

A Marxian View of Social Justice



Public Service Announcement: Today is Friday

<i>MON</i>	<i>TUE</i>	<i>WED</i>	<i>THU</i>	<i>FRI</i>	<i>SAT</i>	<i>SUN</i>

Talking about race and racism
and(?)
Talking about capitalism

The lack of diversity in astronomy is due to racism



OMG! So insightful!

Let's fix it!

Tell us more!



Solving the problem of racism in America requires a critical examination of capitalism



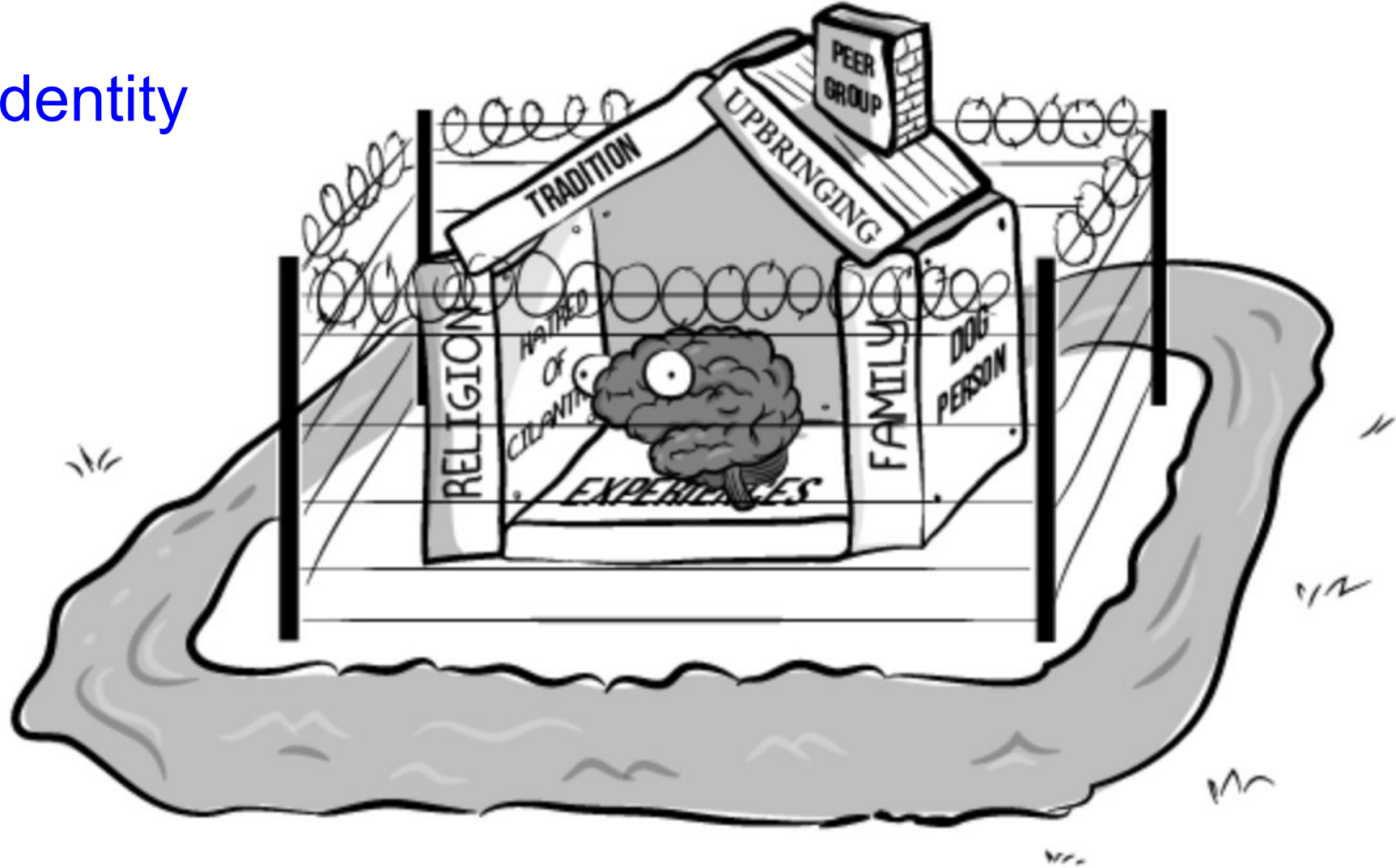
Scientists

Objective, not subjective
Dispassionate, never emotional
Logical vs. ideological





Identity





I'm going to tell
you some things.



You're not going to believe these things I tell you.



The Oatmeal

theoatmeal.com/comics/believe

Science and Structural Analysis

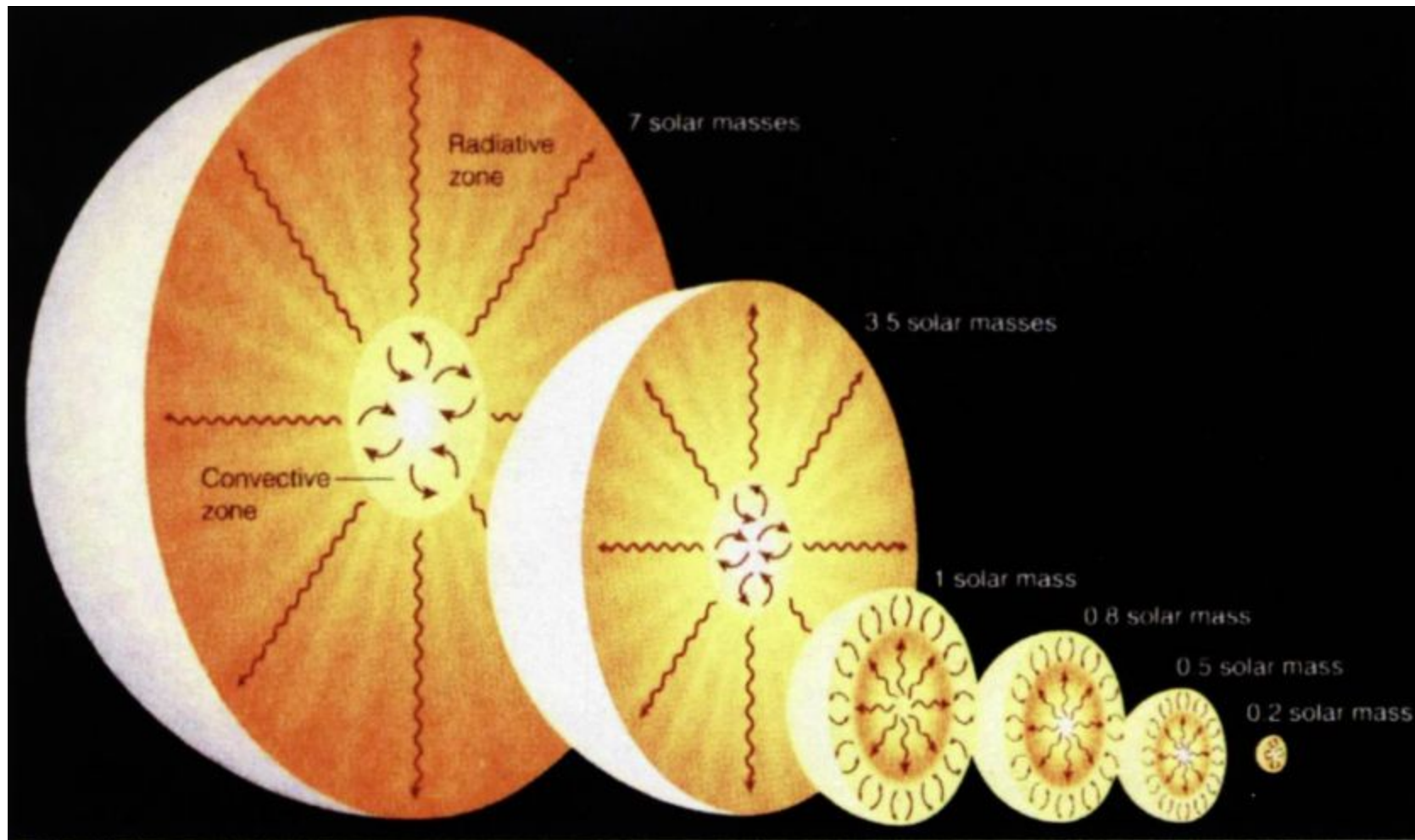
Systems-Based Analysis

How does that
star shine?



How does that
star shine?





Stellar Evolution

Stars are born in nebulae, which are giant clouds of gas (mainly hydrogen) and dust that float in space. Stars can have a life span of millions, or even billions, of years. The biggest stars have the shortest lives, because they consume their nuclear fuel (hydrogen) at a very accelerated rate. Other stars, like the Sun, burn fuel at a slower rate and may live some 10 billion years. Many times, a star's size indicates its age. Smaller stars are the youngest, and bigger stars are approaching their end, either through cooling or by exploding as a supernova.



Massive star
More than 8 solar masses

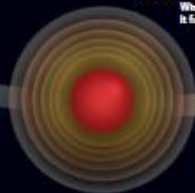
Small star
Less than 8 solar masses

Life Cycle of a Star

The evolution of a star depends on its mass. The smallest stars, like the Sun, have relatively long and steady lives. Such a star begins to burn helium when the hydrogen is depleted. In this way, its outer layers begin to swell until the star turns into a red giant. It ends its life as a white dwarf, eventually fading away completely, shedding remaining outer layers, and forming a planetary nebula. A massive star, because of its higher density, can fuse elements heavier than helium from its nuclear reactions. In the final stages of its life, its core collapses and the star explodes. All that remains is a hyperdense remnant, a neutron star. The most massive stars end by forming black holes.

1. PROTOSTAR
A protostar is formed by the separation of gas and dust. Gravitational effects cause its core to rotate.

2. STAR
The star shines and slowly consumes its hydrogen. It begins to fuse helium as its size increases.



3. RED GIANT
The star continues to expand, but its mass remains constant and its core heats up. When the star's helium is depleted, it fuses carbon and oxygen.

4. PLANETARY NEBULA
When the star's fuel is depleted, its core condenses, and its outer layers detach, or puff out, forming an expanding shell of gas.

5. WHITE DWARF
The star remains surrounded by gas and is dim.

95% of stars
end their lives as white dwarfs. Other (larger) stars explode as supernovas, shedding outer layers for weeks, although their brightness is often obscured by the gas and dust.

1. PROTOSTAR
A protostar has a dense gaseous core surrounded by a cloud of dust.

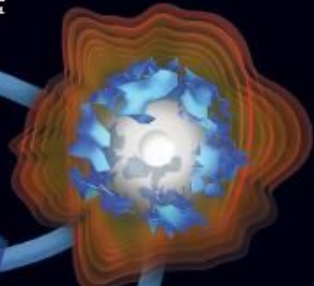
2. STAR
A star is finally born. It fuses hydrogen to form helium and then along the main sequence.

5. BLACK HOLE
If the star's initial mass is 20 solar masses or more, its nucleus is denser and it turns into a black hole, where gravitational force is extremely strong.

