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Amazon Echo and the Aesthetics of Whiteness

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Abstract

This article examines the figuration of the home automation device Amazon Echo and its digital assistant Alexa. While most readings of gender and digital assistants choose to foreground the figure of the housewife, I argue that Alexa is instead figured on domestic servants. I examine commercials, Amazon customer reviews, and reviews from tech commentators to make the case that the Echo is modeled on an idealized image of domestic service. It is my contention that this vision functions in various ways to reproduce a relation between device/user that mimics the relation between servant/master in nineteenth- and twentieth-century American homes. Significantly, however, the Echo departs from this historical parallel through its aesthetic coding as a native-speaking, educated, white woman. This aestheticization is problematic insofar as it decontextualizes and depoliticizes the historic reality of domestic service. Further, this figuration misrepresents the direction of power between user and device in a way that makes contending with issues such as surveillance and digital labor increasingly difficult.

On 6 November 2014, Amazon surprised the tech community by casually

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unveiling its newest "futuristic gadget experiment": the Amazon Echo (Wo[1]ng, 2015).[1] Choosing to forego the usual fanfare of tech launches, the Echo was announced using a press release and a string of promotional images and videos, showcasing a sleek, black cylindrical object with pulsating blue lights and perforated speaker holes. Although from the outside it resembled a Bluetooth speaker, an already popular commercial product, it quickly became apparent that the Echo was capable of much more than just playing music. The Echo had an in-built, voice-controlled digital assistant called Alexa, which, like Apple's Siri, could respond to verbal commands and provide the user with information about news, weather, traffic, and more. It could sync with other applications, create to-do lists, shopping lists, and schedule appointments and reminders. More distinctively though, the Echo could also connect to other wifi-enabled devices to effectively function as a voice-controlled "smart home hub" controlling other smart home products such as light bulbs, thermostats, and switches (Amazon, 2015). Fitted with an array of microphones, the device was designed to be "always on" and, thus, always listening. While many reviewers praised the Echo as exactly "what smart homes should feel like" (Wong, 2015), others were more apprehensive, particularly because all interactions were recorded and saved unless users chose to manually delete them. One reviewer condemned the Echo, describing it as "a trojan horse [for Corporate America] to penetrate our remaining private moments" (Wasserman, 2014) while another suspiciously asked, "Alexa, what are you hiding?" (Murphy, 2014).

Despite these concerns, the Echo received almost instant commercial success and over the next few years would come to dominate both the market and the cultural imaginary for smart home devices. Following its initial limited release, the Echo received a general US release in 2015, followed by its first international releases in the UK and Germany in 2016. By December 2017, it had expanded into thirty-four

[1]Data for the chapter was collected from online promotional videos, customer reviews, YouTube parody videos, and tech reviews. To respect the anonymity of customer reviewers, names have been redacted and references to their customer accounts have been removed.

countries with Amazon introducing a full product line of more than nine related devices.

It is, to date, the most popular device of its kind. As of November 2017, there were an estimated 20 million units installed in US homes, a figure which represents 75 percent of the US market for home automation devices. By comparison, the Google Home, the next leading consumer product, has an estimated 7 million units installed or 27 percent of the US market (Consumer Intelligence Research Partners, 2017). As one of the first devices to integrate home automation with voice control and artificial intelligence (AI) systems, the Echo has subsequently taken a place in the public consciousness as the exemplar of smart home technology. Amazon Echo commercials have gone viral, generating millions of views and spin-off parody videos; there are dozens of online forums and communities dedicated to discussing the Echo and its features; tens of thousands of customer reviews have been posted to Amazon.com; and hundreds of professional reviews by tech writers in publications such as Tech Radar, Engadget, CNET, Gizmodo, PC Mag, Business Insider, and more.

In this article, I examine the ways in which the Amazon Echo has been figured on visions of idealized domestic service. The terms *figure* and *figuration* designate here the act of producing a cultural representation of an object, idea, person, or event. This representation does not necessarily correlate to its "real" conditions—which is not to say that they do not have real implications or effects—but rather their imagined impressions imprinted in places such as language and culture. The case study materials for this analysis comprise commercials for the Echo, Amazon customer reviews, and reviews from tech commentators. The commercials analyzed were published on Amazon's YouTube channel between November 2014 and November 2017. Customer reviews were accessed on the Amazon product pages with both the highest positive and negative rated reviews at the time of study selected for close reading, and professional reviews from non-paywalled popular tech commentary magazines were also sourced during the same period. It is my contention that across these discursive sites, the Echo is consistently modeled on an

idealized vision of domestic service. In many ways, this vision works to reproduce a relation between the device/user that mimics the relation between servant/master in nineteenth- and twentieth-century American homes. Significantly, however, the Echo departs from this historical parallel through its aesthetic coding as a native-speaking, educated, white woman. As I will argue, this aestheticization is problematic insofar as it decontextualizes and depoliticizes the historic reality of domestic service. The Echo romanticizes the relations of servitude in a way that denies the pain and historic context of that relation. It not only erases the bourgeois middle-class home as a site of exploitation, especially for women of color, but also misrepresents the power relation between the user and the device in such a way that obscures issues such as hierarchical surveillance and digital labor.

Smart Homes, Nostalgia, and Class Privilege

In her work analyzing the commercial cultures of smart homes, Lynn Spigel (2009) has argued that "in moments of technological transition, people often search for ways to balance novelty with tradition" (p. 61). She states that like radio and television before it, smart homes and other new technologies "are subject to patterns of cultural adaptation that aim toward conserving familiar lifestyles" (p. 61). Tracing this strategy through historical examples from the "homes of tomorrow" of the 1930s and 1950s to Bill Gates's 1990s fantasy smart house, Spigel notes that the discourse of smart homes is oddly nostalgic, looking backwards in its attempt to look forwards. She states that these "nostalgic returns" are usually marked by "hierarchies of social position and class privilege" (2001, p. 403). Specifically, she refers to Adi Shamir Zion's reading of Gates's smart house, which Zion argues prescribes a particular class relation between the house and its user.

