

Information Inspirations

The Web Browser as Racial Technology

In the previous chapter, I claim that Blackness is a discursive, informational identity—one that brings a particularized coherence to digital practice. While Twitter is perhaps the most publicly available manifestation of online Blackness, Black digital presence existed before the dawn of the commercial internet. The traces of digital practice manifest on-screen and in code, but the means (the devices and applications) through which users conduct digital practices are typically not of interest to media researchers. This chapter asks, Can Blackness be discerned at the level of digital infrastructure? The design and launch of the Blackbird application offers insights into how Blackness could operate as a design principle for one of the most integral pieces of informational infrastructure: the web browser. Formally, Blackbird should be understood as a conceptual attempt to revise an infrastructural application to serve a different type of user—to make Blackness intrinsic to the enactment of Black online information needs and desires. This chapter examines discourses around the release of a web browser that explicitly enacts a racial epistemology. In doing so, this examination also interrogates how technoculture—Black and Western alike—shapes our beliefs about appropriate digital practices and racial inflections of internet content.

Given the demographic composition of the tech industry, it is unsurprising how little attention has been paid to how whiteness structures application design. Reflexivity has never been a benchmark for information technology industries; instead, these institutions focus on instrumental outcomes of “improving” computers and code, burying their cultural influences behind technical protocols and limited imaginaries about users who are not themselves. How, then, does one locate Blackness, much less race, in the applications we use? McPherson (2011) offers

one possibility for examining race at the code level by interrogating how whiteness and masculinity shaped Unix. Moreover, recent studies of GitHub (Romano, 2013) have also revealed racism, masculinity, and homophobia as discursive phenomena in programming code repositories. These studies' focus on operating systems and programming code, while admirable, does not account for how Black folk, much less Black epistemologies, are present in the internet's infrastructure.

To address the lack of research on racialized applications and platforms, this study begins by considering the lowly web browser. Like Xerox became a generic term for photocopies and Coke a generic term for soda (at least in the southern United States), the web browser is the sign for the internet. When people say "I was on the internet today," we visualize their use of a window through which they access the World Wide Web. Browsers organize and frame the incredible amount of content, media, and protocols we know as the World Wide Web.

Although early adopters and power users may scoff at the synecdoche (where a specific thing is used to refer to a more general class of things), it is not difficult to see why users would understand a complex assemblage of hardware and software through their use of a particular application. The browser as a medium is a cultural artifact, defining its users as technologists, as curators, and as social actors. Once considered valuable enough to trigger a government-led antitrust lawsuit (that Microsoft lost), today's web browser is remarkably deprecated in today's app and mobile economy. Social networking apps, incorporating web viewers in place of full browsers, have nearly usurped the browser's enticement to explore and experience the web. It is part of our communicative infrastructure—invisible to our information literacy practices until a rupture occurs.

A confession is necessary here: I employ a gloss to make my claim. The technical infrastructure powering the commercial internet that we know as the World Wide Web should be properly understood as networks of cables, satellites, and servers as well as the protocols, policies, and netcode that enables digital media and information to be transmitted across the globe at high speed. Billions of internet users, however, have never seen these technologies at work. (How can one tell if a cable is actually transmitting information without some mediating interface?) What they have seen, and extensively interacted with, is a client

application—the browser—to access the internet.¹ This chapter argues that the browser *is* the internet for many people, given that many visits to the internet begin by opening this application.

Why is this important? In short, browsers are where our identities as digital practitioners are enacted rather than simply performed. I offer the term *enactment* to highlight the substrate of practices underlying online performance and consumption; these browser-specific activities (e.g., refreshing the page) bracket online participation. The quotidian nature of actions associated with the browser, however, is still subject to technocultural beliefs about appropriate technology use and users.² For example, the “browser wars” of the early aughts featured debates about the ideologies of their developers; people also argued about the construction of each browser’s imagined or ideal user as signified by the browser design (including the chrome!). Firefox/Mozilla users were presumed to have different information behaviors than Safari users, whose information behaviors differed from Chrome users. Thus the libidinal economic analysis here highlights how beliefs about Black digital practice prefigure the use of an application designed specifically for Black users.

The Soft Bigotry of Low Information Expectations

Unfortunately, there is a dearth of critical research on the internet browsing beliefs—not browsing habits or digital content—of Black folk even as more Black folk are online than ever. I base this argument on the excellent data compiled by the Pew Research Center’s Internet & American Life Project³ (especially that of Aaron Smith), who deserve recognition for their ongoing series of surveys on race and social media. Their research is notable in part thanks to survey methodologies that oversample minority and underserved internet users; many disciplines attempting to survey and study Black communities don’t include adequate numbers of Black respondents, fail to separate socioeconomic status from race, neglect in-group heterogeneity, or are tainted by interview bias. These problems are apparent when reviewing social science research on internet access or the digital divide, which is morbidly fascinated with promulgating “facts” about the limitations of and on Black

folks' internet use. Researchers are often concerned, for example, with the structural and cultural drawbacks associated with Black folks' frequent social media use, which is operationalized as less "productive" than other forms of digital practice and thus less reliable for "rational" information gathering.

Additionally, researchers' failures to disambiguate race from socio-economic status when measuring disparities in information access for poor and low-income (see also *urban*) families are also conceptualized as disparities for Black digital practitioners en masse. What does this mean in practical, technocultural terms? High-priced, prepaid mobile broadband data plans paired with low-budget, moderately powered feature phones and smartphones are primarily marketed to poor and minority communities, whose members are often unable to secure post-paid mobile service. As mobile service has been found to be the primary means by which Black folk access the internet (Smith, 2010b, 2015), these phones and plans are seen as limiting factors to accessing the commodified, data-intensive internet of today. For Black folk to use them to primarily access social media—and then to view and post content revolving around racial identity—is often understood as "inappropriate," as Black digital practice should revolve around economic, educational, or productive information concerns instead.

This chapter evaluates Black digital practice and practitioners from a Black technocultural perspective rather than from the standpoint of the hegemonic and coercive standards of Western technocultural beliefs, which position Blackness uncritically as the nadir of humanity. A critical approach should reformulate how productivity and, more important, creativity can be hallmarks of engaging with and fulfilling Black digital practice. Grounding research into Black digital practice from a Black cultural perspective does not separate those practices from beliefs about respectability, economic progress, or social propriety. However, the technocultural perspective employed here encourages perceptions of Black desires for and the pleasures of having a universe of information and media production at one's fingertips. In doing so, it serves as an additional warrant for Blackness as an informational identity premised on culturally competent semiotic and material relationships among content, code, hardware, and culture.

Introducing Blackbird

The Blackbird browser was designed to abet and promote the discovery of African American internet content. Blackbird can be understood as part of a genre of web browser client apps known as niche browsers. These browsers were intended to serve specific internet user types (not communities *per se*): Songbird for music lovers, Flock for social networking, or the now discontinued Gloss for women. More specifically, these browsers were built on the open-source Mozilla browser, then popular for its astonishing number of customization options for users. Niche browsers feature targeted content, services, and advertising all integrated with thematic interface elements designed to appeal to their prospective audience. Blackbird's targeting of the Black community as preferred users occasioned a startling response for the introduction of an information technology product. Whereas most tech products are evaluated in terms of their ease of use or feature set, Blackbird's reception as an information and computer technology (ICT) artifact was "colored" by the racial frames of the pundits, bloggers, and commenters who discussed it.

To return to the organizing metaphor of this text, the browser's ubiquitous distribution—packed in as essential software for every operating system (OS) and the primary interface from which to interact with the World Wide Web—introduced information without limitations (e.g., as a set of dictionaries or a thesaurus) in a private, domestic space for the first time. Absent the physical and geographic limitations of the library and the segregationist constraints of educational institutions, Black households, workers, and students were able to experience and interact with information on their own terms. To unpack the cultural and technocultural implications of a software artifact like Blackbird, I analyze the following:

- histories, practices, and beliefs about Blackbird/browser use
- hardware and protocols necessary to use Blackbird
- Blackbird interface (client)
- practices and conventions—social, technical, and cultural—necessary to use Blackbird
- out-group beliefs about race and technology
- in-group beliefs about race and technology

The interface analysis of the browser and the discourse analysis of a select few blog posts and their associated comments are laid out against a critical race framework integrating theories of technoculture and the libidinal energies powering them to understand how the browser is constructed through practice, experience, and identity.

