

# Science Librarianship and Social Justice: Part 3

# **Advanced Concepts**

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## Introduction

This is the third of a four-column series that aspires to delve deeper into more complex concepts of equity, diversity, inclusion, and social justice (EDISJ). With each concept, there are accompanying science and library-based examples to further explicate and to open dialog, reflection, and conversation inside and outside of STEM librarianship. This column continues to be scaffolded upon the concepts of the first and second columns, becoming increasingly interdependent and interwoven. The authors have been intentionally thoughtful about ensuring the lists of concepts are successive and build upon earlier concepts in the column series.

As with previous columns, the concepts covered are a representative sample and are not encompassing of all of the possible definitions, especially those that have definitions or uses outside of social justice or equity-related disciplines. We are cognizant that the list is not comprehensive, but a snapshot of appropriate concepts within our current United States institutional and societal climates. We also recognize that some concepts' definitions have evolved beyond their original purpose or definition, and specific understandings/uses may vary per region in the US. The nuances have been noted where appropriate to help guide readers.

Additionally, our examples are a mix of real and fictitious scenarios, sometimes offering a solution and other times, a narrative of the issue in action. As a reminder, the concepts and examples are based on the authors' <u>lived experiences</u>; however, there exists a large volume of resources and research, academic and otherwise, on these concepts if you wish to research them more deeply. We encourage readers who want to continue the deeper dive into social justice understandings to consider library EDI Resources from: <u>ALA</u>, <u>ACRL</u>, <u>SLA</u>, <u>STS</u>, <u>Disrupting</u> Whiteness <u>Bibliography</u>.

As a reminder, the goals of the column are

- To engage readers in meaningful and intentional conversations around EDI and ask them to reflect on their own practices
- To expose readers to scaffolded social justice concepts as pertinent to serving and teaching people of diverse backgrounds
- To demonstrate the relevance of social justice concepts by using examples that intersect with science librarianship

As a group of five librarians from different institutions, there is no single positionality statement that could cover all of us. That said, the work behind these columns is driven at least in part because of our identities and lived experiences including non-binary, Latina, Black, White, queer, and autistic librarians. We have come together as a group to bring conversations about justice to the forefront of science librarianship. We also realized that as we dug deeper into our work and understanding, we wanted to engage other scholars in the field for clarity and refining. In this column, we have invited more consultants than the previous column, and you will see their names listed in our acknowledgements. We appreciate their willingness to continue to engage with us all as we tackle some of the challenging concepts, especially as we try to present them as clearly and completely as we can.

This column will challenge some readers, and it should. As one of our authors says in their social justice related presentations, "this work is messy and uncomfortable." The authors encourage readers to use the self-reflection questions to help untangle the dissonance between the concepts and their understanding of them. We encourage readers to start and continue conversations within their libraries, spheres of influence, and/or other <u>brave spaces</u>.

## **Advanced Concepts**

### Accommodation

Grown out from disability activists' call for equal access to public accommodations, it has come to mean when efforts are made to adapt an existing resource, space, service, or experience to be accessible to all, including but not limited to those who are disabled. Accommodations are usually provided only to those with recognized disabilities who ask for them or when the law requires the accommodation to be provided. Institutions are legally required to provide accommodations in order to be in compliance with the Americans with Disabilities Act (ADA) of 1990. The word accommodation is also used to describe any action taken by organizations or institutions when they are compelled to facilitate basic access to a marginalized group (i.e., providing space suits that fit female astronauts or providing gender-inclusive restroom access) (APA 2012; ADA National Network [date unknown]).

Accommodation is also used in educational theory. This usage originated in Jean Piaget's theory of cognitive development, referring to the stage of development where a person adjusts their

existing knowledge to fit new information instead of adjusting new information to fit their existing knowledge (<u>Kibler 2011</u>).

*Library Example*: An older library embarks on a stack shifting project that involves weeding a percentage of the collection and moving the remainder to another floor. This allows them to finally, after numerous complaints and requests, bring the library into legal compliance with Section 8 of the ADAAG (ADA Accessibility Guidelines) by moving their stacks further apart and accommodating wheelchairs (U.S. Access Board 2002; ALA 2019).