Gates's house is a peculiar mix of premodern structural techniques with state-of-the art digital technologies. Choosing to conceal electronic circuitry with natural materials such as timber, stone, and marble, Gates's

ambition is to have the house "be in harmony with its surroundings and the needs of the people who will occupy it" (Gates in Zion, 1998, p. 71). He describes the house as "an intimate companion or, in the words of the great twentieth-century architect Le Corbusier, 'a machine for living in'" (p. 71). Zion argues that Gates's demand for the house to both discreetly serve *and* function as an "intimate companion" is analogous to the "servant class in relation to the master in the 'upstairs/downstairs' quarters of the English country house" (p. 72). In this way, Gates's smart house architecturally recuperates not only the physical features of the premodern home but the distinctive rhetorics of class privilege that accompany family structures of this era.

I would suggest that the Echo is similarly figured through a nostalgic discourse that is tacitly laden with class privilege. In her broader work addressing media, the home, and family life, Spigel (2001) has described the coding of advertising images of new domestic technologies with what she calls "yesterday's future" (p. 382). She defines this as a romanticized vision of the future that looks to the past in an attempt to imagine tomorrow's "everyday." In the commercial representations of kitchens that clean themselves, robots that provide forms of intimate care, and houses that automatically adjust the climate to comfortably suit their families, smart homes and associated products position themselves as a futuristic pastoral fantasy, what Spigel calls "a wish fulfilment of some idealized past" (p. 391). In the case of the Amazon Echo, it is the white, middle-class nuclear family lifestyle that functions as the stage on which new and radical media practices are debuted.

For instance, in the first demonstration video released on the official Amazon website and YouTube channel in 2014, a fictional white, American, suburban family is shown unboxing and welcoming their "newest member": the Amazon Echo. The four-minute video demonstrates the device's functions by presenting various scenes in which the Echo is used to perform domestic tasks. Staged like a family sitcom, the video is laden with generational clichés and gendered stereotypes. A sarcastic teenage daughter mocks her annoying younger brother. A dorky father

tries to look cool by showing off his new gadgets. In one scene, the mother is in the kitchen mixing dough with her hands:

> Mother: Oh I need to get wrapping paper [*looks at the Echo*]. Alexa, add wrapping paper to the shopping list.
>
> Alexa [*placed on the kitchen counter*]: I've put wrapping paper on your shopping list.
>
> Mother: Alexa, how many teaspoons are in a tablespoon?
>
> Alexa: One tablespoon equals three teaspoons.
>
> Mother: Oh ok. Alexa, set a timer for eight minutes.
>
> Alexa: Eight minutes starting now.

Figure 1. Scene from Amazon Echo demonstration video (Amazon.com, Inc., 2014).

Here, the Echo is a happy electronic helper, supporting a perky and proficient mother in carrying out her daily duties. Like "his wife Judy" Jetson, who relies on the robot maid Rosie, the Echo mother seamlessly integrates new technologies into familiar routines of domesticity. Indeed, in the same ways in which *The Jetsons*, a show ostensibly about a futuristic space-age family, is in essence an exact replica of *The Flintstones*, a show about a prehistoric stone-age family, the characters' conformity to traditional nuclear family stereotypes demonstrates the portability of such tropes into almost any place or context. Such nostalgic dramatizations are

designed to provide a comforting assurance that "while technology advances, domestic ideals remain the same" (Spigel, 2009, p. 60).

Indeed, these nostalgic and romanticized images of middle-class domesticity continue as an underlying theme in almost all of the Echo's subsequent promotional material. In an ongoing series of commercials titled "Alexa Moments," which began airing on US commercial television in 2016, different households are portrayed incorporating the Echo into intimate and strikingly heteronormative scenes of domestic life. A man in a wedding tuxedo buttons his jacket and looks into a mirror and says "Alexa, add anniversary to my calendar. One year from today." A couple are looking at buns baking in the oven, the male partner looks confused while the woman sighs "Alexa, open baby names," they both giggle in excitement. After wiping liquid off his face with a baby towel, a man asks Alexa to tell the baby stats app that "Brian went pee again." A middle-aged couple sit on a couch and reminisce over a family photo album and one asks "Alexa, play the top songs from 1967."

Each commercial was short (ten seconds) and was structured using the same formula: a single scene followed by a close up of the Echo. Amazon has produced over a hundred of these micro-commercials and, while individually they appear as intimate vignettes of everyday life, as a whole they mimic the narrative trajectory of what queer scholar Jack Halberstam (2005) calls "a middle-class logic of reproductive temporality" (p. 4). This is a logic that privileges the paradigmatic markers of heteronormative life experience "namely, birth, marriage, reproduction, and death" (p. 2). It sentimentalizes the nuclear family and ties the Echo to traditional domestic ideals.

Figure 2. Scene from “Alexa Moments: Big Day” (Amazon.com, Inc., 2017).

Figure 3. Scene from “Alexa Moments: Bun in the Oven” (Amazon.com, Inc., 2016).

Figure 4. Scene from “Alexa Moments: Top Songs” (Amazon.com, Inc., 2017).

This figuration accords with mainstream discourse on smart homes that weave together radically new technologies with deeply conservative principles. In readings of gender within this context, many scholars have argued that this discourse furthers stereotypes regarding the gendered division of household labor. This is often critiqued by drawing parallels between the figuration of smart home technologies, and especially digital domestic assistants, with figures such as housewives or mothers.

