COMMENTARY

More than Skin Deep: a Response to "The Whiteness of AI"

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Abstract

This commentary responds to Stephen Cave and Kanta Dihal's (2020) call for further investigations of the whiteness of AI. My response focuses on three overlapping projects needed to more fully understand racial bias in the construction of AI and its representations in pop culture: (1) unpacking the intersections of gender and other variables with whiteness in AI's construction, marketing, and intended functions; (2) observing the many different ways in which whiteness is scripted, and (3) noting how white racial framing exceeds white casting and thus cannot be undone by more diverse and inclusive hiring (or engineering). Our techno-utopian fantasies, I conclude, are morally suspect in ways that go beneath and beyond the white plastic covering on robotic bodies.

Keywords AI · Robots · Whiteness · Race · Gender · Colonialism

In "The Whiteness of AI", Cave and Dihal (2020) describe and interpret the whiteness of AI as produced by engineers and in popular culture. Observing the white surface materials that cover humanoid robots, the white voices of chatbots and virtual assistants (VAs), and the Caucasian features of AI as portrayed in stock images on the internet and in (predominantly US) film and television, the authors ask: Why is AI predominantly portrayed as white? Cave and Dihal offer three answers. The whiteness of AI may reflect (1) the whiteness of its creators; (2) Eurocentric portrayals of intelligence as white; and (3) white hope that people of color will become unnecessary, even as servants.

Cave and Dihal's work is an important contribution to an expanding literature on racism and AI (see, e.g., Atanasoski & Vora, 2019; Benjamin, 2019; Noble, 2018, Precarity Lab, 2020, Rhee, 2018). Unmasking the whiteness of AI, as Cave and Dihal do, is important. So too is the larger project of decolonizing AI, of which recognizing racial bias is a part (see Mohamed, Png, and Isaac 2020). In response to their call for "further investigation" of their interpretations, I offer an intersectional

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analysis of the racialization of AI and, relatedly, closer attention to the symbolic and practical functions of AI. My comments gesture toward the need for decolonial strategies beyond racial diversity and inclusiveness.

1 The Gendered Whiteness of AI

Humanoid robots are frequently stylized with white materials and/or Caucasian features which, Cave and Dihal argue, reflects a tendency for white designers to create products in their own image. This is plausible. Yet a more intersectional analysis of AI's whiteness reveals that AI designers are creating products not in their *own* image but instead in the image of (idealized) daughters, wives, secretaries, and assistants (Strengers & Kennedy, 2020; Wosk, 2015).

Many white robots are feminized. Cindy Smart Doll and My Friend Cayla are not merely "blond-haired and blue-eyed"; they sport ponytails, pink shirts, frilly socks, shiny shoes, and names marking them as white *girls*. Likewise, Sophia's name and form mark her as a white *woman*. Her torso suggests breasts and hips, her arms and fingers are slender; she wears eyeshadow and lipstick. In the photo Cave and Dihal share, she wears a soft lacy blue dress; the fabric is draped in an "X" pattern drawing attention to her "breasts" and a black band accentuates her waist. Her creator, David Hanson, claims to have modeled her features "in part after Audrey Hepburn and [his] wife" (Greshko, 2018).

Less humanoid in form, Kismet's blue eyes and pink ears connote whiteness as Cave and Dihal suggest; its full, bright red lips and high-pitched voice further suggest femininity. In keeping with Cave and Dihal's "in one's own image" thesis, Kismet (created by Cynthia Breazeal) replicates the gender of her creator. While more androgynous in build, the use of male pronouns to refer to Nao, Pepper and Care-o-bot (all created by men) likewise suggests gender replication. Yet, the primary character traits of these putatively male robots (emotional intelligence, empathy, helpfulness, childlike innocence, and subservience) are those more often associated with normative white femininity than with normative white masculinity.

Most chatbots and VAs are gendered as female. Cave and Dihal discuss ELIZA (a therapist chatbot) and Siri (Apple's VA), both of whom have female names and voices. We could add to this list: Jess (a robot therapist), Ada (used by Shopify, Mailchimp and others), Alexa and Cortana (VAs for Amazon and Microsoft). In addition to default speech patterns identifiable as "standard" US English, the voices of these assistants are soft, soothing, gentle, and patient. Their vocalization "fits" their function; their whiteness marks them as reliable and trustworthy, while their femininity marks them as attentive, caring, and subservient.