Science Example: An astronomy department enrolls a blind student, and the department must accommodate their learning needs. They found one such tool called C.A.R.D.I.S. (Coordinates and Relative Dimension in Space), a tactile three-dimensional coordinate grid that can help make astronomy accessible for blind and visually impaired learners. Developed by Dr. Wanda Diaz-Merced, a practicing blind astronomer, and Dr. Kathy DeGioia Eastwood, C.A.R.D.I.S. can be easily put together from cheap, widely available materials. Similar to the way curb cuts or ramps help those in wheelchairs, as well as parents with strollers, and people pushing grocery carts, C.A.R.D.I.S. can also aid sighted students who find it hard to visualize three dimensional spaces (Astrosense [date unknown]).

## **Allyship**

Allyship is an umbrella term for a spectrum of behaviors by members of dominant cultures who use their privilege to walk alongside, support, defend, and/or advocate for members of non-dominant cultures. This support can look like developing friendships with members of the marginalized group, participating in celebrations and cultural events, holding positive attitudes toward and using positive language about the marginalized group, and/or taking small or large actions toward cultivating in the dominant group acceptance and understanding of the marginalized group. This can include having an intention to be a comrade or partner in the pursuit of equity and equality for and/or with BIPOCs, LGBTQ people, or other marginalized groups. An ally might also be a deliberate disruptor of the systems, policies, procedures, and practices that negatively impact marginalized and minoritized experiences in disproportionate ways. While some allyship may be seen as timid, everyone's circumstances are different and allyship is not measured by how it looks but by how supported the members of non-dominant groups feel.

Recently, the idea of people and groups labeling themselves "allies" has been critiqued because it can be seen as performative, e.g., corporations posting black squares in recognition of Black Lives Matter on social media and not also changing their hiring practices. One of the main thrusts of those making these critiques has been a push toward the activist side of the spectrum of allyship behaviors, specifically the ideas of standing in solidarity and being an accomplice. This critique of performativity recognizes that good intentions alone have either no impact or a harmful one.

The concept of standing in solidarity aims to shift members of the dominant culture from working for to working with non-dominant cultures. The concept of being an accomplice means not just working with but being led by non-dominant cultural leaders, whether or not they are in the room, and taking on the risks associated with challenging dominant power structures. These adaptations of allyship involve standing alongside members of non-dominant cultures and collaboratively supporting their work. This sometimes looks like taking action and sometimes looks like stepping back, but mostly it requires asking non-dominant cultures what their needs are and not assuming them (Indigenous Action 2014; McKenzie 2015; Clemens 2017; Harden & Harden-Moore 2019, Kim 2020).

Library Example: After seeing the lack of diverse viewpoints in the membership on a national conference planning committee, an active white member realized that as a person from a dominant culture, he had the power to influence the situation. He exercised allyship by advocating for recruiting new committee members with special emphasis on representation from historically Black colleges and universities (HBCUs), minority serving institutions (MSIs) and tribal colleges, as well as gender and abilities.

Science Example: The faculty members of a mathematics department published a statement to denounce the current and historical inequities women and BIPOC of all genders had faced in their department. Upon reading the statement, a Black woman PhD student approached the group and suggested they move beyond performative allyship into solidarity by supporting the work already being done by the Black Student Union and the student chapter of the Association of Women in Mathematics.

## **Code Switching**

Originating in linguistics, code switching first meant the art of and/or the necessity to switch linguistic manifestations to adapt and maneuver within different contexts. Examples of linguistic code switching would be switching from "the King's English" in meetings and speaking in a lay or informal dialect with colleagues of similar backgrounds, or it may be speaking in a native language to hide a conversation from colleagues. The definition has since expanded to encompass how one navigates institutional or dominant cultures and spaces through shifts in language and expression. It is an internal process for the individual dependent on their knowledge of and experience with the language and culture to which they are attempting to adapt. Additionally, these shifts are dependent on existing power structures. While everyone code switches to some extent, it is especially complex and important for people from non-dominant cultures and groups. In particular, members of non-dominant groups are expected to, and often need to for safety or professional reasons, conform to the norms and expectations of language and expression when in a dominant group's space. In contrast, members of the dominant group are not likely to be expected to or need to change their language or expression when in a non-dominant group's space.

