Social-Cultural Quantum Optics at a Predominantly White University: Refusing, Rebuffing, and Undoing Racism through Collective Experiential Observation

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Abstract

Racism is commonly defined as prejudice plus power, but in some contexts it can be practiced as a lack of diversity, equity and inclusion. These issues have been at the forefront of popular culture and academic research for some time now, but one could argue, interest has exploded in the U.S. consciousness since May of 2020 and the video recording of the extrajudicial killing of George Floyd in Minneapolis, mirroring that of Philando Castile four years earlier in the same city. In this paper we document the ways diversity, equity and inclusion are perceived, and how those perceptions render racism (un)visible. Within this context, we introduce a framework we are calling social-cultural quantum optics (SQO). With data from two large diversity symposia at a university on the east coast that is more diverse than many coupled with our experiences at three art exhibits, we begin to construct a path unlocking small scale, quantum, determinants of racism. We argue that understanding SQO can undo its links to racism on everyday life in cities and communities where universities are located,
while at the same time urging the use collective experiential observation of artistic expression to aid in data analysis.

**Keywords:** racial optics, visceral methods, speakout, undoing racism, urban university.

In May 2016, the Dartmouth College Republicans put up a display on campus in honor of National Police Week. They co-opted the nationally recognized hashtag “Black Lives Matter” with “Blue Lives Matter” (Benjamin & Qian, 2016).

In 2016 S.B. Nation published an article humanizing Daniel Holtzclaw, convicted of raping 13 African American women in Oklahoma City. After hundreds of complaints, the editor was forced to retract it and acknowledged: “…an organization cannot afford to wait to be diverse, particularly if that organization is one that wants to tell stories” (Bellware, 2016).

“Some students decided they had had enough.” In November 2019, #NotAgainSU, a newly formed coalition of students of color and White student allies, staged a sit-in for more than seven days to protest the university’s slow response to racist and hateful incidents, “flawed handling of the situation and failure to recognize the seriousness of the unfolding events” (Anderson, 2019).

**Introduction**

Racism is commonly defined as prejudice plus power, and in many contexts, the practice of racism results in a lack of diversity, equity, and inclusion. Racism in urban education and society has been at the forefront of popular culture and academic research for some time now. Still, interest has exploded in the U.S. consciousness since May of 2020 with the video recording of the extra-judicial killing of George Floyd in Minneapolis, mirroring that of Philando Castile four years earlier and less than one year after the police killing of Daunte Wright in the same city. As the U.S. grapples with the continuing murders of Black and Brown people by law enforcement, coupled with protests, not just nationally but internationally, demanding more diversity, the broad, long-term, and deep impacts of racism have ironically come into full view for many who have been blinded by a cultural parallax and/or binoculars of privilege (Dyson, 2016; Nabhan, 1995). The idea that it has taken 400-plus years to see the social, political, economic, and bodily harm of structural racism is astounding. Reams of paper printed with articles, books, and, most recently, websites and social media posts documenting these harms are broad, long-term, and hard-hitting. Unfortunately, as McKittrick would say, these harms have been (un)visible to many
for far too long. (Un)visible is the state of being covered up or the absence of presence (McKittrick, 2006).

An important area that we know impacts the nodes of truth and reconciliation regarding race and anti-racism in our educational system, specifically within urban higher education institutions. Racial violence on college campuses, college students choosing inappropriate Halloween costumes appropriating racial identity, promoting parties that stereotype and malign individual groups and/or affiliations, or creating businesses and media where people of color are (un)visible are, unfortunately, still common on campuses across the country (Freisleben, 2016; Friedersdorf, 2015; Harwood et al., 2012; Neville et al., 2010). Following the 2016 election of President Donald Trump, Muslim and immigrant students were targeted at universities, hate group paraphernalia and broadsides appeared on bulletin boards and telephone poles in public spaces, and students of color were murdered (Arriaga, 2017; Moyer, 2017; Quintana, 2017; Zirin, 2017). More recently, in the context of the pandemic, Asian communities have been increasingly targeted by hate crimes. Murder and assault of Asian students and Pacific Islanders are on the rise, and the murdered and missing Native women and girls continue to be invisibilized in popular media. Unresolved assaults on Black, Native, Latino/a/x, and Asian groups, along with Muslims and other marginalized communities, struggle against discrimination and racism outside of the academy. Too often, their group experiences are mirrored inside the academy.

Racism in the academy takes on many forms. Still, one key aspect that contributes to it is the lack of diversity on college campuses, particularly at faculty and higher administration levels. Even though it is widely recognized that increasing such diversity positively impacts key aspects of faculty-student interaction and pedagogy (Mayhew & Grunwald, 2006; Umbach, 2006) and can support anti-racist work to dismantle racism actively, diversity is still elusive on many campuses.1 Without encountering real diversity in their lived experiences on campuses, both in-class and outside, students’ ability to see and dismantle racism is diminished. As Beth McMurtrie (2016) writes, “If [universities] continue to fall short on diversity efforts, colleges risk disconnecting from the larger culture.”