In contrast to feminized white robots, chatbots and VAs, most stock images of AI depict white *male* robots. Fourteen of the eighteen images that top Cave and Dihal's Google search for "artificial intelligence robot" feature pronounced brows, wide-set eyes, square jaws, and broad shoulders. (Four are more childlike.) None wears makeup, decorative accessories, or clothing of any kind. None smiles or invites engagement. All look deep in solitary thought. Several strike a pose reminiscent of Rodin's "Thinker" with their chin or forehead resting on their hand. These images of pensive

male robots illustrate a starkly gendered contrast between how AI is *imagined* and how it is, in fact, *engineered and marketed*. Journalists, bloggers, and philosophers imagine AI as autonomous, solitary, and focused (a portrait of white *male* reason). Robotics firms, on the other hand, are developing and marketing products to interact with consumers in homes and businesses, machines that appear sociable and emotionally responsive (a portrait of white *femininity*).

Today's AI are "extensions of feminized labor serving surveillance capitalism" (Moran, 2020, 2). A fuller explanation of this phenomenon would trace the ways in which contemporary deployments of white femininity to gather data replicates the historical deployment of white womanhood to advance colonial projects of domination and expansion (see e.g. Smith, 2015).

2 A Variety of White Scripts

Cave and Dihal note that AI in film and TV have, until recently, been largely depicted as white, citing white actors playing AI in *Terminator*, *RoboCop*, *Blade Runner*, *Ex Machina*, and *Metropolis*; white bodied robots in *I, robot*; and white voice actors in *2001: A Space Odyssey, Her*, and *Futurama*. They link Hollywood casting decisions to Eurocentric ideals of intelligence as white. An intersectional analysis reveals that different scripts invoke *different forms of whiteness*; not all whiteness is equally intelligent, and not all whiteness is equally White (Kindinger & Schmitt, 2020; Omi & Winant, 2014, Roediger, 2018).

Unlike the stock images of white AI earlier discussed, representations of AI in film and television exhibit gender and other forms of diversity. These diverse representations tend to enact scripted stereotypes, however. Female AI often play the role of femme fatale, seductress, or love interest (e.g. *Metropolis*, *Ex Machina*, *Her*). In family comedies, female AI are cast as mother (*Smart House*), child (*Small Wonder*) or maid (*the Jetsons*). In contrast, in sci-fi films such as *2001: A Space Odyssey*, *Terminator*, *Robocop*, and *I, Robot*, male AI are combatants, warriors, and resistance fighters. In *I, Robot*, the mastermind AI behind the robot uprising is female (V.I.K.I.). But it is rare for female AI to hold the fate of humanity in their hands. And when they do, it is almost always tied to their role as seductress ("false Maria" in *Metropolis*, Niska in *HUMANS*, Maeve in *Westworld*).

Hollywood may also use whiteness to convey innocence. Like the OS at the beginning of *Her*, machines at the early stages of their learning are characterized by wonder and curiosity. Child AI (e.g., David in *A.I.*, WALL-E and Sam in *HUMANS*) exude vulnerability; humans feel protective of them. Similarly, aging, outmoded AI evoke human compassion; like Odi in *HUMANS*, they malfunction and are at threat of being permanently discarded. Both young and old AI represent disability (rather than normative superiority). Young AI still learning to read human emotions are frequently read as autistic. Older AI suffer memory and other cognitive, as well as mobility, "deficits". Some white AI isn't intelligent.

Some white AI isn't even white. In *Metropolis*, the "false" (robot replica of) Maria is marked by Orientalist tropes. Ultimately burnt at the stake, fake Maria appears as the whore of Babylon, riding a many-headed dragon and flirting in the

Yoshiwara club (alluding to Tokyo's red-light district). While her *skin color* is the same, the robot Maria is depicted through an anti-Semitic lens that contrasts to the Aryan, Christian presence of the real (human) Maria. Schwarzenegger's character in *Terminator* also misses the mark of idealized Whiteness. The title character—an android killing machine sent to murder the prospective white mother of a white child who will save humanity—is a "dark" character, cast in the shadows of night and often surrounded by dark metallic androids whose eyes, like his, glow red. Schwarzenegger himself was often cast as a grotesquely muscled "Other" in Hollywood. Like *Conan the Barbarian*, *The Terminator* is less about white intelligence than it is about what might happen if (morally superior, white) humanity is overtaken by the (morally inferior, dark) savages.