Library Example: Jorge took a break from his reference work to ponder on how to organize his presentation. While he was staring at the trees outside the library, a student approached him to ask for directions. Jorge was in such deep thought, that he did not hear the student. When he realized that the student said something, he asked, "¿Qué necesitas?" The student just stared at him. Jorge realized he had not code switched and apologized to the student for not responding in English. He explained that he was thinking in his native language and asked the student to repeat the question.

Science Example: When she started graduate school in chemistry at a school in the Northeastern USA, Yasmin tried to lessen her southern accent as much as possible because she knew that her teachers and fellow students would be less likely to view her as intelligent and capable because of it, though it came back strongly every time she called home. Then when she visited back home over winter break, she found that she often had to consciously shift from using the technical language of the lab back into a more colloquial form when talking with her family about her time and work in graduate school (Fields 2012).

## Critical Pedagogy

A teaching framework originally developed in the 1970s by Brazilian adult literacy educator Paolo Freire that combines theory and practice into praxis of reflective teaching. Educators around the world, such as bell hooks, have adapted and expanded this theory to fit their various disciplines and contexts. Critical pedagogy is based on critical theory and emphasizes the integration of social justice, political awareness, and a resistance to dominant cultural norms in curricula, course design, and teaching practice. It also challenges traditional educational hierarchies, such as what Freire called the banking model of education in which the teacher is always the only expert and the student is an empty vessel. When applied in the classroom, it includes viewing students as fully formed human beings with experiences and knowledge that influence how they engage with concepts and using a dialogic, or conversational, approach to teaching and learning.

*Library Example*: Librarians redesigned their information literacy program learning outcomes to emphasize critical consciousness about the sociopolitical context of information. They agreed to start reflective teaching journals, and to meet regularly to discuss how to continue to resist the banking model of education.

Science Example 1: An ecology professor, Dr. Rachel K. Thiet (2017), reflected on her teaching practice and her students' "sense of self" and came to the conclusion that she could enhance student learning of the science course material if they were given a voice in the learning process. Dr. Thiet created a first-day activity that allowed students to equitably and openly share their personal experiences and knowledge with both her and the other students in the class.

Science Example 2: After years of practicing critical pedagogy in their classrooms, the faculty of the College of Science and Technology decided to apply this across their curriculum. They revised their graduation requirements to include a course on the societal impact of science policy. In the course, the instructor guides and encourages the students as they critically consider their major in light of its social justice impact and its political power and influence.

## **Cultural Appropriation**

The act of hijacking, exploiting, or profiting off of a non-dominant religious, ethnic, racial or spiritual identity by someone from a more or equally dominant group without attribution or wealth-sharing. Cultural appropriation is disrespectful and often reinforces stereotypes, contributing to oppression.

Library Example 1: A white librarian learns to cook traditional Oaxacan dishes while on a summer vacation in Oaxaca de Juárez, Mexico. When she returns, she starts offering classes in the library on how to cook these dishes. The library offers these classes for several months until it comes to their attention that, because the librarian is white and not a member of the Oaxacan culture, they are participating in cultural appropriation. They do some research and reach out to the local Oaxacan community to see if anyone with a personal connection to the food would like to be contracted to develop and teach the class. The library creates a policy dictating that all cultural programming in the library will be developed and facilitated in relationship with local community groups with fair compensation in order to avoid cultural appropriation in the future.

Library Example 2: At the Reference desk, a white librarian would close out conversations with patrons who approached the desk with the phrase, "Namaste" from the Indian culture. While the reference librarian thought this made them seem more inclusive, the Library received anonymous

concerns that this greeting was inappropriate to be made by a white person and outside the context of the Indian culture.