For instance, Spigel (2001) has argued that homes of tomorrow are created in the image of an imaginary 1950s housewife. She states, “They simulate the role of a full-time mother who lives in a suburban dream house and who looks after everyone’s needs” (p. 391). Similarly, in her research interviewing smart home designers, Anne-Jorunn Berg (1999) correlates the functions of home automation with women’s work. She reads the domestic sphere as a “feminine domain” and as such argues that designers of smart homes should consult more with women because “women possess important skills for and knowledge about the home that

should be a resource in the design process" (p. 310). This characterization draws on very traditional notions of women's value and views housework itself as a gendered skill that can be modeled by paying closer attention to real-life, physical women.

More recently, Yolande Strengers and Larissa Nicholls (2017) have argued that smart homes and digital assistants are marketed as a kind of "wife replacement" (p. 6). In a content analysis of magazine and online articles, they found that the smart home was predominantly promoted as "a means to reduce the stress of managing everyday tasks, appliances, household supplies and householders by providing greater control and integration—a form of 'coordinating' or 'multitasking' work which often falls to women" (p. 5). For them, the desire for a domestic assistant is indicative of modern women's "double-bind"—the ambition to pursue satisfying careers as well as maintain roles as mothers and partners. The attraction of home automation is, thus, in its potential to fulfill "wife-like duties on a household's behalf, thereby freeing up time and coordination pressures on women" (p. 5).

The prevalence of the housewife figure in scholarship on digital assistants can be understood as coextensive with the rise of "housekeeping" as a dominant metaphor in recent scholarship addressing networked media and the domestic sphere (see Jarrett, 2016; Kennedy Nansen, Arnold, Wilken, & Gibbs, 2015; Tolmie, Crabtree, Rodden, Greenhalgh, & Benford, 2007; Strengers & Nicholls, 2017). "Digital housekeeping" is characterized as those forms of labor "involved in incorporating home networks into domestic routines" (Tolmie et al., 2007, p. 332) and includes managing subscription and internet accounts, researching software and hardware upgrades, and organizing cables, wires, and other devices in the house. The "digital housewife" has subsequently emerged as a descriptor for the actor/agent who performs or enacts this labor. This metaphor has also been extended by authors such as Kylie Jarrett (2016) to highlight the gendered distribution of consumer labor in the social reproduction of the commercial web (pp. 1-2). For Jarrett, the forms of online participation that are integral to platforms such

as Facebook, YouTube, or Twitter resonate with "the unpaid, quasi-voluntary labour of the domestic sphere" (p. 4). In the case of smart homes and digital assistants, the housewife metaphor is called on again to capture the parallels between the promises of home automation and the activities of social reproduction.

However, I would like to argue that there are major limitations to focusing solely on the housewife/mother figure. First, by prioritizing the gendered division of labor within their critiques, these readings risk re-inscribing its binary logic. For instance, in her work, Berg (1999) naturalizes the relationship between women and reproductive labor, arguing that male designers lack a "basic knowledge about housework" precisely because the domestic sphere is an essentially "feminine domain" (p. 309). This categorization oversimplifies the division of labor within the home and positions women as a priori trapped within heteropatriarchal structures. The solution for many of these authors, including Berg as well as Strengers and Nicholls, is not to challenge the stereotype of women and housework but rather to *further commit*. Both studies recommend in their conclusions to "involve more women in the design and development of automated and smart technologies" to ostensibly "reduce traditional 'women's work'" (Strengers & Nicholl, 2017, p. 9), a suggestion that does not question the binary division of labor but instead ties women closer to it.

Second, these readings overlook the dynamics of power and privilege that function *within* gendered groups. By focusing only on the mother/housewife these readings elide the subtle hierarchies that structure the relationships between women within the domestic sphere. For instance, rarely acknowledged is the role of maids, cleaners, nannies, childcare workers, cooks, laundresses, and other gendered figures who historically have assisted upper- and middle-class women in the fulfillment of their domestic responsibilities. These figures are often neglected within analyses of women and power in the home, with most readings choosing to focus on dynamics of gender rather than dynamics of class or race. Indeed, passed over in many critiques of smart home devices is the distinct sense of class privilege embedded within the discourse of these

sophisticated luxury items and how this privilege contributes to broader social hierarchies.

While these authors foreground the idealized image of a mother or housewife as *the* archetypal figure through which to critique the gendered dynamics of smart home discourse, here I propose a different figure: the idealized vision of domestic service. Despite the clear connection between smart home technologies and the labor of domestic service, as figures, domestic servants are surprisingly underexamined within the critical literature. By shifting the focus, my aim is to highlight the role of class privilege in the figuration of digital assistants and to also underscore the class and racial hierarchies that proliferate within modes of gendered social reproduction.

Keeping Pace with Idealized Domesticity

Like almost all new domestic technologies, the Echo is sold on the promise of freedom from drudgery.[1] Since the 1920s, advertisements from stove-top percolators to washer-dryer units have pandered to ideas of housewives' "liberation" (see Cowan, 1983; Spigel, 2009). Women are depicted playing tennis, going shopping, and chatting with their girlfriends while the machines at home do the work. Although social and cultural expectations of both men and women in the domestic sphere have certainly changed over time, the appeal for such a "liberation" endures.

For instance, in the commercial "Voice Shopping with Alexa" produced in 2016, Amazon portrays a busy working mother rapidly performing domestic tasks within moments of coming home from the office. She kicks off her work heels and immediately begins bringing the home into order. Without breaking a sweat, she directs a succession of requests at the Echo: she orders dog food, throws out old takeaway, changes the bin liners, orders a gift for a school teacher, prepares dinner for the family, sees to the laundry, sets the table, and when she finally sits to rest, makes time to order herself some bath salts. The late twentieth-century fantasy of the modern woman who "has it all"—family, career, and

confidence—is repackaged here as a correlate to the modern home.