By using data from two campus-wide diversity symposia at a large East Coast urban university, coupled with our collective experiential observation of three Black art exhibits, we begin to construct a pathway to unlocking small scale, quantum2, determinants of racism. First, we look at

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1 While our work is not targeted to white students in particular, it is notable that research shows when students lack varied experiences at predominantly white institutions of higher learning—only interacting with faculty and administrators who look like them—they miss an opportunity to engage fully with the multi-faceted and multicultural world in which we live, as well as lose opportunities to challenge anti-Black and Brown racial ideologies.

2 Quantum refers to the smallest piece, particle, minutest building block of something.
the perceptions and realities of diversity at this large East Coast urban university by referencing the work on “cultural parallax” (Nabhan, 1995) and the “binoculars” of privilege (Dyson, 2016). While analyzing and discussing this data, some research team members attended three Black art exhibits, which led to theory building and a framework we are calling social-cultural quantum optics (SQO). This paper documents the variety of ways diversity, equity, and inclusion are perceived, along with how those perceptions render racism (un)visible. We argue that by understanding how SQO functions, we can undo its impact on racism in everyday life in urban institutions and disrupt racism nationwide.

In this paper, we first review how diversity, equity, and inclusion (DEI) are framed in the literature and pay particular attention to how they are understood or not by different campus community members. While DEI does not end racism, we cannot imagine ending racism without DEI nor without an understanding of it. We then provide a brief description of our methods, including content analysis of data from two symposia on DEI and racism and a method we are calling collective experiential observation. Following a description of these methods, we share our analysis of perceptions of diversity and racism from the symposia and theory-building, based on our collective visits to three art exhibits that led to the formation of social-cultural quantum optics. Our goal is to understand how racism works at a predominately white urban institution of higher education, how diversity, equity, and inclusion are interpreted, and most importantly, to document how, through social-cultural quantum optics, two people can look at the same situation and see or experience something completely different. We argue anti-racist work on campuses must understand the mechanism by which we learn to see, or not see, diversity, equity, inclusion and race. Social-cultural quantum optics, along with collective experiential observation, provide building blocks for refusing, rebuffing, and undoing racism.

**Framing Diversity Equity and Inclusion**

Framing diversity, equity, and inclusion in the context of higher education is aided by several interrelated themes: student activism about diversity, why/how diversity matters, and attempts to be more sensitive or reflective about diversity, equity, and inclusion through diversity courses. Additionally, and essential for our work, is the research documenting administrators too often lack understanding regarding the state of diversity, equity, and inclusion climate on their campuses (Gasmen, 2014). Our data show that not only administrators but also students, staff, and faculty frequently have difficulty seeing the lack of diversity, equity, and inclusion that raises barriers to enacting anti-racist work.

**Student Activism for More Diversity**

With the emergence of such movements as Occupy Wall Street, Black Lives Matter, Sanctuary Cities, and #MeToo, universities have seen a rise in student activism focused on diversity,
equity, and inclusion (Brown et al., 2016; Schmidt, 2016), and even more after the murder of Michael Brown in Ferguson, Missouri at the hands of police in 2014. Nationwide, students have called for increased student diversity but have also challenged administrators to take a closer look at university climates and faculty diversity as they relate to students’ experiences (Espinsoa et al., 2016). These concerns are echoed by the Supreme Court Fisher II decision, which reaffirmed the notion that “obtaining the educational benefits of a diverse student body is [a]compelling government interest” (Espinosa & McDonough, 2016). Espinosa and McDonough (2016) argue that: “The court also signaled, during a time of deep unrest and debate regarding diversity and inclusion on college campuses nationwide, something salient and undeniable: Race matters” (p. 1).

Why/How Race and Diversity Matters
Race, as well as other aspects of student diversity, do indeed matter for reasons of equality, but additionally because there are documented educational benefits inherent in diverse environments (Sweet & Ortiz Escalante, 2010). If students from dominant groups do not experience inclusion and social equity with all groups in the college setting, upon graduation, they will be woefully underprepared to do the anti-racist work necessary for social transformation. Hoover (2017) asserts that while the physical presence of diversity is important, the numbers themselves do not guarantee inclusiveness nor necessarily represent a diverse population. Institutions need a critical mass of diverse individuals sitting at the table helping to make policy decisions to say they have a diverse environment. In such settings, there also must be diversity, equity, and inclusion in pedagogy to ensure “. . . all students are reaping the benefits of the diversity colleges strive to deliver” (Hoover, 2017, p. 1). In fact, the Fisher Supreme Court case affirmed that colleges must be attentive to all student success, satisfaction, and belonging (Hoover, 2017).