Science Example: In the 1990s, patents were awarded to the U.S. headquartered W.R. Grace corporation for pest control products derived from the neem plant, even though it had already been used as an insecticide by the people of India for thousands of years (Roht-Arriaza 1996). W.R. Grace's vice-president dismissed Indian farmers' uses of neem as more similar to "folk medicine" than science and the corporation did not plan to provide any compensation for their use of neem. Indian farmer and activist Sasha Reddy spoke with the LA Times about this appropriation, "It is of Indian origin. It is our material. It belongs to the entire nation" (Tolan 1994).

## Cultural Humility

Born at the intersection of science and social justice, cultural humility was first used in 1998 by Drs. Melanie Tervalon and Jann Murray-Garcia (1998). The concept was developed for physicians in how to treat patients from backgrounds different than their own and to correct any related injustices. More broadly, cultural humility has come to mean being both self-reflective about one's own cultural identities and biases, and other-oriented when it comes to aspects of identity that differ from one's own. This stance requires being non-defensive to critique of one's own culture, as well as being committed to developing intercultural relationships that are non-paternalistic and mutually beneficial and to working toward redressing power imbalances. A core element of cultural humility is understanding that having good intentions does not change the impact of one's actions (Waters & Asbill 2013).

Library Example: After realizing they have no collections on the history of science, the science liaison librarian develops a collection development proposal that decenters whiteness in the sciences by explicitly committing to purchase materials that cover the contributions of Black and Indigenous people of color and non-white (BIPOC), non-Western cultures to scientific knowledge. She realizes that because of her positionality she cannot do justice to this topic on her own. She includes in the proposal that the Library build relationships with BIPOC librarians and scientists, faculty who are experts in DEI topics in the history of science, and other experts to inform their collection development activities.

Library Example: When writing this column, the authors reached out to librarians to review the definitions and examples in subsets. In one occurrence, we invited a librarian who observes a non-institutionally recognized cultural holiday to do the review during this holiday. Our request put the librarian in the situation of having to ask us to extend our deadline so they would be able to provide a review without it impacting their observances. We did extend the deadline, but not in nearly as gracious a way as we should have and later followed up with an apology for our lack of cultural humility and understanding. We should never have put the librarian in this position in the first place.

Science Example: Maria, a young fourth-year medical student doing a rotation in geriatrics, encountered a patient who was angry about having an appointment rescheduled for a month later and assumed this was another example of the entitled behavior she associated with Baby Boomer generation patients. Nonetheless, Maria talked with the patient and discovered the patient's real source of upset was anxiety over potentially not receiving the treatment in time. This led Maria to realize that instead of assuming her older patients were simply a part of an entitled generation, she needed to recognize they have a different set of lived experiences, needs, and worries and work to better understand those things in order to treat them effectively.

## Deadname

Describes a trans or non-binary person's birth name that is no longer used, usually because it doesn't reflect their gender identity. This concept has its origins in the trans community, and it is intended to reflect the intensity of the disconnect between the trans or non-binary person's current identity and the birth name, and to indicate the level of discomfort, disrespect, and potential danger experienced by the trans or non-binary person when someone uses that name. Deadnaming is a <u>microaggression</u> wherein one uses a trans or non-binary person's birth name without consent.

Library Example: A few years after being hired, a trans librarian decides to come out at work. They send an email to their colleagues introducing the name and pronouns they use now and explicitly request that nobody use their deadname. Despite this request, some of their colleagues slip up by misgendering or calling them by their deadname. Whenever a colleague accidentally uses the deadname, however, they apologize quickly, correct themselves, and practice using the trans colleague's name and correct pronouns whenever possible.

Science Example: At the urging of its trans membership, The American Chemical Society (ACS) supports all requests for name changes, with no proof of the new identity required (ACS Publications [date unknown]). This October 2020 policy revision only needs the preferred name to appear on the ORCiD and ACS Paragon Plus. Any searches on the ACS platform will show up with the preferred name, and any articles written with the deadname can be linked with the preferred name, as long as other co-authors agree. However, ACS has no control on what appears on other databases nor browser searches; users will have to enter both the deadname and the preferred name on these platforms to find all pertinent scholarly works.

