Queer Science Reading List! A living document.

Topics (Control F to search)

Note: These topics can and should change as we develop the list. Feel free to enter articles into one of the topics or create a new topic entirely. Use first and last names based on how authors identify:

Anti-Colonialism and Queerness

Being Queer in Science

Critiquing Queer Theory: Critical Examination

Doing Science Differently: Queer/Feminist/Indigenous Science

Queer Concepts and Theory

Queer Methods and Methodologies

Science Studies Queerness

- * Means we've read as a group
- + Means members have requested to do so

+Anti-colonialism and Queerness

*Qwo-Li Driskill (2010), Doubleweaving Two-Spirit Critiques: Building Alliances between Native and Queer Studies. *GLQ: Journal of Lesbian and Gay Studies* 16: 69-92

One of the strongest aspects of emergent queer of color critiques is their ability to employ a multiplicity of tactics to decode nationalist (both colonizing and colonized) strategies. Yet the absence of Native peoples and histories in formulating these emergent theories should give us pause. The fact that Native people and an analysis of ongoing colonialism for Native nations have largely been left out of queer of color critiques points to a major rupture in these theories. Native people, then, must *disidentify* with the very critiques that claim to be decolonial and counter hegemonic interventions for queer people of color in order to build viable theories for Native communities. Drawing on the Cherokee basketry tradition of doubleweave, in which two independent yet interwoven designs result, this essay asserts the necessity of Two-Spirit critiques that centralize Native peoples, nations, identities, land bases, and survival tactics, and invites an alliance between Native studies and queer studies through doubleweaving theories that can strengthen our theories and practices.

Andrea Smith (2010), Queer Theory and Native Studies: The Heteronormativity of Settler Colonialism. *GLQ: A Journal of Lesbian and Gay Studies* 16: 41-68

Queer studies highlights the importance of developing analyses that go beyond identity and representational politics. For Native studies in particular, queer theory points to the possibility of going beyond representing the voices of Native peoples, a project that can quickly become co-opted into providing Native commodities for consumption in the multicultural academic-industrial complex. The subjectless critique of queer theory can assist Native studies in critically interrogating how it could unwittingly re-create colonial hierarchies even within

projects of decolonization. This critique also sheds light on how Native peoples function within the colonial imaginary—including the colonial imaginary of scholars and movements that claim to be radical. At the same time, Native studies can build on queer of color critique's engagement with subjectless critique. In the move to go "postidentity," queer theory often reinstantiates a white supremacist, settler colonialism by disappearing the indigenous peoples colonized in this land who become the foils for the emergence of postcolonial, postmodern, diasporic, and queer subjects. With respect to Native studies, even queer of color critique does not necessarily mark how identities are shaped by settler colonialism. Thus a conversation between Native studies and queer theory is important, because the logics of settler colonialism and decolonization must be queered in order to properly speak to the genocidal present that not only continues to disappear indigenous peoples but reinforces the structures of white supremacy, settler colonialism, and heteropatriarchy that affect all peoples.

Katherine Schweighofer (2017). A land of one's own: whiteness and indigeneity on lesbian land. Settler Colonial Studies. Doi: https://doi.org/10.1080/2201473X.2017.1365410

This essay takes up the question of queer white women's sexualities in the context of the colonialist project using archival material from the lesbian land movement in the United States. The lesbian land movement, sometimes called the women's land movement, was a phenomenon between 1970 and 1990 that merged lesbian feminism, identity politics, environmentalism, anti-capitalism, and a back-to-the-land do it yourself (DIY) ethos. Driven by scholarship in Queer Indigenous Studies, this article demonstrates how the experiences of Indigenous-identified women in the lesbian land movement reveal the ongoing operation and modification of colonialist land rhetoric. White women produced a position for themselves that was neither free from nor aligned with patriarchal colonialist operations. Within lesbian land communities, forms of settler sexuality surfaced in the operation of sexual norms, which shaped power hierarchies despite women's countercultural political commitments. Finally, the article considers an event that engages histories of racism and colonialism with lesbian separatism in a complex moment of decolonialist triumph. Bringing Native-identified women's accounts and Queer Indigenous theories to bear on a point in US lesbian history heavily marked by whiteness reveals both the possibility and the importance of integrating Indigenous Studies into conversations moving beyond Indigenous-centred themes.

Scott Lauria Morgensen (2010). Settler Homonationalism: Theorizing Settler Colonialism within Queer Modernities. *GLQ: A Journal of Lesbian and Gay Studies* 16: 105-131

Settlement conditions the formation of modern queer subjects and politics in the United States. This essay newly interprets the settler formation of U.S. queer modernities by inspiration of Jasbir Puar's critique of homonationalism. Puar argues that homonationalism produces U.S. queers as regulatory over the racialized and sexualized populations targeted within the imperial biopolitics of the war on terror. I explain homonationalism as a quality of U.S. queer modernities having formed within a colonial biopolitics, in which the terrorizing sexual colonization of Native peoples produces modern sexuality as a function of settlement. This essay reinterprets

historical accounts at the intersections of queer, Native, and colonial studies to show how a colonial biopolitics of modern sexuality relationally produces Native and settler sexual subjects. Modern queer projects enact this biopolitics when their normatively non-Native and settler form distances Native people from sexual modernity, even as they seek modern sexual freedoms in the settler state. Homonationalism arises here, as one effect of settlement's naturalization and defense in U.S. queer modernities, and as one means by which the continued colonization of Native peoples and land shapes the imperial projections of the United States and its subjects. Settler homonationalism may be destabilized by marking and challenging its historical formation and holding queer projects accountable to Native struggles for decolonization.

