

WHITENESS AND SCIENCE?

Jonathan D. McCausland engages “in storytelling that highlights the historic relationship between white supremacy and science,” referencing “historical accounts and analyses of the history of science and race ... as well as critical whiteness scholarship ... to unpack instantiations of whiteness in the science laboratories I participated in as an undergraduate that supported white supremacy.”¹ He uses “methods drawn from autoethnography” and “narrative inquiry” to “understand the relationship between science and white supremacy,” a decidedly non-scientific approach to his subject but one enabling him to “describe my experiences and theorize about the experiences in relation to white supremacy and science.”² Regarding the former, McCausland considers “whiteness” not an “identity” but as a “racial discourse” that “supports white supremacy,” a discourse that “interacts with other systems like science and colonialism (...) [that] helps reinforce dehumanizing, racist policies and practices designed to ‘fix,’ erase, and/or exterminate ‘deficient’ Black and Indigenous populations and their cultures.”³ Through policies and practices – he terms them “mechanisms” – “power is distributed and resources are allocated resulting in our present material reality.”⁴

After disconnecting white supremacy from identity, McCausland reconnects them, telling us that “white people” suffer “white shame” due to “white racial abuse,” defined as a failure of parents/care-takers to love adequately during the “white child’s upbringing,”⁵ a failure hardly limited to European-descent people, indeed not necessarily racialized at all. Due to this “white racial abuse, white people compromise our core selves by setting aside the parts of us that are not ‘white,’ in order to belong in our white community,”⁶ a developmental sequencing that escapes me entirely. I wonder what would qualify as a “white community” – meetings of the Ku Klux Klan?⁷ Survivalists in rural Idaho?⁸ Maybe anywhere European-descent people find themselves in each other’s company? McCausland continues undeterred, now reporting that “white shame informs “how white people learn to be white” – so, it’s something learned, not culturally or genetically bequeathed – spurring “white people” to devise “white and nonwhite zones that are evidently policed by “white authority,” needed apparently because individuals must “prove they are white enough.”⁹ Proving one is “white enough” is a prerequisite to belonging to “their white community,” implying that not only whiteness is precarious but so are white communities, as McCausland then tells us that to “accomplish” being “white enough,” the “the white community must continuously ensure its members are not venturing into nonwhite zones.”¹⁰ Besides being fragile, always in danger of disintegrating, “white people” are apparently also self-sabotaging, since they been “venturing into nonwhite zones” since at least the 4th century BCE.¹¹

Having summarized white supremacy, McCausland now turns his attention to science, “a discipline that is historically grounded in Europe during the Renaissance,” often referred to as “Western science, Western Modern Science, or Eurocentric Sciences in order to denote its difference from other ways of understanding nature, for example, Native sciences.”¹² Science supposes that “nature is knowable and controllable, acquiring knowledge to gain knowledge, and until around the 1960s, although this thinking still exists, a positivist worldview,” namely that reality can be known “through rational observation and quantification.”¹³ Ignoring the role of education in establishing expertise, McCausland reports that “scientific status” is socially determined, meaning that “when created by a society rooted in white supremacy, science will, as a consequence, be influenced by white supremacy,” influence that has been long-lasting apparently, as there is a “historic relationship between science and race,” as “from the moment race was politically constructed, science was used to justify claims that the ‘white’ race was superior,” race not “biological” he reminds but political, enabling “white supremacists used science to rationalize numerous racialized oppressions that include settler colonialism and chattel slavery.”¹⁴ So science is the tail that wags the dog? It would seem to say so, as he alleges that “in a racialized society, it makes sense that science would not only investigate questions regarding race but produce theories that support the dominant value system.”¹⁵ Then he backs off a bit: “While I am not saying that science is always racist, I am saying that science can embrace white supremacy.”¹⁶