Sensitivity and Reflection Through Cultural Humility
Cultural competency has been championed as part of the process of promoting more sensitivity and understanding regarding diversity, but it only prescribes an outward-looking, one-way production of knowledge (Sweet, 2018). On the other hand, as articulated by Melanie Tervalon and Jann Murray Garcia (1998), cultural humility encourages individuals to challenge their own hidden biases and ethnocentrism, recognizing that they can never know all but can learn to be sensitive to others. There is merit in trying to learn about others, but individuals should examine their own culture and reflect on their own biases and assumptions of others as well (Sweet, 2018). Using a cultural humility approach (as opposed to a cultural competence lens, to facilitating, and requiring interactions in and outside the classroom) gives students opportunities to listen to and engage with multiple perspectives and experiential knowledge, which increases their openness to engaging and embracing diversity, along with their confidence in effectively communicating with individuals from diverse backgrounds (Lee et al., 2012). Cultural humility attempts to stop domination and exploitation in relationships between groups with power.
differentials, such as social workers and clients and professors and students, law enforcement and the community. Cultural humility requires constant self-reflection and demands that power imbalances be reduced.

The goal of cultural humility is to develop “nonpaternalistic” collaboration with communities (Tervalon & Murray-Garcia, 1998, p.117). It encourages practitioners to “relinquish” their position as experts (Ross, 2010, p.318). Institutional accountability through cultural humility is also an important component of system change (Tervalon & Murray-Garcia, 1998, p.122). Therefore, cultural humility is helping in stopping the academy's perpetual cycle of privileged thinking. Again, simply increasing the diversity of an institution is not enough. We need to abolish the power imbalances that enable racism to thrive.

**How Administrators See (or Not) Diversity, Equity, and Inclusion**

Even while progress has been made, administrators’ understanding of the state of the diversity, equity, and inclusion climate related to racism has been elusive. Marybeth Gasman documents that “most college and university presidents don’t think …racial tension is [even] happening on their campuses” (Gasman, 2014). Some administrations might not have an accurate read of the reality of the climate for diversity at their institution. For example, despite the release of the 2016 Yale College Climate Assessment for Learning, Living and Working, the research indicates, “there is a troubling disconnect between the ideals of its educational mission and the varieties of exclusion that students, faculty and staff variously experience” (Greenwood et al., 2016, p. 3). Yet, a national online survey by the American Council on Education (ACE) Center for Policy Research and Strategy (CPRS) suggests the racial climate is a priority for college and university presidents (Espinosa et al., 2016). These studies suggest a lack of awareness but a concern for improvement, demonstrating a disconnect regarding diversity, equity, and inclusion.

In the wake of the George Floyd murder in May 2020 and many other violent behaviors toward Black people by police, many Instagram accounts have emerged, such as @blackat_university_name (university or high school name) (Moore, 2020). These sites have thousands of followers and contain horrific first-person narratives of Black experiences of racism in U.S. elite schools and colleges. Many of them described inaction by administrators and faculty when students filed complaints. The accounts confirm a Gallup survey that found most college graduates said they are not confident their institution would have “fully” investigated charges of discrimination (Anderson, 2020). Motivated by current protests and the disconnects that they illustrate, institutions of higher education across the country are rethinking past policies and evaluating their campus climate for diversity, along with recommitting their respective brands to a more equitable representation on college campuses and setting faculty hiring goals (Arnett, 2015). There are conflicting perceptions of and ideas about the scope of the problem and how best to address it.
Much as we have seen in U.S. society in the wake of the Trump administration, when the people at the top either agree with or are silent in and around racial tension and racial violence, that silence and/or indifference only magnifies or intensifies the violence (Wang, 2017). On college campuses where administrators have failed to address discrimination publicly and racial tension, for example, at the University of Illinois Urbana-Champaign, the University of Maryland, and Delaware State, those campuses, unfortunately, became embroiled in bitter controversies that spilled into surrounding cities and town communities (Castillo, 2016; Mosendz, 2015; Zirin, 2017).

While it is clear that peoples’ social experiences over time result in particular racial understandings, the inability to see the lack of diversity, equity, and inclusion, when the reality is so stark, is less well understood. We are interested in how racism works, how diversity, equity, and inclusion are interpreted, and how two people can look at the same situation and see or experience something completely different. These are our driving research questions. Additionally, we are interested in ways to see better and more clearly to advance anti-racist work. Our experiment with collective experiential observation also proved to be an important catalyst for seeing and analyzing our data more clearly.

**Positionality**

The four authors of this paper include one Native woman in urban planning & community development and Africana studies, two Black women, one in theater and one in journalism, and one white woman in urban education. Our transdisciplinary approach adds to, informs, and complements existing literature. We worked together from our different disciplinary positions on campus to deal with the racism three of us experienced firsthand. Based on reviewers’ comments on our submission to this journal, we saw how we had, at some level bought into the discourse of diversifying diversity. Even though we had a Black provost for part of our work, we were told we should not speak about race per se but to couch it as diversity since that is/was more palatable. We could not be Black/Native and proud in a sense. We had to do things quietly behind the scenes.