+The Critical Polyamorist Blog (n.d.) *The Critical Polyamorist*. http://www.criticalpolyamorist.com/

Non-monogamy is not only a personal decolonizing project. I tie it into my decolonial Indigenous Studies scholarship, including my scholarship on nature and environment. I am increasingly asked by colleagues in the know to lecture about non-monogamy. I welcome the opportunities to speak and write to others - including Indigenous people - about the joy, community, and decolonial theorizing to be found in evolving forms of non-monogamy. Monogamy has not been a choice for many of us, Indigenous and not. It is mostly compulsory in settler society, and challenging It is to challenge the colonial imposition of often oppressive forms of settler sexuality, family, and property. My Dakota ancestors were also non-monogamous and there are accounts of multiple marriages (whether sexual or not, we do not always know) being used to make extended kinship networks and to take care of relatives more effectively. I figure my ancestors probably had it more right than the violent imposers of one-on-one, lifelong, monogamous state- and church-sanctioned marriage. My non-monogamy project, while it can never be exactly what my ancestors did, in part honours their relationship wisdom.

The Critical Polyamorist, AKA Kim TallBear, blogs & tweets about indigenous, racial, and cultural politics related to open non-monogamy. She is a prairie loving, big sky woman. She lives south of the Arctic Circle, in Edmonton, Alberta, Canada.

+Joshua Whitehead (2017) Full metal indigiqueer. Talonbooks: British Columbia.

This poetry collection focuses on a hybridized Indigiqueer Trickster character named Zoa who brings together the organic (the protozoan) and the technologic (the binaric) in order to re-beautify and re-member queer Indigeneity. This Trickster is a Two-Spirit / Indigiqueer invention that resurges in the apocalypse to haunt, atrophy, and to reclaim. Following oral tradition (à la Iktomi, Nanaboozho, Wovoka), Zoa infects, invades, and becomes a virus to canonical and popular works in order to re-centre Two-Spirit livelihoods. They fiercely take on the likes of Edmund Spenser, Shakespeare, Charles Dickens, and John Milton while also not forgetting contemporary pop culture figures such as Lana Del Rey, Grindr, and Peter Pan. Zoa world-builds a fourth-dimension, lives in the cyber space, and survives in NDN-time – they have

learned to sing the skin back onto their bodies and remain #woke at the end of the world. "Do not read me as a vanished ndn," they ask, "read me as a ghastly one."

Billy-Ray Belcourt (2018). This Wound is a World. Frontenac House: Calgary, AB.

Part manifesto, part memoir, *This Wound is a World* is an invitation to "cut a hole in the sky to world inside." Billy-Ray Belcourt issues a call to turn to love and sex to understand how Indigenous peoples shoulder sadness and pain like theirs without giving up on the future. His poems upset genre and play with form, scavenging for a decolonial kind of heaven where "everyone is at least a little gay."

Being Queer in Science

Jeremy B. Yoder & Allison Mattheis. (2015) Queer in STEM: Workplace Experiences Reported in a National Survey of LGBTQA Individuals in Science, Technology, Engineering, and Mathematics Careers. *Journal of Homosexuality* 63: 1-27.

A survey of individuals working in science, technology, engi- neering, and mathematics (STEM) fields who identify as les- bian, gay, bisexual, trans*, queer, or asexual (LGTBQA) was administered online in 2013. Participants completed a 58- item questionnaire to report their professional areas of expertise, levels of education, geographic location, and gender and sexual identities and rated their work and social communities as welcoming or hostile to queer identities. An analysis of 1,427 responses to this survey provided the first broad portrait of this population, and it revealed trends related to workplace practices that can inform efforts to improve queer inclusivity in STEM workplaces.

*Vivian Underhill (2013), 'Queered Science.' Blogpost series for Autostraddle.

Queered Science is a series of profiles meant to highlight queer science and tell you what you need to know about it, for your intellectual edification and so you don't feel excluded from a major and predominantly heterosexist subset of academia and industry.

- -LGBTQ Scientists and the Legend of the Unicorn. September 13th, 2013. https://www.autostraddle.com/queer-scientists-the-legend-of-the-unicorn-187054/
 -Interview: Dr. Donna Riley and Engineering Social Justice. October 18th, 2013. https://www.autostraddle.com/queered-science-interview-dr-donna-riley-and-engineering-social-justice-200233/
- -Eradicating Misogyny in the Scientific Community. September 27th, 2013. https://www.autostraddle.com/queered-science-eradicating-misogyny-in-the-scientific-community-188764/
- -Jeremy Yoder, Allison Mattheis and Surveying Queers in STEM. October 25th, 2013. https://www.autostraddle.com/queered-science-jeremy-yoder-allison-mattheis-and-surveying-queers-in-stem-200257/

-Historic Women Pioneers, November 13th, 2013.

https://www.autostraddle.com/queered-science-historic-pioneers-206709/

-Ms. Dr. Joseph Digs Derby and Dragonflies. November 15th, 2013.

https://www.autostraddle.com/queered-science-ms-dr-joseph-205437/

-Queered Science: Why Social Justice and STEM Fields Should Hang Out More Often September 13th, 2013.

https://www.autostraddle.com/queered-science-why-social-justice-and-stem-fields-should-hang-out-more-often-187609/

-Sexism is for everybody. November 8th, 2013.

https://www.autostraddle.com/queered-science-sexism-is-for-everybody-204178/

*Alex Bond (n.d.) 'LGBTQ.' on his blog, The Lab and the Field.

Various posts about being queer/ promoting queerness in STEM disciplines.

-The (not-so-fabulous) life of gay academics. June 10th, 2013.

https://labandfield.wordpress.com/2013/06/10/the-not-so-fabulous-life-of-gay-academics/

-Where are Canada's gueer scientists? January 19th, 2014.

https://labandfield.wordpress.com/2014/01/19/where-are-canadas-queer-scientists/

-We have work to do (On sexism in STEM) July 17, 2014

https://labandfield.wordpress.com/2014/07/17/we-have-work-to-do/

-Being out or an ally at scientific conferences. August 9th, 2015

https://labandfield.wordpress.com/2015/08/09/being-out-or-an-ally-at-scientific-conferences/

-Why the #LGBTSTEMinar succeeded & was needed. January 16th, 2015.

https://labandfield.wordpress.com/2016/01/16/why-the-lgbtsteminar-succeeded-was-needed/

-The locations of scientific meetings matter January 29th, 2017.

https://labandfield.wordpress.com/2017/01/29/the-locations-of-scientific-meetings-matters/

-So you want to "do something about/for diversity" June 10th, 2016

https://labandfield.wordpress.com/2017/06/10/so-you-want-to-do-something-aboutfor-diversity/

Critiquing Queer Theory: Critical Examination

Capezza, N.M. (2007) Homophobia and sexism: The pros and cons of an integrative approach. *Integrative Psychology and Behavioural Science*, *41*(3), 248-253.