5. NEUTRON STAR
If the star's initial mass is between eight and 20 solar masses, it ends up as a neutron star.

3. RED SUPERGIANT
The star swells and heats up. Through nuclear reactions, a heavy core of iron is formed.

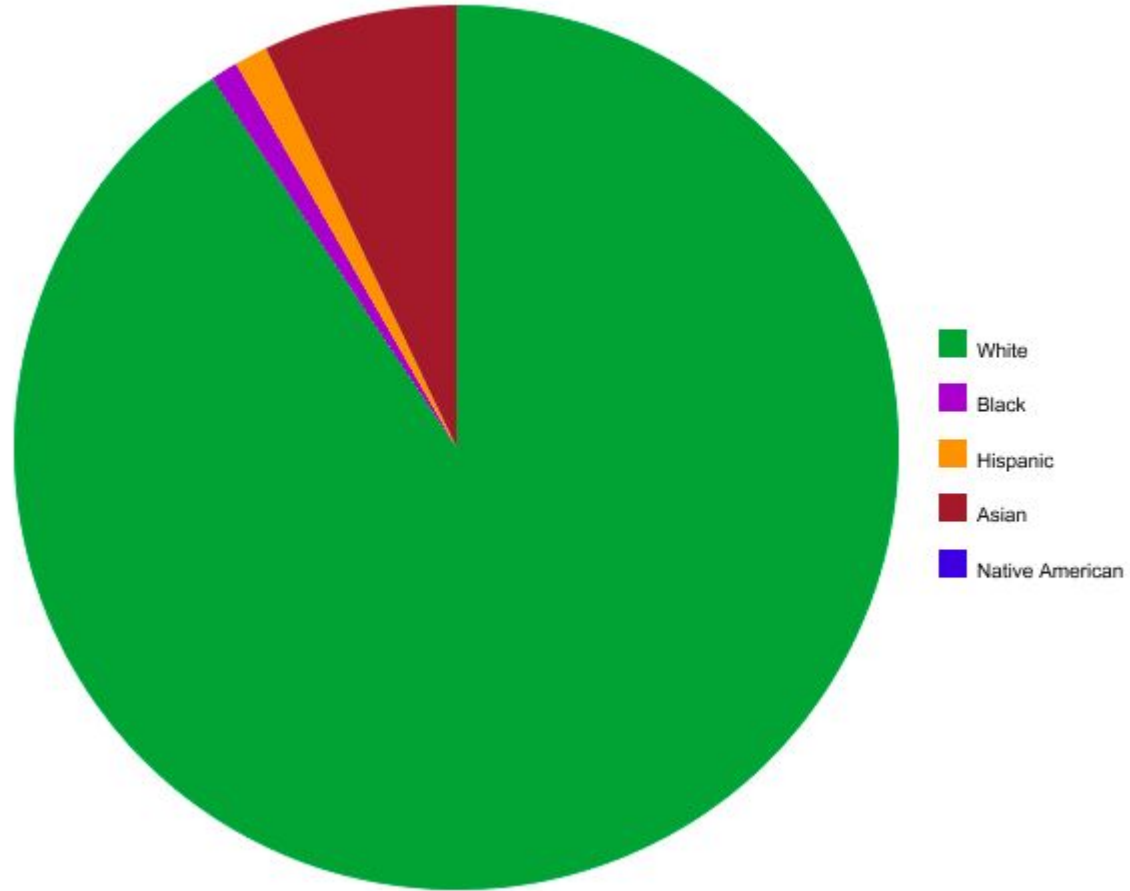
4. SUPERNOVA
When the star can no longer fuse any more elements, its core collapses, causing a strong explosion of energy.



Social Justice and Structural Analysis

Systems-Based Analysis

US Astronomy Racial Demographics



“Race is a social construct.”



This is a construct



***Why* was race constructed?**

How does our economic system work?

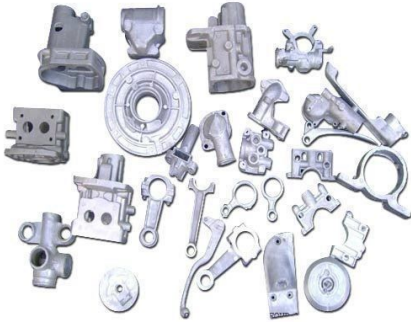
A Marxian Analytical Framework

Marx's Labor Theory of Profit

Capital Investment

Money Used for:

Fixed Capital



Labor Capital



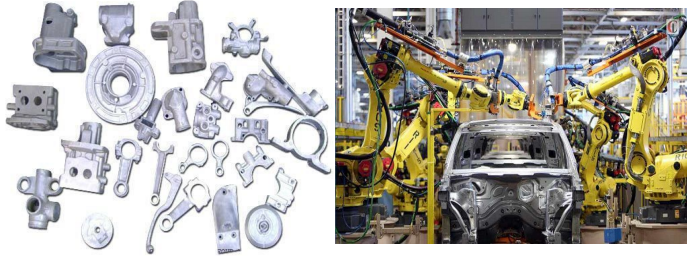
Marx's Labor Theory of Profit

Buying up auto parts and assembly machines does not lead to profit



Marx's Labor Theory of Profit

Fixed Capital



Labor Capital

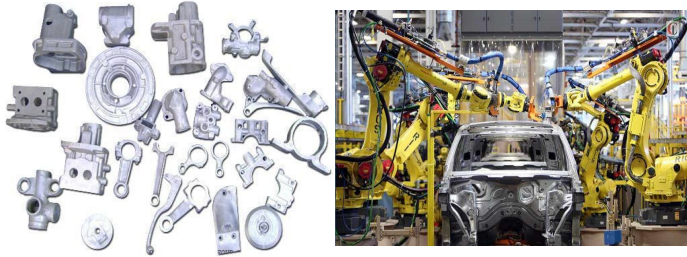


Value



Marx's Labor Theory of Profit

Fixed Capital



\$100/hr



Labor Capital



\$20/hr



Value



> \$120/hr

8 Hour Work Day

Surplus
Labor Time
(~5 hours)

Socially Necessary
Labor Time
(~3 hours)

Produces profit and wealth for capitalists



Produces value necessary for the worker to
meet their basic needs/wants



Capitalist Class Structure

Capitalists (Billionaires)
appropriate and
distribute surplus value

“Ownership Class”



Wealth is not, and cannot be
distributed equally between
these two groups.

Labor produces
surplus value (profits)

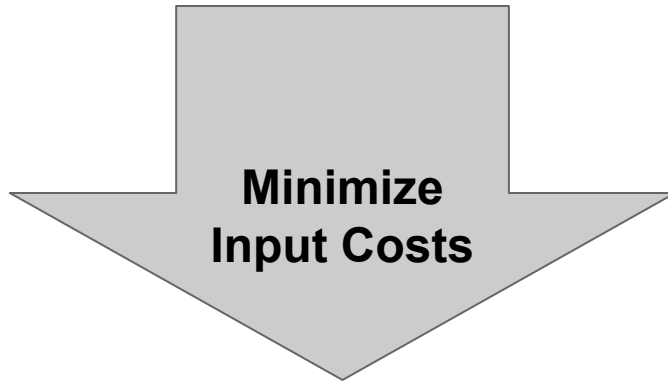
“Working Class”



Inequality and inequity are
built in; features, not bugs.

***Why* was race constructed?**

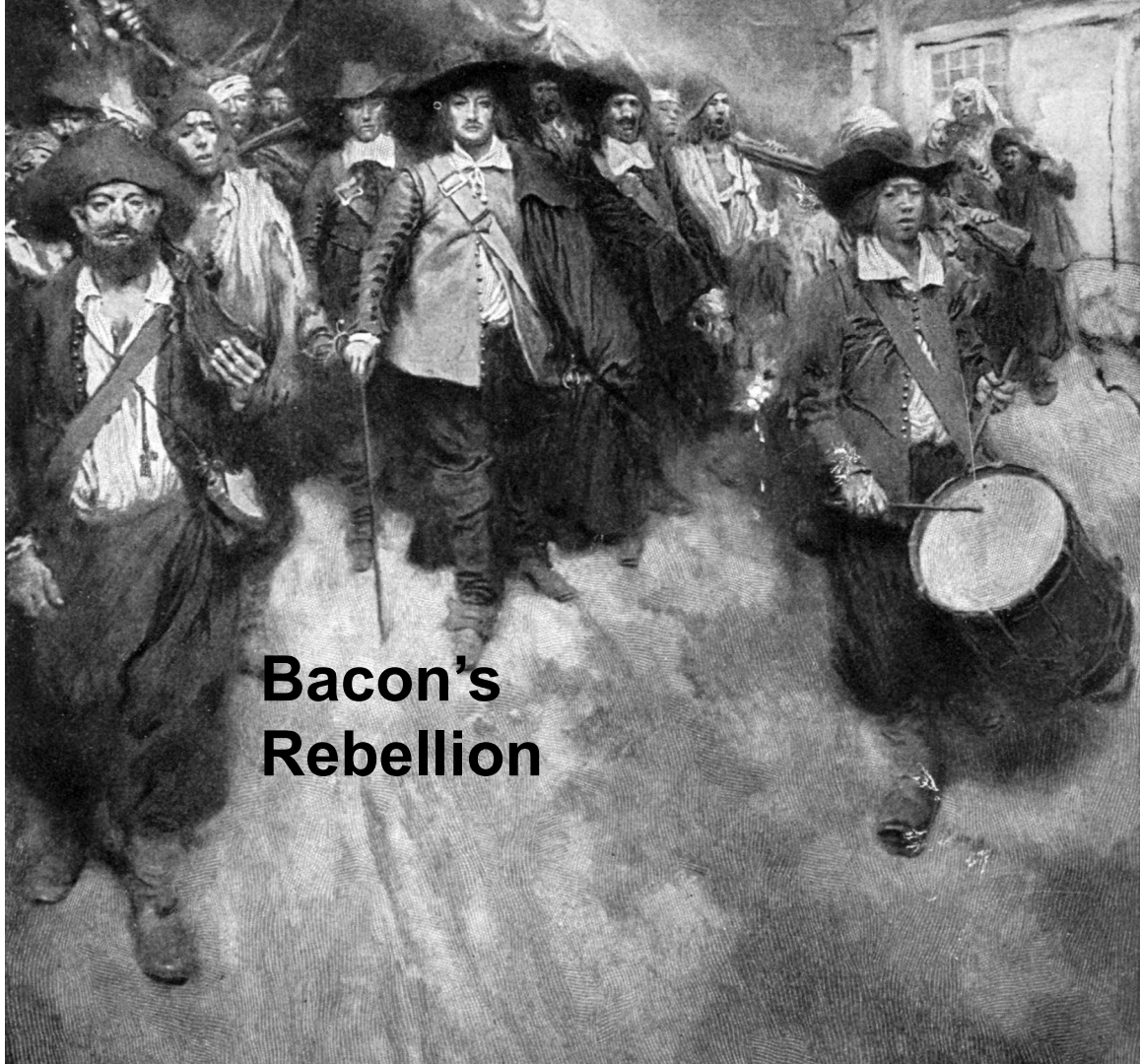
A Market Economy and its Incentive Scheme



(a.k.a the profit motive)

Slave labor (labor-cost minimization) was first African *and* European





Bacon's Rebellion

Stono Rebellion

HORRID MASSACRE IN VIRGINIA.



\$100 REWARD!

RANAWAY

From the undersigned, living on Current River, about twelve miles above Doniphan, in Ripley County, Mo., on 2nd of March, 1860, **A NEGRO MAN**, about 30 years old, weighs about 160 pounds; high forehead, with a scar on it; had on brown pants and coat very much worn, and an old black wool hat; shoes size No. 11.

The above reward will be given to any person who may apprehend this said negro out of the State; and fifty dollars if apprehended in this State outside of Ripley county, or \$25 if taken in Ripley county.

APOS TUCKER.

