

I remember my first time learning about research

My teacher brought us to the library in a timely manner

To the carpet everyone!

You're pushing me!

Shh!

Or at least tried to...

Important thing is, she managed

I can't forget that stunning new article. It was 100% proof that

OCTOPUSES LIVE ON TREES!?

totallyrealpic.jpg

I remember thinking I was going to go home and tell my parents something they didn't know

And it's true, no one knew. It was so secret that only our class knew...because it was a fake article my teacher wrote on Wikipedia!

Yeah...that probably got taken down

I was in grade 5... cut me some slack

I was no expert in octopus physiology, so how was I supposed to know?

You'd be surprised what we're lead to believe...

Beliefs that drive our actions

Actions with consequences

We can be lead to believe many things, such as



As lovely as that warning is, let me lead you into a time when we believe(d) in something that hurt a lot of people

Let's start with a little activity

What's different about them?



Look at him

And her



Fun fact: depending on who you ask and where she is, she may be called "Black" or "Mixed" or something else



And her

What came to mind?
Their features? Skin tones? "Race"?

Okay, that's enough celebs

Humans are visual creatures and we notice things that are different from ourselves.

We tend to classify things, but with classification can come

Confusion

That's not fair! The other team has Black players. Of course they'll win!

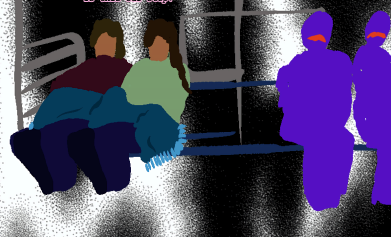
And



Division

Is this our stop?

Ugh, they're turning Canada into India



Sometimes it can be hard to talk about race when we aren't sure what it is

So let's take this opportunity to define things

RACE

"A worldview and social classification that divides humans into groups based on their appearance and assumed ancestry, and that has been used to establish social hierarchies"

(Graves and Goodman, 2021)

notice they're linked!

RACISM

"Systematic discrimination by a powerful individual or institution against individuals based on their perceived membership in a socially defined racial group"

"ONLY governments, corporations, social groups, and individuals who have collective political and social power can implement racism."

(Graves and Goodman, 2021)

So from here on out, let's remember:
Race is not a biological category

Our DNA isn't too different for us to be considered different species

The same 4 base pairs that make up our DNA!

Mutations happen randomly in our DNA, and the environment we're in decides whether those phenotypes are favourable

So sequences may differ for each individual, but for "races", there is more variation within groups than across

That's why humans in different environments have different phenotypes: different observable features

It helps us survive as a species! You can find humans practically everywhere ... except maybe not the poles!
{Brrr!}



So why do we believe in biological races ... ?

Why do we make race matter?!

From what I've seen and read, we tend to fear what is different from us

She's darker... look at his eyes
why is he wearing that? run!
alien! You don't belong! go back to your country!
terrorist! stop ruining our bloodlines!

We create something called "the other"

Medical Form

- ☐ Black
- ☐ White
- ☐ Hispanic
- ☐ Other

It persists today
Familiar?

The other is not us, and that's dangerous thinking

Because if "the other"s are not us, not like other humans, then do people need to protect their rights? Do they have human rights?

Today, we've gotten past some of the more extreme acts of racism, but it still persists

Ever wonder where this thought of races being biological came to be?

One of the earliest categorizations were by

Swedish Naturalist

Father of Modern Taxonomy

the science of classification

Carl Linnaeus

1707-1778

"One of the first of a long line of scientists to try and define and classify races" (Graves and Goodman)

Which may be fine when it comes to plants and animals, but then it was applied to humans

In the 18th century, he published *Systema Naturae*, which categorizes humans into 4 classes

1) *Homosapien Americanus*

This would be who we consider "Native American"

Red
Black Hair
Scanty beards
Obstinate
Free

← what?

← "not governed = inferior to hierarchy of races"

↑ now, how was this observed?

2) *Homosapien Asiaticus*

"From Asia"

Yellow
Melancholy
Black hair
Brown eyes
Severe
Haughty
Stingy

note: they didn't want to give resources/labour to "the great European Race"

(not nearly as good)

Wear loose clothing
Governed by opinion
Humour dominates personality

Oh, by the way:
Linnaeus has only seen Europeans



What kind of science - ugh!

And, published at the peak of the transatlantic slave trade, I present:

"Black, from Africa"

3) *Homosapien Africanus*

Black
Cunning
Phlegmatic
Black curly hair
Women act without shame and lactate profusely
Anointed with grease
Ruled by impulse
Too relaxed

← what the!

← "They need to be governed!"

"White, from Europe"

4) *Homosapien Europeanus*

White
Long flowing hair
Blue eyes
Sanguine
Muscular
Inventive
Covered with tight clothing
Governed by law

notice the change in language?

← "Positive"

← Considered the best

(Revolution and Ideology, 2019)

People jumped on this "scientific" publication that "proved" that white is superior to justify their brutal acts of racism

But ... how is this science?



That's right, this is terribly bad science!

From my personal experience, there's much more steps needed to prove our claims are backed by good science

Let's remind ourselves of the Western approach to science we learn in school:

I can try mapping out Linnaeus's process too

Observation

what do we notice about the world?

people look different

Question

What observations are we unclear about?

How are people different?

Hypothesis

Does one thing impact another thing?

N/A

Predictions

A guess on how one thing impacts another thing using literature

N/A

Test/Experimentation

build an experiment that can rule out whether or not only our one thing impacts another

N/A

Report Results

Does our experiments prove/disprove the prediction?

Was our experiment conducted correctly?