Madureira's (Integr Psych Behav, 42(23), 2007) article on the cultural barriers of homophobia articulates the need for an integrative approach to the study of homophobia and sexism. This comment focuses on critically examining the similarities and differences between homophobia and sexism. Sexism and homophobia are related concepts – both likely stem from a patriarchic social structure with specific expectations for the proper roles of men and women—but they are also distinct in important ways. The potential benefits of integrated research on racism and homophobia are also discussed.

Fifield, S., and Letts, W. (2014) [Re]considering queer theories and science education. *Cultural Studies of Science and Education*, *9*(2), 393-407.

We take Mattias Lundin's Inviting queer ideas into the science classroom: studying sexual education from a queer perspective as a point of departure to explore some enduring issues related to the use of queer theories to interrogate science education and its practices. We consider the uneasy, polygamous relationship between gay and lesbian studies and queer theories; the border surveillance that characterizes so much of science [education]; the alluring call of binaries and binary thinking; the 'all' within the catchcry 'science for all'; and the need to better engage the fullness of science and the curriculum, in addition to noting silences around diverse sexes, sexualities, and desires. We catalogue some of the challenges that persist in this work, and offer thoughts about how to work with and against them to enact a more just and compelling science education.

Doing Science Differently: Queer/Feminist/Indigenous Science

Sari M. van Anders. (2015). Beyond Sexual Orientation: Integrating Gender/Sex and Diverse Sexualities via Sexual Configurations Theory. *Archives of Sexual Behavior* 44: 1177-1213.

Sexual orientation typically describes people's sexual attractions or desires based on their sex relative to that of a target. Despite its utility, it has been critiqued in part because it fails to account for non-biological gender-related factors, partnered sexualities unrelated to gender or sex, or potential divergences between love and lust. In this article, I propose SexualConfigurations Theory (SCT) as a testable, empirically grounded framework for understanding diverse partnered sexualities, separate from solitary sexualities. I focus on and provide models of two parameters of partnered sexuality—gender/sex and partner number. SCT also delineates individual gender/sex. I discuss a sexual diversity lens as a way to study the particularities and generalities of diverse sexualities without privileging either. I also discuss how sexual identities, orientations, and statuses that are typically seen as misaligned or aligned are more meaningfully conceptualized as branched or co-incident. I map out some existing identities using SCT and detail its applied implications for health and counseling work. I highlight its importance for sexuality in terms of measurement and social neuroendocrinology, and the ways it may be useful for self-knowledge and feminist and queer empowerment and alliance building. I also make a case that SCT changes existing understandings and conceptualizations of sexuality in constructive and generative ways informed by both biology and culture, and that it isa potential starting point forsexual diversity studies and research.

- And a response by feminist STSers: Banu Subramaniam and Angela Willey (2016)
 Fighting the Derpy Science of Sexuality, Archives of Sexual Behavior 45: 513-515.
- AND a response back by: Sari M. van Anders and Zach C. Schudson (2017) A
 Response to Commentaries on 'Beyond Sexual Orientation: Integrating
 Gender/Sex and Diverse Sexualities via Sexual Configurations Theory.' Archives
 of Sexual Behavior 46: 1547-1550.
- Followed by an apology for using ableist language by: **Angela Willey and Banu**Subramaniam (2017) On the Hegemony of Naturalized Violence: An Apology', *Archives of Sexual Beavior* 46: 1581.

+Mark Carey, M. Jackson, Alessandro Antonello and Jaclyn Rushing (2016) Glaciers, gender, and science: A feminist glaciology framework for global environmental change research. *Progress in Human Geography 40*: 770-793.

Glaciers are key icons of climate change and global environmental change. However, the relationships amonggender, science, and glaciers – particularly related to epistemological questions about the production of glaciological knowledge – remain understudied. This paper thus proposes a feminist glaciology framework with four key components: 1) knowledge producers; (2) gendered science and knowledge; (3) systems of scientific domination; and (4) alternative representations of glaciers. Merging feminist postcolonial science studies and feminist political ecology, the feminist glaciology framework generates robust analysis of gender, power, and epistemologies in dynamic social-ecological systems, thereby leading to more just and equitablescience and human-ice interactions.

And surrounding controversies:

Carolyn Gramling (2016). Q&A: Author of 'feminist glaciology' study reflects on sudden appearance in culture wars.

http://www.sciencemag.org/news/2016/03/qa-author-feminist-glaciology-study-reflects-sudden-appearance-culture-wars

Last week, science historian Mark Carey of the University of Oregon, Eugene, found himself thrust into the limelight as the latest target of conservative-leaning bloggers questioning federally funded research. In 2013, Carey received a 5-year National Science Foundation (NSF) CAREER Grant, one of three NSF grants he has held. He is a prolific scientist, with more than 30 articles and book chapters, as well as three books under his belt. But one article he co-authored—published in January in Progress in Human Geography—included a hot-button word guaranteed to draw some bloggers' ire. The article, "Glaciers, gender, and science: A feminist glaciology framework for global environmental change research," has become the latest talking point in an ongoing controversy about NSF-funded research.

Center for Ethics, Neuroethics Program at Emory University (2012). Doing Feminism: Interview with Dr. Sari van Anders. *The Neuroethics Blog*.

http://www.theneuroethicsblog.com/2012/11/doing-neuroscience-doing-feminism.html

After attending the Neurogenderings Conference in Vienna, where participants debated whether it would be possible to conduct feminist neuroscience research, I decided it would be useful to interview an actual practicing feminist neuroscientist – and I knew just who to talk to. Dr. Sari van Anders is an Assistant Professor in Psychology and Women's Studies at the University of Michigan. She earned her Ph.D. in Biological & Cognitive Psychology from Simon Fraser University. In her social neuroendocrinology lab at the University of Michigan, she conducts

feminist neuroscience research on a variety of topics, with a principle focus on the social modulation of testosterone via sexuality, partnering/pair bonding, and nurturance. She has received grants from the National Institutes of Health (NIH) and the American Institute of Bisexuality and has published articles in Hormones and Behavior, Archives of Sexual Behavior, and Psychoneuroendocrinology, among others.