Absorbing Marxist feminist critiques of the devaluation of domestic labor as a result of its largely invisible position in the eyes of the market, this example illustrates the ways in which socially progressive movements, such as women's liberation, can be co-opted by commodity capitalism. Here, reproductive labor is afforded the status of "legitimate" labor—not only is it visible but it is performed with skill and deftness. In kicking off her shoes, the actress in the commercial signals that for modern women, coming home from the office is when the real work begins. As a manager in an organization might rely on an office assistant to assist in coordinating tasks, this woman relies on her digital domestic assistant to likewise support her in this regard. "Women's liberation" here is not freedom from responsibility—indeed since the 1980s many liberal feminists have lobbied for corporate inclusion in decision-making and managerial roles—but freedom from the doubt that "having it all" is possible.

The use of a digital assistant to help keep pace with the unrealistic expectations of idealized domesticity is reminiscent of the ways in which early twentieth-century middle-class households used domestic servants to resolve certain contradictions between feminine virtue and the hard labor of domestic work. Evelyn Nakano Glenn (1992) argues that in the context of the United States, the rise of industrial capitalism during the latter half of the nineteenth century also coincided with the elaboration of middle-class women's reproductive responsibilities. She states,

> Rising standards of cleanliness, larger and more ornately furnished homes, the sentimentalisation of the home…and the new emphasis on childhood and the role of the mother in nurturing children all served to enlarge middle-class women's responsibilities for reproduction at a time when technology had done little to reduce the sheer physical drudgery of housework. (p. 7)

By the early twentieth century, the norm for most middle-class women was to hire another woman to perform much of the hard labor of household tasks. These women were usually recent migrants, working-class "native-born" women, or women of color. In this way, white middle-

class women were free to indulge in other class privileges, such as participating in cultural activities, leisure, volunteering, and charity work.

Similarly, Phyllis Palmer (1987) in her work on the relations between housewives and household workers in America in the 1920s to 1940s, notes that many middle- and upper-class women were held to a domestic code that placed contradictory demands on "feminine virtue" and domesticity (pp. 192-195). "Virtuous women" were defined in terms of their spirituality, elegance, and refinement and were expected to create a warm, clean, and attractive home for husband and children. However, maintaining such a home meant confronting the reality of physical labor and dirt. Transferring these physical duties to a domestic helper allowed middle-class women to both fulfill their domestic duties and also spend time on self-improvement. Palmer argues that middle-class women searching for hired help were essentially searching for a clone: "a woman who could do things as she herself did them, for the hours that were expected of her, and with the credit for finding such a paragon going to her" (p. 194).

Remediating this role in the twenty-first-century smart home is the Amazon Echo. Again and again, the Echo is figured as a technology that enables the fulfillment of domestic subjectivities. In the example above, the identity of the working mother is made possible *only through* the labor of the digital assistant, a relationship that mimics the reciprocity between early twentieth-century middle-class women and their servant staff.

Indeed, the figure of the servant helps bring to attention certain continuities in how affluent households have aspired to organize their homes. Historian Lucy Delap (2011) notes that in the nineteenth and early twentieth centuries "domestic service was an institution that was key to establishing claims to identities of privilege, entitlement, and status" (p. 191). She argues that servant-keeping functioned to delineate "middle-class identity" and despite current attitudes that cast servant-keeping as anachronistic and antithetical to forms of domestic modernity, domestic service continues to function as a marker of privilege for the affluent classes, albeit recast under more "progressive" titles such as au-pairing

(pp. 191-204).

In the same vein, new domestic technologies, and especially smart technologies such as the Amazon Echo, help to imply a sense privilege and class identity through the provision of certain levels of domestic service. While the Echo itself may not be capable of physically performing tasks such as cooking, cleaning, or chauffeuring, it does work to centralize command over applications that can, for instance, by controlling automated vacuum cleaners like Roombas, placing orders for food delivery services like Dominos, or making requests to ridesharing services such as Uber. The aspirations of middle-class respectability are here measured at the level of everyday domestic organization, a model that remediates earlier structures of ownership and service through the techno-sanitized language of automated systems and the sharing economy.

The (digital) servant problem

Like the people on which they are figured, digital domestic assistants are held to a standard of idealized servitude that demands not only excellence in its physical performance but an expectation of personal devotion to the household that goes beyond the exchange of labour for wages. This devotion is expressed through qualities such as loyalty, dedication, pride and affection. A striking theme across customer reviews on the Amazon website was the compulsion to share not just assessments of the Echo's features but intimate stories of personal connection and companionship. For example, in a review posted on 2016, one customer praised Alexa as a perfect bedside companion for his brother diagnosed with MS:

My brother…who has been bed ridden and paralyzed with Multiple Sclerosis from his neck down for more than 30 years now has a new friend named Alexa! He was in tears with happiness when Alexa played 70's music, played Jeopardy, answered all his questions and wakes him up every morning. Thank you Amazon for giving my brother a new bedside companion.

Another customer shared her husband's experiences after purchasing an Echo:

We have been using Echo since April 2015. Prior to that time, my husband had been hospitalized for several weeks. He is currently wheelchair bound. We immediately installed the Hue bridge and lights as well as the WEMO outlet. With these, and dear, dear, Alexa, he has a great deal of control of his environment in ways that make him much more independent. Others might enjoy Echo for fun and convenience, but for him it is a lifeline! He has even had her turn the lights on in my bedroom when I didn't hear him call…Our lives have settled into a new normal, and the Echo is a huge part of what makes normal easier.