Critical Frameworks:

Technoculture and Racial Formation Theory

To fully understand how digital technologies are cultural, one must analyze the ways in which they manifest cultural meaning alongside their meaning-making capacities as functional and instrumental artifacts. Thus to analyze Blackbird, my conceptual framework for this chapter incorporates concepts from racial formation theory, critical race theory, and theories of technoculture. Each instance of critical technocultural discourse analysis (CTDA) research—my preferred methodology—requires assembly; this is in part because the object of inquiry changes and also because the inquiry itself may differ. The central conceit of CTDA is the application of a critical discourse analytic to the interface and to the discourses about the interface.

My first step in assembling a conceptual framework, then, is to turn to Omi and Winant (1994), who contend that race is a matter of social structure and cultural representation, or racial formation. Blackbird's design and reception make it possible for one to infer that all browsers are racialized social structures. Before you scoff at this seemingly facile observation, consider this: The browser is typically understood as a neutral conduit for information. If there are any cultural implications to browser use, the association of these practices with navigational metaphors (e.g., surfing, exploring) is nearly completely dissociated from the imperial and colonial histories of Western seafaring. Instead (and similarly), the web is popularly understood as a limitless resource—like the ocean—belonging to no one and accessible to everyone. The explosion of information—commercial, artistic, banal, quirky, or journalistic—that quickly populated the web browser from the mid-1990s on was considered universal even as it became apparent that the typical internet user was white, male, and middle class.

Thus an unavoidable first step for examining the browser is *excavation*: evacuating the browser from its infrastructural home to unearth a better understanding of its meaning-making practices and beliefs. Infrastructure most frequently becomes visible when it ruptures, causing interruptions in the everyday use of otherwise invisible resources and capacities. By front-loading the racial identity of its users and designers, Blackbird is not an infrastructural rupture in the traditional sense. Instead, its existence and capacity rupture beliefs about who and what should be the focus of a computational and informational artifact, particularly one that accesses the “neutral” World Wide Web. From this perspective, the browser is an odd duck. While nominally it is a social structure—indeed, a social infrastructure given the number of platforms, protocols, and practices enacted within as well as the invisibility of the browser window to our internet usage—it should be given serious consideration as cultural representation (at least from the perspective of the Blackbird developers).

If one accepts the synecdoche that a browser is the internet, then the browser as a social structure represents and maintains Western culture through the dissemination of content while embodying Western racial ideology through its information practices. The browser indiscernibly frames the racial ideologies that users, content providers, and designers deploy to encode and decode their internet experiences. But, you may exclaim, so does the graphical user interface (GUI) or the computer monitor—the browser is just a window through which we observe the goings-on online! In response, I must reiterate that all technologies—and to an even greater extent, all information technologies—are socially and culturally shaped. Information technologies are more complicit because of their capacity (though limited) to re-create entire institutions, practices, and worlds. The application known as the web browser is the result of countless semiotic decisions about practice, visual interface elements, and display. These stipulations, which are normative and seemingly implacable, become clearer when race is brought to the forefront as a design imperative.

The flip side of using racial formation to discuss the meaning-making capacity of the web browser leads to a discussion of cultural representation: How does the browser perform racial ideology? Later in this chapter, I will delve into how elements of browser interfaces and practices

promote racialized practices. For now, it is important to consider how race and racial ideology contribute to patterns and practices of browsing itself.

Internet usage, from a critical race and technocultural perspective, can be understood as the evincing of racial dynamics for information seeking and information behaviors—partially mediated by the user's cultural milieu and racial ideology—in a digital medium. This takes place while the user simultaneously redistributes cultural resources (e.g., attention, audience, cultural capital, and political capital) along racial lines. This has become increasingly clear during our social media era; Anderson and Hitlin (2016) of the Pew Internet & American Life Project report that Black social media users are significantly more likely to post or encounter racial content across their online travels, whereas few white users report seeing race at all in the spaces they visit. The browser offers a starting point from which to view and interact with online content and spaces, but the content-neutral perspective it offers prioritizes mainstream websites that present information from a technophilic white, middle-class, male viewpoint. This perspective works to re-create social dynamics online that mirror offline patterns of racial interaction by marginalizing women and people of color.

Consider the default set of bookmarks shipped with any browser; the developers offer a limited variety of websites to prime the internet experience. Many of the sites are simply the home pages for technology and lifestyle brands while others represent destinations for various interest genres such as technology, travel, or food. If there is a set of bookmarks for culture, the gesture is toward a vaguely defined “internet culture,” where the peculiarities of internet ephemera are on display.

Race plays an integral role in technoculture, although it is rarely acknowledged for digital media or practice unless nonwhite practitioners are under scrutiny. Blackbird was designed to satisfy the information needs of Black internet users, so racial formation theory and elements of the Black technocultural matrix will be used to understand the meanings Black and white users assigned to Blackbird's practices, features, and discourse. However, Blackness in the American cultural context is juxtaposed against white racial ideology, which offers the opportunity to interrogate the absence of Blackness in technocultural belief through critical whiteness studies. Dyer's (1997) concept of whiteness

as paradoxical identity and Harris's (1993) arguments for whiteness as property are also used to understand users' meaning-making strategies. This is not a comparative analysis of Black and white users; instead, it properly grounds Blackness as an American cultural identity—for good or for ill.

American identity (in particular, whiteness) is bounded and extended by negative stereotypes of Black identity (Morrison, 1993). Giroux (1996) adds that "whiteness represents itself as a universal marker for being civilized and in doing so posits the Other within the language of pathology, fear, madness, and degeneration" (p. 75). Civilization here should be understood as the technologies for managing and controlling natural, social, and cultural resources; from there, it's not a huge leap to include communicative technologies as markers of civilization. Harris (1993), while arguing that whiteness is an ideological proposition imposed through subordination (p. 1730), also contends that "whiteness serves as reputation in the interstices between internal and external identity and as property in the extrinsic, public, and legal realms" (p. 1725). This latter assertion leads to my own claim that "unmarked" digital content, services, and artifacts are commonly understood as white, as belonging to whiteness, and as "civilized" *until* a nonwhite actor or group is seen utilizing them. Thus whiteness is infrastructural; this can be understood through the realization that science-fiction stories populate entire universes with fantastic aliens *and* white folk.

Finally, Dyer (1997) contends that white identity is founded on a paradox: whiteness entails being a "sort of" race *and* the human race—an individual subject *and* a representation of the universal subject. This claim neatly supplements Harris's (1993) concept of interstitial whiteness, lending whiteness a universalist individualism that is still socially constructed. Dyer returns to the idea of control—over the self, over the spirit, over others, and as the engine of enterprise—as a hallmark of white identity. Dyer's observations tie neatly into Western histories of political and economic expansion, where trade and communication networks were deployed as national policies to extend cultural hegemony over "undeveloped" countries with abundant natural resources. In particular, the ideals of technological progress and technology as means to reach the future foreground whites' use of technology to control the natural and man-made world.

Without closing off possibilities for understanding race as a relational construct, my conceptual framework encourages a view of race as an infrastructural quality. By *closing off*, I mean that Blackness is not defined solely by being subordinated, nor is whiteness only understood as a subordinating identity. The browser affords an implicitly “unmarked” technological commons even as each internet surfer personalizes his installation to conform to his personal browsing habits through bookmarks, cookies, add-ons, and user scripts. The seeming openness of the platform, coupled with libertarian (and neoliberal) rhetoric about the internet as a culture-neutral space, obscures the reality that most online content available through the browser and its technological implements still constructs and maintains Western and modern notions of race, gender, and class. Without examining content specifically, the next section begins the analysis of Blackbird by briefly outlining the browser’s representation as an informational, racial, and cultural artifact.

The Web Browser

Browsers are general-purpose applications designed to retrieve and display a variety of multimedia resources (print, image, audio, video, code) linked to a specific User Resource Identifier/Locator (URI or URL) on a remote server. In many ways, they are similar to word processors, which also allow users to compose digital texts with images. Browser design has not drastically evolved since the introduction of Mosaic in 1993 even as seminal technologies such as Adobe (once Macromedia) Flash have largely disappeared from browser spaces. They feature now commonplace design elements such as a home button, a refresh button, and a back button in a bar across the top of the window while the remainder of the space is dedicated to displaying content. As Jakob Nielsen (1993) writes, “UI is the barrier through which [users] reach for the content they want” (p. 66).

The browser’s utility in delivering multiple types of networked information—including but not limited to advertising—has led to plenty of invective against manufacturers and software developers. Browsers can be intimately wired into an operating system (e.g., mobile Safari and iOS or Internet Explorer and Windows), guiding the user to employ programs created by first-party developers while limiting access

to, if not outright excluding, browsers by third-party developers. The legal furor over predetermined browser integration is tied to the belief that the browser is the manifestation of the open, democratic nature of the internet. In *United States v. Microsoft Corporation* (2001), the US Department of Justice argues successfully that the browser's integration into the operating system inescapably frames the user's access to the type, amount, and quality of information available online even while allowing for a near-infinite personalization of the internet experience.