Civic Laboratory (n.d.) Civic Laboratory. https://civiclaboratory.nl/

Civic Laboratory for Environmental Action Research (CLEAR) engages in action-oriented research through grassroots environmental monitoring. Civic Laboratory's techniques are developed in recognition that the process of research, as well as research findings, impact the world. We focus on do-it-yourself, feminist, participatory, and activist methodologies based in local knowledge so research contributes to positive change in the environments in which we work and live.

Michael P. Oman-Reagan. 2015. "Queering Outer Space." SocArXiv, Open Science Framework. Manuscript, submitted January 22, 2017. doi:10.17605/OSF.IO/MPYK6. osf.io/preprints/socarxiv/mpyk6/

How can queer and other minority or marginalized people stake a claim in human futures in space? This paper reflects on the challenges, opportunities, scenarios, and interventions involved as we try to queer the increasingly corporate and military human exploration of and engagement with outer space. I suggest that we must go further than academically interrogating the military and corporate narratives of space "exploration" and "colonization." We must also water, fertilize, and tend the seeds of alternative visions of possible futures in space, not only seeking solutions to earthly problems of the moment, but actively queering outer space and challenging the future to be even more queer.

Kim TallBear (2014). 'Indigenous Bioscientists Constitute Knowledge Across Cultures of Expertise and Tradition' in J. Gardebo, M. Ohman, and H. Maruyama (eds), Re:Mindings: Co-Constitution Indigenous/Academic/Artistic Knowledge. Uppsala Multiethnic Papers 55: 173-192.

This talk explains my recent Indigenous Science Studies research project – an ethnography of Indigenous bioscientists in the U.S. – as it is informed by two key Feminist Science Studies frames, "feminist objectivity" and "feminist standpoint theory." Most often, anthropological projects focused on Native Americans derive from outside the Native American community and often turn Native American social and cultural practices into anthropological curiosities and sites of difference from the non-Indigenous observer. However, from my longstanding location within U.S. Native American social, cultural, educational, and professional circles, this Indigenous standpoint project examines cultural and social conditions that lead U.S. Native Americans to work as bioscientific researchers. The Indigenous standpoint in this research is not mainly concerned with assessing Native American social or cultural difference from the mainstream.

Rather, this research investigates how Indigenous participation in bioscience can help make Western bioscience more multi-cultural and democratic, while also serving Native American community capacity-building and self-governance. This talk also advocates that Indigenous Studies scholars pay greater attention to the role of science and technology as they seek to do research that supports Indigenous sovereignty. Both Nation States and Indigenous Nations increasingly govern through science. However, in its U.S. formation, Indigenous Studies is more focused in humanities fields. It engages too little with the physical and biological sciences and with technology fields. If Indigenous Studies scholars ignore the role of technoscience in both limiting and facilitating Indigenous sovereignty, they limit their relevance for Indigenous communities.

Kyle Powys Whyte (2017) Our Ancestors' Dystopia Now: Indigenous Conservation and the Anthropocene. In Routledge Companion to the Environmental Humanities. Edited by U. Heise, J. Christensen, and M. Niemann. New York: Routledge, 206-215.

Anthropocene discourse often describes futures using dystopian themes. I wondered how might some Indigenous peoples interpret such futures. While similarities are present given Indigenous concern with conserving native species, it is more accurate to claim that indigenous conservationists focus more on sustaining particular plants and animals whose lives are entangled locally, over many generations, in ecological, cultural and economic relationships with human societies. What is more, the environmental impacts of settler colonialism have made it so that quite a few indigenous peoples in North America are already no longer able to relate locally to many of the plants and animals that are significant to them. In the Anthropocene, then, some indigenous peoples already inhabit what our ancestors would have likely characterized as a dystopian future. So we consider the future from what we believe is already a dystopia, which frames how we approach conservation decisions today.

Queer Concepts and Theory

Catriona Mortimer-Sandilands and Bruce Erickson (eds). (2010). *Queer Ecologies*. Indiana: Indiana University Press.

Treating such issues as animal sex, species politics, environmental justice, lesbian space and "gay" ghettos, AIDS literatures, and queer nationalities, this lively collection asks important questions at the intersections of sexuality and environmental studies. Contributors from a wide range of disciplines present a focused engagement with the critical, philosophical, and political dimensions of sex and nature. These discussions are particularly relevant to current debates in many disciplines, including environmental studies, queer theory, critical race theory, philosophy, literary criticism, and politics. As a whole, *Queer Ecologies* stands as a powerful corrective to views that equate "natural" with "straight" while "queer" is held to be against nature.

Sara Ahmed. (2006). Queer phenomenology: Orientations, objects, others. Duke University Press.

In this groundbreaking work, Sara Ahmed demonstrates how gueer studies can put phenomenology to productive use. Focusing on the "orientation" aspect of "sexual orientation" and the "orient" in "orientalism," Ahmed examines what it means for bodies to be situated in space and time. Bodies take shape as they move through the world directing themselves toward or away from objects and others. Being "orientated" means feeling at home, knowing where one stands, or having certain objects within reach. Orientations affect what is proximate to the body or what can be reached. A queer phenomenology, Ahmed contends, reveals how social relations are arranged spatially, how queerness disrupts and reorders these relations by not following the accepted paths, and how a politics of disorientation puts other objects within reach, those that might, at first glance, seem awry. Ahmed proposes that a queer phenomenology might investigate not only how the concept of orientation is informed by phenomenology but also the orientation of phenomenology itself. Thus she reflects on the significance of the objects that appear—and those that do not—as signs of orientation in classic phenomenological texts such as Husserl's Ideas. In developing a queer model of orientations, she combines readings of phenomenological texts—by Husserl, Heidegger, Merleau-Ponty, and Fanon—with insights drawn from queer studies, feminist theory, critical race theory, Marxism, and psychoanalysis. Queer Phenomenology points queer theory in bold new directions.