In an open forum with over 200,000 individual reviews, these comments consistently received the highest approvals by fellow Amazon users with some receiving over 50,000 upvotes. They went beyond a statement of customer satisfaction to express a distinct sense of affection for "dear, dear, Alexa." While I in no way wish to suggest that the Echo does not meet genuine needs, as in the cases above, or only functions as a marker of privilege or excess, what I do hope to emphasize with these examples is the consistent use of language.

Many reviewers referred to Alexa as a "friend" or as "family," a sentiment indicative of the integration of digital assistants into the most intimate parts of users' everyday lives. These terms of affection are reminiscent of descriptions of "good" servants—those who demonstrated hard work and loyalty. "Like family" was a compliment bestowed on those dedicated workers who went above and beyond their duties, a commendation delivered with the unspoken caveat "despite being the hired help." The image of the "family retainer" such as *Little Women*'s Hannah who lived and worked for the March family for sixteen years and became "more of a friend than a servant" was a well sought after asset (Strasser 1982, p. 163). Unsurprisingly however, the reality rarely matched the ideal and employers were often left disappointed when servants fell short of their high expectations.

Historians have noted the influx of literature during the late nineteenth

and early twentieth centuries responding to this so-called "servant problem" (see Davidoff 1995; Dawes 1974; Delap 2011; Huggett 1977; Sambrook 1999; Strasser 1982; Turner 1962). They found that across domestic manuals, women's magazines, periodicals, the newspaper press, and government reports there was a sense of urgency to address what was perceived as a dire shortage of "decent help." The issue was not necessarily a question of quantity but that of quality. Employers complained that "most servants put on airs, stole from their employers, left their positions without notice, and performed their duties without skill or care" (Strasser 1982, p. 163). In response, many middle-class women published literature outlining guidelines and offering advice to their fellow peers on how to best manage and get the most out of their domestics. Lida Seely, author of *Mrs. Seely's Cook-Book; a manual of French and American cookery, with chapters on domestic servants, their rights and duties and many other details of household management* (1902), offered in her manual a list of twenty "don'ts" for employers when dealing with servants. These ranged from "Don't engage a servant without having a clear understanding as to what he or she is expected to do" to "Don't neglect to have inventory of china, glass, silver, and bric-a-brac of each servant coming and going" (pp. 33-34). This genre of advice literature written *by employers* specifically *for employers* is a practice that bears an uncanny resemblance to the style of reviews written by customers on the Amazon website. For instance, users often structured reviews in terms of lists of positive and negatives or dos and don'ts. One top reviewer posted 9 tips in his review of the Echo Dot. They suggested for users to "Take the time to voice train Alexa at least once. It's kinda tedious but really improves the accuracy," and "If a phrase doesn't yield the results you're looking for, reword it and try again".

The parallels between domestic manuals and user and tech reviews extends even more so into the kinds of concerns that were raised. Value for money and expenses were a common theme. *Mrs. Seely's Cook-Book* included pay tables for servants from one day to one month, and described best practice for settling wages with servants in the event of

dismissal (pp. 1-38). Similarly, tech reviews from Wired, Gizmodo, Tech Radar all made assessments based on functionality and value for for money. But perhaps the most striking similarity is in the forms of criticism levelled at both servants and digital assistants. Listening, both not enough and far too much, were equal causes of anxiety for domestic employers and Amazon Echo users.

The Verge reviewer David Pierce (2016) opened his review of the Echo with snapshot from an interaction

"Alexa, what's the weather today?"

"ALEXA! What's the weather today?"

"ALEXA WHAT IS THE WEATHER TODAY GODDAMMIT."

"Right now, in New York it's 25 degrees with clear skies and sun. Today's forecast has mostly sunny weather, with a high of 29 and a low of 19."

He criticised the Echo's lack of responsiveness

She doesn't work every time, she doesn't respond the way she's supposed to half the time, and it doesn't take long before you stop totally relying on her. And then she sits silent… I need the Echo to just work, so I'm not standing in my kitchen like an insane person shouting questions to nobody.–

The demand for precision and unfaltering compliance from reviewers like Pierce and the subsequent splurge of vocal frustration when these expectations were not met is reminiscent of the treatment of servants who fell behind their duties. As one housekeeper stated "I am treated and spoken to as if I were a dog…and grumbled and growled at from morning to night" (quoted in Huggett, 1977 p. 155). Knowing when to speak and when to listen was a high priority. The top critical reviews on the Amazon customer reviews page made complaints that ranged from an inability to listen well, "It seems to have slowly lost its sensitivity to my voice. It can no longer hear me say Alexa unless I am within 3 feet of it"; to listening too much, "NEEDS security! Anyone in range of this things Bluetooth can connect and start playing music or speaking through this thing on cell calls…I heard Alexa announce that a bluetooth device had connected, so I

opened the app and discovered numerous devices, that weren't mine… Now, I get to randomly hear other voices or music start playing, in the middle of the night, anytime the people in the apartments behind me decide they wanna screw around."

These complaints were, again, resonant with expectations placed on servants. In her book *Domestic Service* (1897), Lucy Maynard Salmon, Vassar college's first female historian and a domestic reformer, discussed the social degradation of servants specifically through the regulation of everyday social interaction. She writes

[The domestic employee] is seldom introduced to the guests of the house, whom she may faithfully serve during a prolonged visit; the common daily courtesies exchanged between the members of the household are not always shown her; she takes no part in general conversation around her; she speaks only when addressed, obeys without murmur order which her judgement tells her are absurd, "is not expected to smile under any circumstances" and ministers without protest to the whims and obeys implicitly the commands of children from whom the deference to parents is never expected.