White AI in film and television reveal dominant cultural scripts about idealized (white) forms of (hetero)sexuality, (nuclear) family, workforce productivity, governance by force, and (hierarchical) social order. These morality tales about humanity are only partially and sometimes not even about white intelligence. A more complete exploration of the scripts of white AI in pop culture would trace how diverse forms of whiteness play diverse roles. A decolonial analysis would also explore how fantasies about the future replay Eurocentric historical narratives about the colonial past.

3 Non-White AI: The Limitations of Diversity and Inclusivity

Mentioning *HUMANS* and *Westworld* as recent "attempt[s] to address [the whiteness of AI] with AI characters evincing a mix of skin tones and ethnicities" in their "large casts of androids" (694), Cave and Dihal imply greater racial diversity in the depiction of AI might address the "white racial frame" (Feagin, 2013) through which AI is imagined. But white racial framing exceeds white casting. And racial diversity isn't decolonization. *Star Wars* includes an iconic Black cyborg (Darth Vader) whose raspy voice is performed by a Black actor (James Earl Jones). This racialized casting of the dark side of The Force upholds, rather than disrupts, the tale's white—indeed, *imperial*—frame. Similar considerations pertain to *Futurama*. Built in Tijuana and described as an "alcoholic, whore-mongering, chain-smoking gambler", Bender (BB) Rodriguez is a robot whose defects invoke stereotypes of working-class Mexican machismo and Mexican-made products as substandard. Cave and Dihal criticize producers for giving the part to a white voice actor (John DiMaggio). But giving Bender's part to a Mexican actor would *not* dislodge the white racial frame. Similarly, the whiteness of *Ex Machina* is evoked in its Orientalist depictions of Kyoko. The geisha-like personal servant and sex slave to the robotics company CEO, Kyoko, is instrumental in destroying the female AI's captor and abuser; yet she remains voiceless and servile to the end, dying while cleverly helping Ava escape.

In contrast, *HUMANS* and *Westworld* both explicitly critique racial techno-capitalism. *Westworld* is set in an American-style "Old West" themed vacation destination populated by humanoid machines programmed to fulfill the desires of park guests—desires that include rape, murder, and pillage. As Westworld expands

eastward, guests are offered imperial adventures featuring Orientalist fantasies in India and Japan. The racial stereotypes—pioneer white woman, Black madam, Japanese geisha, Hispanic bandit, stoic Indian, Japanese warlord, etc.— overtly *reveal* themselves as made for white consumption and designed by and for the white, male imaginary. *Westworld* is a commentary on white desire and the imperial will to subjugate, exploit, and literally dehumanize/objectify the "Other" for one's own pleasure (the guests) and profit (the designers and owners).

In *HUMANS*, AI offers more mundane forms of personal service. Humanoid AI include an Asian female nanny, a Black male gardener, a white female prostitute, white home health aides, and a host of other domestic servants. In *Westworld* and *HUMANS*, AI becomes conscious, regaining repressed memories of exploitation, oppression, and abuse. And in both series, as the AI awaken, they resist their subjugation, both individually and collectively, often violently. Importantly, both series expose techno-utopian futures as mimicking a colonial past—a White imaginary in which AI provides emotional, sexual, and domestic service and entertainment on demand for those who can afford it and with little concern for those who are dehumanized by these profit-making ventures.

4 Moral Cover-ups

The techno-utopian dream embodied in robotics marketing is one in which care can be automated and outsourced. Frauenhoefer's (German) Care-o-Bot assures seniors it "will not only care for you but about you". Gatebox's (Japanese) augmented reality characters promise to "provide companionship" and "emotional support" to young professional singles; Amazon's Alexa promises to make our lives "easier, more meaningful, and more fun". Cave and Dihal argue these fantasies—of a life of automated ease—reveal white desires to "remove people of color, even in the form of servants", noting that "interact[ing] with non-White servants [is]... considered a 'dirty job'" (698). White AI may facilitate a clear moral conscience as well as a Whiteness unsullied by "offensive physicality" (699).

