "up" or "down" (a choice that is rare on social media sites) means that redditors are continually asked to judge, on behalf of the reddit community, the relative merit of any given content. Because of this unique architecture, redditors

⁶³ Unlike the requisite reciprocity of Facebook friendships, on Twitter even the relationships that form the foundation of the network need not be reciprocal—users can follow another without being followed in return. In so doing, Twitter's architecture abandons the type of recognition that is the foundation of a democratic community, making it more difficult for users to encounter one another as equals.

⁶⁴ "About Reddit," 2014, <http://www.reddit.com/about>.

⁶⁵ As of 3/24, reddit had 5,637 "active communities" with at least five posts or comments. See Ibid. This is not to say all these communities are deserving of praise. There are also problematic subreddits, such as r/gonewild. For more on reddit's basic structure, see "Frequently Asked Questions: Reddit," 2014, <http://www.reddit.com/wiki/faq>.

⁶⁶ "About Reddit."

are tasked with the double-responsibility of acting as both engaged actors and audience members, contributing, judging, and responding to content that is self-consciously presented to a well-defined audience. The result is a self-regulating community, in which users challenge, debate, and police content to an extent unseen on sites like Facebook or Twitter.⁶⁷

The centrality of this engagement with content on reddit is evident in the site's use of karma, which "reflects how much good the user has done for the Reddit community."⁶⁸ Karma, prominently displayed next to one's username, is indirectly determined by others on the site. Users gain karma through active participation on the site, by submitting popular links and responding helpfully to the links of others.⁶⁹ It is telling, perhaps, that users of Reddit are self-ascribed "redditors," while no analogous term exists for users of Facebook or Twitter.⁷⁰ By constructing the site in such a way so as to highlight and evaluate the contributions of redditors in the context of their communities, reddit preserves room for the values that give meaning to activity on the site, beyond mere instrumentalism or happiness.⁷¹

Conclusion

As instances of public space, social media exemplify the possibilities for *homo faber* in the modern age. Just as architecture matters for the built environment, social media sites should be distinguished by their differences in architecture and site design. With the distinct lack of

⁶⁷ See Matt Silverman, "Reddit: A Beginner's Guide," *Mashable*, October 2013, <http://mashable.com/2012/06/06/reddit-for-beginners/>. For a specific example of this type of policing, see Lindy West, "Reddit Users Attempt to Shame Sikh Woman, Get Righteously Schooled," *Jezebel*, September 26, 2012, <http://jezebel.com/5946643/reddit-users-attempt-to-shame-sikh-woman-get-righteously-schooled>.

⁶⁸ "Frequently Asked Questions: Reddit."

⁶⁹ *Ibid.*; See also Silverman, "Reddit: A Beginner's Guide."

⁷⁰ Wikipedia has a similar communal identity, as is evident in their use of the identifier "Wikipedians" to describe "people who write and edit the pages for Wikipedia, unlike readers who simply read the articles." See "Wikipedia: Wikipedians," *Wikipedia*, n.d., <http://en.wikipedia.org/wiki/Wikipedia:Wikipedians>.

⁷¹ For a discussion of the difficulty in "gaming" reddit, in addition to commentary on the reddit community, see Tom Lamont, "Reddit: How to Win the Internet," *The Guardian*, February 07, 2014, <http://www.theguardian.com/technology/2014/feb/07/reddit-how-to-win-the-internet>. "This community wouldn't be told what to think, what to click; their 20m daily votes couldn't be lobbied for."

values beyond efficiency and happiness driving their architectural decisions, sites like Facebook and Twitter call attention to the precarity of work and the ease with which work can fall victim to the logics of *animal laborans* and the cyclical demands of nature. By contrast, in extending the opportunities to build and maintain a common world, reddit demonstrates the ways in which social media can be used to create spaces designed for the sake of engaging with an audience of peers. In practice, this means that various social media sites should be understood as constructed spaces, the product of the deliberate production efforts of *homo faber*. As such, these sites must be evaluated for, among other things, their ability to foster the kinds of user experiences that lend themselves to the performance of political roles—the "speaking of words and the doing of deeds."

At the same time, recognizing social media's role as constructed public spaces also forces us to acknowledge the unique challenges of being a participant in a networked public. In collapsing the distinction between "walls" and "laws" that is evident throughout Arendt's discussion of work, social media introduce a number of new concerns into caring for the world. When the rooms that structures political life are no longer visible, for example, participants must learn to cultivate the ability to perceive, appraise, and discuss the design processes and characteristics for themselves. This requires a different set of skills and demands of participants than those of traditional political life, while also providing more opportunities for distraction, misdirection, and uniformity. Once again, social media call attention to the inherent entanglement of the distinct capacities of the *vita activa*. Despite these challenges, however, rethinking social media in light of labor, action, and, especially, work, puts us one step closer to realizing their potential. In so doing, we are better able to care for the world, making the best of the historical circumstances in which we find ourselves.

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