Elizabeth Freeman (ed). (2007) Queer Temporalities Special issue of GLQ: A Journal of Lesbian and Gay Studies 13: 159-367.

This special issue of <u>GLQ</u> offers new essays on the sexual politics of time, history, and sequentiality—and on the temporal poetics of sexual practices and erotic ways of being in the world. In queer theory's inception as a mode of critical inquiry, it often focused on space: social geographies, the metaphors of closet and stage, the terrain of the body, the politics of borders and boundaries. Latent and sometimes unremarked in these explorations were powerful theories of time. Now new queer theory, often returning to mine the temporal aspects of this earlier work and taking further cues from postcolonial and critical race theory, deconstruction, psychoanalysis, Foucauldian genealogy, and, more recently, such domains as physics and the biological sciences, has seen an efflorescence of work on the power of the untimely. Central to this scholarship is a commitment to the nonpunctuality of "queer" itself—its status in the academy and on the streets as at once a critical avant-garde and an obsolete commodity, a productively failed political project and an as-yet-unrealized utopia.

The contributors to this issue include filmmakers and scholars in anthropology, history, film and literary criticism, performance studies, postcolonial studies, U.S. ethnic studies, and women and

gender studies. They take on such diverse topics as the resurgence of martyrdom in the global economy, the movements for and against gay marriage, the chronopolitics of white middle-class family values, the queer utopias glimmering out of Black Arts drama, the state's hijacking of mourning rituals in Sri Lanka, the killer child, poetic collaboration, female-female incest, and pedophilia. They offer a rich array of figures for the powerful untimeliness of sexual alterity—the coincidence, the specter, the not-yet, the pause, loitering—all of which resist the seductive notion that heterosexual normativity, or even contemporary gay and lesbian identity, is a sign of progress.

+José Esteban Muñoz, Jinthana Haritaworn, Myra Hird, Zakiyyah Iman Jackson, Jasbir K. Puar, Eileen Joy, Uri McMillan, Susan Stryker, Kim TallBear, Jami Weinstein, and Jack Halberstam (2015). Theorizing Queer Inhumanisms. *GLQ: A Journal of Lesbian and Gay Studies* 21: 209-248.

This issue features a group of leading theorists from multiple disciplines who decenter the human in queer theory, exploring what it means to treat "the human" as simply one of many elements in a queer critical assemblage. Contributors examine the queer dimensions of recent moves to think apart from or beyond the human in affect theory, disability studies, critical race theory, animal studies, science studies, ecocriticism, and other new materialisms. Essay topics include race, fabulation, and ecology; parasitology, humans, and mosquitoes; the racialization of advocacy for pit bulls; and queer kinship in Korean films when humans become indistinguishable from weapons. The contributors argue that a nonhuman critical turn in queer theory can and should refocus the field's founding attention to social structures of dehumanization and oppression. They find new critical energies that allow considerations of justice to operate alongside and through their questioning of the human-nonhuman boundary.

*Radiolab. 'Debatable'. March 11th, 2015. http://www.radiolab.org/story/debatable/

In competitive debate future presidents, supreme court justices, and titans of industry pummel each other with logic and rhetoric.

But a couple years ago Ryan Wash, a queer, Black, first-generation college student from Kansas City, Missouri joined the debate team at Emporia State University. When he started going up against fast-talking, well-funded, "name-brand" teams, it was clear he wasn't in Kansas anymore. So Ryan became the vanguard of a movement that made everything about debate debatable. In the end, he made himself a home in a strange and hostile land. Whether he was able to change what counts as rigorous academic argument ... well, that's still up for debate.

*Stephen Molldrem and Mitali Thakor (2017). Genealogies and Futures of Queer STS: Issues in Theory, Method, and Institutionalization. Catalyst 3: 1-15.

What is Queer STS (Science and Technology Studies), and what is new about it? In this "News in Focus" piece we situate recent efforts by various STS scholars to tinker and play with the intersections of queer studies and social studies of science and technology within a longer history of sexuality studies. We also narrate several critical new developments in academic collaborations in this growing subfield, from workshops to conference roundtables, and attempt to further develop Queer STS theory and praxis while negotiating the role of this nascent sphere of academic practice.

Queer Methods and Methodologies

Catherine J. Nash and Kath Brown (2010). Queer Methods and Methodologies: Intersecting Queer Theories and Social Science Research. London, UK: Routledge.

Queer Methods and Methodologies provides the first systematic consideration of the implications of a queer perspective in the pursuit of social scientific research. This volume grapples with key contemporary questions regarding the methodological implications for social science research undertaken from diverse queer perspectives, and explores the limitations and potentials of queer engagements with social science research techniques and methodologies. With contributors based in the UK, USA, Canada, Sweden, New Zealand and Australia, this truly international volume will appeal to anyone pursuing research at the intersections between social scientific research and queer perspectives, as well as those engaging with methodological considerations in social science research more broadly.

Potential chapters of interest:

- *-'An introduction' Kath Browne and Catherine J. Nash
- -'Queer in the field: on emotions, temporality and performativity in ethnography' Alison Rooke
- 'Intimacy with strangers/intimacy with self: queer experiences of social research' Jamie Heckert
- 'Queer(ing) communication in research relationships: a conversation about subjectivities, methodologies and ethics' ,Andrew Gorman-Murray, Lynda Johnston and Gordon Waitt
- -'The trouble with fieldwork: queering methodologies' Michael Connors Jackman
- -'Femme on femme: reflections on collaborative methods and queer femme-inist ethnography' Ulrika Dahl
- -'Queer(y)ing the ethics of research methods: towards a politics of intimacy in researcher/researched relations', Mathias Detamore
- -'Method matters: ethnography and materiality' Mark Graham
- 'Autoethnography is a gueer method' Stacey Holman Jones and Tony E. Adams
- 'Queer techne: two theses on methodology and queer studies' Tom Boellstorff
- 'Queer quantification or queer(y)ing quantification: creating lesbian, gay,bisexual or heterosexual citizens through governmental social research' Kath Browne;

Birgit Hofstätter and Torsten Wöllmann (2011). The Concept of 'Heteronormativity' and its Methodological Implications. Proceedings of the 10th Annual IAS-STS Conference on Critical Issues in Science and Technology Studies. 2nd-3rd May 2011.