Order of Operations

Races existed first, followed by racial oppression

Order of Operations

~~Races existed first, followed by racial oppression~~

Oppression existed first, followed by the **ideology of race**

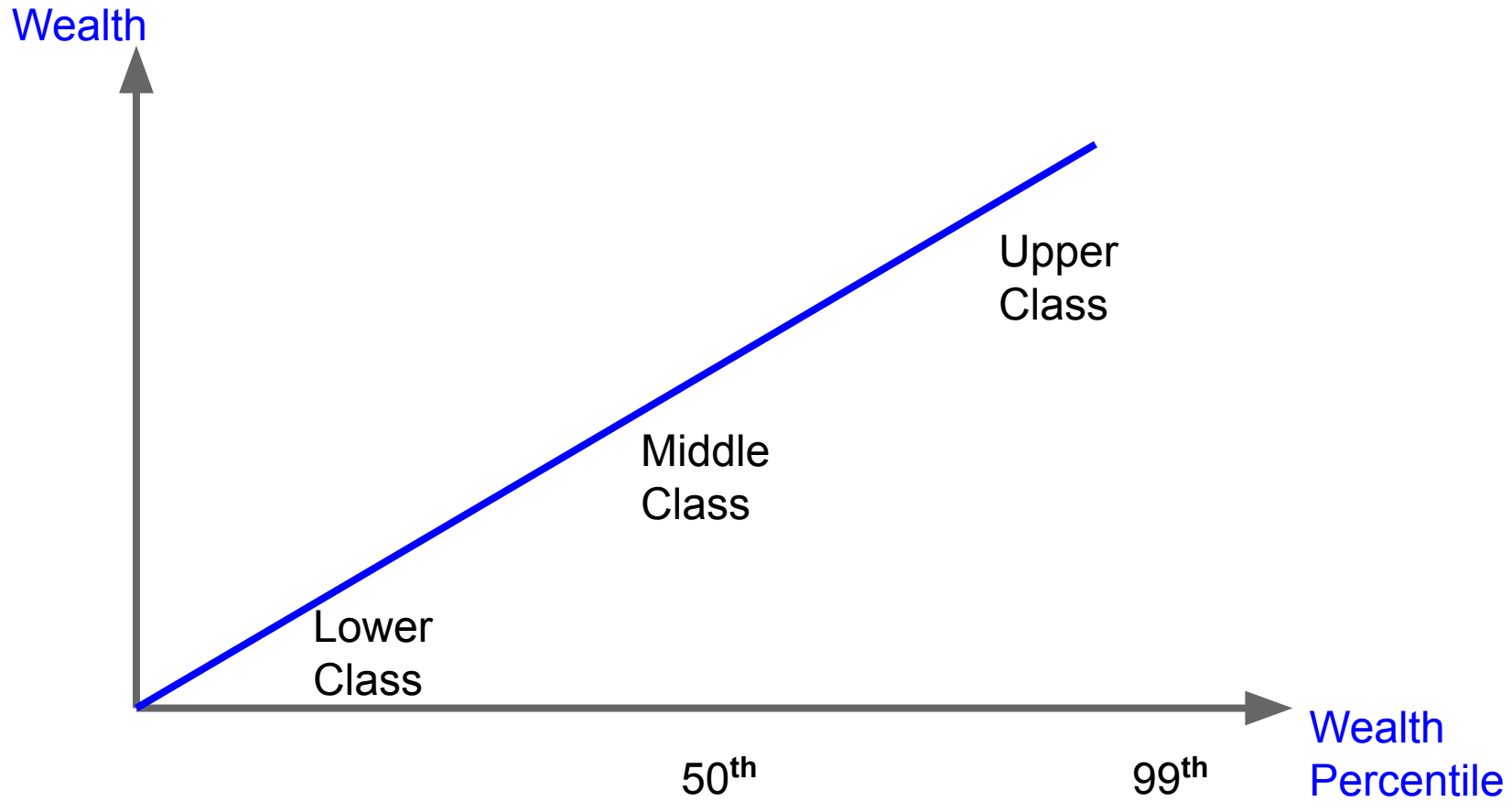
Here, then, is the origin of Negro slavery. The reason was economic, not racial; it had to do not with the color of the laborer, but the cheapness of the labor. As compared with Indian and white labor, Negro slavery was eminently superior.

The features of the man, his hair, color and dentifrice, his "subhuman" characteristics so widely pleaded, were only the later rationalizations to justify a simple economic fact: that the colonies needed labor and resorted to Negro labor because it was cheapest and best. This was not a theory, it was a practical conclusion deduced from the personal experience of the planter. He would have gone to the moon, if necessary, for labor. Africa was nearer than the moon, nearer too than the more populous countries of India and China. But their turn was to come.

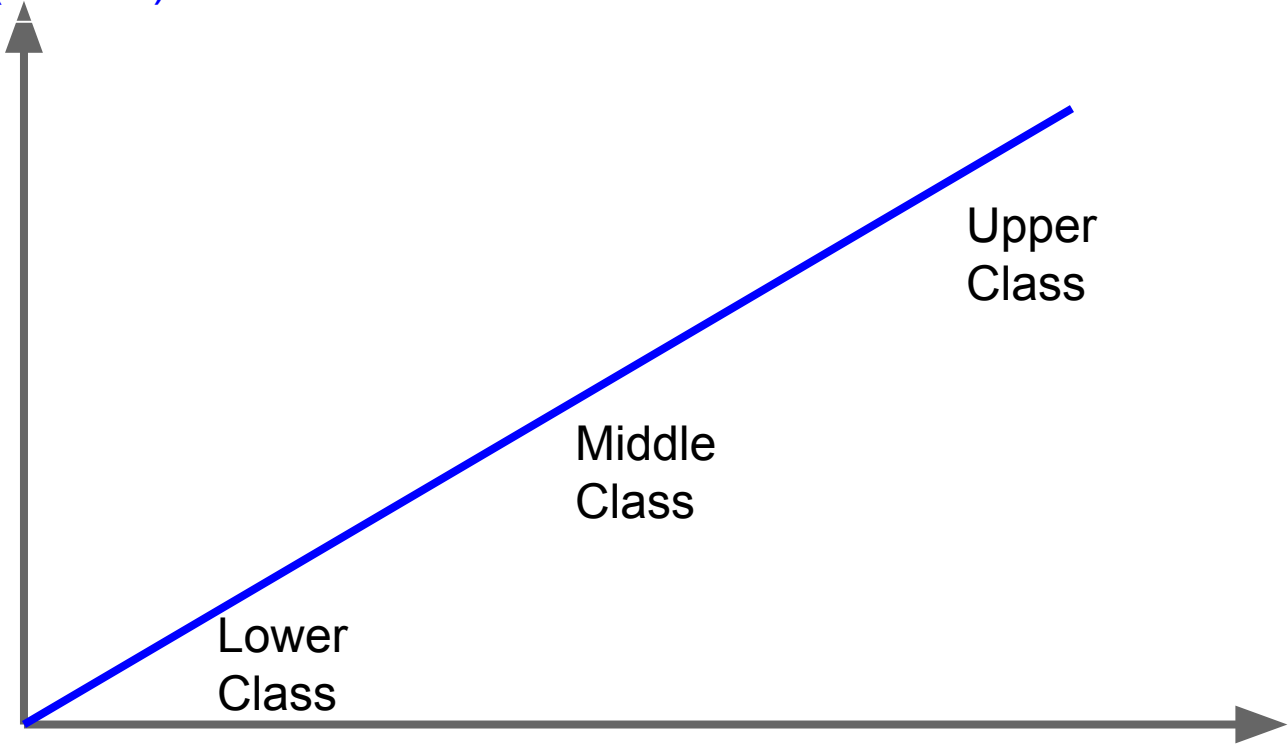
Race was constructed...

- ...as a way of rationalizing slavery in the “land of the free”
- ...to divide the labor force (free whites as distinct from Black slaves)
- ...to placate poor white citizens (the wages of whiteness)

But why does racism persist?