After making these sweeping generalizations, McCausland moves to his narrative, a narrative presumably illustrating – or is it determining – his conception of white supremacy and its totalizing determinative power. “Through this vignette, I argue that taxonomy, a practice of classification, is used as pedagogy to reinforce and teach white supremacy,” and “in the second vignette, I demonstrate how dehumanization is informed by science.”¹⁷ Following each narration, McCausland “highlight[s] how whiteness operates within the vignettes, supports white supremacy, and reifies the historic relationship between white supremacy and science.”¹⁸ In vignette #1, McCausland recounts that his science “group included two people of Color, Selena and Carlos,” the groups assigned to “identify organisms we noticed during a biodiversity survey,” an assignment completed differently by different students: actually “nobody stuck to the script we had outlined” and “presentation was missing information,” the presentation further compromised because “Carlos struggled to respond to questions and communicate ... [and] Selena read directly from slides and made no eye contact,” a move that “taught me how much partners mattered,” meaning – for McCausland – joining “groups I thought would succeed,” groups it turns out to have “consisted of all white students,” sharing stories of “backpacking” while “staying up late to fix bad grammar in slides, stressing about whether the data these members collected would be ‘good,’ and how we would ‘cover’ for people who clearly ‘should not be here,’” on occasion “compar[ing] ourselves to the other groups,” assuring themselves that “the

other groups were just not as good at science as we were,” resulting in being “told to help other groups and ‘show them how to do it’.”¹⁹

From this “vignette” McCausland moves to “classification and isolation in white supremacy and science,” arguing “that taxonomy’s process of classifying and ranking life spill over into the pedagogy within the science lab, in the form of white and nonwhite zones of science, reinforcing white supremacy,” a “nonwhite zone” McCausland had evidently entered when he worked with Carols and Selena? “What strikes me most from this vignette,” he reports, is “how quickly I was able to identify what was accepted in class.”²⁰ He return to the Teaching Assistant: “Amanda was teaching us to categorize life by breaking them down into parts, parts that are knowable and real, all aspects of science’s epistemology,” a process of categorization extended to her students: “Amanda worked to classify us using the same process,” not new to her of course, as McCausland explains that “through taxonomy, Linnaeus and others provided white authority figures with a method to sort people,” a “method Amanda used to pick apart perceived differences in PowerPoint appearance, language use, and how evidence was collected in order to define who was scientific or not,” such “classification justified the type of education being provided to Black and Indigenous people,” taxonomy itself “a science rooted in white supremacist notions about people, ... used to determine the type of education provided to specific people in order to socially engineer people away from nonwhite zones,” and – wait for it - Amanda’s “pedagogy” is nothing less than “a present-day version” of it, “a pedagogy born from classification of races and medicine for racialized social engineering.”²¹

McCausland then tells us that “part of what defined the white zones of science included the ‘character’ ... of being a scientist,” the term “character” denoting “professionalism and ways of doing science,” is learning that “finding the ‘most interesting’ organism mattered, mirroring the drive of early taxonomist to describe ‘exotic’ peoples,”²² another Olympic logical leap but hardly warranting the use of the gerund “mirroring.” Apparently, he knew he was “moving into a nonwhite zone of science,” indicated by his “walking-on-eggshells feeling,” an “awareness” that “gave me an advantage because I already understood and recognized the nonwhite zones.”²³ He concludes: “So, while I was still learning, my peers had more to learn, and these small differences mattered.”²⁴ Apparently these “small differences” weren’t too small for Amanda to notice, she then “engaged in pedagogical classification, mirroring Linnaeus, where every difference, no matter how small, was real and important in creating a hierarchy.”²⁵ Mirroring Linnaeus²⁶ – really? Amanda must have been proud.

Not in McCausland’s mind where, it’s clear, she should have been feeling shame, as he reports that she “opined” about “intangible” aspects of students’ “presentation by commenting on language, slide structure, and timing,” something supposedly scurrilous, because “by noticing difference, just like early white educators of Black people, Amanda was fixing us to be more scientific.”²⁷ Repeating an idea abandoned forty years ago and by those who initially promoted it,²⁸ McCausland tells us that