On the occasion of the 10th IAS-STS Conference "Critical Issues in Science and Technology Studies" researchers and students dealing with gender aspects in their work and studies came together for a workshop to discuss the concept of heteronormativity and how to deal with it. This paper will first provide a brief introduction given at the beginning of the workshop, followed by review of the discussion among the participants who previously were asked to prepare for the workshop by reading Stevi Jackson's article "Interchanges: Gender, sexuality and heterosexuality:

The complexity (and limits) of heteronormativity" (2006) and thinking about three questions:

- How have you come across the concept of heteronormativity (in your studies, your research or private life)?
- How has heteronormativity affected your research/studies methodologically, i.e. where have you experienced limits caused by heteronormativity in your studies and/or fields of research?
- If you have found a way to deal with heteronormativity in your research/studies, what kind of strategies could you recommend?

Aristea Fotopoulou (2012). Intersectionality Queer Studies and Hybridity: Methodological Frameworks for Social Research. *Journal of International Women's Studies* 13: 19-32.

This article seeks to draw links between intersectionality and queer studies as epistemological strands by examining their common methodological tasks and by tracing some similar difficulties of translating theory into research methods. Intersectionality is the systematic study of the ways in which differences such as race, gender, sexuality, class, ethnicity and other sociopolitical and cultural identities interrelate. Queer theory, when applied as a distinct methodological approach to the study of gender and sexuality, has sought to denaturalise categories of analysis and make normativity visible. By examining existing research projects framed as 'queer' alongside ones that use intersectionality, I consider the importance of positionality in research accounts. I revisit Judith Halberstam's (1998) 'Female Masculinity' and Gloria Anzaldua's (1987) 'Borderlands' and discuss the tension between the act of naming and the critical strategical adoption of categorical thinking. Finally, I suggest hybridity as one possible complementary methodological approach to those of intersectionality and queer studies. Hybridity can facilitate an understanding of shifting textual and material borders and can operate as a creative and political mode of destabilising not only complex social locations, but also research frameworks.

+Doreen J. Mattingly, Karen Falconer-Al-Hindi (1995). Should Women Count? A Context for the Debate. *The Professional Geographer* 47: 427-435.

Much recent feminist geographical scholarship emphasizes the utility of qualitative research methods; yet, a significant proportion of feminist research in geography is quantitative. Geographers' engagement with the ideas of feminist theorists has shed new light on the relationship between epistemology, methodology, and objectivity, which in turn has facilitated a reexamination of feminist uses of quantification. In providing a context for the debate over quantitative and qualitative methods, we argue that each has a place in feminist geographical research.

Science Studies Queerness

en state. Malin Ah-King (2013). Queering animal sexual behavior in biology textbooks. Confero: Essays on Education, Philosophy and Politics, 1(2), 46-89.

Biology is instrumental in establishing and perpetuating societal norms of gender and sexuality, owing to its afforded authoritative role in formulating beliefs about what is "natural". However, philosophers, historians, and sociologists of science have shown how conceptions of gender and sexuality pervade the supposedly objective knowledge produced by the natural sciences. For example, in describing animal relationships, biologists sometimes use the metaphor of marriage, which brings with it conceptions of both cuckoldry and male ownership of female partners. These conceptions have often led researchers to overlook female behavior and adaptations, such as female initiation of mating. Such social norms and ideologies influence both theories and research in biology. Social norms of gender and sexuality also influence school cultures. Although awareness of gender issues has had a major impact in Sweden during recent years, the interventions conducted have been based on a heteronormative understanding of sex; this has rendered sexual norms a non- prioritized issue and thereby rendered non-heterosexuals invisible in teaching and textbooks. Since this research was published in 2007 and 2009, norm critical pedagogics have been included in the Swedish National Agency for Education's guidelines for teaching. This inclusion represents one way to tackle the recurring problem of heterosexuality being described as a naturalized "normal" behavior and homosexuals, bisexuals and transsexuals being described from a heteronormative perspective. In this paper, I employ gender and queer perspectives to scrutinize how animal sexual behavior is described and explained in Swedish biology textbooks. The analysis is based in gender and gueer theory, feminist science studies, and evolutionary biology.

Malin Ah-King, & Hayward, Eva. (2013). <u>Toxic sexes—Perverting pollution and queering hormone disruption</u>. *O-Zone: A Journal of Object Oriented Studies*, *1*. Republished on <u>Technosphere Magazine</u>.

Engaging in debates about sex changes in animals as a consequence of environmental endocrine pollution, this essay uses a dynamic model of sex described by Malin Ah-King and Sören Nylin (2010) to show how hormones and their environmental disruption can be understood as part of an ongoing process of sexing. The deleterious effects of material culture—the objects we encircle ourselves with, the food we eat, the water we drink, the medicines we take, the hygienic products we use—become part of the process of sexing. Side-stepping the now entrenched debates about the socially or biologically constructed nature of sex, sex might be better understood as a dynamic emergence with environment, habitat, and ecosystem, and made toxically so within the context of pollution. Combining feminist and queer studies of sex, gender, and sexuality with a critical but engaged approach to biology, this essay claims toxicity as one of the current conditions of sex in the contemporary moment. The intent is to broaden our understanding of humans' and animals' shared vulnerability and explore potential sites for coming to terms with the environmental catastrophe that we are already living in.

Lynda, Birke (2000). <u>Sitting on the fence: Biology, feminism and gender-bending environments</u>. *Women's Studies International Forum*, 23(5), 587-599.