$\log_{10}(\text{Wealth})$



Lower
Class

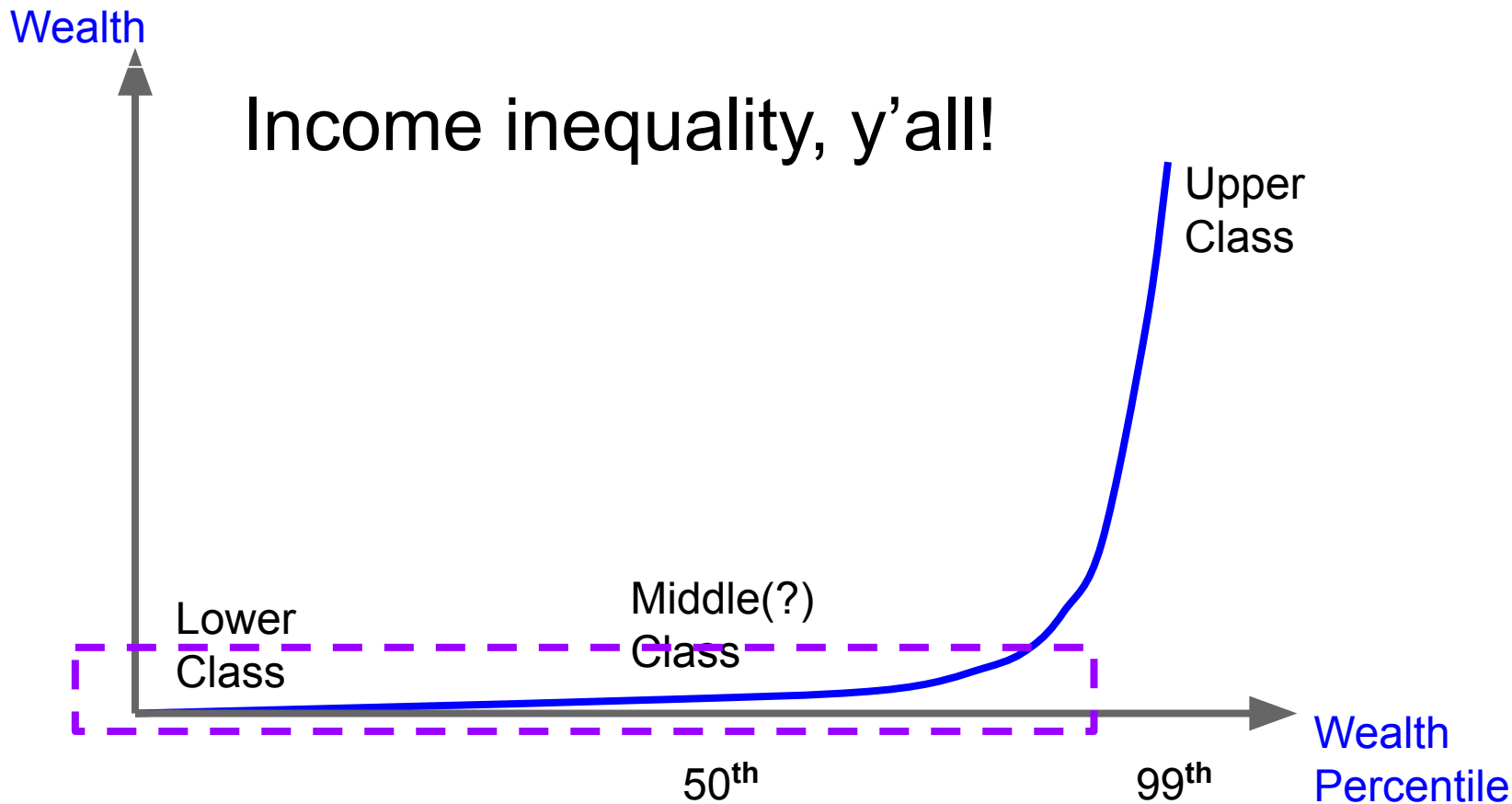
Middle
Class

Upper
Class

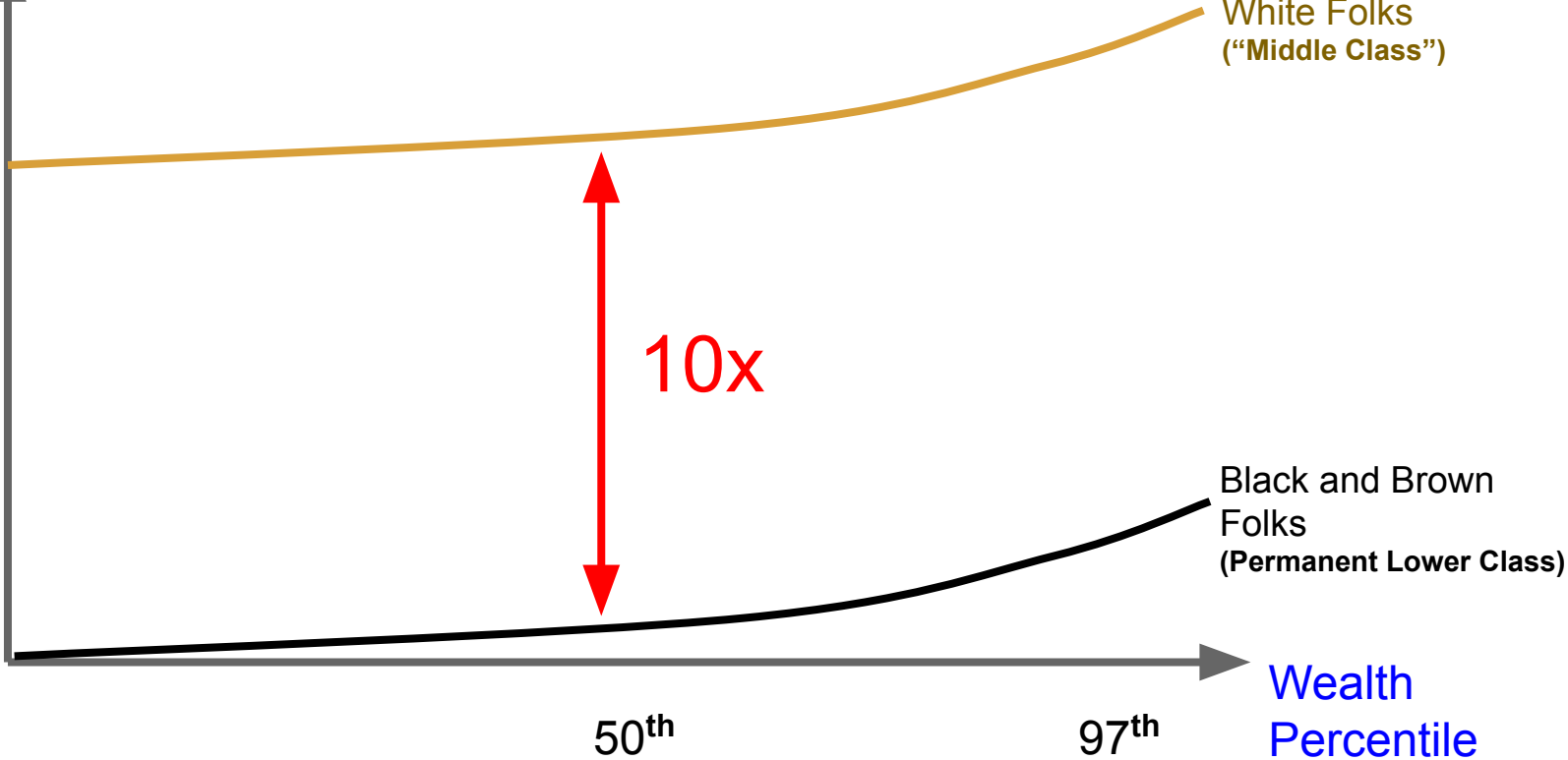
50th

99th

Wealth
Percentile



Wealth

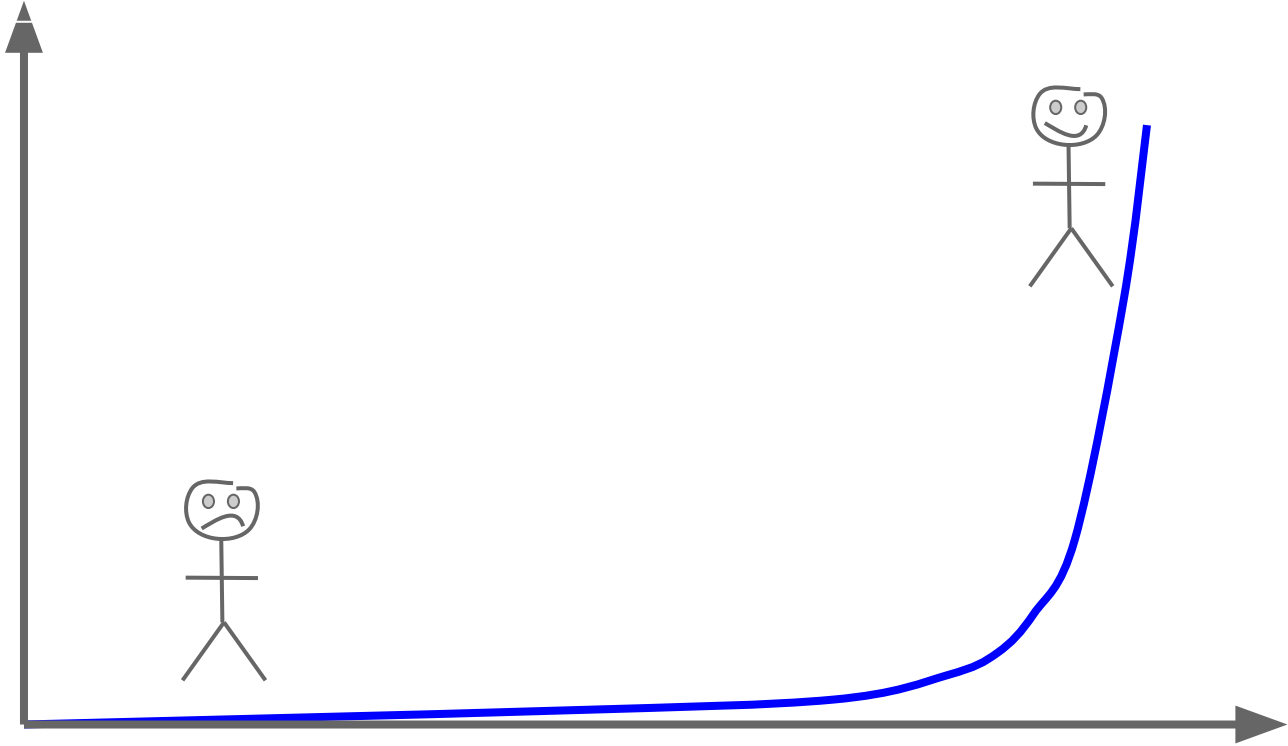


50th

97th

Wealth
Percentile

Wealth

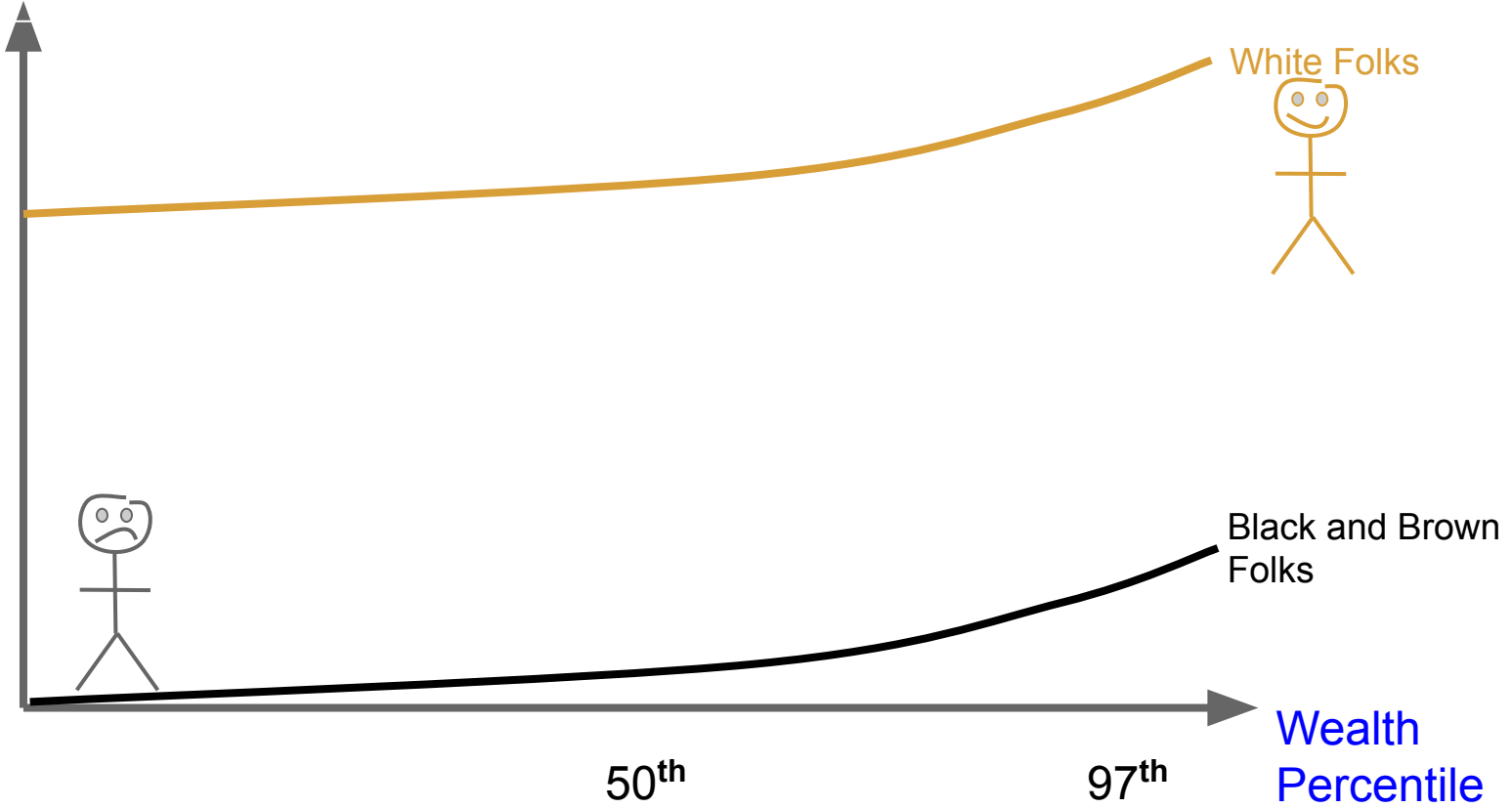


50th

99th

Wealth
Percentile

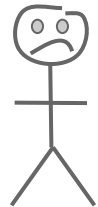
Wealth



White Folks



Black and Brown Folks



50th

97th

Wealth
Percentile

Systemic Racism

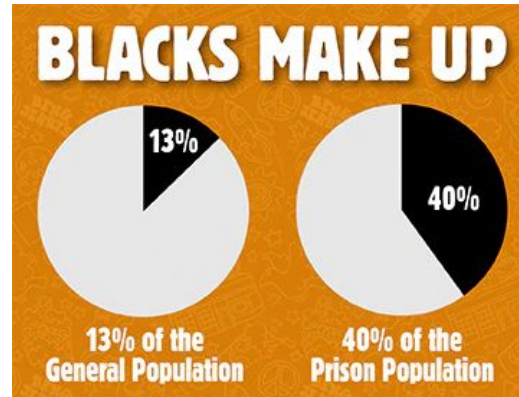
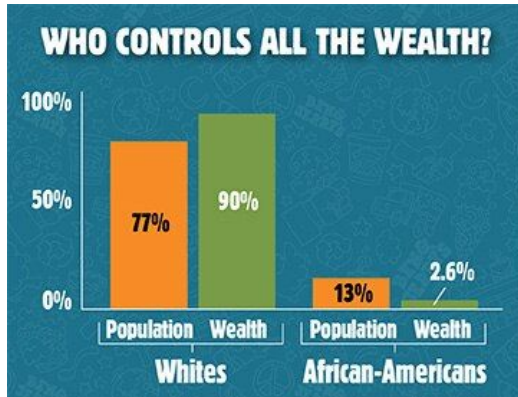
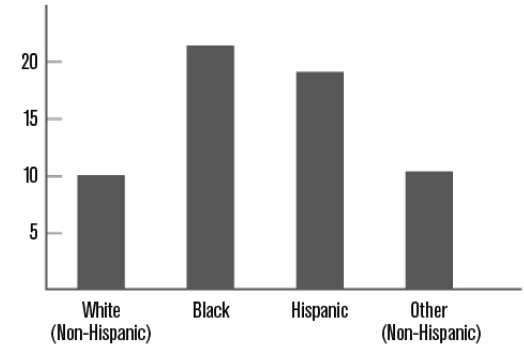