education is “often viewed” as reproducing “ideas and values that support the economic and social order,” something of which he is presumably guiltless but a crime he accuses Amanda of committing, namely by “policing of nonwhite zones around ‘professionalism’ [that] could be viewed as maintaining the social order of science.”²⁹ Inadvertently accusing himself of being racist – or at least expedient – McCausland admits: “Desiring to be scientific enough, I avoided people that I did not think would meet my standards, keeping me in white zones,” leading him “to choosing groups that I knew understood how to do science the ‘right’ way, the way Amanda (and others from my past) had taught me,” meaning that “I chose racially white groups to stay in physically white zones as it was usually in groups with people of Color where I got policed.”³⁰ Then we learn McCausland is innocent, as he lacked autonomy (and thereby responsibility) for his actions, as “the ability to engage in and respond to classification was already built into my cultural DNA and I knew exactly how to respond when confronted with individuals that were not white or scientific enough.”³¹ But then maybe he is guilty after all, as he confides: “My familiarity with white supremacy allowed me to recognize non-white zones, avoid them, and keep anyone associated with them down on the social hierarchy.”³² There were extenuating circumstances, as “I was only threatened with isolation, while people who were not as ‘scientific’ as me, often people of Color, were also directly harmed through ‘bleeding’(decreasing) their grades and more ‘labor’ in the form of extra work and staying after class.”³³ Also a victim of operant conditioning,³⁴ McCausland remembers that “while in white zones, I was rewarded,” and including the “power . . . my groups were given over other groups when charged to ‘help’ them.”³⁵

Sidestepping any charges of sexism, McCausland’s second target is male – “Matt” – another instructor who (while students “in awe” as “before “us was “what would become the heart of a chicken”) told us: “You are to figure out how much caffeine a chicken embryo can withstand until its heart stops,” an experiment that need not succeed on the first try as “we have several dozen eggs in front of the room, so don’t feel like you need to get this on the first try” – and thank goodness, as McCausland reports that his group “failed miserably over and over,” causing him to feel “increasingly more anxious,” prompting him and his colleagues to “joke about how we were committing chicken genocide,” a self-accusation soon replaced as other “groups succeeded in getting caffeine on the embryos, [and] some people were so effective that they were praised as the ‘surgeons’ in the room,” prompting Matt to ask them to “help others,” but – it turns out – certain “others” did not want help, did not want to conduct the experiment at all, as “one group, consisting of all people of Color, decided not to remove the embryo from the yolk or add caffeine,” an action the moved Matt to “pepper them with questions about why they weren’t engaging in the activity,” explaining that “they would not gain the knowledge needed from the activity,” to which “they responded by saying, ‘We don’t need that knowledge then. We will just copy from another group like the other people,’ Matt then stat[ing], ‘That’s plagiarism. Besides,

you still cracked the egg open. The embryo will still die.”³⁶ For the imaginative McCausland, “this narrative is indicative of how science adopts a worldview from white supremacy that accepts dehumanization of those not deemed white.”³⁷ Moreover, “the acceptance of science that maintains nature as separate, knowable, and controllable, informs how dehumanization happens in white supremacy,” as “at the core of white supremacy is the belief that white people are the pinnacle of humanity, of nature.”³⁸ “White supremacy and science work to determine who is and is not human,” and “when combined with the belief that nature is the ‘servant to humankind’ ... and science being ‘the acquisition of knowledge or the sole purpose of acquiring knowledge’ ... science, in a society seeking to prove the dominance of white people, positions white people as the ideal and master of nature or everything that is not white.”³⁹

“White supremacy is designed to provide white people with certain privileges,” McCausland continues, but it “also has a cost,” including “an inability to relate to others with self- integrity.”⁴⁰ To substantiate this sweeping allegation he returns to the experiment, telling us that by participating in it “I betrayed my core self to stay in a white zone of science, a core self that valued nonhuman life and did not see the benefit of what we were asked to do.”⁴¹ Remember McCausland’s “joke” about “chicken genocide,” cited above? Turns out it was not entirely a joke: “During the ‘experiment’ we positioned the chicken embryo as separate from us and, therefore, able to be controlled,” a “similar justification used for enslavement and genocide.”⁴² While the institution where they studied may have considered them students, it turns out they were actually accomplices in a crime: “We learned that we needed to participate in discourses and actions that were oppressive.,” that “we needed to treat all nonhuman life as an object and that nature was something for us to extract knowledge from no matter how effective or ethical such actions may be,” that “getting the desired knowledge was not the priority” but “control” was: “When my peers spoke back to Matt’s questions by stating, ‘We don’t need that knowledge then,’ they were pushing back on a social goal of science to obtain knowledge for the sake of obtaining knowledge,” were instead “arguing for a knowledge system that was relational in regards to nature and maintained an ethic that our activity was epistemologically unnecessary,” peers who “were able to engage with integrity, but were also marginalized and deemed unscientific.”⁴³