Do white folk find interacting with non-white servants distasteful? Probably. Is this because whites view people of color as literally dirty (unwashed, polluted, diseased) and thus a potential source of contamination? Perhaps. Can white AI facilitate a clear moral conscience for white folk? Doubtful. The intractable threat to Whiteness posed by interactions with non-white servants—whether human or non-human—is to the *moral* purity of Whiteness. As Cave and Dihal observe, the dystopian trope of slave rebellion as featured in *Human*s and *Westworld*—and precursors such as *Ex Machina*, *I, Robot*, and *Bladerunner*— reveal human fears of being overtaken or conquered by machines. They also reveal, I suggest, white fear of its own monstrosity.

Through a white racial frame, Whiteness is associated with *moral* as well as intellectual superiority and with *moral* innocence as well as physical cleanliness. Interacting with non-white human servants reminds white folk that *their own* hands are dirty, that "the leisure... available to the wealthier classes is disproportionately facilitated by the labor of working-class women of color" (698). Techno-utopian fantasies

of care literally whitewash the master–slave relationship. But while white AI coats the humanoid robot in white plastic, it cannot undo the image of white folk as slave-holders. The word robot comes from the Czech word meaning "worker" or "slave" and the race politics of robotics replicates colonial race relations (Sparrow, 2020). Moreover, white AI does not eliminate the *need* for people of color in servile roles. As Crawford and Joler's (2018) account of the production of Alexa makes clear, the need for dirty labor *expands* rather than diminishes under techno-capitalism, as does white complicity in injustice.

No amount of white plastic covering on robotic bodies can hide the morally questionable nature of our technological desires and the rootedness of those desires in the ongoing (neo)colonial nightmare imagined as western Humanism.

References

Atanasoski, N., & Vora, K. (2019). *Surrogate humanity: Race, robots, and the politics of technological futures*. Durham: Duke University Press.

Benjamin, R. (2019). *Race after technology: Abolitionist tools for the New Jim Code*. Medford: Polity.

Cave, S., & Dihal, K. (2020). The Whiteness of AI. *Philosophy & Technology, 33*, 685–703. https://doi.org/10.1007/s13347-020-00415-6

Crawford, K., and V. Joler (2018). "Anatomy of an AI System." http://www.anatomyof.ai.

Feagin, J. R. (2013). *The White racial frame: Centuries of racial framing and counter-framing* (2nd ed.). New York: Routledge.

Greshko, M. (2018). "Meet Sophia, the robot that looks almost human." *National Geographic* https://www.nationalgeographic.com/photography/article/sophia-robot-artificial-intelligence-science

Kindinger, E., & Schmitt, M. (2020). *The Intersections of Whiteness*. Routledge.

Mohamed, S., Png, M., & Isaac, W. (2020). Decolonial AI: Decolonial theory as sociotechnical foresight in artificial intelligence. *Philosophy and Technology, 33,* 659–684. https://doi.org/10.1007/s13347-020-00405-8.

Moran, T. C. (2020). Racial technological bias and the white, feminine voice of AI VAs. *Communication and Critical/cultural Studies, 18*(1), 19–36.

Noble, S. (2018). *Algorithms of oppression: How search engines reinforce racism*. NYU Press.

Omi, M., & Winant, H. (2014). *Racial Formation in the United States* (3rd ed.). New York: Routledge.

Precarity Lab (2020). *Technoprecarious*. London: Goldsmiths Press.

Rhee, J. (2018). *The robotic imaginary: The human and the price of dehumanized labor*. Minneapolis: University of Minnesota Press.

Roediger, D. (2018). *Working toward whiteness: How America's immigrants became White*. Basic Books.

Smith, A. (2015). "Not-seeing: State surveillance, settler colonialism, and gender violence." In R. Dubrosky and S. Magnet, eds., *Feminist Surveillance Studies*, 22–38. Durham: Duke University Press.

Sparrow, R. (2020). Do robots have race? *IEEE Robotics and Automation, 45*, 144–150. https://doi.org/10.1177/0162243919862862

Strengers, Y., & Kennedy, J. (2020). *The smart wife: Why Siri, Alexa, and other smart home devices need a feminist reboot*. Boston: MIT Press.

Wosk, J. (2015). *My fair ladies: Female robots, androids, and other artificial eves*. New Brunswick: Rutgers UP.