Thanks to the dictates of capitalism, even the lauded capacity to personalize and individualize one's browser experience has been exploited through the browser's susceptibility to invasive digital advertisements. Advertising tactics—ranging from pop-under windows to click-jacking to following users away from commerce sites—are often framed as part of the debate on how to monetize the internet, both to rescue legacy industries such as newspapers and also to support the immense amount of technological investment necessary for start-ups to reach scale. I argue, however, that this is as an inevitable consequence of the browser's commitment to interstitial whiteness. That is, the browser's designed enactment of a "color-blind" technological, implicitly white reputation allows for the imposition of a class-based, implicitly white identity ripe for the exploits of advertisers looking to market to this lucrative group of consumers. These enactments do not transfer to my Black online experiences; I can certainly tell you that advertisements for Black cultural products never follow me around during my online travels.

The browser's institutional/individual identity, as it is understood and articulated by users in the blogs analyzed here, maps closely to Dyer's (1997) definition of white identity. As mentioned earlier, Dyer argues that whiteness operates as a marker for both individual humanity and universal humanity. The browser's computational position (prominently displayed on default installations of virtual desktops) and capacities (framing networked digital content through a patina of personalization) render it as a communication device for "humanity" while obscuring its underpinnings as a legacy artifact of communication networks in its continued bolstering of economic and sociocultural imperialism. Meanwhile, the overwhelming amount of content designed by and for mainstream audiences who are familiar with older forms of broadcast media extends the perception of universal (access to) information. From

an individual perspective (particularly since the rise of Web 2.0), the browser has been designed to encourage customization of web use based on personal preferences. Thus while many people use the same browsing software, few will experience the web in the same way. The dual experience of universal application and individual preferences, then, prejudices users to assume that the “universal” web, configured to their liking, is similarly configured for every other user. This is borne out by the posts and comments analyzed later in the chapter, but this universalist rhetoric echoes today’s rhetoric of color-blind identity that serves to protect the interests of whiteness in popular and political arenas.

Blackbird

The whiteness of the World Wide Web was documented as early as 1998 in Hoffman and Novak’s canonical report on the digital divide. They argue that one of the more likely factors in the digital divide’s perpetuation was a lack of content—and the mechanism to discover it—addressing the information needs of Black users. I would be remiss if I did not point out that Hoffman and Novak’s findings unknowingly echoed those of the 1968 Kerner Commission (United States National Advisory Commission on Civil Disorders, 1968), which concludes that Black unrest and protests have some impetus in the lack of positive Black content available across the mass media of the time. Nevertheless, these calls for the development and dissemination of culturally competent content have only been sporadically addressed across any media. For example, a recent report noted that less than 5 percent of all television writers are Black (Hunt, 2017). While comparing the tech industry to the entertainment industry doesn’t offer a fair comparison, it’s telling that Blacks represent less than 5 percent of that industry as well.

40A Inc., a company founded by three Black entrepreneurs,⁴ is Blackbird’s developer of record, but there’s very little information online about the company. Blackbird was designed to address the difficulties of finding content oriented toward the information needs and interests of African Americans. Constructed from the open source codebase of Mozilla Firefox, it is structurally and thematically similar to the Flock (social networking), Gloss (women-centric), and Mozilla-variant browsers. Each variant features custom interface tweaks (chrome) designed to

visually identify the browser as well as plug-ins, custom searches, and other tweaks designed to enhance the targeted user's experience. From the features available, it is clear that the Blackbird creators intended to leverage social networks and web services already in use by African Americans by integrating them into an application-based social network offering cultural content. The browser was initially released for Windows⁵ in February 2009, with a release for OS X (Mac) users in October of the same year. The Windows release can be understood as pragmatic yet identitarian through its technical standardization of Black digital identity as users of the OS with the largest install base. This OS-level homogenization was an early indicator of the compromises 40A had to make to accommodate Black users.

Visually, the browser used a black theme with red accents and white-on-black buttons to frame the content. A small circular logo featuring a raven's wing with orange tips can be found in the upper right-hand corner of the application window. By default, two customized toolbars (a ticker and a set of large buttons) were enabled and visible. The layout resembled a standard Firefox browser, with the search and address bars sharing space on the top toolbar, while yet another toolbar offered a selection of bookmarks. The interface could get busy; the ticker toolbar streamed Really Simple Syndication (RSS) feed items across the top of the content window (like a chyron) while a notification pop-up occasionally surfaced in the lower right-hand corner.

Feature-wise, Blackbird could be customized with Mozilla extensions and add-ons that were specifically tailored for the browser, but few, if any, were ever released. The Blackbird install automatically imported preexisting Firefox passwords, bookmarks, and plugins but asked whether to import Internet Explorer settings. It seems the designers intended to leverage the growing popularity of Mozilla's browser while taking advantage of Firefox's customization features. For example, a popular power user JavaScript extension called Greasemonkey,⁶ which enabled an augmented browsing experience by modifying web content while the page was loading, seems to have been available to Blackbird users. There was an indication that Greasemonkey user scripts could be invoked (a "user scripts" button in the email services tab of the service preferences), but there is no documentation about the feature.

With respect to built-in features, Blackbird tailored the browsing experience by offering custom features designed around African American content:

- Blackbird News Ticker: a preloaded (but customizable) RSS ticker toolbar
- Black Bookmarks: preselected bookmarks featuring African American websites
- Black Search: a customized Google search prioritizing African American content
- Blackbird TV: a customized YouTube video channel available only to Blackbird users featuring Black content
- Blackbird Community: a browser-centered social network allowing users to share content through the in-browser Grapevine (a Digg clone)
- Give Back: a feature linking users to designated charities serving African American communities

Blackbird also offered web service-centered features. On the services toolbar, users would find a button that could be configured to run Yahoo! Mail, Windows Live (Hotmail), or Gmail. The button offered a badge displaying unread notifications and another power user accommodation: the ability to switch between email accounts without resorting to a bookmark or the address bar.

Users could also take advantage of a social network feature allowing them to access either Facebook or Myspace with one click. For both buttons, the active service was represented by the appropriate logo on the button, or favicon. Blackbird also featured an active sidebar where Facebook could be viewed without leaving the main browser panel to encourage multitasking and increase immersion without leaving Blackbird. When signed into Facebook, this sidebar showed the user's profile picture, status, links to the inbox, and invites. It also showed a friends list that was sortable by last update time, status update time, profile update time, or name. Logging into Facebook also enabled the aforementioned browser-oriented notification system to inform users of friend activity.

Blackbird, like Firefox, featured a search box next to the address bar to reflect the growing dominance of search as a means to discover content.

While it could be configured with the user's choice of several search engines, the default engine was a customized Google search intended to prioritize results that may be of interest to African American users. It appears that Blackbird's developers paid for Google's "siteSearch" variation of the custom search feature site:search function, as the free custom search engine (CSE) version would have populated results with AdWords advertisements before, between, and after results on each returned page. In a highly unscientific comparison, I entered "Barack Obama" into the Blackbird home page, which features a Google search bar and a button for "Black Search" and "Google Search." My results suggested that the Blackbird search properly gave greater weight to information coming from Black cultural sites such as BlackAmericaWeb (the internet home of the *Tom Joyner Morning Show*), BlackVoices (AOL's portal for Black news and lifestyle information), Black Entertainment Television, and *Black Enterprise* magazine's web home. When attempting to replicate these results in a vanilla Google search (without being signed in), the Black cultural results didn't show up at all in the first fifty pages—five hundred results without reference to information curated by authoritative Black online entities. To be fair, a page from Bossip (a popular Black celebrity gossip blog) was listed, but there was also a result marking Conservaepedia's derogatory web page on Obama. The Blackbird developers' contention that Black content can be difficult to find using regular searches seems to be valid given the results of these searches.⁷

In a regrettable move, Blackbird tried to capture users with browser-only features. For example, the browser asked users to create a Blackbird profile, which was meant to populate a browser-based social network. This network was intended to power social features such as the Blackbird-only Grapevine, where members could share items and vote on items of interest. In format, Grapevine resembled Digg.⁸ Items were sorted by the date they were submitted to the site, and users could up-vote or down-vote them. Items could also be arranged by categories or tagged and sorted by popularity in a tag cloud. When comparing Digg and Grapevine, however, it's possible to see that 40A's aim to encourage cultural content sharing could have borne fruit. Every article on the Grapevine page back in 2009 mentioned race or racial issues, compared with only two of the twenty most popular articles featured

on the Digg home page. At the time, I speculated that the cultural orientation of Blackbird's user base (plus the preloaded content served up by Blackbird's content features) helped promote content that validated Black cultural epistemologies of race and racism that would otherwise be of no interest to mainstream audiences.