FIGURE 3.5 HOUSEHOLD FOOD INSECURITY, 2015

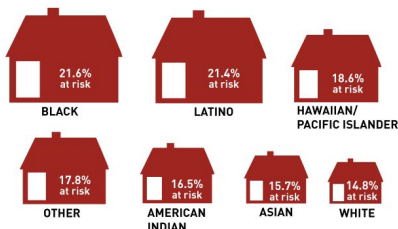
Percentage of Households That Are Food-Insecure



Source: Household Food Security in the United States in 2015, U.S. Department of Agriculture

COMMUNITIES OF COLOR HAVE A HIGHER RISK OF FORECLOSURE

Estimated owner-occupied loans at imminent risk of foreclosure (60+ days delinquent or in foreclosure), 2005-2008 originations



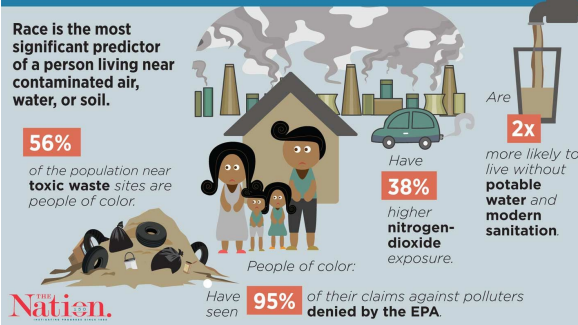
COLORLINES®

Source: Center for Responsible Lending report, Foreclosures by Race and Ethnicity: The Demographics of a Crisis, June 16, 2010; data collected by the Federal government under the Home Mortgage Disclosure Act (HMDA) and data compiled by a private company, Lender Processing Services (LPS).

Environmental Racism Is Nothing New

Race is the most significant predictor of a person living near contaminated air, water, or soil.

56% of the population near toxic waste sites are people of color.



People of color:

38% higher nitrogen-dioxide exposure.

2x more likely to live without potable water and modern sanitation.

THE NATION

Have seen **95%** of their claims against polluters denied by the EPA.

What is racism?

Racism is the ordering of society such that white people have superior life outcomes compared to those of people of color.

What is race?

Race is the ideology for why society is ordered this way.

Systemic Racism

- Most manifestations of racism are economic in nature
- Capitalism is a system in which inequality is built in
- Inequality drives a capitalist society and is leveraged to create more profit
- The “E” in “EIJC” cannot be achieved within a capitalist framework

This is a social construct

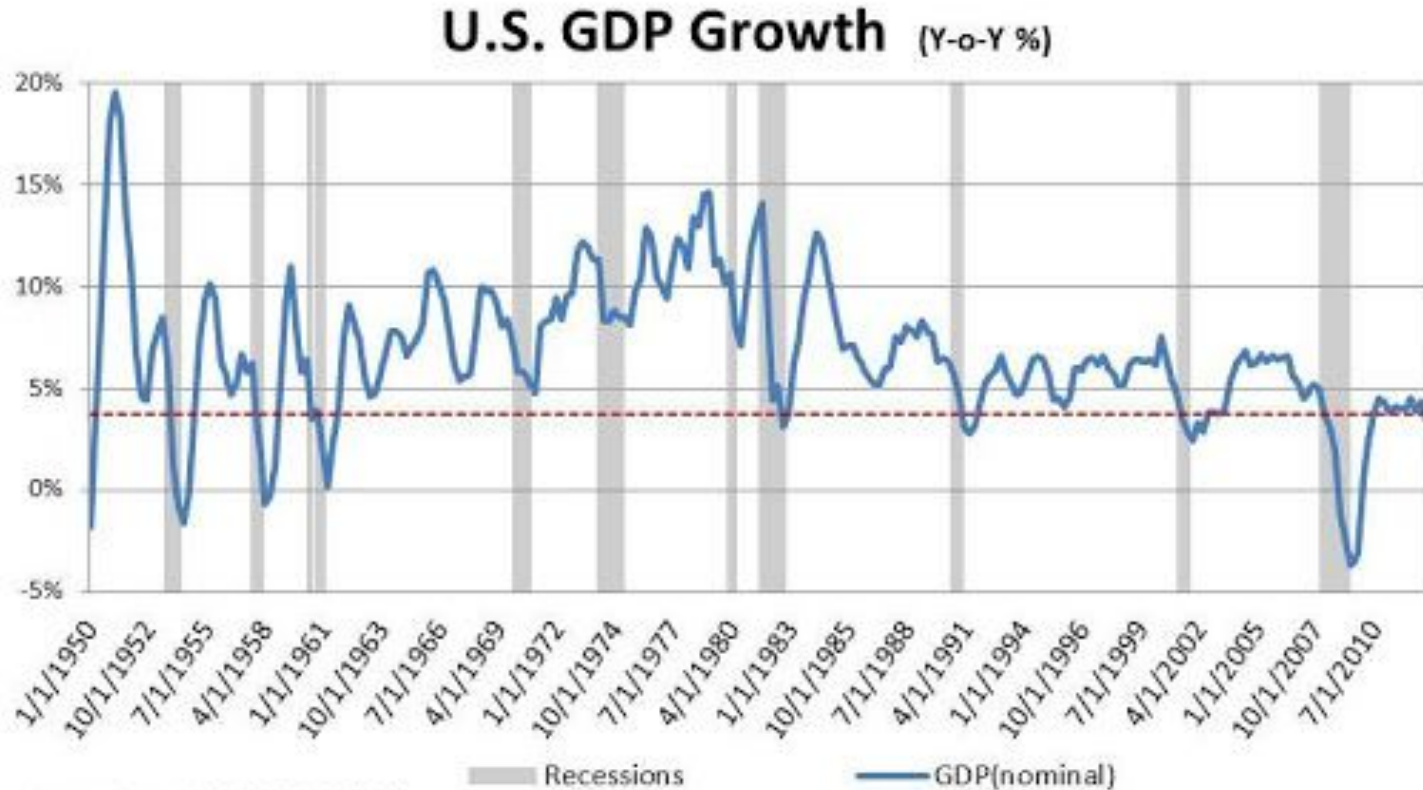


Undocumented humans:
Work for less pay
Have lower job security
No access to legal redress of abuse
Face the threat of deportation for resistance



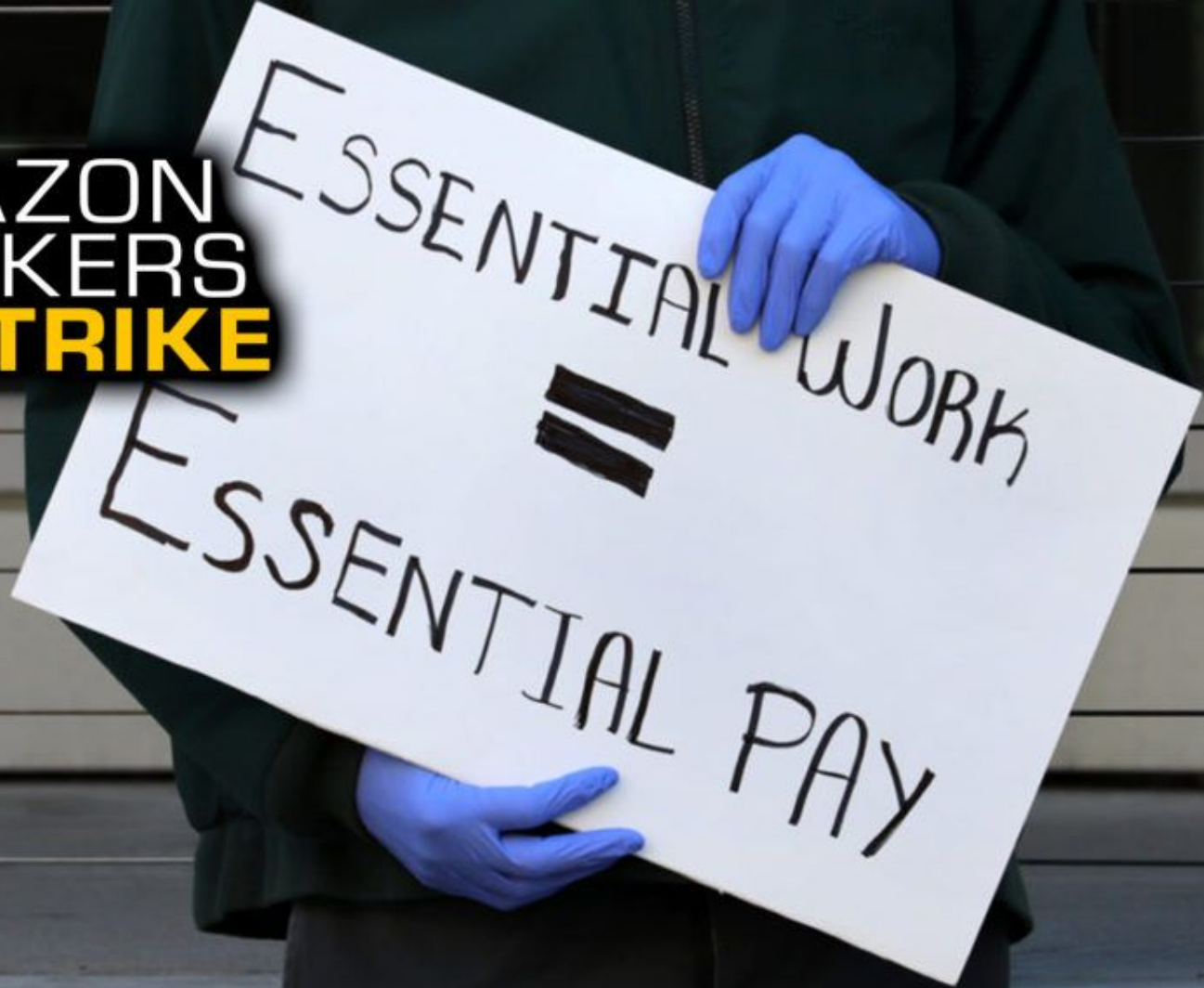


Black America as “Shock Absorbers”