(p. 158)

Attempts to work against these norms was a sign of "wilful disobedience," an offence which could likely result in a discharge from service. Amazon Echo customers implemented equivalent solutions with their own wilful assistants that included "unplugging until the flaw is fixed" or simply discarding the device as "junk".

Directly related to issues of listening were concerns for privacy and surveillance. While I will discuss directly the relationship between surveillance and the Echo's figuration later in this chapter, for now I would like to highlight how these concerns manifest as shared anxieties between Echo reviewers and domestic employers. Among tech reviewers in particular, the placement of what is essentially a corporate microphone in individual households attracted a great deal of suspicion. Many saw it is indicative of the convergence between the "internet-of-things" and dragnet surveillance, while others voiced concern that such devices opened the

door for the commoditisation of our most private moments. The fear that someone may be listening, even if it was not clear who or what for, carried into the concerns of the customer reviews. Some focused on the recent NSA scandals, making vague accusations of "government surveillance" and labelling the Echo as "Amazon's little NSA spy." Others directed their criticisms at Amazon itself, for instance, in one representative review, the customer below griped:

[I] suspect that this device is listening more than we think it is. I will be talking about something and suddenly I start seeing more ads and more stuff about what I was talking about…I honestly worry that this device and Amazon, and Facebook, and Google, and Apple are all developing much more extensive and personal telemetry and information on all of us than we can appreciate. We've allowed them all to spy on us and we willingly give them everything about ourselves with full trust. Who is to say the NSA isn't listening in? While you and I have little to hide, and most of us out there behave in a lawful good manner, the telemetry on us can still be used for insidious purposes.

In this example, domesticity is defined through comfort and privacy. This fetishisation of privacy as a domestic priority is part of a longer narrative that has been slowly evolving since the seventeenth and eighteenth centuries and is associated with the twentieth century decline in servant keeping. Delap (2011) notes that the rise of the individualistic and privatised domestic sphere recast servants as "intrusive" and "disruptive" (p. 192). She argues that in the Edwardian period, many social commentators advocated for servantless living, primarily because it was considered a more "dignified" middle-class lifestyle but also in part so that households could free themselves from the gaze of nosey servants. She discusses articles in which maids were described as "lurking during domestic squabbles" and "[watching] her employers as a cat watches mice" (p. 193). Even Lida Seely (1902) included special notes to servants in her domestic manual bluntly calling them into line, "Don't spy on your masters and mistresses—the fact that their bread is in your mouth should be a reason for keeping it shut" (p. 35).

While historically tensions between privacy and servant-keeping resulted in a decline of servants as a domestic fixture, in the present moment these same tensions have been negotiated with almost the opposite effect. Servant-keeping (even in its figural form) returns to the domestic realm at the very same time that privacy appears to make its exit.

These examples illustrate the persistent figuration of the Echo in the image of domestic service across a broad range of materials. In Amazon's own promotional discourse and in the discourse produced by customers and professional reviewers, domestic servility is reinscribed onto the figure of the digital domestic assistant in ways which distinctly shape attitudes and relations with the device. Whether this is conscious or unconscious is secondary to its effect; that is, projecting onto the device preexisting structures and narratives regarding servility and the domestic organisation of power. There are, however, notable deviations between the Echo's figuration and the historic reality of domestic servility. Of significance to this analysis is the deracialized representation of the voice of Alexa.

Race, Voice, and Figurative Narratives

It is my contention that the voice of Alexa is coded through whiteness. By whiteness, I refer to the sense of being "non-raced," that is, not explicitly identified according to race. Richard Dyer (1997) has argued that in dominant discourse (i.e., white discourse) whiteness is a category that often escapes identification and explicit racialization. He states, "race is something only applied to non-white peoples" and that whiteness is not "racially seen and named" in the same manner (p. 1). Whiteness defines the voice of Alexa insofar as it escapes the ascription of characteristics that identify it as a racialized Other. Indeed, Mark Marino (2006, 2014) has argued that most mainstream chatbots often utilize what he calls "unmarked (white) standard English" (2006, p. 4). This is a form of English that aspires to evade specific identifying cultural inflections; it is language that is, for him, "without culture, disembodied, hegemonic, and, in a word,

white" (2006, p. 193).

In HCI voice interface research, the dominant paradigm is to consider race through a strictly visual logic. Race is understood as a variable of skin tone, hair type, eye color, and other forms of visual presentation. As a result, non-visual variables such as voice are often neglected as an expression of race. For example, on the subject of race and conversational agents, human–computer relationship researchers Clifford Nass and Scott Brave (2005) have argued that interface designers should focus on accent, meaning the unique vocal intonations associated with regional dialects, rather than "the skin color of the agent" when designing an interface (p. 67). They state,

> The current research suggests that *race is not important as an independent effect*, at least when an accompanying voice provides broader and deeper information than what can be determined from ancestral geography. The linguistic and paralinguistic cues are so informative that *identifying a person's geographic progenitors is simply not valuable*. (p. 69, emphasis added)

Yet, at the same time, they also advocate for the use of labels and stereotypes to help socially identify a synthetic voice. They argue that appealing to labels can be favorable as "labels allow the human brain to make quick assumptions and predictions about other people and help the brain cope with the complexities of social interactions" (p. 69). They go on to discuss how accents are tied to stereotypes and how properties such as "education," "intelligence," and "credibility" are "manifested in speech" (p. 70).