Another browser-locked Blackbird component of note was the "Give Back" feature. Part of Blackbird's promotional strategy for the browser's introduction touted the developers' intention to fundraise for charitable and educational organizations that positively impact the African American community. Their primary philanthropic tactic was to donate 10 percent of 40A's 2009 revenue to their nonprofit partners. To encourage a similar charitable spirit among its user base, Blackbird offered a "Give Back" button in the services toolbar. This button led users to the "Do Good Channel" page, where they could enter their location and find charitable organizations in their area. The organizations could be sorted by cause or ways to participate. The Blackbird Do Good Channel was a branded version of the nonprofit endeavor of the same name run by good2gether, a website that offers nonprofits a way to advertise their services and content on the web for free and generate revenue by adding sponsors.

The Give Back initiative was impressive because internet browsers rarely offer users possibilities for interacting with the outside world in a manner that isn't commercial, much less offering users dedicated channels within the application for charitable donations. Blackbird was one of the first general-purpose applications to encourage users to engage with nonprofit community-based and national organizations. Blackbird's version of the Do Good Channel, like its other content, focused on African American-oriented charities and nonprofits (when compared to good2gether's version), but it did not limit its users to selecting those organizations. Since Blackbird's introduction, sites such as GoFundMe have arisen to provide individuals and nonprofits an electronic space to solicit donations for philanthropic purposes. While there are social websites and services that work to bring together people with like interests, their emphasis is on helping isolated members find others who are like them. Alternatively, web surfers can donate processor cycles to distributed computing projects like Folding@home or unused bandwidth to peer-to-peer applications like BitTorrent. Few of these spaces,

however, focus specifically on philanthropic enterprises dedicated to aiding the Black community.

The features that differentiate Blackbird from Firefox speak strongly to 40A's concept of embedded social networking as an electronic definition of community. The browser encouraged its users to integrate their existing social networks and web services in the application. It sweetened the pot by offering customizable presence and status notifications that allowed users to monitor their social networks while surfing other websites. However, the implementation was not as refined as Flock, Mozilla's variant social networking browser. Flock featured a broader set of social media features, including Facebook Chat, Twitter, Delicious bookmarking, Picasa photo streams, Digg, Bebo, and Xanga access as well as YouTube and Truveo video subscription feeds. Flock even included drag-and-drop capability between the social media pane and the main browser window.

The inclusion of content specifically targeting African Americans layers a cultural definition of community on top of the software / internet instantiation and offers a compelling visualization of the explicit integration of ethnic and technocultural practices. 40A's implementation of the browser is a criticism of the structural inequities of "mainstream" internet content, which privileges the information needs of middle-class white male users. Moreover, Blackbird's incorporation of links to charities and nonprofits also speaks to a communal support model that addresses the implicit affluence of web users (those with time to surf and the wherewithal to afford the equipment) and asks them to aid their identified cultural communities. This was a paradigm shift, first popularized by MoveOn.org and other nonprofit sites, where the internet's pan-location is used to leverage the power of local connections for civic gain. By tying together nonprofits and Black online visitors, Blackbird's Give Back initiative was a powerful attempt to close the digital divide by asking a community to support its own using information technology resources.

Technology as Belief: Online Reactions to Blackbird's Ethos

In the introduction to this text, I discussed Pacey's theory of technology as a triadic entity composed of an artifact, practice, and belief. Popular

conceptions of technology center on the first two pieces, often obscuring the beliefs that power the dissemination and use of the technology. The internet provides a unique vantage point for observing the beliefs that people associate with their use of a particular technology artifact. As the web has matured as a communications platform, weblogs have become a popular feature for articulating viewpoints on any number of personal, societal, civic, social, or arcane matters. They are embedded within an information ecosphere that implicitly and explicitly demands interactivity among software, authors, audiences, and the world. When examining a web event around a cultural object, then, the interactive nature of the web encourages discussions across multiple digital and online spaces. These conversations construct or reconfigure the properties, practices, and beliefs that people bring to their understanding of that object (Nakamura, 2006). As such, we can gain additional understandings about any cultural object that finds an interested web audience.

Social networking services—particularly in their mobile incarnations—are the most visible representations of an internetworked cultural identity bounded by a digital frame. Prior to the meteoric growth of smartphone use (and broadband internet), however, distributed Blackness manifested unevenly across blogging platforms and websites. This was because blogging platforms were conceived of as publishing spaces for individuals who *might* want to connect; accordingly, their search features prioritized topical content over community building. In the early days of blogging, practitioners worked around the individualist nature of these platforms by creating webrings and bloglists,⁹ but as blogging went mainstream, these folksonomic features proved difficult to update and maintain. Still, Black blogger-led endeavors to build out Black blogging communities like the AfroSpear and others should be understood as the first attempts to seed a distributed Blackness spread across hundreds of Black-authored blogs and within the comments of thousands of enthusiast and general-interest mainstream blogs.

While Blackbird did not highlight blog content as a primary information source for Black community content, the blogs analyzed here can be understood as paratexts: the reactions offered by expert users, by expert Black users, and by Black users contextualize the various information needs that the browser serves and provides as a cultural infrastructure for Blacks and mainstream users. Blackbird's launch received a

fair amount of press from technology blogs as well as blogs that featured dialogue on racial issues. To understand Blackbird's reception, I gathered a small set of blogs publishing reviews and reactions to the browser from a variety of perspectives.

The selected blogs are examples of how ideological and cultural factors influence users' technology analyses. They were selected through a purposive sampling of twenty-six blogs retrieved from a Google search using the keywords "Blackbird browser."¹⁰ I created three categories from the results: high-profile (mainstream) technology blogs, Black technology blogs, and general-interest Black cultural blogs. All the blogs published a Blackbird review and include threaded comments featuring responses from the blog's community. To support my claim for a Black informational identity, this inquiry required data evincing conversations that (1) were about Blackness and the digital; (2) were not simply focused on the instrumental aspects of Blackbird's use; (3) involved multiple participants, none of whom were the original poster; and (4) contained multiple threads.

The Blogs

I feel compelled to write a historical note: when I first conducted this research, blogging was at or near its zenith as a Web 2.0 long-form mode of information publishing, consumption, and sharing. Since that time, social networking services have almost completely subsumed blogging content and practices. For example, Facebook (181 million US visitors) is eclipsed only by Google (206 million US visitors) as a space where users routinely visit to learn about the world's goings-on (Amazon, YouTube, Wikipedia, and Yahoo! round out the top six). In terms of longer-form information and news, only the *New York Times* and BuzzFeed crack the top twenty websites visited monthly (as of March 2017; Desjardins, 2017). Updating this inquiry to reflect changes in online information behaviors was never an option, however; Blackbird was an ephemeral creation of its time, and the analysis of the blogs presented here work well as a hermeneutic for understanding not just Blackbird but the World Wide Web, Black technoculture, and digital practice at a specific moment.

Gizmodo, formerly of the Gawker Media Group and now owned by Univision, is one of the most highly trafficked websites—not just

technology blogs but all websites—in the United States on desktop and mobile (Alexa.com, n.d.). The financial success of its mission—providing breaking news on information technology, gadget and hardware reviews, and insight into tech industry culture—reveals much about Americans’ fascination with computers and the internet. For this research, however, I chose two smaller technology websites. The first, TechCrunch—which at the initiation of this inquiry was still owned by its founder, venture capitalist and journalist Michael Harrington—was once one of the most popular destinations for Silicon Valley technology news and views (it has since lost many followers and now is *merely* in the top six hundred most-visited sites in the United States). The second technology website selected is Ars Technica. Ars was chosen because it, like many blogs of the time with journalistic aspirations,¹¹ features news and other stories written in an engaging, semiformal style while encouraging participation and feedback from a highly engaged, enthusiast community. Many of Ars’s contributors hold postgraduate degrees, lending a certain measure of intellectual expertise and authority to the perspectives they bring to their technology coverage.

In terms of viewership, there has never been a Black technology website equivalent to Gizmodo. The closest current comparison is Marcus (MKBHD) Brownlee’s extremely popular YouTube channel of technology reviews, but Brownlee does not feature breaking tech news or cultural takes on technology design and use. The Black tech blogs examined here, Roney Smith’s site and BlackWeb 2.0, represent a less visible (and sadly, even less visible today) strain of technology blogging emphasizing coverage of technology products impacting African Americans. This is not to say that these two websites only focus on African American-oriented tech; rather, they were conceived to address the perceived lack of coverage of technology by, for, and about African Americans. Smith’s blog features a banner image with text (originally in all caps) proclaiming the site’s mission: “Readers of my blog will benefit from my technological experiences, exploits, misadventures, and learn from my mistakes. The topics discussed will not be limited to technology issues alone but since most blog entries are created through my cell phone, sharing opinions about technology will be at the forefront.”