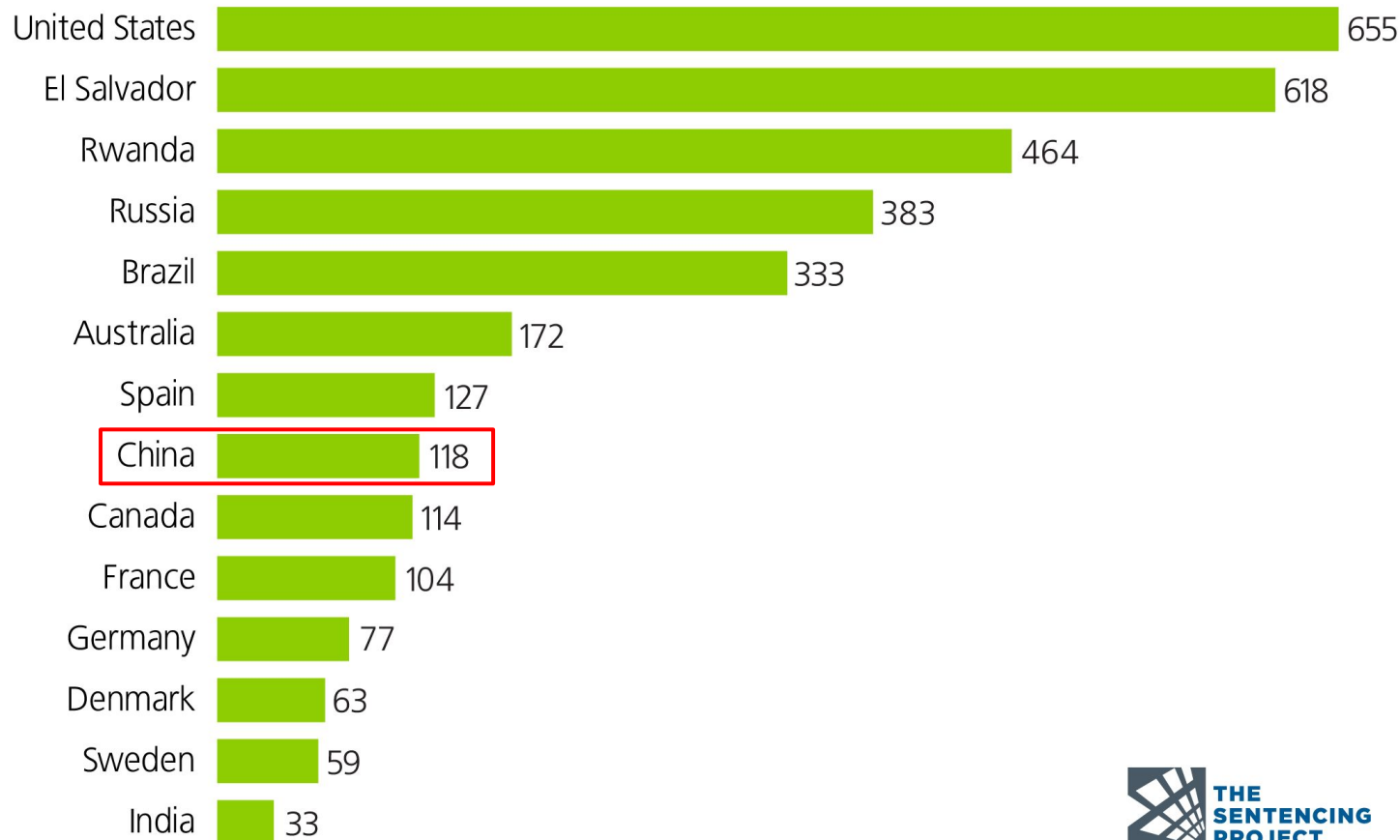


source: Recession (NBER); GDP (BEA)

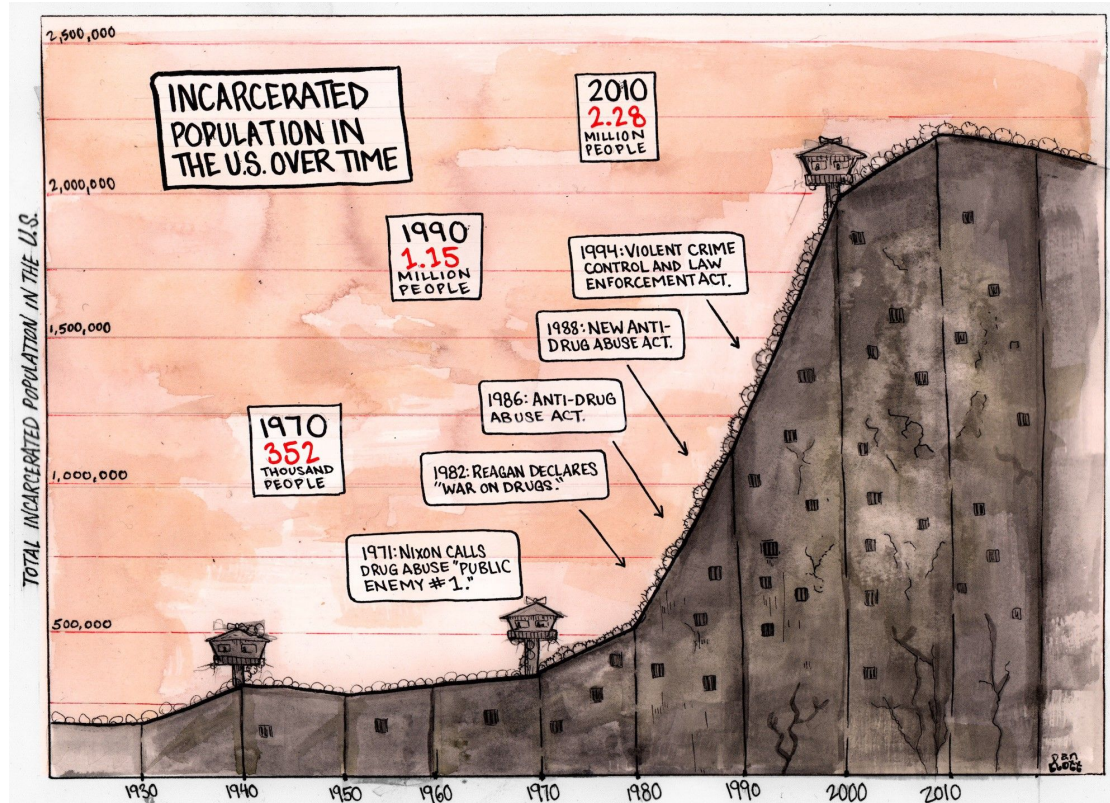
AMAZON
WORKERS
ON STRIKE



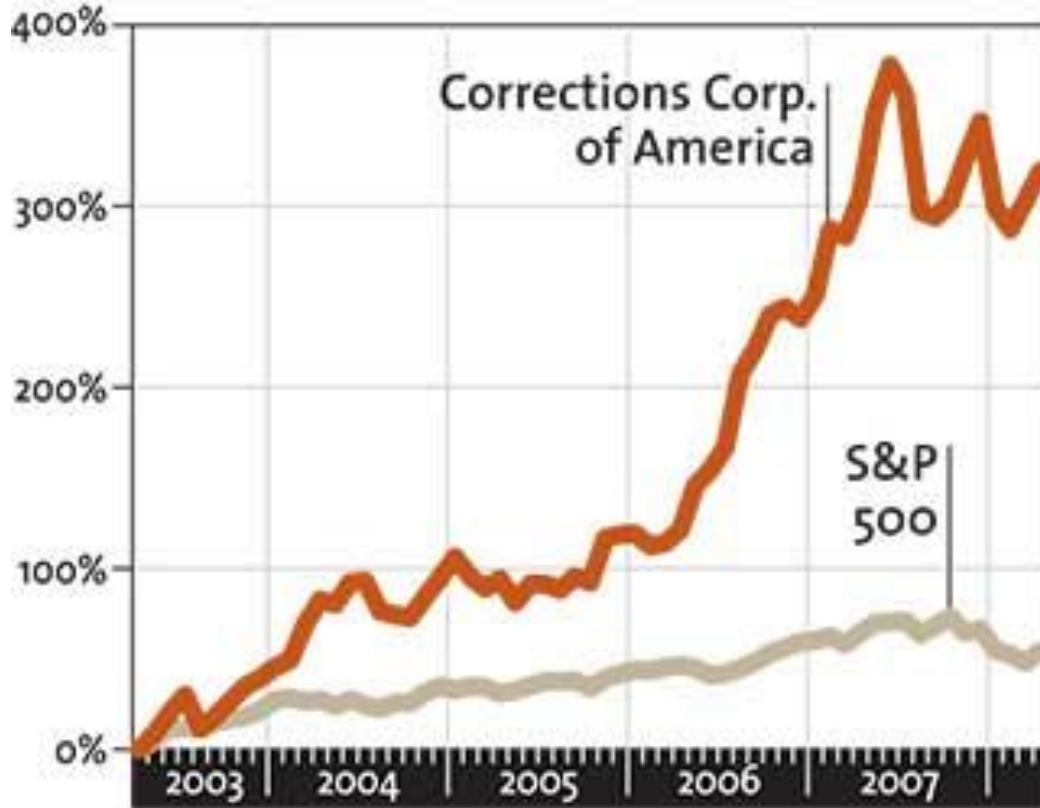
International Rates of Incarceration per 100,000



The New Jim Crow as a solution to Surplus Labor

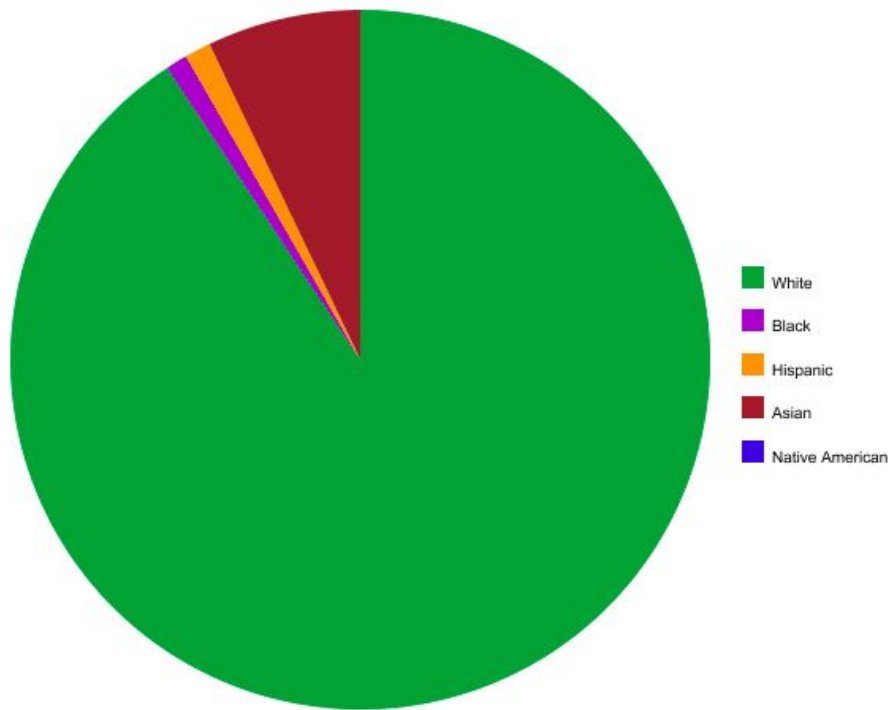


Two birds, one stone!