In this article, I use the example of "gender-bending" chemicals to explore some of the ways we think about "nature." Feminist biologists occupy a tricky position, having both to accept the reality of nature to some degree (especially if working in the lab, or when critiquing biological determinism); but we must also recognize the ways in which knowing about nature is socially constructed.

Mel. Y. Chen (2011). <u>Toxic animacies, Inanimate Affections</u>. *GLQ: A Journal of Lesbian and Gay Studies*, 17(2-3), pp.265-286.

This essay suggests that thinking, and feeling, with toxicity invites a recounting of the affectivity and relationality—indeed the bonds—of queerness as it is presently theorized. Approaching toxicity in three different modes, I first consider how vulnerability, safety, immunity, threat, and toxicity itself are sexually and racially instantiated in the recent panic about lead content in Chinese-manufactured toys exported the United States. This analysis, while seeming at first to hover somewhat outside queerness, is completed in the next section, where I interweave biopolitical considerations of immunity into an account of the peculiar intimacies and alienations of heavy metal poisoning, rendered in the first person. The essay ends by suggesting that the queering and racializing of material other than human amounts to a kind of animacy. Animacy is built on the recognition that abstract concepts, inanimate objects, and things in between can be queered and racialized without human bodies present, quite beyond questions of personification. Theorizing this animacy offers an alternative, or a complement, to existing biopolitical and recent queer-theoretical debates about life and death, while the idea of toxicity proposes an extant gueer bond, one more prevalent today than is perhaps given credit. Such a toxic queer bond might complicate utopian imagining, as well as address how and where subject-object dispositions might be attributed to the relational queer figure.

*Giovanna Di Chiro (2010) 'Polluted Politics? Confronting Toxic Discourse, Sex Panic, and Eco-Normativity.' in Catriona Mortimer-Sandilands and Bruce Erickson (eds). *Queer Ecologies*. Indiana: Indiana University Press. P. 199-230.

In this paper, I discuss how the dominant anti-toxics discourse deployed in mainstream environmentalism in the U.S. often adopts and relies upon the rhetoric of "toxic pollution" as undermining the "natural": natural biologies/ecologies, natural bodies, natural and/or morally determined reproductive processes. This version of an unexamined environmental alarm appeals to cultural fears of exposure to chemical and endocrine disrupting toxins as troubling and de-stabilizing the normal/natural gendered body of humans and other animal species leading to what some have called the "chemical castration" or the "feminization" of nature. Particular anxiety has been focused on the dangerous consequences of "swimming in a sea of estrogen," an environmental problem that is articulated as providing evidence for the alleged pan-species instability of maleness and which is putting at greatest risk the future sustainability of natural masculinity. Invoking an oft-used environmentalist metaphor, this anti-toxics discourse emanating from many U.S.-based environmental scientists, writers, and activists warns that the rising incidences of male-to-female gender shifts and intersex conditions observed in the "lower" species of animals such as frogs, fish, and salamanders, represents the newest "canaries in the coalmine" portending an uncertain fate for human maleness and for the future of normal sexual reproduction. Moreover, this environmental discourse gives rise to the argument that these chemical toxins disrupt or prevent normal/natural physiological development (during pre-conception or in utero) and disturb natural reproductive processes leading to rising incidences of infertility and/or producing disability, i.e., defective, enfeebled, and monstrous bodies. What are presented as progressive, critical, and even far-sighted environmental/ scientific facts (worthy of alarm) can, however, work to resuscitate familiar heterosexist, queerphobic, and eugenics arguments classifying some bodies as being "not normal": mistakes, perversions, tragedies, or burdens. This version of anti-toxics environmentalism, while professing and acting on behalf of laudable and progressive goals, mobilizes the knowledge/power politics of "normalcy" and reinforces what gueer and disability theorists have analyzed as a compulsory social-environmental order based on a dominant regime of what and who are constructed as normal/natural. I examine the ways that the selective telling of the scientific story that focuses on toxic chemicals' role in creating sexual instability and impairment has functioned strategically to appeal to the society's basest fears of an ominous disruption in the "normal" gender order and ultimately the challenge to heteronormativity. In the spirit of queer(y)ing the liberal stance on U.S. environmentalism, and examining the figurations of a science and politics of what I am calling "eco-(hetero)-normativity," I examine several examples of scientific research practices, environmental criticism, and social activism that incorporate an "anti-toxics" emphasis while at the same time registering a commitment to eco-feminist and environmental justice politics.

Nancy Ordover (2003). American Eugenics: Race, Queer Anatomy, and the Science of Nationalism. Minneapolis: University of Minnesota Press.

This book traces the history of eugenics ideology in the United States and its ongoing presence in contemporary life. The Nazis may have given eugenics its negative connotations, but the practice--and the "science" that supports it--is still disturbingly alive in America in anti-immigration initiatives, the quest for a "gay gene," and theories of collective intelligence. Tracing the historical roots and persistence of eugenics in the United States, Nancy Ordover explores the political and cultural climate that has endowed these campaigns with mass appeal and scientific legitimacy. American Eugenics demonstrates how biological theories of race, gender, and sexuality are crucially linked through a concern with regulating the "unfit." These links emerge in Ordover's examination of three separate but ultimately related American eugenics campaigns: early twentieth-century anti-immigration crusades; medical models and interventions imposed on (and sometimes embraced by) lesbians, gays, transgendered people, and bisexuals; and the compulsory sterilization of poor women and women of color. Throughout, her work reveals how constructed notions of race, gender, sexuality, and nation are put to ideological uses and how "faith in science" can undermine progressive social movements, drawing liberals and conservatives alike into eugenics-based discourse and policies.

Lee, Robyn, and Roxanne Mykitiuk. (2018). <u>Surviving difference: Endocrine-disrupting chemicals, intergenerational justice and the future of human reproduction</u>. *Feminist Theory*, DOI: 1464700118764080.