Angela Benton and Markus Robinson founded BlackWeb 2.0 in 2007. Their mission is to redress Benton’s difficulty in finding information on

Black technology entrepreneurial and industry efforts. The site discusses key topics at the intersection of Black culture and technology, including Black media products and digital strategies. Thanks to Benton's acclaim as a digital influencer, BlackWeb 2.0 content is occasionally cross-posted to TechCrunch.

April Davis of AroundHarlem.com achieved fame in the late 2000s for her coverage of New York City's Black community events. Davis's archived "About Us" page mentions that Around Harlem was a national lifestyle magazine—primarily online—focusing on African Americans and people of color. The Angry Black Woman (TABW) blog, whose tagline is "Playing the Race Card since 2005," was founded by K. Tempest Bradford, a speculative fiction author of some renown. Bradford was a notable presence at LiveJournal, where she authored posts on science fiction, fantasy, race, and gender. TABW was a leading online voice among African American websites for its pungent critiques of racism, sexism, and stereotypes in various forms of media.

The chosen blogs are critical of Blackbird's feature set for many practical reasons, thanks to shared beliefs about what information technology in the age of Web 2.0 should do. In this, they highlight constructions of Western technocultural identity, which is shaped by ICT practices and technological determinism. Racial frames, however, also shape these technocultural identities. Of particular interest for this chapter is how, due to the racialized design intention of the browser, the respondents—regardless of racial affiliation—mediate their explanations of racial identity through articulations of information technology. By examining how web users understand technology through their proclaimed cultural affiliations, we can better comprehend how belief and ideology shape information technology use, implementation, and design.

Analysis: Features

I found that the Blackbird feature set triggered discourse about the racial implications of a cultural browser. These discussions were rarely complimentary of either the design or the implementation, regardless of the cultural orientation of the critiquing website and community. Reviewers

tended to focus on an “ideal” browser as a culturally neutral information space for internet consumption—configurable for individual browsing preferences but initially set up to be as generic as possible in order to serve the greatest number of people. By fixating on a browser’s capacity for individualization and personalization, the reviewers’ instrumental approach elides the cultural and ideological nature of the content the browser allows access to.

For example, in his review of Blackbird on TechCrunch, Robin Wauters notes the browser’s capacity to reach culturally relevant content but does not assay whether that should be an incentive for use. This is significant because Wauters also mentions the browser-specific features (e.g., the ticker) and writes that their addition does not seem like a compelling incentive for Black people to download yet another browser; however, he does not go as far as to speculate what features would entice Black browser users.¹² TechCrunch’s commenters, however, pile on to Wauters’s instrumental and ostensibly neutral review by adding racial considerations to their discussion of the feature set.

A commenter called Que notes the lack of in-depth Black cultural content:

One good thing I can see it has a bookmarks [*sic*] to most Historic African American Colleges everything else looks like this was put together by a focus group which was asked a bunch of question and they built it from the results and that way you would never gets things right.

Dentalchicken writes,

Does the browser know the difference in content? Facial recognition for the imagery, looking for definitive slang terms in the textual content?

Jason Jobbs, concerned about the elision of Black-run online communities, asks,

Also, whats [*sic*] with Facebook and Myspace? Where the true Black communities, Blackplanet.com, Nuplay.tv, if they actually had brothers making this software it would reference true Black communities.

Max, writing about perceptions of the lack of Black digital expertise, says,

It's one thing to build CONTENT targeted at [a] particular target audience. . . . It's another thing to build a TOOL that essentially implies that the standard tool (regular Mozilla) is somehow "too smart" "too white" or otherwise not good enough for blacks. That's just insulting.

Concerns about digital segregation also arose in the TechCrunch comments. Around Harlem's April Davis writes,

I don't like filtered browsers because I see it [as] a step backwards in technology. . . . Once you control content through a browser you control access to information.

An anonymous commenter emphatically chimes in from a color-blind perspective:

This is hilarious. HEY GUYS, LETS *[sic]* MAKE A BROWSER THAT HAS A COMPLETELY SUPERFLUOUS FUNCTION! ALSO I REALLY LIKE THE IDEA OF A BROWSER MEANT TO CREATE NEW SOCIAL BARRIERS IN AN AGE WHEN INTERNET ANONYMITY MIGHT ACTUALLY BREAK THOSE BARRIERS DOWN!

Jdb, expanding on the cultural neutrality of color-blind technology use, writes,

No one is going to convince me that Google is white by default unless you want to argue that being simple, quick and useful is "white." LOL. The thing is that from an ideal perspective when a user logs onto the Internet they are starting from a "unified" and "unfiltered" position and choose to navigate toward targeted content. The difference here is that someone has developed a "tool" that controls and filters the "experience" right from the start. They've found a way to create a segregated experience.

Finally, Pat Long writes in support of Blackbird's mission by comparing it to Apple's control of the user experience with Safari:

I am an African American male, have been in technology for over 10 years, and don't see anything wrong with the idea of a browser that serves content that may interest me and my demographic.

When I buy a new Mac, by Safari browser sort of does the same thing. It has a start page and preset bookmarks that appeal to me as a Mac user.

With the popularity of African American culture, I am sure a lot of people will be checking it out. Anyone is free to use it, it doesn't care who you are.

Advertising partners and content relationships seem to be the next natural progression for this browser. Except for not running on a Mac, the initial concept seems fine by me.

Over on Ars Technica, David Chartier (2008) begins his Blackbird review by claiming that the internet created “a largely color-blind World Wide Web.” He comments that Blackbird’s only notable changes from a standard Firefox install are the ticker and a toolbar that incorporates cultural content-oriented features. Chartier also mentions the Blackbird custom search, as it returns results for African American users that would not be returned from a standard Google search. Overall, however, Chartier argues that Blackbird’s feature set is “nothing new” in the vein of targeted browsers. To contextualize this claim, Chartier compares Blackbird to the Flock browser, which he argues for as something “altogether different” from a default browser and a “great all-in-one-tool.”

Chartier’s review deserves praise for his interview of Ed Young, the Black CEO of 40A. He asks Young why 40A did not simply produce Firefox add-ons (at the time, Firefox enjoyed a 21 percent share of the browser market) and appears to question whether Blackbird could be considered exclusionary to whites. Young fields these questions deftly, relating Blackbird’s audience to another highly engaged tech community (Warcraft gamers) and arguing that Blackbird was intended to bring “those people” closer to the sites they are interested in.

In the Ars Technica comments following the article, the audience apes the behavior of the TechCrunch commenters, racializing their responses regarding Blackbird’s feature set.¹³ For example, Murph182 worries that the custom search will be biased against white folk, asking,

If Obama starts doing all kinds of nutty stuff, will a standard search return news articles and criticism and the Blackbird search censor such things?

Davidd adds insult to injury, suggesting that Blacks primarily search online for help with criminal behavior:

So it comes pre-loaded with links to Public Defenders, and tips on how to beat weapons charges. . . . Great.

Rpgspree argues that the browser will prioritize Black culture over “authoritative” information, writing,

If the browser, as the article states, skews results away from potentially more informative and authoritative sources of information in favor of those that are more culture centric, then it really is doing it’s [sic] users a disservice.

Some Ars Technica commenters fight back against the tone of these comments. Oluseyi writes that the browser’s intent is inclusion rather than segregation:

You could argue that the browser is not an “African American browser,” but rather an “African American Interest browser.” Nothing precludes non-Black Americans from using it, and it’s very likely that a large number of its eventual users will be non-blacks.

Stagoleee adds that Blackbird’s intent is to provide specific information to an underserved audience:

The browser developer is saying “if you would like a browser that helps to narrow down content to what our team has identified as having an African American focus, then download/install/use Blackbird.”

Anechoic writes that the long-term sustainability of the product might be questionable, but its ethos is not antiwhite:

Blackbird isn't about "walled gardens" or "separatism"—it doesn't take you to some blacks-only internet, it doesn't wipe your harddrive [*sic*] if a white person tries to use it, it's a product designed to appeal to the needs and wants of blacks. You can disagree with the viability of this model (which I do) but there's nothing wrong with the motivation.

