

 Sign in to medium.com with Google ✕

 **Emily Mixon**
emilyemixon@gmail.com

 **EMILY MIXON**
eemixon@wisc.edu

2 more accounts



[Image: two people with beards, one in a turban, one in a hat, holding what look like geometric tools]
source: wikipedia

Decolonising Science Reading List

It's The End of Science As You Know It





Chanda Prescod-Weinstein Follow

Apr 25, 2015 · 10 min read


Thank me for my free labor maintaining this list by making a donation to funds for the Kānaka Maoli Protectors of Maunakea. Academic work cite and/or acknowledge.

A note on Making Meaning of “Decolonising” that the original motivation behind the creation of the use of Maunakea by non-Kanaka Maoli is “decolonising” if you’re not going to tie it to what it requires. Intellectual colonialism only works if it.


Sign in to medium.com with Google
✕



Emily Mixon
emilyemixon@gmail.com



EMILY MIXON
eemixon@wisc.edu

2 more accounts

A twitter thread by Melissa Daniels (Athabasca Chipewyan First Nation) on engaging in colonialist activity under the guise of “decolonising education”

October 2016 Introduction


In April, 2015, one of the most visible topics of discussion in the Astronomy community was the planned Thirty Meter Telescope and protests against it from Native Hawaiians who didn’t want it built on Mauna Kea. I wrote a lot about this on social media, spending some significant time trying to contextualize the debate. This reading list was originally created in response to requests for where I was getting some of the information from. A lot of people asked me about what I’d been reading as reference points for my commentary on the relationship between colonialism and what we usually call “modern science.”


In August 2016 I updated to announce: *I’m happy to report that Sarah Tuttle and I will be contributing to this list with our own publications in future thanks to this FQXi grant that we are co-I/PI on: Epistemological Schemata of Astro | Physics: A Reconstruction of Observers. The grant proposal was based on a written adaptation of a speech I gave at the Inclusive Astronomy conference, Intersectionality as a Blueprint for Postcolonial Scientific Community Building.*

As part of this work, I’ve continued to expand the reading list, which seems to have become a global resource for people interested in science and colonialism. As I originally said, I make no claims about completeness, about updating it regularly, or even ever coming up with a system for organizing it that I find to be satisfactory. You’ll find texts that range from personal testimony to Indigenous cosmology to anthropology, to history


to sociology to education research. All are key to the process of decolonising science, which is a pedagogical, cultural, and intellectual and practices. This reading list functions considering the ways in which science are read all or part of and saw some value in

I am especially indebted to the #WeAreSpurring me to educate myself.


Sign in to medium.com with Google
✕



Emily Mixon
emilyemixon@gmail.com



EMILY MIXON
eemixon@wisc.edu


2 more accounts


Original April 2015 Commentary

There are two different angles at play in the discussion about colonialism and science. First is what constitutes scientific epistemology and what its origins are. As a physicist, I was taught that physics began with the Greeks and later Europeans inherited their ideas and expanded on them. In this narrative, people of African descent and others are now relative newcomers to science, and questions of inclusion and diversity in science are related back to “bringing science to underrepresented minority and people of color communities.” **The problem with this narrative is that it isn’t true.** For example, many of those “Greeks” were actually Egyptians and Mesopotamians under Greek rule. So, even though for the last 500 years or so science has largely been developed by Europeans, the roots of its methodology and epistemology are not European. Science, as scientists understand it, is not fundamentally European in origin. This complicates both racist narratives about people of color and innovation as well as discourse around whether science is fundamentally wedded to Euro-American operating principles of colonialism, imperialism and domination for the purpose of resource extraction.


This leads me to the second angle at play: Europeans have engaged what is called “internalist” science very seriously over the last 500 years and often in service and tandem with colonialism and white supremacy. For example, Huygens and Cassini facilitated and directed astronomical observation missions in order to help the French better determine the location of St. Domingue, the island that houses the modern nations of Haiti and the Dominican Republic. Why? Because this would help make the delivery of slaves and export of the products of their labor more efficient. That is just one example, which stuck out to me because I am a descendant of the Caribbean part of the Atlantic Slave Trade, and I also have two degrees in astronomy (and two in physics).

There is a lot that has been hidden from mainstream narratives about the history of astronomy, including 20th century history. How has science been taken us? From Europe to Haiti to now. This is the conversation now, even though the story is still being told. To understand the context of what is happening, we must understand that Hawai'i is not just a place and benefited from colonialism. And in the history of science. Thus, my reading list also includes


Sign in to medium.com with Google
✕



Emily Mixon
emilyemixon@gmail.com



EMILY MIXON
eemixon@wisc.edu

2 more accounts

tl;dr: science has roots outside of the Eurasian peninsula known as Europe, it likely has its limitations as one of multiple ontologies of the world, it has been used in really grotesque ways, and we must understand all of these threads to truly contextualize the discourse in Hawai'i around science, Hawaiian epistemologies and who gets to determine what constitutes “truth” and “fact” when it comes to Mauna a Wakea.