### Environmental Justice

Actions, laws, policies, etc., that ensure the environment and the people closest to it are cared for and protected, recognizing the interconnectedness between land, resources, and people. A lack of environmental justice leads to systems and companies abusing the environment while ignoring and endangering the lives of indigenous people, marginalized people, and communities in the process.

The Environmental Justice Movement is the struggle for acknowledgement of the environmental harms done and the implementation of actions, laws, policies, etc., required for environmental justice.

Library Example: The library plans to redo the landscape of their courtyard. Wanting to treat the land with respect, they do some research on the history of the surrounding area and learn that it was originally acquired by the University due to a broken treaty with the local indigenous people who have been stewards of it for thousands of years. The library decides to build a reciprocal relationship with the local indigenous government to determine an appropriate use of the land. Following their advice, the library designates the space as a sustainable edible garden with native plants that is open to use by the tribe and is marked by a plaque detailing that this garden is on unceded territory.

Science Example: Historically, toxic industries or processes have been placed in the neighborhoods of marginalized communities because people living in those areas don't have enough political power to stop them. People who live in environmentally toxified locations are forced to advocate for themselves in the face of a dominant culture that won't recognize or care

about the harm caused to them and a lack of checks and balances for the industries that cause these harms. Specifically, many oil refineries and chemical manufacturing plants have been placed along the Mississippi River between Baton Rouge and New Orleans. This area has been the home of mainly poor Black residents who have been ignored and suppressed for centuries. When the residents noticed that the high rates of many types of cancers were killing them and brought it to the media, the term "Cancer Alley" started being used in the news reports to bring awareness to the environmental injustice. Because of this negative publicity, nearby companies now sometimes work with the residents and public health officials to reduce people's exposure to carcinogens (Baurick et al. 2019; Ramirez 2020).

## *Intersectionality*

Kimberlé Crenshaw (1989), a Black woman lawyer and scholar, originally coined the term intersectionality in her legal argument against the way courts would only consider discrimination based on race or on gender but not both, in particular focusing on how Black women face discrimination as Black people and as women. Since Crenshaw's introduction, the concept of intersectionality has grown well outside its framing in law; it is now considered a framework for analyzing how a person's various identities, and associated discrimination or privilege, affect how they are treated and viewed within a society, including its political and legal systems. Intersectionality examines the interconnected and interwoven nature of the multiple facets of a person's identity including but not limited to race, gender, sex, sexual orientation, and physical ability. While these identities are often targeted individually for oppression and discrimination, the interaction of multiple identities can further disadvantage individuals or groups that possess more than one identity.

Library Example: The library was excited about hiring Pat, an expert in data visualization in information studies. Unfortunately, due to unexamined biases embedded in the institutional culture, Pat experiences microaggressions about their use of gender non-binary pronouns, traditional dress of their home country, and presumed sexuality. They are experiencing a unique type of discrimination at the intersection of gender, ethnic origin, and sexual orientation.

Science Example: A climate survey of LGBT physicists by the American Physical Society found a number of examples that BIPOC LGBT physicists faced discrimination on account of the intersection of their race, gender identities, and sexual orientations (Atherton et al. 2016). These physicists indicated they did not feel at home in either majority white LGBT groups or the majority cis and straight BIPOC organizations. The survey also found that LGBT women physicists faced exclusionary behavior at three times the rate of LGBT men.

### Restorative Justice

What began as a reformative theory about criminal justice has become a movement about people, relationships, community, and reconciliation. Originally a theory and practice that brings together the harmed person, the wrongdoer, and the affected community to examine the specific harm from everyone's viewpoint, to acknowledge the roles of the perpetrator and community in the harm, and to work toward a resolution that will benefit all who are involved. This is done through creating space for conversations among the harmed person, the affected community, and the wrongdoer in order to bring about resolution and transformation. As the concept has evolved, it has been used more broadly in a variety of settings, including academia (Pedreal 2014; Knott 2016; OSC Loyola 2021), to resolve conflicts and wrongs with positive outcomes. In all cases, restorative justice remains centered on peaceful resolution to injustices and conflicts such that there is transformative change for all parties involved or affected.