Including international faculty as diversity is watering down for us, but it is part and parcel of a strategy to move forward, however imperfectly. The issues facing Asian faculty are also complex. While Asian faculty are overrepresented in the academy, they too are facing racism, and some groups within the category Asian are less well represented. As noted above, anti-Asian hate has escalated in the context of the COVID-19 pandemic. For us as Black/Native and white women in the academy, our goal is to end racism, but we recognize our susceptibility to social, cultural, and political pressure to walk on eggshells as we seek tenure and promotions. We hope the steps taken in the article are heavy enough to break some of those eggshells.
Methods and Data

To answer our research questions, we engaged in two distinct processes. One is the co-creation of data that documents the phenomenon of distinct but generalized perceptions of diversity, equity, and inclusion as a proxy for how racism is evident on the campus. Symposia activities (detailed below) combined individual responses to questions regarding diversity, equity, and inclusion through a Speak Out, group discussions, and workshops focused on various groups, including people of color, LGBTQIA+, women, and international community members. These co-created data constitute the information that informs the context of racism on our campus. The second process is what we call collective experiential observation, a kind of “shared sensory spatial experience” (Sweet & Ortiz Escalante, 2015) that enables us to view several art exhibits communally and to be inspired by the space and optics, all while thinking together about what we were viewing and how it informed our analysis of the data, driven by our research questions. The collective experiential observation was important for helping us interpret data that was not making sense to us. We saw racism, but some of the data points from respondents suggested no racism existed. Through interacting with art, we analyzed the data in new ways.

Symposia

During two diversity symposia, one in 2014 and one in 2017, students, faculty, staff, and administrators were invited to reflect on prompts about diversity on campus. At each event, participants were asked to respond to the queries indicated in Table 1. The first symposium participants responded by writing individually or having a listener write down their answers on individualized index cards. Each handwritten comment was randomly given an I.D. number, scanned, transcribed, and coded using a two-tier coding process in Dedoose 8.0.35. Participants were asked to respond to the same prompts via SurveyMonkey during the second symposium. Respondents’ answers from the second symposium were downloaded from SurveyMonkey and uploaded to Dedoose.

For this paper, we focus on the results from the prompts regarding faculty diversity. Literature reveals that universities need diverse individuals “sitting at the table” along with diversity, equity, and inclusion in pedagogy (Hoover, 2016). Many universities focus on setting faculty hiring goals (Arnett, 2015) and should also be working toward developing a broad embrace of cultural humility.
From the first Symposium, a total of 1823 cards were collected. The second symposium yielded a significantly lower participation rate via SurveyMonkey. Coding was an iterative process.

**TABLE 1. Prompts for Symposium Participants and Numbers of Responses**

<table>
<thead>
<tr>
<th>Speak Out Themes</th>
<th>Prompts</th>
<th>Symposium 1 responses (1823)</th>
<th>Symposium 2 response (584)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diversity</strong></td>
<td>For me, “diversity” means… My own dream for diversity at X University is a place where…</td>
<td>363</td>
<td>134</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>Improving Student Diversity</td>
<td>We can improve student diversity at X University by… Some of my insights/experiences about the challenges and opportunities regarding student diversity at X are…</td>
<td>367</td>
</tr>
<tr>
<td><strong>Improving</strong></td>
<td>Improving Faculty Diversity</td>
<td>We can improve faculty diversity at X University by… Some of my insights/experiences about the challenges and opportunities regarding faculty diversity at X are…</td>
<td>352</td>
</tr>
<tr>
<td><strong>Improving the</strong></td>
<td>Improving the Workplace/Space for a Diverse Workforce at X University</td>
<td>We can improve the environment for a diverse workforce at X University by… Some of my insights/experiences about the challenges and opportunities regarding diversity in the workforce at X are…</td>
<td>366</td>
</tr>
<tr>
<td><strong>Improving X University’s Connections to the Neighborhood</strong></td>
<td>Some of the important issues for the neighborhoods surrounding X are…</td>
<td>375</td>
<td>116</td>
</tr>
<tr>
<td><strong>Improving</strong></td>
<td>Improving Faculty Diversity</td>
<td>We as a university can contribute to addressing some of these issues and strengthen healthy community connections by…</td>
<td></td>
</tr>
</tbody>
</table>

(Creswell, 2012; Lichtman, 2013). To establish a reliable code frame, each research team member individually coded cards one through 50 of the first symposium faculty cards. The lower number of participants may have been the result of several circumstances including severe weather on the morning of the symposium, limited advance time for outreach and advertising of the event related to the contestations over which university organization would take the lead in organizing the symposium, whether the digital format was more or less accessible, and a changing university-wide commitment to diversity as a result of messaging and evolving policies of the Trump administration.
research team met to review and refine the list, compare and discuss findings and then work to develop a working list of 24 first and second-tier codes. Additionally, we developed conceptual maps to help facilitate a rich and dependable code frame. We used this code frame with the data from the first symposium in Dedoose, coding each response. We then applied the same code frame to the data from the second symposium. Any codes that emerged from the second symposium data were added to the codebook. Throughout the coding process, the research team modified the working list of codes and categories as necessary and returned to the first symposium data to check for additional coding opportunities based on new codes from the second symposium.