Finally, I believe science need not be inextricably tied to commodification and colonialism. The discourse around “diversity, equity and inclusion” in science, technology, engineering and mathematics must be viewed as a reclamation project for people of color. Euro-American imperialism and colonialism has had its (often unfortunate) moment with science, and it's time for the rest of us to reclaim our heritage for the sake of ourselves and the next seven generations.

Note: this reading list is woefully low on materials about science in the pre-European contact Americas, Southeast Asia and parts of Australasia. I'm probably missing some stuff, but I think it signals a problem with research in the history of science too. Also I make no claims about completeness or a commitment to regularly updating it with my newest finds. Also see A U.S./Canadian Race & Racism Reading List.

May 2017 edit: I also just learned that there is a Reading List on Modern and Colonial Science in the Middle East.

October 2017 edit: I gratefully acknowledge Duane Hamacher of the Indigenous Astronomy twitter account for suggesting texts on Australian Indigenous astronomy and for introducing me to research on subarctic Indigenous astronomy.

Martin Kusch's Sociology of scientific knowledge bibliography may be of interest.

As of May 2017 Beatrice Martini has posted Decolonizing technology: a reading list.

Works by me that may help you continue thinking about. These are partly here on my own horn but because I found that we have contributed to the dialogue myself be

Making Meaning of Decolonising (in dialogue)

Black Women Physicists in the Wake

Intersectionality as a Blueprint for Postcolonial Scientific Community Building

Women in Astronomy: Ain't I a woman? Living at the intersection of gender, race, and sexuality

The Self-Construction of Black Women Physicists

The List

We Live In the Future. Come Join Us. by Bryan Kamaoli Kuwada

Protecting Mauna A Wakea: The Space Between Science and Spirituality by Keolu Fox

Maunakea: Redirecting the lens onto the culture of mainstream science by [Aurora Kagawa-Viviani](#)

The fight for Mauna Kea and the future of science by Sara Segura Kahanamoku


Science, Time, and Mauna a Wākea: The Thirty-Meter Telescope's Capitalist-Colonialist Violence (Part I, Part II), Uahikea Maile


Multicultural settler colonialism and indigenous struggle in Hawai'i: The politics of astronomy on Mauna a Wakea a dissertation by Joseph Salazar

Aloha Betrayed: Native Hawaiian Resistance to American Colonialism by Noenoe K. Silva

A Nation Rising: Hawaiian Movements for Life, Land and Sovereignty, Noelani Goodyear-Ka'opua, Ikaika Hussey, and Erin Kahunawaika'ala Wright, editors


✕

 Sign in to medium.com with Google



Emily Mixon

emilyemixon@gmail.com



EMILY MIXON

eemixon@wisc.edu

2 more accounts

voices of fire: reweaving the literary lei of pele and hi'iaka by ku'ualoha ho'omanawanui

Transient Workspaces: Technologies of Eve

Chakanetsa Mavhunga

Taking Back Our Spirits: Indigenous Liter

Episkenew

African Cultural Astronomy: Current Ar

in Africa eds. Jarita C. Holbrook, Johnson O. Orland, and K. Thebe Mendepe

Alaska Athabascan Stellar Astronomy by Christopher M. Cannon

Night Skies of Aboriginal Australia: A Noctuary by Dianne Johnson

Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants
by Robin Wall Kimmerer

Race After Technology: Abolitionist Tools for the New Jim Code by Ruha Benjamin

*Captivating Technology: Race, Carceral Technoscience, and Liberatory Imagination in
Everyday Life* ed. Ruha Benjamin

The History of White People by Nell Irvin Painter

The Handbook of Science and Technology Studies eds. Ulrike Felt, Rayvon Fouché, Clark A.
Miller, and Laurel Smith-Doerr

Pursuing Intersectionality, Unsettling Dominant Imaginaries by Vivian May

Decolonizing Methodologies: Research and Indigenous Peoples by Linda Tuhiwai Smith

Medicalizing Blackness: Making Racial Difference in the Atlantic World, 1780–1840 by
Rana A. Hogarth

In the Wake: On Blackness and Being by Christina Sharpe

Against Purity: Living Ethically in Compromised Times by Alexis Shotwell



Sign in to medium.com with Google



Emily Mixon

emilyemixon@gmail.com





EMILY MIXON

eemixon@wisc.edu


2 more accounts

The Crest of the Peacock: The Non-European Roots of Mathematics by George Gheverghese Joseph; **Many thanks to Archishman R**
caveat about this book: *I just wanted to*
charge on G. Joseph for appropriating info
<http://ckraju.net/Joseph/Complaint-abo>
<http://ckraju.net/Joseph/Annexures-Ma>
context that someone from University of M
India. Addendum from Chanda: the link
available on the Wayback Machine.