Endocrine-disrupting chemicals have been identified as posing risks to reproductive health and may have intergenerational effects. However, responses to the potential harms they pose frequently rely on medicalised understandings of the body and normative gender identities. This article develops an intersectional feminist framework of intergenerational justice in response to the potential risks posed by endocrine-disrupting chemicals. We examine critiques of endocrine disruptors from feminist, critical disability and queer standpoints, and explore issues of race and class in exposures. We argue that responding to the risks posed by endocrine disruptors such as brominated flame retardants (BFRs) and phthalates requires developing a theory of intergenerational justice that recognises relationality and transcorporeality, and that also recognises harm in terms of suffering, not in terms of difference.

*Emily Martin (1991). The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles. Signs 16: 485-501.

As an anthropologist, I am intrigued by the possibility that culture shapes how biological scientists describe what they discover about the natural world. If this were so, we would be learning about more than the natural world in high school biology class; we would be learning about cultural beliefs and practices as if they were part of nature. In the course of my research I realized that the picture of egg and sperm drawn in popular as well as scientific accounts of reproductive biology relies on stereotypes central to our cultural definitions of male and female.

The stereotypes imply not only that female biological processes are less worthy than their male counter- parts but also that women are less worthy than men. Part of my goal in writing this article is to shine a bright light on the gender stereotypes hidden within the scientific language of biology. Exposed in such a light, I hope they will lose much of their power to harm us.

*Annemarie Mol. (2015). Who knows what a woman is...On the differences and the relations between the sciences. Medical Anthropology Theory 2: 57-75. http://www.medanthrotheory.org/site/assets/files/4955/ft-mol-mat-v2_1.pdf

In this text I will talk about the relations between branches of science that all concern themselves with woman. I will do so in wilful ignorance, that is without knowing or seeking to know for myself what a woman is. Instead, it is my aim to gather strategic insights for feminist interferences in the life sciences.

Anne Pollock (2016). Queering Endocrine Disruption. In Katherine Behar (ed.) Object-Oriented Feminism. University of Minnesota Press. pp. 183-99.

Queering endocrine disruption. What do I mean by this? For those who are familiar with the ecological alarm around endocrine disruption, it may seem to be already queer, not needing a present progressive verb from the likes of me. In addition to its association with breast, prostate, and other cancers, the major story of endocrine disruption is this: there is considerable scientific evidence that toxic chemicals that pollute our environment interfere with the endocrine systems of wildlife, contributing to an increased prevalence of animals that are sexually atypical—with lowered fertility, intersex characteristics, and pairing with animals of the same sex. I am by no means the first to point out that there is homophobia embedded in that ecological alarm. Many writers in feminist and queer ecocriticism have pointed out that discourse of endocrine disruption in both scientific and environmentalist literature has exemplified a "sex panic." Posing intersex characteristics as the sine qua non of harm to our environment is a move steeped in heteronormativity. And yet to my knowledge, no one is celebrating the queer here. In this chapter, I want to suggest that we depathologize queer animals, even when that queerness is the product of human-produced toxins in the environment, and even when it inhibits animals' reproductive capacity. Perhaps we even might find a perverse joy here.

Dayna Nadine Scott, Haw, Jennie., & Lee, Robyn. (2017). <u>'Wannabe Toxic-Free?'From precautionary consumption to corporeal citizenship.</u> *Environmental Politics*, 26(2), 322-342.

Ecological citizens are increasingly encouraged to adopt 'precautionary consumption' – a set of practices aimed at shielding them from the potential health harms of exposures to everyday toxics. The utility and the effects of precautionary consumption in relation to common chemical exposures are investigated. Precautionary consumption is not only of questionable utility, but is fundamentally misguided as an approach for inspiring antitoxics organizing. The failure of this

approach is in part due to its assumption of a naturally bounded, autonomous individual who is able to maintain an impermeable boundary between herself and the environment. Drawing on the work of material feminist theorists, it is argued that Gabrielson and Parady's notion of *corporeal citizenship*, an approach that places bodies into a complex web of material, ecological relations entangled with the social, offers several strategic advantages for framing resistance strategies.

Rena Bivens (2015). The gender binary will not be deprogrammed: Ten years of coding gender on Facebook. New Media and Society 19 (6): 880-898.

A February 2014 iteration of Facebook's software upgraded the number of options for gender identification from 2 to 58. Drawing on critical theoretical approaches to technology, queer theory, and insights from science and technology studies, this iteration is situated within a 10-year history of software and user modifications that pivot around gender. I argue that the gender binary has regulated Facebook's design strategy while the co-existence of binary and non-binary affordances has enabled the company to serve both users and advertising clients simultaneously. Three findings are revealed: (1) an original programming decision to store three values for gender in Facebook's database became an important fissure for non-binary possibilities, (2) gender became increasingly valuable over time, and (3) in the deep level of the database, non-binary users are reconfigured into a binary system. This analysis also exposes Facebook's focus on authenticity as an insincere yet highly marketable regulatory regime.

Alex Zahara (2019). Queering Chemicals (EDCs): A Bibliography. Discard Studies, 15 April 2019.

There is a class of environmental toxicants that are known for their 'queer-making' effects. Endocrine Disrupting Chemicals, or EDCs, produce a wide swath of health issues, including cancers, diabetes, and heart disease that disproportionately impact already marginalized communities (Murphy 2017). Recently, scientists have begun linking EDCs to supposed 'sexual abnormalities': stories of gay birds and trans frogs have sounded the alarm on possible impacts to human sex, gender, and sexuality. EDCs comprise a number of industrially- produced chemical compounds (e.g. PCBs, PBDEs, atrazine) that act like hormones when they enter the bodies of humans and other animals. The term 'queer'-though originally a homophobic and transphobic slur- has been reclaimed by LGBTQ+ folks to describe aspects of gender, sex, and sexuality that have been historically discriminated against. 'Queering' refers to practices of questioning, historicizing and "making strange" often taken for granted categories associated with sex, gender, and sexuality. The following is a bibliography on Queering Endocrine Disrupting Chemicals (EDCs). Some key arguments in this literature include: (1) Scientific and media reports about EDCs often tap into fears about queerness, trans folk, and disability; (2) Many anti-EDC prevention campaigns assume folks are straight, white, rich, and married.; (3) EDCs remind us that sex and sexuality are a process rather than a giv