Next, McCausland informs us that “white supremacy borrowed practices of science to inform how to (re)produce itself,” presumably illustrated by Amanda and Matt “leveraging classification” to categorize McCausland and his peers “as scientific or not, then engaged in ‘uplifting’ us through policing of nonwhite zones,” a “type of teaching [that] served to erase different worldviews and science like those of my resistant peers in order to assimilate and homogenize, a practice of white supremacy and colonialism.”⁴⁴ He confers agency upon concepts, asserting that “assimilation and homogenization create a binary of white and nonwhite zones.” (By definition, assimilation and homogenization dissolve binaries.) “Leveraging science,” he

continues, “white supremacy recognizes any nonwhite zone as separate, knowable, and controllable,” and it is “this separation [that] informs how white supremacy dehumanizes because white supremacy, informed by science, permits people and entities labeled as white to know and control nonwhite people and entities,” resulting in “the removal, enslavement, and elimination of Black and Indigenous peoples, knowledges, and cultures.”⁴⁵

“How do we teach science,” McCausland asks, “a discipline historically grounded in the oppression of others, in ways that do not engage students in learning white supremacy or leverages pedagogy that embraces white supremacy?”⁴⁶ I thought science was the problem – as well as the pedagogy – but here, employing the omnipresent “how” question - as a form of instrumental rationality discredited almost a century ago⁴⁷ - McCausland parodies pedagogy. “If we continue to teach students potentially oppressive ways of thinking and use pedagogies born out of white supremacy and science,” he concludes, “we are only reproducing a society rooted in oppression,” a “society that reproduces a science that marginalizes women and people of color with their indigenous knowledge, and cultural frames of reference” as it “creates opportunities for more racist science as evidenced by some science today.”⁴⁸ What would such a non-racist science education look like? For McCausland, “science education ... means examining the stories we tell in and about science, inviting new questions and answers, and realizing that we only teach partial and biased knowledge,”⁴⁹ an acknowledgement of humility that had been aggressively absent thus far. “The need for more nuanced science teaching,” McCausland adds, “is emphasized by work grounded in Native sciences.”⁵⁰ In the “Native sciences” would “more nuanced” scholarship also be grounded?

REFERENCES

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ENDNOTES

¹ 2020, 115-116.

² 2020, 116.

³ 2020, 117.

⁴ Ibid.

⁵ 2020, 118.

⁶ Ibid.

⁷ <https://www.britannica.com/topic/Ku-Klux-Klan>

⁸ <https://www.csmonitor.com/USA/Society/2022/0307/Conservatives-move-to-rural-Idaho-to-escape-liberal-politics>

⁹ 2020, 119.

¹⁰ Ibid.

¹¹ <https://www.britannica.com/topic/European-exploration>

¹² 2020, 119.

¹³ Ibid.

¹⁴ 2020, 119-120.

¹⁵ 2020, 120.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ 2020, 121-122.

²⁰ 2020, 122.

²¹ 2020, 123-124.

²² 2020, 124.

²³ Ibid.

²⁴ Ibid.

²⁵ 2020, 125.

²⁶ <https://www.britannica.com/science/taxonomy/The-Linnaean-system>

²⁷ 2020, 125.

²⁸ Pinar, et al. 1995, 252ff.

²⁹ Ibid.

³⁰ Ibid.

³¹ Ibid.

³² Ibid.

³³ 2020, 126.

³⁴ <https://www.simplypsychology.org/operant-conditioning.html>

³⁵ 2020, 126.

³⁶ 2020, 126-127.

³⁷ 2020, 127.

³⁸ Ibid.

³⁹ 2020, 128.

⁴⁰ Ibid.

⁴¹ 2020, 129.

⁴² Ibid.

⁴³ 2020, 129-131.

⁴⁴ 2020, 131-132.

⁴⁵ 2020, 132.

⁴⁶ 2020, 133.

⁴⁷ “[T]he quest for human emancipation,” Kaes (2009, 185) notes, “was thus transmuted and hardened into a system of universal oppression. The legacy of the Enlightenment spirit that informed modernity meant, in short, the triumph of instrumental rationality.” This is, of course, a distillation of the Adorno-Horkheimer argument:

<https://www.oxfordreference.com/display/10.1093/oi/authority.20110803095715751>

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Ibid.