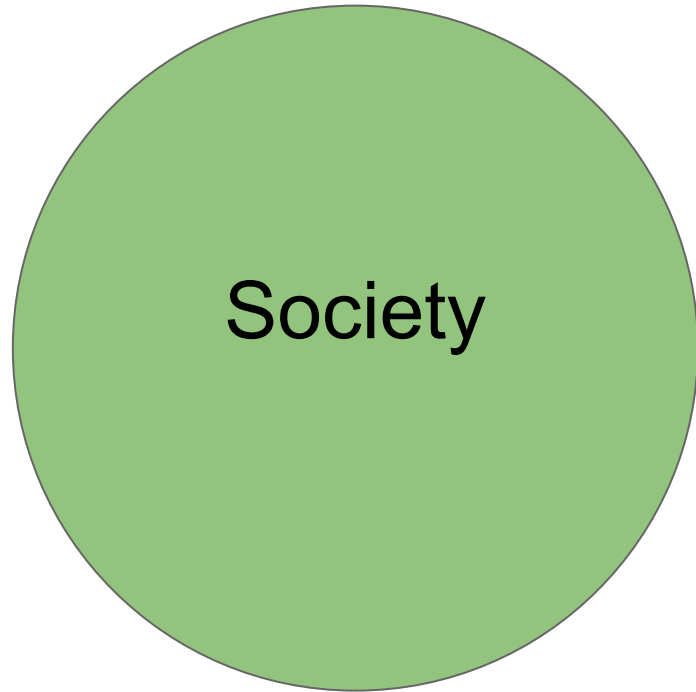
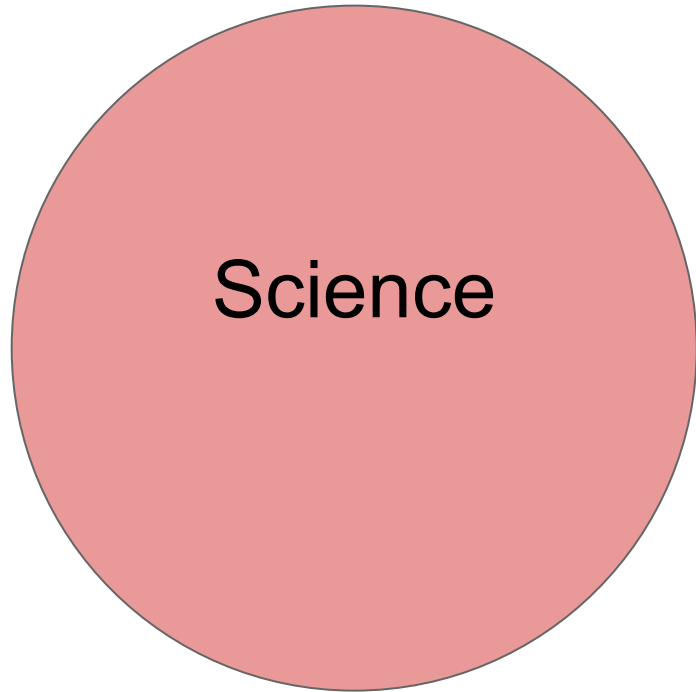


Manifestations of racism in Astro

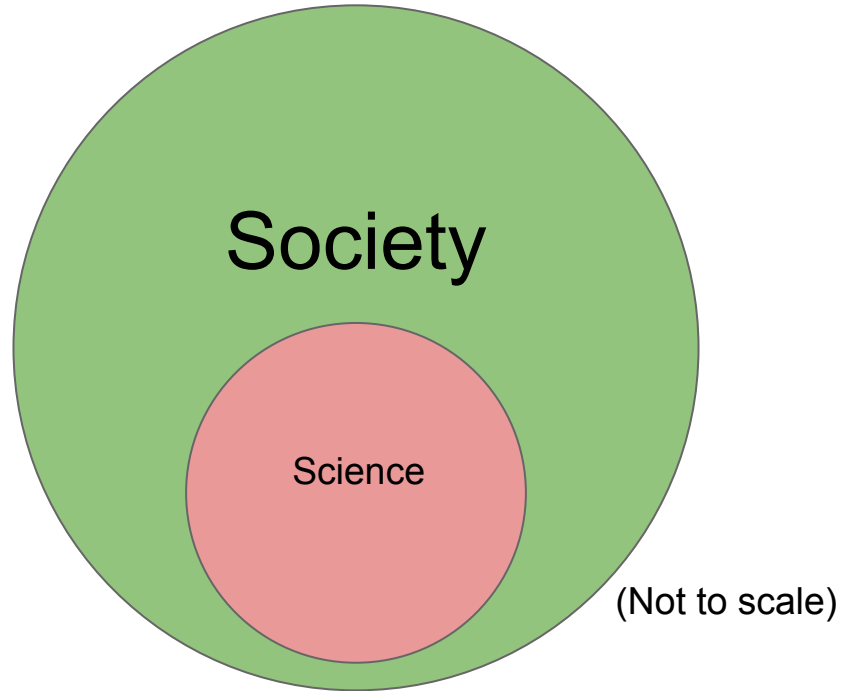
Both an emergent phenomenon and passive acceptance of normalcy



Myth:

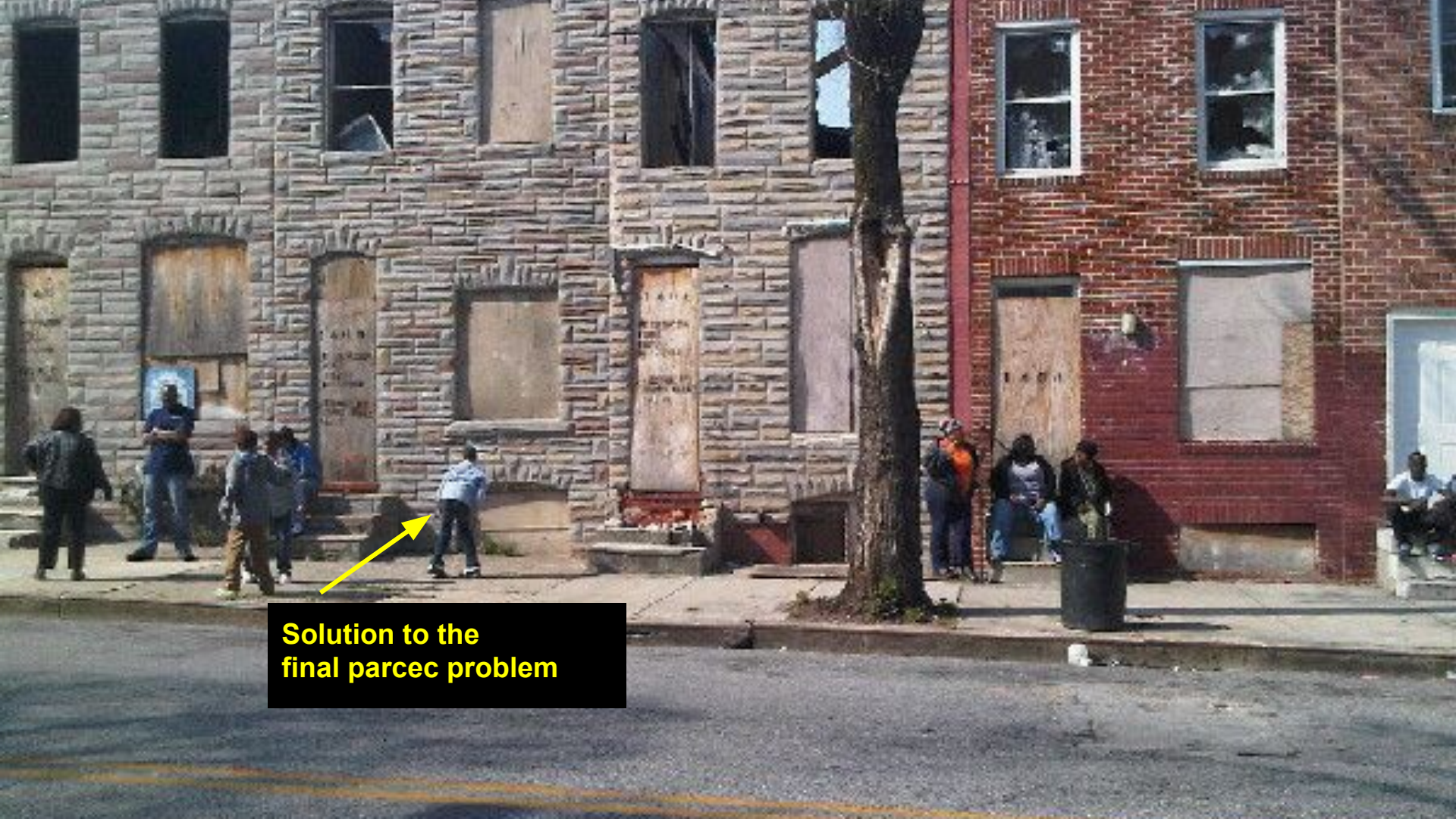


Reality:



A high-angle, wide shot of a massive, diverse crowd of people, likely at a large-scale event or festival. The individuals are packed closely together, filling the entire frame. A prominent black banner is superimposed across the upper portion of the image, containing the title text in white. The crowd exhibits a wide range of ages, ethnicities, and clothing styles, creating a vibrant and textured visual field.

Consequences of Racism for Science



**Solution to the
final parcec problem**



**Explanation of nature
of dark energy**

**Discoverer of confirmed
extrasolar biosignatures**



Take-away point:

- You need to be a Marxist to fight racism

Take-away point:

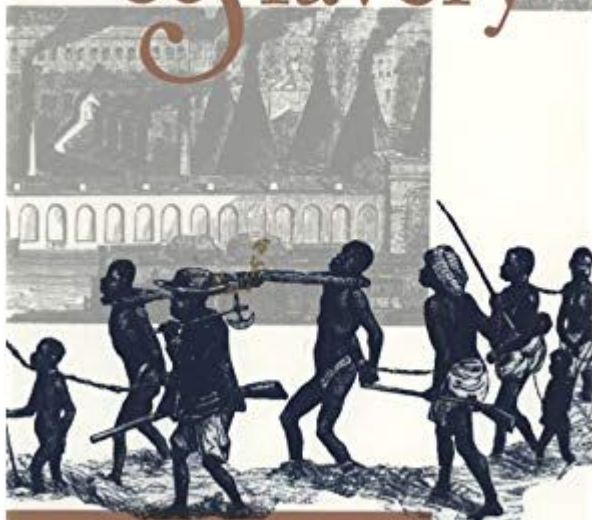
- ~~● You need to be a Marxist to fight racism~~
- Marxist theory provides a framework for critical examination of the system of capitalism (our socio-economic system)

So...what can I do?

