Studying Social Inequality with Data Science
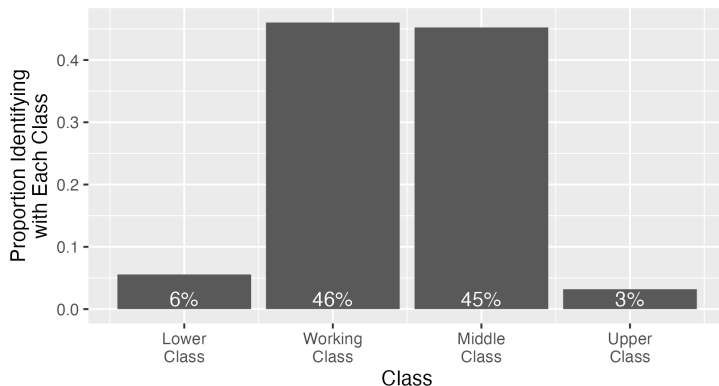
Social Class

Learning goals for today

By the end of class, you will be able to
- engage with the concepts of social hierarchy beyond income
  - social class as ownership of capital
  - social class as authority and skills
  - cultural capital
  - status hierarchies
- connect these ideas to data sources

Discussion recap

If you were asked to use one of four names for your social class, which would you say you belong in: the lower class, the working class, the middle class, or the upper class?

1. Should we study social class?
2. If so, how would you define it?

Class as ownership of capital
A Marxist view

- capital creates a system of power relations

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How do we see this today?

Class as ownership of capital

A data science project could

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- describe stock market returns that exceed growth

Class as ownership of capital

A data science project could

- ▶ describe stock market returns that exceed growth
- ▶ describe home values that rise faster than inflation

Class as ownership of capital
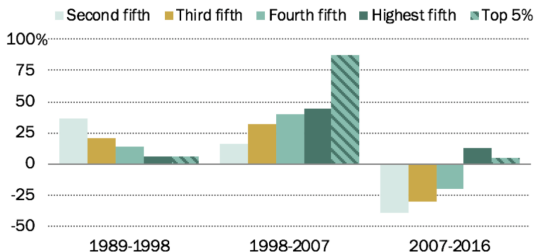
A data science project could

- describe stock market returns that exceed growth
- describe home values that rise faster than inflation
- describe the consolidation of capital in fewer hands

Class as ownership of capital

The richest families are the only group to have gained wealth since the Great Recession

% change in median family wealth, by wealth quintile and for the top 5%

Legend: Second fifth · Third fifth · Fourth fifth · Highest fifth · Top 5%

Note: Data for families in the first quintile (bottom 20%) are not shown. Their median wealth was as follows: 1989 – $0; 1998 – $0; 2007 – $36, and 2016 – negative $1,099 (figures in 2018 dollars).
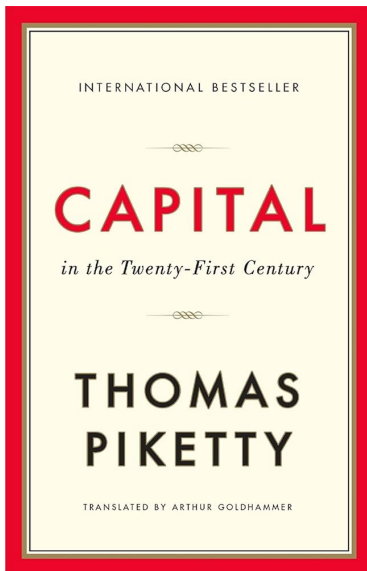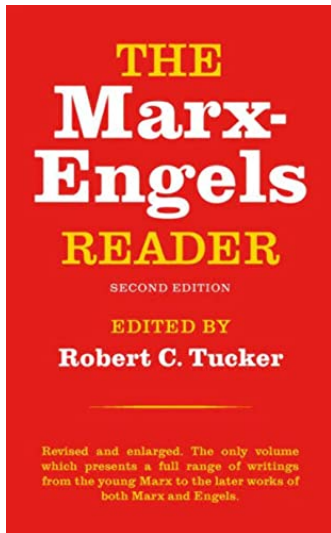Source: Pew Research Center analysis of the Survey of Consumer Finances.
"Most Americans Say There Is Too Much Economic Inequality in the U.S., but Fewer Than Half Call It a Top Priority"

PEW RESEARCH CENTER

Class as ownership of capital

Classic texts

Beyond two classes

For Marx there were two main classes,
- ▶ capitalists (very few)
- ▶ laborers (almost everyone)

characterized by conflict and exploitation

How could we further disaggregate the laborers?