On Black tech blogs, analysis of Blackbird's feature set was seated within a positive communitarian framework even as the observers took an instrumental approach to the technology itself. That is, while mainstream blogs featured many comments slamming the feature set and Black culture, Black tech blogs and their audiences evaluated Blackbird's features from a Black communitarian perspective. For example, blogger Roney Smith has a complimentary yet critical review of the browser. He compliments the RSS ticker but points out that allowing users to access social services they subscribe to within the browser itself yields "no newly created value." Smith adds that because many African Americans access the internet at work or school, Blackbird's browser-centric orientation limits them to access only on their home machines. This criticism is valid given the nature of corporate and institutional IT policies, which seek to prohibit their users from installing unapproved software on company machines in order to prevent viruses or software malfunctions. Smith's other feature criticism is directed toward Blackbird's video channel, which is also limited to in-browser viewing. While noting that the feature represents Blackbird's greatest opportunity for user adoption and growth, Smith contends that if a user found a video of interest but wanted to share it with a non-Blackbird user, that friend would be unable to view the content. While these comments stem from a Black cultural perspective, they are embedded in a pungent critique of TechCrunch's review and of mainstream tech pundits' reactions to Blackbird. Smith's commenters do not directly respond to his analysis point by point; however, one commenter, TGrundy, praises the review by calling it "sensible, rational, technical."

BlackWeb 2.0's initial appraisal of Blackbird's feature set, written by frequent contributor Markus Robinson, is positive. Robinson briefly mentions the ticker, video channels, and Blackbird's search engine under the premise that they provide a tailored experience for Blacks that was

previously hard to find. He enthuses about the possibility of Blackbird allowing developers to customize add-ons through the import of Firefox plug-ins from preexisting Mozilla configuration files. A follow-up BlackWeb 2.0 post on Blackbird written by a less prominent contributor named Rahsheen delves more deeply into the browser's unique features. He compares Blackbird's Grapevine feature to Digg while knocking it for being accessible only through the browser. Rasheed also remarks on a feature other reviewers missed: the Blackbird Local business directory. This feature was designed to address the enormous difficulty Black information seekers encounter when searching for Black-owned businesses online. Neither print directories, search engines, nor review sites highlight "culture" as a prominent search criterion; thus Black consumers must rely on word-of-mouth to find businesses catering to their needs. On a follow-up post published to his personal blog, Rahsheen positively reviews Blackbird's video channel and is encouraged by the browser's stance on philanthropy. However, he argues that Blackbird is not innovative because it uses preexisting features that power users can install on their own as plug-ins, themes, and custom Google searches. Rahsheen also brings up the idea of the "browser as information portal," which was a point of contention for both of the Black general-interest blogs. He contends that a browser oriented toward information of interest to Black people limits access to the wider, mainstream internet while potentially stifling Black innovation and interest in creating online content for audiences outside the Black community.

Blackbird's feature coverage by BlackWeb 2.0's writers consisted of mostly instrumental analyses of features or interface elements. However, their appraisals of Blackbird's utility as a digital artifact also incorporated perspectives on mainstream technology website responses to Black technology efforts. This leads to my arguments for Black technology blogs employing a communitarian frame to understand the browser. For example, Robinson closes his review by arguing that Blackbird's identity affiliation is not a separatist or segregationist approach; it only differs from Flock (and Gloss) in that it places Black information needs and Black culture at the forefront. Similarly, Rahsheen asks, "Do we gain anything by gathering all of this useful and relevant African American information only to lock it inside of a walled-garden, only accessible via a single niche browser?" These perspectives signal an awareness of

the diminished visibility of Black digital content and the concomitant antiblack dismissal and perception of the value of Black information to Black online users.

Over on the Black general-interest blogs, K. Tempest Bradford of TABW criticized Blackbird's hijacking of the "default application" status for internet access. In her review, she argues against the browser as a targeted marketing application intended to serve a demographic to advertisers:

If someone wants to de-marginalize news relevant to Black people, videos relevant to Black people, and social networking/bookmarks relevant to Black people, that's great. I am all for it. But I think doing it through a "Black" browser isn't terribly affective. Or, I should say, it's effective from a marketing standpoint, but from a user standpoint, not so much. What if I like my current browser?

In TABW's comments on the analysis, however, the audience members offer a different take. Jermyn asks, "When will Black innovation avoid criticism and get the respect it so much deserves?" Ben notes that culture can predetermine online behavior:

Perhaps Mozilla will hire some Black developers (these 3 gentlemen?) in the future and bring more culture-based (not necessarily race) ideas into the way we use the internet. . . . Take a look at the way the Japanese use the internet. They do not use URIs, only "search" to get to websites. That has greatly influenced the way we are using Firefox and other browsers over the last year.

Balabusta adds that mainstream search engines obscure Black search results through noise:

It is true that if one is very interested in African-American perspectives on news and social issues, one has to be savvy in the use of search engines, which do not cough up those results without good Google-fu. . . . As a white person with an anti-racist ideology who is interested in reading from [a] Black perspective, I would have downloaded and used the browser just out of curiosity.

April Davis of Around Harlem included her commentary on the browser on TechCrunch as part of her perspective on Blackbird's feature set. She remarks that customized searches and developer-implemented filters are counter to the internet's inherent properties of open information access and could be considered segregationist:

As a website publisher, Blog-AroundHarlem.com, I totally believe in, support, and understand connecting with African Americans online.

However, I have a problem with using and suggesting that a technology product is superior because it's geared towards African Americans.

Surely, with the filtering process, my content is being limited.

There are several reasons for websites geared towards African Americans, and other niche populations, but I feel that this must be done in a manner that engages and supports without making products/services subpar because of limitations and tech sacrifices that are made for revenue generating purposes.

On her blog, Davis begins by unequivocally stating, "I don't need anyone helping me find Black content." She also argues that Blackbird's implementation reveals a lack of innovation: "(Skinned = same technology with custom user interface.) Bad idea. Very bad." Davis then gets to the heart of her instrumental critique of Blackbird: "Technology can't be African American. Or, any other ethnic/racial group." She continues by asking,

How is my web experience enhanced by letting Blackbird filter information through their browser? By visiting African American sites "they" select? Who are "they"? What qualifies them to select African American content? Any Black Studies PhDs or "African American experts" affiliated with the site to determine "the best content"? What is their criteria for acceptable content? Is there any?

Davis's query proffers an individualist and color-blind argument for Black heterogeneity set against a backdrop of American racial ideology's perception of the Black community as an undifferentiated, low-class mass. Moreover, this query also sharply criticizes information

technology's cultural competence for defining Black digital practitioners and "acceptable content." Her structural criticism about the culture-neutral orientation of technology belies her earlier statement about being able to find cultural content using the same technology, given her status as a power user. Davis's view possesses validity from experiential, material, and instrumental perspectives—a browser *is* ostensibly designed to agnostically display content—while glossing over the ideological nature of Western communicative artifacts and the content they disseminate.

Around Harlem's commenters picked up on Davis's argument and added some additional considerations and caveats. Allison writes about the possibilities of online segregation:

Instead of pushing for major browsers or websites to feature AA interest [sic], separate browsers and websites are built.

Tiffany adds,

Blackbird is basically catering to a niche. . . . It's certainly not taking America back by offering a web browser that caters to a particular group of people.

DryerBuzz counters with appreciation for 40A's attempt to provide a curated Black online experience:

If there are two products and one is provided with me distinctly in the demographic, its conducive to my uniqueness (being that I'm so unique), then I'm gonna go for it. . . . In my browsing experience I don't want to see watered down diversity with a few curly heads pictured and peppered here and there. While my brilliance will allow me to conform anything to my uniqueness, I appreciate those who at least attempt to make me a priority.

Some Black tech bloggers and enthusiasts dropped into the comments to support Davis's perspective on Blackbird limiting the internet. Rahsheel (BlackWeb 2.0) compares Blackbird to a content-limited version of Twitter, arguing,

How useful would Twitter be if you could only see tweets that have #blck in them? You could only follow people who use the #blck tag. Everyone else disappears. That sound cool? Ok, now do the same thing with the entire Internet. Does that work for you?

Karsh, of BlackGayBlogger.com, said Blackbird was commercially unsustainable, writing that the browser was “as inane and untenable a concept to bring to market as any other web product or SaaS [sic] which tries to commodify African-Americans.”