Right away, common issues emerged from the first symposium transcripts. First-tier codes included a broad array of themes: individual characteristics of faculty; composition of faculty, staff, administrators, and students; already very diverse; a need for more diversity in faculty, staff, and administration, which would include more diverse others in administration and executive committees; a need for increased sensitivity, and better community relations. Second-tier coding searched for more abstract commonalities such as combinations of factors and clusters of first-tier codes that indicated emergent patterns and factor relationships, i.e., race, gender, national origin, and linguistic competence; a need for faculty training and a desire for representation reflecting the current student body; a desire for increased diverse interactions among students; and administrative action to facilitate better community relations. The coded data were then translated into themes during research team meetings. Specifically, the team looked for evidence contrary to the already developed themes (Creswell, 2012). Finally, the research team developed concepts to then frame the analysis of this data. The process was repeated for the analysis of the second symposium data. Procedurally, having cards for the first set of data and electronic submission for participants may limit the comparability of the two data sets. Likewise, starting the coding process with only the data regarding the faculty diversity may have impacted our data analysis.

We encountered challenges in coding the data because opposing realities emerged, i.e. great diversity and lack of diversity. Additionally, in the group of people, noting a lack of diversity, diversity meant different things. For some, race was the defining characteristic, and for others, it was country of origin or gender. Statistics showed that racial diversity among faculty at X university has been decreasing over 20 years, while there has been a significant increase in international faculty. Engaging with art helped us address the challenge of contradicting perceptions of race and racism in the data.

**Collective Experiential Observation**

During the summer of 2019, several of the authors attended three art exhibits: The Colored Girls Museum: “Search for the Colored Girl”; the Center for Emerging Visual Artists: “Black
Quantum Futures,” and The New York Exhibit by visual artist Karis Salmon: “We Have Made These Lands What They Are: The Architecture of Slavery.” We were inspired to think critically about scale, time, and space during and after these visits. The act of viewing and hearing these exhibits about Blackness together, of having our bodies present and seeing these exhibits conjointly pushed us to think more about the minute details of everyday life and how they impact brain function and change brains. These exhibits sparked thinking and suggested that engaging in the visceral sensations of sharing visual, audio, and emotional stories of Blackness changed our thinking and made us revisit diversity and racism with a new understanding. For us, collective experiential observation added significantly to our more typical processes for analysis, which includes meetings in office spaces, often devoid of art. By including art, film, audio, and visual descriptions in our process, our analysis was redirected and opened through our engagement with different senses; hearing, seeing, and touching. Before these research activities, we struggled to explain what was happening; why were people seeing the same thing but seeing differently? Why, for instance, do university presidents have difficulty seeing the reality of race climates on their campuses? The authors’ collective process of experiencing art generated new thinking and collaborative theory building.

Art Exhibit Theory Building

The Colored Girls Museum

Some of the research team members attended a docent-led tour of the Colored Girls Museum’s exhibit In Search of the Colored Girl, in Philadelphia, PA, in May of 2019. The exhibit focused on the everyday, ordinary and extraordinary lives of colored girls in the broader context of (un)visibility in popular culture and quotidian life. We use (un)visibility following McKittrick (2006). As mentioned earlier, she suggests what has happened is an intentional covering up and covering over Black people’s lives, something very visible has been made (un)visible, a purposeful act ratified by a culture of white supremacy. The In Search of the Colored Girl exhibit allowed us to think about the small, everyday, ordinary aspects of race and culture that often are ignored and overlooked. We began talking about how we are taught to see and not see, interpret and not interpret, unpack versus accept.

Researchers are taught to look for the big, overarching theories, explanations, trends, and phenomena, but we are finding that the small, minute details strongly impact our daily experiences of race and racism—Death by a Thousand Paper Cuts—many small and accumulating harms or microaggressions. But the exhibit also had a mission: to search for the colored girl, that is, each group tour was like a search party looking for the colored girl. Even though the hard-core statistics, social and cultural imaginaries, as well as everyday life for the colored girl is dismal and depressing, the search goes on. Through it, new information is uncovered, and new realities are constructed. For example, one part of the exhibit was about hair.
There were several kinds of products colored girls historically used on their hair, tools used to take care of their hair, and photographs of many different hairstyles used by colored girls. This was a celebration of colored girls’ hair, not a covering-up. The curator’s intentional intervention to find the colored girl was carried out in each room of the exhibit, and for each group that joined the search party, change was made both internally and externally, as all of those who participated in the search left with a charge to search for the ordinary, everyday.