This reductive view of race that considers only visual cues, such as skin color, willfully overlooks broader materializations. It overlooks the relationship between race, class, and accent; it neglects how "education," "intelligence," and "credibility" are attributes that are themselves racialized; and it also fails to acknowledge that race is not just a matter of "being" but of "doing"—that is, one not only *is* raced but also *does* race, and this includes employing cultural linguistic markers (see Nakamura, 2008). To suggest that voice can be empty of race fails to consider how whiteness

has come to constitute a neutral norm. It reinforces the dominant cultural belief that "whites are not of a certain race, they're just the human race" (Dyer, 1997, p. 1), and that coextensively white language is not raced language, it simply is language.

Arguably, the selection of the "white voice" reflects the desire by voice-interface designers to best create the conditions for speech intelligibility. Designers often proceed on the tenet that native English speech is the most intelligible speech. This speech is perceived as "non-accented"—that is, not containing the audible markers of racial difference. But as Halcyon Lawrence (2014) has observed, the ubiquitous use of native speech in speech-mediated technologies is nonetheless problematic as it implicitly functions to "assimilate accented speakers to some native norm" (p. 768). It contributes to an imperialistic view of language that positions those with accented voices as outside the imagined image of a national subject and furthers the use of language as a tool of colonization and marginalization (see Nieto, 2007).

Although Amazon Echo's assistant Alexa is never explicitly identified as "white," it is nevertheless aestheticized and characterized by Amazon using aspects that are underwritten by ideals of whiteness. Alexa speaks English in a broad American accent rather than, for example, a distinctive southern drawl or a South Asian accent. It does not use vernaculars or dialects that are stereotypically associated with racialized communities, such as Black or Latino communities. It has an extensive vocabulary and partakes in certain social mores to associate it with the "mannered," educated upper classes. And finally, it has been given a name that consciously draws on the narrative exploits of Western civilization. Amazon's Senior Vice President of Devices David Limp stated in an interview that, along with having desirable phonics for voice recognition, the name Alexa was chosen because it was "reminiscent of the library of Alexander [sic]," which has been culturally viewed in the West as "the source of all knowledge" (Limp in Lashinsky & Limp, 2016). Indeed, the plethora of parody videos that reimagine digital assistants such as Alexa or Siri as Mexican, African American, or Chinese with

names like Siriqua or Shameka all play on racial and ethnic stereotypes in such a way that underscores the whiteness of the original model.[2]

The figuration of the Echo and Alexa as a native-speaking, educated white woman here departs with the historic reality of domestic servants. In the United States, the role of domestic workers in middle- and upper-class homes were (and is still) undertaken by predominantly women from working-class, African American, Latino, and other racialized migrant groups (Glenn, 1992; Strasser, 1982).

The contradiction between the historic reality and the representation of domestic service is in many ways inherent to the figuration process. As scholars such as Donna Haraway (2013), Lucy Suchman (2012), and Claudia Castañeda (2002) have argued, figuration is not only a process that helps us to describe phenomena but a process that in itself has "worlding" potential. Analyzing figures and figurations is not just a matter of reading histories that are already laid out but of coming to grips with the dynamic construction and reconstruction of histories and cultural narratives. While objects, such as the Amazon Echo, *are figured* by existing cultural narratives, they conversely work to *refigure* our understanding of those same narratives. They thus have the potential to bring into the world new structures, frameworks, and attitudes to power. For this reason, feminist authors such as Haraway have argued that figures are inherently political and that without responsible engagement can operate to reinscribe damaging existing orders.[3]

In this instance, the figuration of the Echo and the digital assistant Alexa in the image of idealized domestic service correspondingly refigures cultural narratives of domestic servility. Instead of being represented as difficult or degrading work, domestic service becomes a pleasure to perform. Instead of servant-keeping being a traditional and conservative-bourgeois form of inferring status, smart assistants are a progressive and uniquely modern marker of social class. And instead of servants themselves being acknowledged as a historically racialized and exploited class exemplary of wider histories of racism in America, Alexa is a white-washed and compliant character dreamed up from the aspiringly socially

conscious culture of Silicon Valley. These narratives have an effect on those previously circulating, reworking popular attitudes and beliefs about domestic service. While the establishment of new trajectories is arguably inevitable as a part of the figuration process, there are certain shortcomings within this context.

First, the elision of racial identity from the figuration of domestic service dehistoricizes and depoliticizes the servant/master relation. Where this relation has been fundamentally predicated on racialized human exploitation, the figure of the white-speaking, middle-class AI effectively erases this essential narrative. We may ask, for what reasons has Amazon chosen to figure Alexa in this way? The optimistic (and albeit less likely) view is that in attempting to reach a broader racially demographic audience, Amazon flips the script on servitude, allowing those who have been traditionally trapped in subordinate relations of race and class to indulge in a fantasy in which Black and brown people give the orders and a white voice cheerily complies. What is, unfortunately, more likely is that by aestheticizing in accordance with the norms of whiteness, Amazon seeks to appeal to a more "universal" subjecthood for their digital assistant. In doing so, they can avoid both the discomfort associated with racialized servitude as well as any confrontations with the historical consequences of slavery, colonialism, global capitalism, or white supremacy.

Here, the nineteenth-century American fantasy of a servile class that is without race and without history is fulfilled. As Strasser has argued, one of the key indignities of working as a domestic servant was that employers paid little respect to one's identity outside of the contract of service. Rena Bethune, a black household worker interviewed in 1977 lamented, "[Employers] don't care anything about you. They don't want to know nothing about your background; they don't even want to know what's going on in your home. All they want to know is what you are doing for them" (Strasser, 1987, p. 178). For multinationals such as Amazon, the coming of age of AI systems and home automation finally resolves the long-standing "servant problem." By creating a servile class that literally

have no personal backgrounds, no families, opinions, desires, wants, or needs, or homes of their own, these companies are able to capitalize on an idealized vision of servitude without having to contend with the practicalities or moral question of servant-keeping.

