

Queering Biology – Sam Sharpe (PhD Candidate, Kansas State University)

29 in-person attendees

- Breakout session. 3 myths
 - o 5-minute discussions
- Is biology transphobic?
 - o Anti-trans legislation, transphobic politicians, and transphobic media often reference biology to support arguments
 - o K-12 biology classes/textbook often discuss human sex/gender as binary traits which is determined before birth
 - o Hearing biology used to argue against trans and non-binary identities can create internal shame, self-doubt
- Myth 1 – “only 2 genders, xx and xy”
 - o Share-out
 - First that’s noticeable, xx and xy – misnomer for sex and gender is the same thing
 - More chromosomes than xx and xy
 - Intersex presentation, other chromosomal combination, can be as common as having red hair
 - Not enough acknowledgement of intersex combinations in this statement
 - If we learned of another intersex/chromosomal combination, it’s framed as a birth disorder
 - In middle school, bio text actually mentioned other sex chromosomes
 - o There are many different genders, including man, woman, nonbinary, genderqueer, agender, demiboy, demigirls and culturally specific genders
 - o xx/xy refer two different sex chromosome variations
 - chromosome are one aspect of human sex traits
 - there are many different sex traits and all of them vary along spectrum
 - chromosomes, hormones, internal structures, external genitals, gonads, secondary sex characteristics
 - o sex traits don’t determine gender
 - o people who are born with sex traits that don’t fit binary understandings of sex are intersex
 - o some trans people are intersex. Some are endosex (non intersex)
 - o intersex people can be cisgender or transgender
- myth 2- “impossible to change gender, will always be biologically male/female”
 - o Share-out
 - People try to use Christian theology on why it’s impossible to change gender
 - Even when there’s acknowledgement that people can change gender, it’s still often stigmatized
 - Couple of differentiates
 - Not my responsibility to make you feel comfortable
 - If people want to use a religious argument in where god creates man/woman. It’s still the case that most religion is a free-will realm, so

it's up to that person to do as they choose, and be willing to deal with their religion as they so choose

- First reaction: not true, people have done it
- Again, sex traits don't determine gender
- People of any gender can have any sex traits
- It is actually very possible to change sex traits
 - Cis people do this all the time
 - Example: breast implants, birth control, steroids
- Sex traits include chromosomes, hormones, internal structures, external genitals, gonads, secondary sex characteristics
- All of them can be altered except chromosomes
 - You can't see chromosomes unless you look at someone's cell under a microscope
 - Most people, including cis people, don't know what sex chromosomes they have
- Myth 3 – being transgender is unnatural and trans people are trying to destroy/deny biology
 - Share-out
 - First thought
 - It's incredibly toxic
 - For someone to say that this is natural/unnatural comes across as that person's personality and what they're subjecting others to
 - That's them saying that, no one who's navigating is presenting that as their argument and to continually push that forward is incredibly destructive
 - Your very existence makes THAT natural. Whoever you are, how you are, how you present yourself makes it natural.
 - Highlight the hypocrisy about how folks pushing that myth goes and consumes unnatural/modified products
 - What could be more natural than infinite diversity and variety
 - "cancer is natural and we try to destroy it"
 - Human nature can only be understood in the context of human cultures
 - Culture is different across time and place, many cultures have had more than 2 gender categories and celebrated gender diversity
 - Many examples across multiple continents, countries and cultures
 - Mandatory gender binary is a modern, white supremacist invention born out of eugenics ideology
 - Trans people are very aware of biology
 - More so than cis people
 - Have to constantly justify existence and manage their own medical care
 - Some of us medically transition to intentionally influence our biological traits
 - Changing biology does not deny biology or intend to destroy
 - Many people who argue that trans people are destroying biology are perfecting with other tech and medical interventions which alter human biology
 - Example: Contact lenses, emergency appendix removal, laser hair removal, filling cavities, piercings, etc.

- Summary

- Transphobic arguments about biology are based in misunderstanding and oversimplifications of human biological diversity
- Human sex varies on a spectrum and most human sex traits can be altered
- Sex traits do not determine gender
- Gender exists in the context of human cultures, which have had many different conceptions of gender across time and space
- Human sex and gender are always understood in the context of culture