**Black Quantum Futurism**

This gallery space, the Center for Emerging Visual Artists, is in the heart of Rittenhouse Square in downtown Philadelphia and regularly features work by emerging local artists. One of the exhibits in the summer of 2019 was the *Black Quantum Futures*. The temporal disruptors, as they call themselves, used a collection of watches, specially re-crafted by Black quantum futurists to embody the temporal features of Black women and Black quantum futurist times(s). The exhibit also included images of African Americans in space suits floating in space, and a video of Reverend Leon H. Sullivan, the late civil rights leader and minister at Philadelphia’s Zion Baptist Church, talking with President Nixon about the establishment of Progress Aerospace Enterprises (PAE), one of the first Black-owned aerospace companies. The exhibit used an Afrofuturism lens that engages oral histories and futures to produce Black spatial-temporal autonomy. Part of our interpretation of this work is their use of quantum in the context of all-weather is local, all politics is local, all time is local. The artists seemed to be saying there is value in looking at the quantum or small local phenomenon. Additionally, there was a very positive visual of Black people as astronauts. The optics, the social-cultural message being taken in by the observer, was of Black astronauts being Black scientists. These images were juxtaposed to some police officers’ use of mugshots of Black men for target practice (Shepard & Torres 2015), in which the optic is of Blacks as criminals with targets on their faces. Through that process, the brains of the police officers are trained to see Black men as those to be killed, not as scientists or astronauts.

During our visit, we were reminded of how one of our team members uses quantum physics in her qualitative methods classes to show the fallacy that is objectivity. Many students come into the classroom inherently suspicious of qualitative research because of their learned desire for and belief in the objectivity of hard science and quantitative research. She described how the act of observing and tracking electrons requires scientists to move the electron to observe it. In that way, the researchers are not just observers, but participants and subjects in science. Their participation prevents them from being objective observers. Even quantum physicists are making things happen by moving electrons themselves to make them observable. Our colleague’s use of quantum physics suggests that even in the observation of electrons, protons, and neutrons, the researcher actively participated in the experiments, questioning the possibility of their objectivity.
The *Black Quantum Futures* exhibit promoted a great deal of conversation and reflection among the authors, along with protracted thinking about the assertion that everything is local, politics is local, time is local. That discussion led one of our team members to interrogate theories in quantum physics—eventually, repurposing theories in quantum optics (on how protons and minute particles of light are observable) to help further explain some of our thoughts on sociocultural theory. That interrogation coupled with the documentary of how Black astronaut Leland Melvin, (who would ultimately spend 24 days in space aboard the space station) lost his hearing during a training accident. After weeks of believing he would never get a chance to fly to the space station or hear music again, his brain developed new pathways to register sound, and ever so slowly, Melvin (2018) reported how he relearned to hear.

**We Have Made These Lands What They Are: The Architecture of Slavery**

The New York Exhibit by Karis Salmon was titled *We Have Made These Lands What They Are: The Architecture of Slavery* and once again, the idea of the ordinary, the overlooked, the small details of life tells a powerful story, which was very much a part of Salmon’s project. She photographed simple structures and household items on former slave plantations, magnifying their importance and juxtaposing them with first-person narratives culled from memoirs of formerly enslaved Africans.

One of the photographs is of the hinge on a door. It is a very small part of a structure of a huge institution—like slavery—so Salmon was asking her viewers to deal with the quantum aspects of a larger problem hinged on racism and discrimination. Another photograph is of a huge plantation house. The inscription below described how an enslaved woman would go to the river to get a handful of mud used as one brick and put on top of another to construct the “Big House.” Here again, Salmon is forcing us, as viewers, to focus on and consider the minute parts of this overarching system of oppression.

Another of Salmon’s photographs is of a banister that curved, that was functional and yet artistic, ordinary, and futuristic. In that image, Salmon captured one piece of wood that enslaved Africans found a way to turn symmetrically into support for those going up the stairs. They made it arched—a symbol of a structure of the past, but in its futuristic design in our minds, it was somehow linked to the Black quantum futures. Here, enslaved individuals who were considered valueless and disposable, created art and utility that projected themselves into a future that still stands today. Salmon uncovered the (un)visible life of enslaved Black people, the ordinary and everyday. Her intervention was part of unlearning racism and discarding white supremacy. Through her photographs, we can see differently—understand differently. We build on the experience of the exhibitions to inform and shape our analysis of the qualitative data.
Analysis of Symposia Data about Faculty Diversity

One-third of participants from the inaugural symposium suggested that X University needs to hire more diverse faculty. For example, one participant felt that faculty diversity needed to increase to mirror that of the student body: “some of my insights regarding faculty diversity at X University are that it could be more diverse. As the student population increasingly grows diverse, so should the faculty.” Symposia participants urged the university to hire more diverse faculty:

We can improve the diversity in the faculty at X university by trying to hire new professors who come [from] different backgrounds. We need to make a more conscious effort in making sure that we’re not hiring all of the same type of people because X university is so diverse, and we all deserve a professor we can relate to on a personal level.