Library Example: A law professor, partnering with a juvenile justice organization, approached the Dean of the Information Science College with a collaborative community project for prospective law librarians. The professor wants to make the city council and local courts aware of restorative justice programs and invites the LIS students to assist in literature and case study reviews. The law professor provides each student an existing regional program, and the student turns in a list of articles about the implementation, process, and success rate of the program.

Science Example: As a part of their EDI efforts, a physics department at a large research institution has decided to use a restorative justice approach for conflict resolution in research lab disputes. Knowing this is outside their field of expertise, they invite staff from their campus' Center for Restorative Justice to meet with the faculty, staff, and students for training. When conflicts arise, a mediator from the center comes to an open department meeting where they are able to facilitate a conversation to understand the various viewpoints, working towards resolution and transformative change.

## Stereotype Threat

Developed by Claude Steele and Joshua Aronson (1995) in research about testing performance of Black students, and further expounded upon by Steele (1997) to examine the barriers faced by women in quantitative fields and by Black students in general, stereotype threat refers to the risk and/or fear (threat) of being seen through the lens of or confirming through one's actions the negative stereotypes related to one's identities. This threat can cause anxiety, doubt, and high cognitive load in situations where it arises leading to decreased performance in those situations.

Library Example: Even though Charlie was an experienced and proficient reference librarian, every time they work the desk with a masculine presenting person, Charlie would start to feel anxious. This was because as a feminine presenting person, Charlie had often had their expertise questioned and had question askers seek confirmation of their answers from masculine presenting librarians.

Science Example 1: Research by Beasley and Fischer (2012) found there to be a higher drop-out rate or change of major for marginalized groups of undergraduate STEM majors, such as Black and Latinx students, based on performance anxiety specifically linked to their racial identity.

Science Example 2: Eduardo is a first generation Latinx student enrolled in a calculus 2 class. When the mathematics professor before the midterms and finals tells the students that the exams will test their mathematical intelligence and natural aptitude for mathematical thinking, Eduardo performs poorly on the exams and fails the course, even though he had studied the material thoroughly and practiced with great success. Eduardo repeats the course with a different professor who encourages the students prior to all exams, reminding them that the test material is what should be familiar to them from lectures and homework. This time around, Eduardo earns an A.

## **Sustainability**

The practice of fulfilling current needs without jeopardizing the capability of people in the future to meet their needs. Sustainability can be seen through many lenses. Three of the most common are: social, economic, and environmental. Social sustainability is concerned with how to increase social cohesion, equality and equity, and opportunities over time, among other similar social goals. Economic sustainability attempts to provide a pathway for long term development and growth with positive outcomes for all people. Environmental sustainability involves engaging

with the natural world in a way that protects and preserves it in as many ways as possible with respect to development, extraction, and study.

Library Example: In order to promote their core value of sustainability, a large University decided to provide internal grants for projects that promoted it. The library applied for and received two of these grants for projects related to environmental sustainability, one for a composting program and another for solar panels. The business librarian thought that this could represent a limited idea of what sustainability means, that it is only environmental, and that there were likely social and economic programs and initiatives already underway in the library that could fall under the umbrella of sustainability. They compared all the library programs and initiatives they were aware of to the UN Sustainable Development Goals (SDGs) and identified four that matched and were then able to successfully apply for an additional internal grant (DESA 2016).

Science Example 1: The Eberly College of Science at Penn State University has established a Sustainability Council that works to incorporate the 17 goals of the UN Sustainable Development Goals (SDGs) into their college life and collaborates with their campus' Sustainability Institute to achieve these goals (Eberly 2020).

Science Example 2: When putting together her tenure packet, materials scientist Jennifer reached out to her liaison librarian, Charles, to help gather impact metrics for her research. Along with providing Jennifer the traditional impact metrics, Charles recommended that since their University has committed to supporting the United Nations Sustainable Development Goals (SDGs) that Jennifer should highlight how her research and collaborations in clean energy could be and have been used in meeting SDGs 7, 11, and 13 (DESA 2016).