The Around Harlem debate over the feature set reveals an urgent concern over how a racial identity frame could limit an ICT’s usefulness. This concern is remarkable precisely because of the linkage between Blackness and limitation, where the internet’s value is somehow lessened because users seek Black content. Note that the critics of Blackbird’s feature sets—regardless of venue—deride the browser because they assume it will *only* allow access to Black content, which is contrary to the browser’s intent and design. Blackbird allows users to specify multiple search engine plug-ins and websites, just like Firefox. Thus while the objections are ostensibly directed against the browser’s limitations, the limitations discussed are primarily ideological. That is, the objections derive energy from a white racial framework, where Blackness signifies a lesser state of being; an all-Black internet is argued as being less valuable than an internet where Blackness is (at best) an insignificant presence in a universe of content supporting a white ideological frame. Blackbird’s highlighting of African American content is seen as an imposition on the universal appeal and beliefs of the internet’s informational “neutrality.”

Analysis: Browsers and Beliefs

Up to this point, my inquiry into Blackbird as an information technology artifact has focused on discourses about the instrumental and material aspects of the browser: the chrome, the interface, and the various functions. These discussions evaluated the efficacy and design shortcomings of the browser’s features as measures of whether they addressed an ideal Black information user. This is largely in line with my theory of Western technocultural belief, where progress and modernity are thematic concerns informing technology design and use.

I have long argued that information technologies have a racial aspect—moreover, that racialization only clearly manifests when one takes seriously Pacey's (1984) argument that all technologies have a belief aspect. In other words, the default belief of many is that technologies are value-neutral. This claim is extraordinarily well supported when examining the responses to Blackbird as a racial apparatus and belief structure on the mainstream technology sites. Given the majority-white demographics of the tech communities at TechCrunch and Ars Technica, it was surprising to find so many commenters denigrating or defending the internet as a social structure based on the perceived limitations of a Black informational identity.

While both mainstream online communities are considered information technology interest sites, Ars can be characterized as more of a professional community, whereas TechCrunch is an enthusiast and tech industry site. These characterizations help determine each site's discursive ethos. Because Ars is professionally oriented, moderators can (and do) openly intervene in conversations by closing threads and banning commenters for conduct that is unbecoming the site. TechCrunch has tried a number of comment-moderation platforms to manage their community; at the time of this research, they were using Facebook (and its “real name” feature) in an attempt to rein in their commenting audience.

On Ars, JChops goes directly to racist stereotypes to contextualize Black internet user behavior:

Blackbird browser? Next thing you know, they'll have their own computer company. Instead of Apple, it'll be Watermelon. And the CEO will be Steve Jobless. And it'll run OS X BLACK PANTHER.¹⁴ Hell, the browser can send its user agent string as “Blackbird” and you could tailor your site to shovel KFC ads and overpriced futon furniture at them. Can you see the 404 pages for this thing? Instead of “404,” you'll get “Nigga, you isn't makin' no sense!” I'll be here all week.¹⁵

I Palindrome I, an Ars Technica managing editor with more than seventeen thousand posts, apparently does not see the humor. They quote JChops's post and add, “Actually, you won't.” Since I Palindrome I has the power to remove offensive commenters, it is entirely possible that they banned JChops for this unnecessary insight.

I have characterized Ars's and TechCrunch's commenting communities as largely white, which gives short shrift to the nonwhite commenters who frequent these spaces. For example, another commenter on Ars, stagolee (a reference to a mythical Black hero), writes about the consequences of acknowledging race online:

As an African American my senses get prickly when posts like this pop up on race-neutral sites. I can be confident that there will be a rash of the following: "If white people did this the world would end!!!" "But we're nice to Black people now, why do they insist on still being blackity Black black?" "Are the dialog boxes in jive talk?" Some of you are thoughtful, but some others here are right and proper assholes who are not worthy of an intelligent response.

Of the sites collected for this research, TechCrunch had the largest number of comments. The site's technoenthusiast and business-friendly ethos attracts a narrow range of highly engaged, technically proficient internet commenters. In many cases, their activity consists of complaining about the shortcomings of TechCrunch's technological expertise or the perceived biases toward certain manufacturers. There is some measure of the complaining ethos apparent in the comments about Blackbird, but the discourse on display at times pushes the limits of civility thanks to the rupture provided by Blackness. One comment by a thoughtful contributor named Nigger is simply the word *NIGGER* repeated 1,681 times, which coincidentally happens to occupy two and a half screens of text. This tactic is as old as chatrooms, where trolls would seek to disrupt discourse by not allowing anyone else to participate.

If I were to characterize TechCrunch's discourse regarding the Blackbird browser, I would say that many argued for the internet as an artifact promoting a color-blind ideology (from Blacks and from whites). The user Ben W offers a thorough example of color-blindness in tech, deprecating race-as-culture in the process:

Silly? Yes. Racist? No.

People self-assign to the groups, and there is no advantage gained by neither its use nor disuse. It may just be a bit segregationist, but Marcus Garvey would approve.

People choosing to identify on the comments that their comment is from a Black person just shows how little race matters on the internet, and how it only becomes an issue when someone pushes it. Anonymous exists in a sphere beyond race. It does show a scary trend that now people need to share their race with strangers to be considered relevant.

The mere existence of this browser has much less effect on racist tensions than making people feel guilty for trying to identify with their culture. That being said, race isn't really a good indicator of culture, especially for the tech crowd (early adopters or people willing to try new web browsers). It just suffers from poor naming a few lame features that use "black" instead of "urban" or some other equally lame non-racial identifier.

Other TechCrunch commenters have no problem displaying their racial animus. Their arguments draw on a technocultural frame promoting (racial) progress, modernity, and a social status quo that implicitly continues white domination. For example, L. applies a "reverse racism" fallacy, writing,

I agree with many people here. To be honest, I think this is the most racist thing I've seen. If this was whitebird, it would be hit with thousands talking about racism, but because it's for african americans it's not racist at all? This isn't a biased opinion considering I'm latin american, just in case you were wondering.

Loris directly links Blackness, crime, and information seeking:

Um. . . . What news does a Black person want to hear and what makes that any different than the news the rest of America hears? Let me guess, they're going to bring up articles on local gang shootings and the newest rap cd's? Give me a break. What makes ANY demographic so different that they'd need their own web browser. Corporate America is getting out of hand with this.

Commenter lola applies stereotypes of Black laziness to the browser:

I guess since it's "black" it will never work 😊

Whereas yeswecan, arguing from a Black-oriented color-blind perspective, rails against the implied segregation from mainstream information sources:

Its like the perfect tool to help reinforce modern day Black boundaries and limitations. Brilliant. Its the kind of condescension only the kkk could consider backing. Fortunately it will fail. Anyone with an ounce of dignity would shrug this off. I am not a target market for your bullshit. I am a people. And my color is not your business. Build a website for this kind of content is fine. But i arrive there and depart anonymous. The advertisers can bite it.

This is not to say that incivility characterizes TechCrunch's discourse community; there are some excellent comments excoriating the racist attitudes on display. For example, NO ID demurs from using Blackbird, drawing on an individualist Black perspective, but still supports the browser:

Naaah, I won't use this browser. The same way I won't go to a Black hair salon (since I wear locs) the same way I won't go to a Black club, listen to Black radio, watch Black cable channels, go to Black bookstores or join a Black sorority or fraternity.

Can't see why any of the above would be necessary . . . yet they all exist.

I downloaded the browser and love it. The news ticker alone is worth it. Instead of having to go through zillions of content aggregators or RSS feeds [sic], I can have content at my fingertips which helps me in my job.

People on this board remind me why even in the midst of an economic recession and with jobs hard to find, I'd almost rather go back to working for Black media than having to work with folks whose attitudes (and I'm sure anonymity helps) reflect the folks on this board. I'm going to check out this sister's Black2.0 website so thanks for that info, as I'd rather be there with people that I likely don't have to explain the 400 odd years of racism in this country nor defend the fact that actually I love and revel in Black culture. I don't want to be "mainstream," I want to be myself. And that is why despite the naysayers here, amongst non-tech heads, the browser is likely to be successful.

On both Ars and TechCrunch, counterdiscourses featuring social justice themes are deployed by a number of commenters. They are remarkable in the amount of thought and detail put into them; some are nearly a full page in length. These remarks, however, are far outnumbered by comments featuring color-blind ideology and others that use the internet as a racist framework. For example, Sick of Ignorant Racists debunks color-blind ideology while noting its implicit racism:

Equality does not mean that anyone of any race need[s] to leave interests unique to their culture at the door. Ironically, it's only the worst type of racists who try to sell the idea that this is necessary for eliminating racism. Those who truly celebrate equality celebrate the right of every group to express the uniqueness of their culture—without being so threatened that they have to resort to petty namecalling and thinly (VERY THINLY) veiled racism.