Sign in to medium.com with Google
✕



Emily Mixon
emilyemixon@gmail.com



EMILY MIXON
eemixon@wisc.edu

2 more accounts

Science, Colonialism and Indigenous Peoples: The Cultural Politics of Law and Knowledge by Laurelyn Whitt

Gender and Scientific Authority, eds. Barbara Laslett, Sally Gregory Kohlstedt, Helen Longino, and Evelyn Hammonds

Beyond Banneker: Black Mathematicians and the Paths to Excellence by Erica N. Walker

Einstein on Race and Racism by Fred Jerome and Rodger Taylor

Epistemic Injustice by Miranda Fricker

Science as It Could Have Been: Discussing the Contingency/Inevitability Problem eds. Lena Soler, Emiliano Trizio, and Andrew Pickering

Black, White, and in Color: Essays on American Literature and Culture by Hortense J. Spillers

Has Feminism Changed Physics? by Amy Grave (née Bug)

(Baby Steps) Toward a Feminist Physics by Barbara Whitten

Has Feminism Changed Science? by Londa Schiebinger

Knowing Otherwise: Race, Gender, and Implicit Understanding by Alexis Shotwell

Cognitive Repression in Contemporary Physics by Evelyn Fox Keller

Academic Articles on race and genetics by A.A. M'charek

Language, Identity, and Ideology: High-
context) by Y. Dominguez-Whitehead, S

Conceptualising transformation and inter-
programme (South African context) by
Liccardo

Beyond South Africa's 'indigenous knowledge' — science wars by Lesley J.F. Green

Decolonizing Science and Science Education in a Postcolonial Space (Trinidad, a
Developing Caribbean Nation, Illustrates) by Laila Boisselle *caveat from Chanda: I *hate**
the use of "developing nation" here. It's a colonialist term.

Women, Science, and Technology: A Reader in Feminist Science Studies eds. Mary Wyer,
Mary Barbercheck, Donna Cookmeyer, Hatice Ozturk, and Marta Wayne

Ghost Stories for Darwin: The Science of Variation and the Politics of Diversity by Banu
Subramaniam

The Eastern Origins of Western Civilisation by John M. Hobson

*Interrogating Whiteness and Relinquishing Power: White Faculty's Commitment to Racial
Consciousness in STEM Classrooms* eds. Nicole Joseph, Chayla Haynes, Floyd Cobb


On the possibility of a feminist philosophy of physics by Maralee Harrell


Challenging epistemologies: Exploring knowledge practices in Palikur astronomy by
Lesley J.F. Green

'Indigenous Knowledge' and 'Science': Reframing the Debate on Knowledge Diversity by
Lesley J.F. Green


The Rain Stars, the World's River, the Horizon and the Sun 's Path: Astronomy along the
Rio Urucauá, Amapá, Brazil by Lesley Green and David Green

Colonialism & Science: Saint Domingue in the Old Regime by James E. McClellan III


Sign in to medium.com with Google
✕



Emily Mixon
emilyemixon@gmail.com



EMILY MIXON
eemixon@wisc.edu

2 more accounts


Is Science Multicultural? Postcolonialisms, Feminisms, and Epistemologies by Sandra Harding


Whose Science? Whose Knowledge?: Thinking from Women

The 'Racial' Economy of Science: Toward a


Science and Other Cultures: Issues in Philo

Harding with Robert Figueroa

 Sign in to medium.com with Google ✕



Emily Mixon
emilyemixon@gmail.com



EMILY MIXON
eemixon@wisc.edu

2 more accounts

Science and Social Inequality: Feminist and Postcolonial Issues by Sandra Harding

Sciences From Below: Feminisms, Postcolonialities, and Modernities by Sandra Harding

The Postcolonial Science and Technology Studies Reader ed. by Sandra Harding

Hating Empire Properly: The Two Indies and the Limits of Enlightenment Anticolonialism by Sunil M. Agnani

Simians, Cyborgs and Women: The Reinvention of Nature by Donna J. Haraway

Beamtimes and Lifetimes: The World of High Energy Physics by Sharon Traweek

The Structure of Scientific Revolutions by Thomas S. Kuhn

A People's History of Science: Miners, Midwives, and Low Mechanics by Clifford D. Connor

Why I Am Not A Scientist: Anthropology and Modern Science by Jonathan M. Marks

Notes on Dialectics by C.L.R. James (available scanned here.)

Science and Technology in Korea: Traditional Instruments and Techniques by Sang-woon Jeon

The Ursula Franklin Reader: Pacifism as a Map

Daughters of Alchemy: Women and Scientific Culture in Italy by Meredith K. Ray

People's Science: Bodies and Rights on the Stem Cell Frontier by Ruha Benjamin

The World and Africa: An inquiry into the part which Africa has played in world history by W.E. Burghardt Du Bois

The Social Life of DNA: Race, Reparations Nelson

Medical Apartheid: The Dark History of M Colonial Times to the Present by Harriet A

Wikipedia entry on Alhazen


Wikipedia entry on History of Scientific Method


Wikipedia entry on Physics in the medieval Islamic World

Tribal peoples have crucial role to play in global conservation Guardian Op-Ed

Collection of documents about TMT situation specifically: aoletmt.com [As of October 2016 this link seems not to work anymore]

Sign in to medium.com with Google

 **Emily Mixon**
emilyemixon@gmail.com

 **EMILY MIXON**
eemixon@wisc.edu

2 more accounts

[Decolonizestem](#) [Wearemaunakea](#) [Science](#) [History](#) [BlackLivesMatter](#)

[About](#) [Help](#) [Legal](#)

Get the Medium app