- Learn and unlearn
- Investigate why we talk about diversity, rather than talking about the structure
- Seriously, be comfortable with the idea that you have a lot to learn and unlearn
- Two approaches: outward vs inward
- Once you've done the background reading, the ways in which you can take action will become apparent

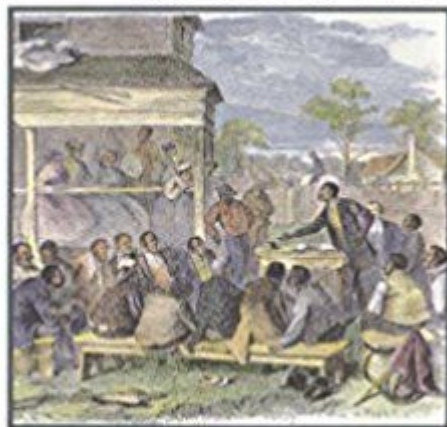
NEW INTRODUCTION BY COLIN A. PALMER

Capitalism & Slavery



Eric Williams

W. E. B. DU BOIS



BLACK RECONSTRUCTION IN AMERICA 1860-1880

INTRODUCTION BY DAVID LEVERING LEWIS

KARL MARX'S
DAS
KAPITAL



A MODERN-DAY INTERPRETATION
OF AN ECONOMIC CLASSIC
BY STEVE SHIPSIDE

**THE MAKING OF THE
BLACK RADICAL
TRADITION**

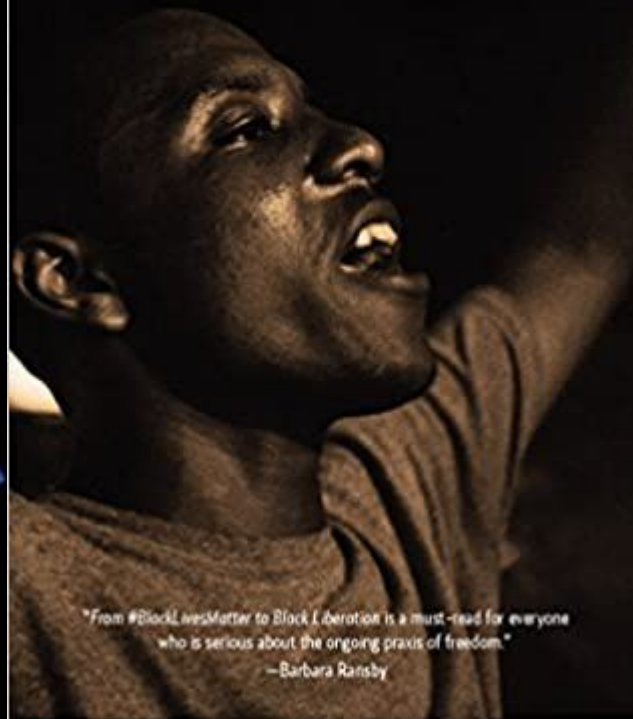
FOREWORD BY
ROBIN D. G. KELLEY
WITH A NEW PREFACE
BY THE AUTHOR

**CEDRIC J.
ROBINSON**

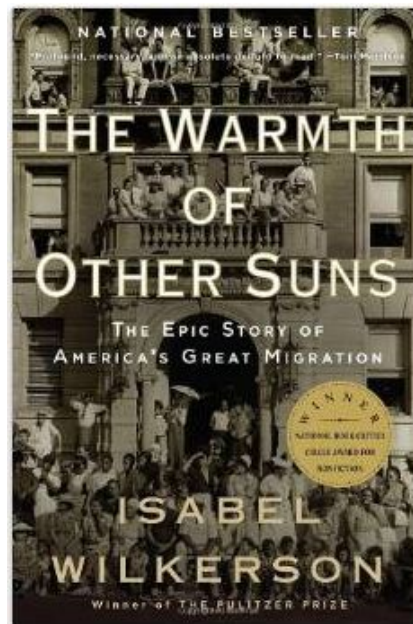
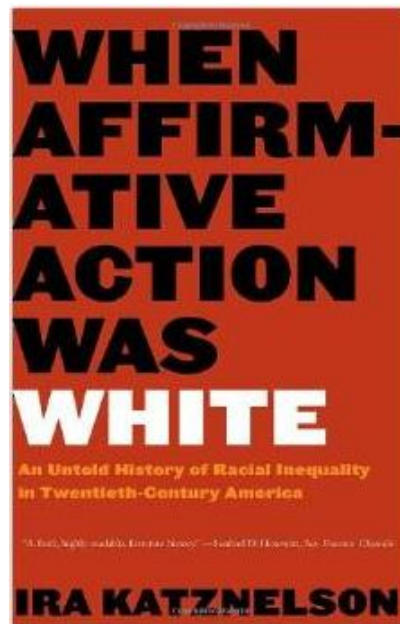
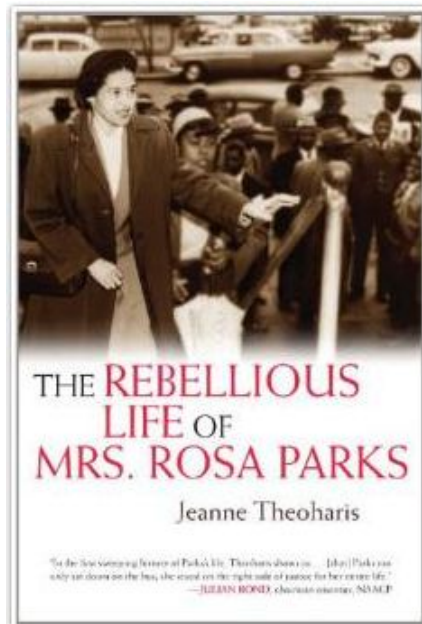
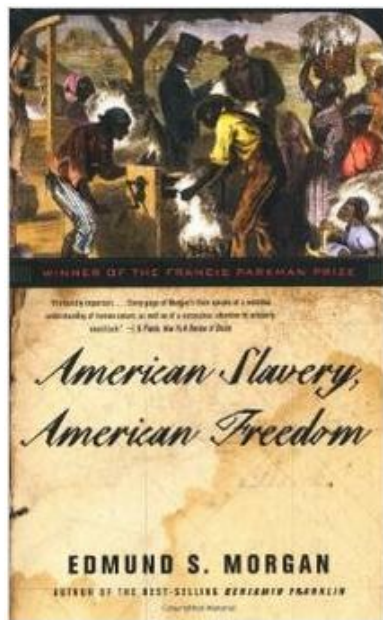
**THE MAKING OF THE
BLACK RADICAL
TRADITION**

FROM #BLACKLIVESMATTER TO
BLACK LIBERATION

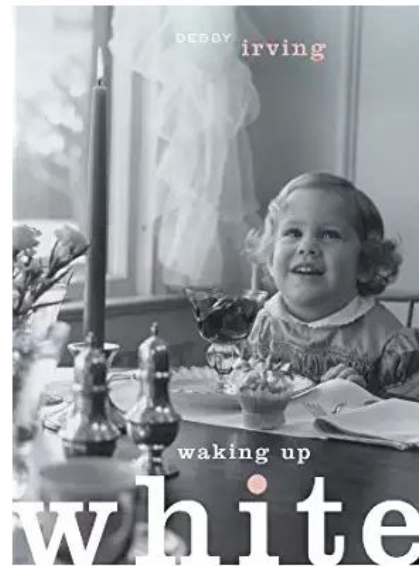
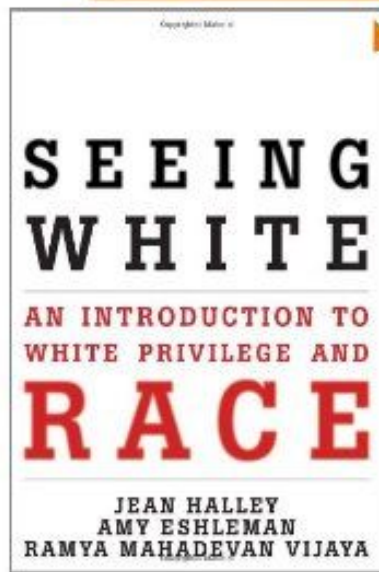
Keeanga-Yamahtta Taylor



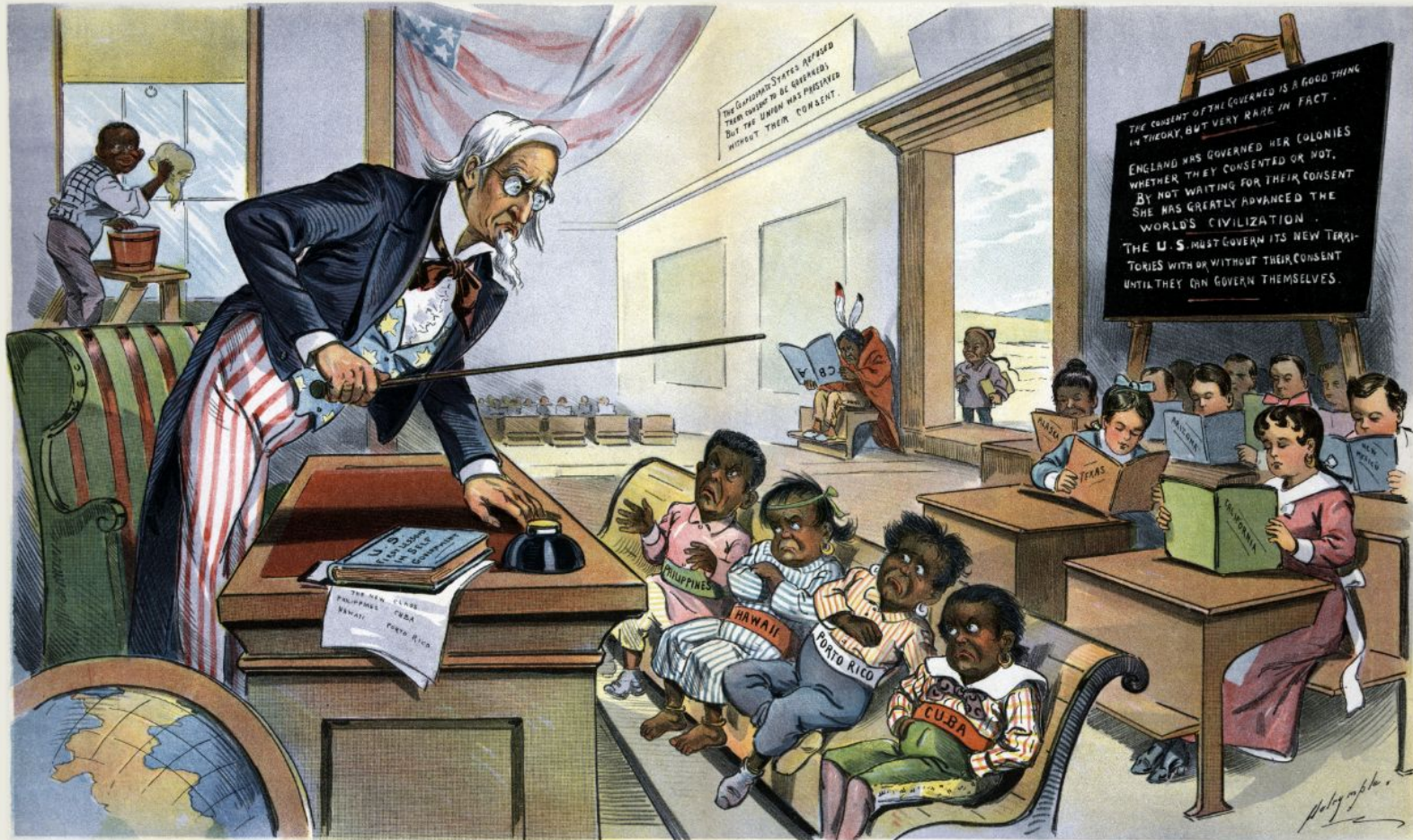
"From #BlackLivesMatter to Black Liberation is a must-read for everyone who is serious about the ongoing praxis of freedom."
—Barbara Ransby



LOOK INSIDE!



Thank you



COPY RIGHT, 1901, BY KOPPEL & SCHNEIDERMAN.

SCHOOL BEGINS.

UNCLE SAM (to his new class in Civilization).—Now, children, you've got to learn these lessons whether you want to or not! But just take a look at the class ahead of you, and remember that, in a little while, you will feel as glad to be here as they are!

JETTMAR LITH. CO. PUCK BLDG. N.Y.