Interestingly, this participant perceives that “X university is so diverse,” when over the last 30 years, the number of Black students has declined significantly. But one-third of participants from the first symposium and 38 of 114 in the second, mentioned a need to hire more diverse faculty. Specifically, symposia participants indicated that racial diversity was their major concern. “All of my teachers throughout my education have been white, which isn’t a problem at all, but it makes me wonder why there aren’t any more African American teachers.” Symposia participants spoke of a need for racial diversity, specifically in tenure track positions. One participant stated:

Improve faculty diversity by recruiting, hiring, and retaining full-time and qualified faculty of color into tenure-track positions campus-wide with explicit focus and strategic intent of academic leadership.

Participants also pointed to seeing “mostly white male professors.” This speaks to the lack of racial diversity in the professoriate and the need for gender diversity. As one participant noted:

Our student body is very diverse (not as much as it could be-but pretty good). However, I think that faculty diversity could be much improved upon- having more professors of color, female professors, etc., would foster better learning through exposing students to a wider variety of voices.

We found this comment particularly telling regarding the privileging of white male faculty members on U.S. college campuses. The social imaginary of professors is dominated by normalizing the illusion of whiteness and maleness as legitimate holders of power and knowledge:
I think a simple answer to this question is to hire more diverse faculty, but we have to consider why we previously hired exclusively white men for teaching and consider our cultural values and ways of thought that have contributed to our view that only white men are capable of teaching.

The call for racial and gender diversity among faculty, particularly in the tenure tracks, is often repeated. One participant noted: “Outspoken women and people of color are less likely to be full-time tenured professors than their similarly minded white coworkers.” A second highlighted the bias students can bring to their evaluations:

I do know there is a huge issue with bias related to student evaluations. Clear evidence that women and people of color receive lower ratings than men and white faculty. This can lead to a particularly toxic environment for women of color.

Nationally, women are underrepresented in the academy and women of color even more so (Abdul-Raheem, 2016). Indeed, in 2017-2018, X University’s adjunct, non-tenure track, tenure track, and tenured faculty was 58.49% male and 67.11% white (X university Fact Book).

A less frequent concern that emerged from the first symposium data was the need for more international and regionally diverse faculty. Students often evaluate international faculty lower, especially if they have an accent or are seen to have lower levels of English proficiency. In light of this tendency, it is interesting that some respondents specifically noted the need for more globally diverse faculty. As an example:

Hiring people with varying opinions and viewpoints not just people from different countries. Although hiring people from different countries certainly increases diversity at X university. This is not always feasible, but even hiring people from different cities or states that have had different life experiences will add diversity to the faculty.

One respondent called for increased diverse representation from Southeast Asia and the Middle East in the staff that would mirror the growth in students from those areas. “I’ve only seen two, maybe three races represented in the staff. I’ve seen very few Asian, Indian, Middle Eastern people. Fewer women than men, etc.” These divergent assessments of diversity point to a need for new theories about diversity and racism. How do we reconcile these contradictory points of view—these different ways of seeing the same thing?

Theory Building with Art

A cultural parallax, as described by Nabhan (1995), documents a phenomenon where dominant group perceptions and realities are limited by a narrow vision (i.e. the parallax) of their
experiences and belief systems. Those “binoculars of privilege” (Dyson, 2016) can either be a legitimate naiveté or a strong inclination to justify one’s expectations and/or justifications for bias outcomes (Williams-Witherspoon, 2011, 2013a, 2013b). Nonetheless, the results of these impediments to seeing reality are similar, a generalizable and broad grouping of knowledge about others and their realities and activities (Gandy, 1998; Said, 1979). The parallax can be likened to a lens narrowing your field of view.

We use cultural parallax to explain the continued varied apprehension of diversity—to show the chasm between reality and perceptions of faculty diversity (Nabhan, 1995). The way we see things or the limitations of our social/visual space influences how we interpret, understand, and respond to diversity. Reality and perceptions of diversity are sometimes similar and sometimes widely dissimilar. We are expanding these ideas of cultural parallax and binoculars of privilege by introducing the concept of Socio-Cultural Quantum Optics (SQO) to explain further the ways in which we see and interpret otherness. SQO is a framework that uses semi-classical and quantum mechanics theories and lexifiers from physics to investigate socio-cultural phenomena around race, racism, bias, and privilege, based on how upbringing and environment teach the brain to see and develop specific expectations others. For us, SQO is the quest to measure how much we see based on our social-cultural positionality.