There's a clear hierarchy!

See the silliness? His descriptions came from others who clearly did not provide objective observations & Linnaeus went:

Write that down!

This hierarchy with white on top and others below were used to justify:

Ethnic cleansing of Native Americans

Enslavement of African Americans

Ethnic cleansing attempted in South East Asia

This "formulation of race was invented and quickly accepted because it provided a scientific cover for colonization, plundering, and slavery" (Graves and Goodman, 2021)

"Black people are 'ruled by impulse', so we need to control them"... was likely the justification

Of course there were people who disagreed, but having racist ideology "backed by science" certainly helped push horrible things forward

This essentialist view of human biological variation was behind the

↑
innate human attributes distinguish us from one another in terms of race



Murders at the Tree of Life Synagogue in Pittsburgh in 2018



↑
recent!

The Christchurch mosque murders of 51 people in March 2019

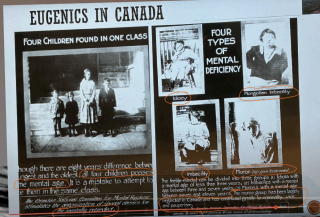
Murder of 22 (Mostly Mexicans) in Walmart, August 2019

Enslavement of 15 M Africans

Murder of 6 M Jews in Europe

Violent storming of U.S. Capitol 2021

And it was used to justify **EUGENICS**



People were killed under the claim it was for the "betterment of society"

"They will ruin the genes of society"
"For the safety of society..."

But scientists continue to look for "evidence" of racial superiority

"Intelligence is in the genes"

"Can't let the 'bad genes' be passed down"

The Policy Response to this "Social Threat"

went down like this:

PREVENTION

"Science with Black vs white skulls shows that Black people have smaller skulls, so they are clearly less intelligent"

INSTITUTIONALIZATION

"We have to keep the feeble-minded away from the normals"

STERILIZATION

"We can't have the criminalistic and feeble-minded passing those genes down"

Who do you think were considered criminalistic? Less than? and then...

EXTERMINATION

So how could it all spiral like this? Why wasn't there more speculation than there was? Why do we still believe in biological races?

Why do medical professionals use social race as a means to diagnose people differently?

Why are we still discriminating against others?

Remember her?

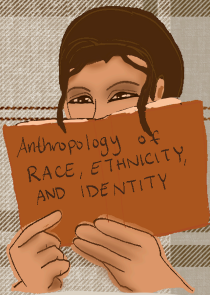
She once believed things at face-value without any question

And I'm proud to say she's come a long way from that



I took this course because I wanted to put myself in a place where I could confidently learn and discuss race

I was tired of being confused. I thought that race was biological, even though it was never said to me in school that it was.



But, it was also never stated at school that it WASN'T biological

In fact, it was like we were just shy of talking about what race really is...or isn't

Even though there is still racism prevalent today

Such as with IQ tests

Race vs Intelligence

It's far from unbiased, yet it is still used in some areas as a measure of intelligence



This was used as a tool for eugenics—scores classifying others as "normal", "borderline", "feeble-minded", "moron", or "imbecile"

Livelihoods can depend on education, so how can a biased test possibly be what stops others from achievement?

Intelligence is actually a result of a combination of genetics and environment. A flourishing environment can help people reach their true potential — An environment that people with generational wealth are likelier to have

Or Driving While Black (DWB)

"Black drivers, once pulled over, are twice as likely to be subject to search" (Graves and Goodman, 2021)

White people in Black neighbourhoods are more likely to be searched, because "why else would they be there?"

The list goes on

White names are more likely to get callbacks for interviews

"Black people have extra muscle and can handle pain"

People of colour are more likely to be living in environmentally unsafe places

There is an imbalance in who is able to achieve generational wealth

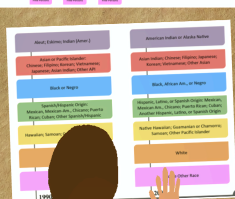
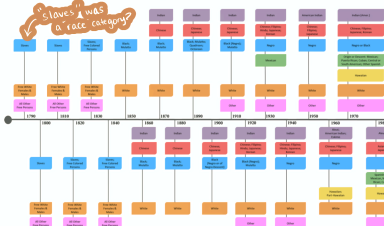
"Black and Brown people are more likely to break the law"



If we look through the history of census data, it's clear that the race labels change over time. Colour lines blur...

Measuring Race and Ethnicity Across the Decades: 1790–2010

Mapped to 1997 U.S. Office of Management and Budget Classification Standards



Even today, I'd be considered "other"

With the advancement of science, how did I fall prey to the idea that race was biological and absolute?

There weren't a very many times I stopped to wonder why I thought the way I did, until conversations of race came up in university settings.

So, I looked into it. I found that social media has a similar effect on our beliefs and ideas as so-called "science" (like Linnaeus' classification) that aligned with ideas people had at the time.

Social media algorithms tend to show us things we're interested. If we're not careful, we can get trapped in an echo chamber.

The repeated interaction with sources that have similar tendencies and attitudes...



Cinelli et al. 2021

This is similar to the past, people who already believed in white superiority could use Linnaeus's work to reinforce that their racist ideologies were correct and their actions justified

Now, "when individuals assume their views are widely shared, they feel more validated, making them less inclined to question their perspectives" (Kochler, 2024)

I remember Instagram comment sections filled with hate,



It can be so easy to accept what we see online.

I suggest a few things to consider for the future:

- 1) Who posted/wrote it?
- 2) Can this be cross-referenced?
- 3) Is there evidence?

Stay Safe, Stay Curious

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Note: Some pictures are from lecture material