Amber is not sold on the idea but joins in to contextualize the furor over the tech within the longer arc of civil rights struggles in America:

While I personally think this is a stupid idea (though the news ticker is genius) the comments here have made me sad. I sit here and say wow you know just 40 years ago my grandmother was getting spat on and getting rocks thrown at her for being Black but today look how far we have have come . . . and then I see really not that far when I see this kind of stuff.

A Black Avatar of Digital Civil Rights

Finally, at the time, TechCrunch was home to one of the most peculiar examples of the internet as a racial apparatus I have ever come across in my research. Several commenters invoke President Barack Hussein Obama to contextualize their responses to the features and intent of the Blackbird browser. OoOo writes,

Obama, Blackbird . . . are whites a minority now? Btw not racist in the least bit but theres [sic] too much African American pride going around nowadays.

Jdb comments,

To me filtering the experience from the start is antithetical to this dream. I don't get it and don't see how anyone would want this in this day and age especially right after we've elected a Black president which demonstrates how far we've come to achieve this [MLK's] dream.

Obama is conjured here to demonstrate the ongoing degeneracy of an American society that caters to the needs of African Americans. Moreover, Obama's name is also invoked to show that America has become postracial and that our browsers should reflect this supposed state of racial comity. Blogger Roney Smith links Black respectability, Black radicalism, and cultural technology design:

Currently Blackbird has a Civil Rights mindset when a Barack Obama approach is preferred and welcomed.

Obama can be understood across these examples as an avatar for the Black digital in the American tradition both as a sign of technological progress and as a component of Blackness and deviance.

Laying the Body to Rest: Analysis Summary

In retrospect, the Black bloggers' and commenters' noncommittal responses to Blackbird outline several possibilities for Black cyberculture. Several describe their blogs and websites as interventions—as acts of resistance against mainstream technology sites that rarely cover material of interest to Black technology and computer enthusiasts. In this vein, TABW and Around Harlem's reviews of Blackbird promote positive Black cultural values even as they strongly criticize the technological and cultural limitations of the browser. Their reactions to the guided nature of Blackbird's interactions with the web conflate the libertarian, individualistic rhetoric of internet use with a Black cultural resistance to white racial ideology's assignation of Black identity to the nadir of modern society.

On the Black blogs—both tech-oriented and general-interest sites—reviewers draw heavily from a Black communitarian perspective

to contextualize their findings. Indeed, I was impelled to create a Black technocultural matrix in part because these Black websites articulate nascent rationales for Black technology use predicated on Blackness as a norm for information use and behavior. The Black technocultural matrix is responsive (and often resistant) to Western technoculture given that Blackness is a syncretic creation of Western imperialism and thus inseparable from Western conceptualizations of white identity. Blackness, from the perspective of the Western technocultural matrix, can be understood as the antiblack libidinal economy of Western whiteness and technology.

TABW's and Around Harlem's interpretations of Blackbird's potential, however, give weight to my arguments about racial identity—that is, their elucidations are Black respectability-based versions of Western technoculture's antiblackness formulations of Black behavior and culture. Both groups view Blackbird's approach as segregationist. The mainstream tech blog commenters conjure up images of Black pathology (e.g., weed locators, twenty-four-inch rims) while arguing that culturally oriented approaches are divisive and racist. Similarly, the Black cultural bloggers (and their audiences) worry about the technocultural consequences of being "left behind" or segregated from the wider economic and technological possibilities of online information through Blackbird's selective focus on Black cultural websites and media.

Discussion

Given the increasing levels of complexity in our information and communication devices and the interpenetration of internet-hosted content into our everyday lives, we often have little time or energy to reflect on how ICTs will improve our lives. Upon its introduction, Blackbird made an astonishing claim: it would curate a heretofore unconsidered experience—an informational online Blackness for personal improvement and empowerment. New technologies—and browsers are no exception—claim to be faster, shinier, and more customizable; as a "niche" browser with new features designed specifically for Black users, Blackbird claimed to be "all that and then some." However, Blackbird's reception marks a rupture in American communicative infrastructure, achieving a level of scrutiny and critique that other browsers have never

had to undergo—namely, the open articulation of libidinal energies and beliefs about appropriate technology use and appropriate technology users. For example, this inquiry marks one of the few times in my personal recollection that a sitting president was used to exemplify the power *and* the failure of a computational artifact and its constituent networks.

In the examination of a technological artifact and the practices associated with it, beliefs about American technoculture invoked in the blogs examined are made apparent. The niche community targeted by Blackbird—the 13 percent of Americans collectively labeled “African Americans”—occupies a disproportionately large mindshare in American culture, much of it pejorative and discriminatory. Some comments reveal the libidinal energies of anger and despair over the perceived erosion of white hegemony and American culture. They show that technocultural beliefs about the web as a color-blind space are, in truth, markers of whiteness and its control of the future. Indeed, several commenters are outspokenly racist at a time when *postracial* had become the watchword of the day. Many others reveal confusion at Blackbird’s temerity in imposing a Black cultural framework on ostensibly neutral information and communication technologies. These comments, made in online spaces dedicated to technorationality and its adherents, significantly outnumber reasoned responses to the browser made by other commenters.

My analysis emphasizes the role of paratexts in articulating beliefs about technology use. Blogs, where audience members become coauthors in the contestation or maintenance of arguments presented by online content, illustrate the influence of sociocultural factors on the publication of and participation in web content. These websites can be configured to provide minorities and women the opportunity to populate and maintain discursive spaces that may differ from (or support) mainstream attitudes and beliefs. Blogs’ public nature and ease of access have expanded the scope of personal participation and expression and, not incidentally, contributed to the construction of online identities.

I find that the blog-based expositions of criticism, reflection, and analysis of everyday objects (like internet browsers) reveal how technology users employ tech to help process their internal identity formations. Their articulations of identity in a public networked space make

apparent the importance of exteriority to the formation of the self and to conceptions of race. The internal formation takes place in the blog's intimate reveal of the author's feelings about a particular worldview. The external formation—that is, the role of the “not-I” in defining identity—becomes visible through the social interactions between the blog's author and commenters and the electronic interactions embodied in hyperlinks to social networks, externally hosted media, and other content.

Conclusions

Langlois (2014) argues that technological culture depends on the value placed on access to and use of the products of technology. Blackbird's formulation, however, demurs from technocultural values of impersonality and pragmatic rationality to instead proffer information as a communitarian, cultural endeavor. Blackbird's feature set and community orientation argue for Blackness as a collective identity—one that troubled some of the Black tech bloggers—and also for the vanilla browser's aggregation and presentation of information as a formulation of white communal identity even with the attendant personalization possibilities available to users.

Given these possibilities, I contend that the Blackbird browser can be understood as a digital manifestation of double consciousness. Rawls (2000) contends, “Double consciousness has to do with differences in the experience of being an individual in [the] two communities, and not with marginalized social roles within a single community” (p. 244). Blackbird's execution of internet access and information provision illuminate content that is reflective and responsive to concerns of Black everyday life even while it mediates that content through an artifact that “take[s] the role of the white ‘other’ towards the [white] self” embodied within information “without any fundamental contradiction” (p. 244) or reflection.

April Davis's powerful question regarding the validity and authenticity of African American online content is the basis of my claim for Blackness as an *informational identity*. This term is meant to reconfigure Black discursive identity inclusive of Black digital practice—that is, the enactment of Blackness through the mediation of computational

and digital technologies. These computational and digital aspects are not traits of Blackness per se; they are culturally inflected curatorial, archival, data, and metadata practices needed to build out and maintain Black digital spaces and communities. Informational identity differs from discursive identity in that it places the medium on a near-equal footing with the content of the discourse; in many ways, informational identity allows one to capture the nonverbal components of Black digitality (a la signifyin' discourse) necessary to evoke online Blackness.

Blackbird's design and reception offer potent demonstrations of the intersubjectivities between technological capacity and racial identity. The browser—a banal technology if ever there was one given its invisibility as a mediator of information—structures the internet as an individual endeavor. That this individuality maps onto the accessibility of and access to content that is amenable to the informational pleasures and needs of whiteness is not accidental. The internet's command and separation of space, time, and communication is the latest iteration of modernity's imputation of the *transcendence* of white racial identity, particularly with respect to enterprise, rationality, and command of the earth itself (Dyer, 1997).

Blackbird ruptured Western technocultural belief in its formulation of Blackness as a normal internet identity even as its reception revealed the connections between white identity and technical capacity. Blackbird's efforts to make Black internet *content* visible to Black *users* revealed beliefs about whiteness as the default racial identity associated with internet use and design, as demonstrated by proficient white users on enthusiast blogs like Ars Technica. Blackbird's release also showed that technorational values represent a racialized libidinal economic perspective on information access and use even as it proved that these values are not the only available perspectives.