In physics and biological sciences, we already know that with most human senses (sight, hearing, smell, taste, touch) our hands, ears, and eyes work in tandem with our brains. We can touch fire, listen to classical or new world music, or lookout and appreciate a sunset with our hands, ears, and eyes but unless the electrons, firing neuropathways in the brain, tell us what we see, hear, and touch is what it is, we cannot know it. SQO suggests that those raised by systems of bias or privilege are taught to see with expectations of otherness based on stereotypes and schema in ways that limit their understanding of diversity, equity, and inclusion. While cultural parallax and binoculars of privilege describe how our experiences limit our view, SQO goes further to show how not only is our vision shaped by experiences but that these quanta, minute experiences collectively train our brains to respond to stimuli like race in particular ways and, over time, put barriers in place that prevent us from seeing racialized reality. We posit that with a positionality steeped in negatively “raced” SQO, individuals readily develop an implicit bias.

Since SQO is theoretically learned, it can be unlearned. Racist expectations can be unlearned, and building blocks for diversity, equity, and inclusion can also be learned, but it requires many minute opportunities to relearn how we see others, along with repetition and intentionality. Our brains learn, remember, and codify (Gandy, 1998). Living in a country where racism has existed since the beginning means everyone has the responsibility to recognize what has been done and then work to refuse it, rebuff it, and undo it. We argue that self-reflection and broader systems analysis through the historiography of race and racism, along with interrogating how those systems are linked to the political economy, can provide a strategy to examine the micro and
macro processes that contribute to prejudice, racism and discrimination and unravel the would-be hard wiring of SQO and replace those old ways of seeing and knowing (Foucault, 1972, p. 224) with a much more socially and culturally nuanced and discerning sight. The current efforts by state legislators and others to ban even a nuanced conversation relating to Critical Race Theory (CRT), an effort to not expose students to factual history, undermines the effort to undo the rhizomatic structure of SQO.

Implications for Anti-Racist Work

In this paper, we have presented an analysis of data from two diversity symposia at X University in 2014 and 2017, using content analysis. We document in both symposia, there were two general impressions regarding the diversity of faculty, one of very limited diversity and one of much diversity. In reality, the diversity of faculty is minimal and decreasing. In our efforts to understand these divergent observations of the same situation, we engaged in what we call collective experiential observation. Viewing three art exhibits: *In Search of the Colored Girl*, *Black Quantum Futurism*, and *We Have Made These Lands What They Are: The Architecture of Slavery* made us see differently. Our collective experiential observation led us to describe the disparate views of the same situation regarding diversity, race, and racism due to Social-Cultural Quantum Optics (SQO). We argue that SQO explains, to some degree, how some groups see the same situation/circumstances, particularly around race and diversity but describe that situation very differently. This helps to explain how university presidents are disconnected from the realities of diversity, equity, and inclusion on their college campuses and how, often, they are deficient in seeing race and racism. A classic example of this is how Blacks and whites saw the O.J. Simpson trial. “Whites assume that if there were enough accusations, that Simpson would be convicted. Blacks assume that here’s another Black man drawn into the criminal justice system” (Ogletree Jr., 2005).

As a result of the convergence of the arts and cultural events that the research team participated in, using a collective experiential observation method for analysis, the subsequent discussions led us to examine the multiplicity of expressions and resistance strategies across times and geographies. It was the confluence of these events that helped us develop the concept of SQO, which, again, addresses the way we, as individuals, are taught to see from the micro to the macro and vice versa. Comparing the two sets of data from the symposia, we expected to see differences and even references to the larger political climate and the rise in hate crimes and violent attacks—that the “binoculars” of privilege would have been clearer. But they seem to be cloudy, seemingly, having normalized more egregious experiences of systemic racism and an even higher tendency to discriminate on college campuses noted throughout the paper.
Our goal during the symposia was to understand how faculty, students, administrators, and staff perceive and judge diversity at an urban Research 1 university. We started this research during the Obama administration. Three years later, moving through the 2016 Presidential campaign, and into the Trump administration, despite the change in the political climate, there was surprisingly little difference in how respondents perceived diversity and inclusion at X University. Despite the pendulum swing from President Obama’s administration to President Trump’s, most people’s perception of race and diversity in our study remained the same. This enduring perception led us to develop a framework for analysis that considers how we are taught to see SQO.

Because people are socialized into perceptions of race from a very young age with many minute experiences, our analysis using SQO suggests that ways of perceiving stay with them, thereby guiding the ways they see race, racism, and diversity. It will take a conscious, intentional effort to change or alter SQO, to be able to see race and racism, even though instances of bias and discrimination may not impact them directly. The dominant SQO buys into the stereotypes that we are frequently fed through media and the educational system. We assert that SQO can only be altered and/or improved on the quantum level, through frequent purposeful and intentional action and interventions that slowly refuse, rebuff and undo racism.
References