Second, the figure of idealized domestic service misrepresents the power relation between the device and its user in such a way that it makes contending with issues such as surveillance and digital labor increasingly difficult. Whereas in classic servant/master relations it is the servant who is understood to be performing labor for the household, in this refiguration the relation is inverted.

Companies such as Facebook, Google, Twitter, and Amazon famously capitalize on the exploitation of user data through complex mechanisms of commercial surveillance. While some of this data is created consciously by users in the form of user-generated content, or what Christian Fuchs (2015) calls "prosumer labor," much of it is gathered through measures of monitoring and surveillance of users' profiles, communications, behavior, activities, and social relations. Fuchs argues that the processes of consumption on digital platforms, like social media, is also in effect a process of production insofar as user activity actively produces the data commodities that are then sold to advertising clients. This process constitutes a kind of labor, which like all labor within commodity capitalism, is vulnerable to issues such as exploitation, coercion, and alienation (see Fuchs, 2012, 2015).

Within cultures of automation in which AI systems form part of the critical infrastructure of capital accumulation, large-scale monitoring and consumer surveillance have become "an integral component of the online value chain" (Andrejevic, 2012, p. 85). In this context, smart home devices with digital assistants form another interface for the collection of user data. By adding microphones that record natural language and conversation to the already rich array of data collection methods, Amazon is able create more layered and intimate profiles of domestic habits that have so far been only obliquely observed or constructed through conjecture. That Amazon encourages users to link their Echo devices directly to online

purchasing accounts is suggestive of the intent to manipulate domestic environments into commercially lucrative opportunities.

Mark Andrejevic (2012) describes these forms of commercial manipulation as indicative of the widespread integration of predictive analytics into marketing ecologies. He describes this as a wager predicated on the belief that "comprehensive monitoring will give marketers greater influence over consumers" (p. 74). The marketing industry exploits data gathered from user activity to in turn create the ideal conditions to induce desired behavior. He critiques this intent to "trigger latent demand" as a form of conscious manipulation and control:

> If I have certain anxieties and desires that are triggered and enhanced by custom-targeted forms of marketing that result in a response anticipated by marketers, it seems misleading to say that behaviour has not been subject to deliberate forms of management and control. In this respect, the ability to collect and analyze large amounts of data in order to influence consumer behaviour might be considered a form of power. (p. 76)

The inclusion of smart devices into intimate spaces and daily routines represents a new frontier for the commodification of everyday life, creating a suffocating reality in which every aspect of social and personal life becomes colonized by commercial interests. To describe smart devices as working for or in service of households is an inaccurate representation of the direction of power; on the contrary, it is the household that labors for the device. The figuration of the Echo through idealized servitude not only obscures this power relation but also consciously exploits this false image to extract more information, more data, more labor.

Conclusion

In this article, I have explored the ways in which the assistant Alexa is figured on the idealized image of a domestic servant. Examining a range of case study materials, I have explored how this figure consistently appears in the discourse of customers, paid reviews, Amazon marketing,

and other popular media. Although I have argued that this figuration, and in particular the use of the white-speaking voice, misrepresents and refigures racialized histories of servitude, I also wish to acknowledge the ways in which this figuration similarly obscures exploitative relations in the contemporary moment.

Within the techno-fetishistic language of contemporary AI discourse, humans and human labor are posited as at odds or at risk of displacement by machines. On the one hand, workers are said to be under threat as industries are automated and professions obsolesced; on the other, this new-found labor efficiency is a source of opportunity as time and money are invested elsewhere. The displacement of the human, as something that is fundamental to the figuration of AI technologies like digital assistants means that forms of human labor vital to their functioning are rarely considered. The Echo, for instance, suggests the automation of tasks like the provision of food, transport, and a clean and ordered home. All the user need do is ask and the white-voice delivers. However, this characterization erases the wide-ranging networks of exploited labor that make such service possible. From the factory workers who assemble these devices in sweatshop conditions in places like Shenzhen, China, to the low-income pickers in Amazon's mega-warehouses in places like Chester, Virginia, and the migrant workers who make and deliver food in service industries across the country, all these tasks are performed by predominantly racialized labor and all go unacknowledged within this figuration.

While these workers and their histories have not been the primary subject of this discussion they nevertheless constitute a central part of understanding new domestic technologies and their figurations. Their continued erasure in historic and contemporary discourse is a telling insight into the ongoing marginalization of racialized workers. While much of the critical literature addressing AI and gender and race has focused on social personality (how the interface is made to look or sound like a person), fundamentally, the figuration of domestic assistants in the image of domestic service speaks more to the historic dehumanization of

working-class men and women of color than to the contemporary anthropomorphism of these digital assistants.

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Notes

[1] However, as authors such as Ruth Schwartz Cowan (1983) have argued, the promise of freedom from drudgery is often an empty one, as new domestic technologies arguably create "more work for mother."

[2] Gregory Jerome Hampton (2015) has similarly argued in his book *Imagining Slaves and Robots in Literature, Film, and Popular Culture* that fictional robot characters such as Rosie the robot are often modeled on antebellum slave tropes like the mammy. Her blackness too was erased by identifying her not with southern accent but a New Jersey accent, a notable point of difference between the household who spoke with broad non-distinct American accents (pp. 11-12).

[3] Haraway's own engagement with figures and figuration famously includes the cyborg (1985/2004), the modest-witness (1997), and ,more recently, the Cthulucene (2016).

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The original version of this article, published 1st April, 2019 in vol 5 (1), included screenshots of Amazon customer reviews with images posted by the reviewers. The author recognizes that these images were potentially identifying and wishes to sincerely apologize. She has taken active steps to have the article amended to remove any identifying material.