### **Tokenism**

Putting forth only a symbolic or perfunctory effort to demonstrate inclusion in order to avoid/stop criticism. This may include the act of labeling a single person and their experience as a representative of an entire culture, ethnicity, or marginalized group. This allows an institution or department to project that they have made substantive changes to address inequality when in fact they are merely paying lip service to the idea of inclusion by treating individuals as checkboxes on a diversity bingo sheet. Similar to model minority, tokenism unfairly sets high expectations and places undue pressure on the person being tokenized which contributes to feelings of isolation, guilt, overextension, demoralization, and lower levels of job satisfaction on the part of individuals being used in this fashion.

Library Example: When discussing equity and inclusion in the executive level of universities, people often highlight the accomplishments of a few BIPOCs or a few women leaders without acknowledging how rare it is for BIPOCs or women to be promoted to those roles. Though their stories are valuable, their use as tokens suggests that their experiences could be duplicated by all BIPOCs or women, thereby minimizing the nuances and challenges of being a BIPOC or woman leader.

*Science Example*: When her Chemistry department asked her to take part in some photos for their new pamphlet for prospective students, Jazmin was honored to take part. This feeling soured when the pamphlet came out and she realized that she was the only BIPOC student featured in a clear attempt to make the department appear more diverse.

### Whiteness

A social construct that <u>positions</u> people with pale skin and/or those who are descended from European ancestors in a privileged social class by which all others are compared, to the detriment of those who are not identified as white. It is a system of domination that gives unearned advantages to white people and unearned disadvantages to BIPOC. Whiteness is something one is born into and/or conferred upon a person by society: if you are a white person or are seen by society as being white, you benefit from whiteness, whether or not you understand, identify as, or want to be a "white person." It is also mythologized as an aspirational category in the American Dream, wherein those ethnic and racial groups and individuals who are able (or allowed) to assimilate convincingly enough are granted conditional entry (<u>Smithsonian 2019</u>; <u>Williams 2020</u>).

Whiteness is normalized, meaning that elements of culture, politics, economics, etc. that benefit the system of whiteness and are preferred by white people form the standard by which other races are compared. This reinforces whiteness as a power structure hidden even from white people themselves. It positions white people as the default and whiteness as "the way things should be" making both nearly unnamable and therefore uncriticizable. White people have the choice to never confront their own whiteness, even when they are outnumbered, because they have no experience or understanding of what it means to be minoritized. (Guess 2006)

Library Example: Science librarianship (collections, reference, and instruction) elevates work based on the scientific method developed in Europe during the Enlightenment period and discounts the experiences of oral traditions and alternative medicine as legitimate modes of experimentation, fact finding, and questioning. In order to de-center whiteness, an astronomy librarian diligently searched for and selected books on the history of astronomy that were inclusive of the First Nations people of Australia and their impressive astronomical work (Norris & Hamacher 2009).

Science Example: New parents have for generations worried about how the growth of their infants was on pace to develop appropriately and within the norm of how other infants and toddlers grew. Until 2000, the growth charts that were used in doctor's offices around the U.S. were based on the research of Fels Longitudinal Growth Study that had a limited sample of only formula-fed, white middle-class infants in Southwest Ohio (Carroll 2020). This means doctors were centering whiteness as the standard by which all other infants would be compared for more than twenty years before it was revised (DHHS 2002).

## **Reflection Questions**

To engage further with these concepts and/or colleagues, we provide a few discussion questions:

- 1. Are any of our definitions different from your understanding of the concepts, and if so, how?
- 2. Given your lived experience, which of these concepts do you feel is most significant to your life?
- 3. Considering the departments that you liaise to, which of the concepts are most relevant in your work?
- 4. How can you apply these concepts to your work right now as a science librarian?

## Acknowledgements

The authors would like to gratefully acknowledge the amazing review work done by Bonnie Fong, Amani Magid, Lisa Ngo, Rebecca Orozco, Gina Schesselman-Tarango, Shaunta Smith-Cruz, and Mea Warren.

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Issues in Science and Technology Librarianship No. 97, Spring 2021. DOI: 10.29173/istl2601