Beyond two classes
Wright, 1997. Class Counts

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- ▶ authority over others
- ▶ possession of scarce skills
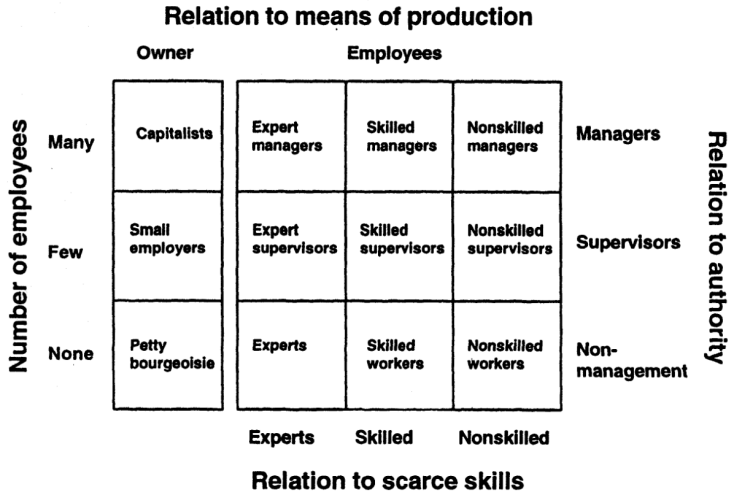
Beyond two classes

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Relation to means of production

	Owner	Experts	Skilled	Nonskilled	
		Employees			
Many	Capitalists	Expert managers	Skilled managers	Nonskilled managers	Managers
Few	Small employers	Expert supervisors	Skilled supervisors	Nonskilled supervisors	Supervisors
None	Petty bourgeoisie	Experts	Skilled workers	Nonskilled workers	Non-management

Number of employees

Relation to authority

Relation to scarce skills

Figure 1.3 *Elaborated class typology*

Beyond two classes

How would you measure classes
by ownership, authority, and skills?

Beyond two classes

How would you measure classes
by ownership, authority, and skills?

- ▶ Categorize jobs into **occupations**
  - ▶ titles based on tasks done at work
- ▶ Categorize occupations into classes

Beyond two classes
Erikson, Goldthorpe, & Portocarero 1979

I	Higher-grade professionals
II	Lower-grade professionals
III	Routine non-manual
IV	Small proprietors
V/VI	Skilled manual
VII	Unskilled manual

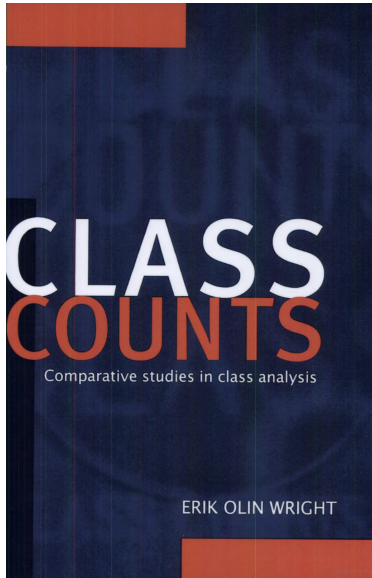# Beyond two classes: Class mobility

From a working paper with Daniel Molitor and Jennie Brand.
Data from NLSY79. Replication code here.

	Farmers	Unskilled Manual	Skilled Manual	Routine Nonmanual	Professional
Professional	0.27	0.24	0.30	0.34	0.51
Routine Nonmanual	0.25	0.30	0.31	0.34	0.26
Skilled Manual	0.21	0.21	0.19	0.16	0.14
Unskilled Manual	0.18	0.25	0.19	0.15	0.09
Farmers	0.09	0.01	0.01	0.01	0.00

Child Occupational Class (rows) / Parent Occupational Class (columns)

Classes as power relations: A place to go to learn more

Classes and capital that is not financial

Bourdieu 1986. The Forms of Capital.

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- ► You can buy this knowledge with your tuition
  - ► forms of capital are **fungible**

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Questions in cultural capital:

1. what kinds of cultural capital are valued?
2. in what fields?
3. how is that cultural capital acquired?

Classes and capital that is not financial

Lareau. Unequal Childhoods.

Classes and capital that is not financial

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- concerted cultivation

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The field (the U.S. education system and economy)
rewards concerted cultivation

How could you use data science to study cultural capital?

One idea: Time diaries
- PSID-CDS (questionnaire)
- American Time Use Study

An example paper: Weininger, Lareau, & Conley (2015)

Status

You are at a party

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"Hi. What do you do?"

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"Hi. What do you do?"
- A: I'm a medical doctor

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"Hi. What do you do?"
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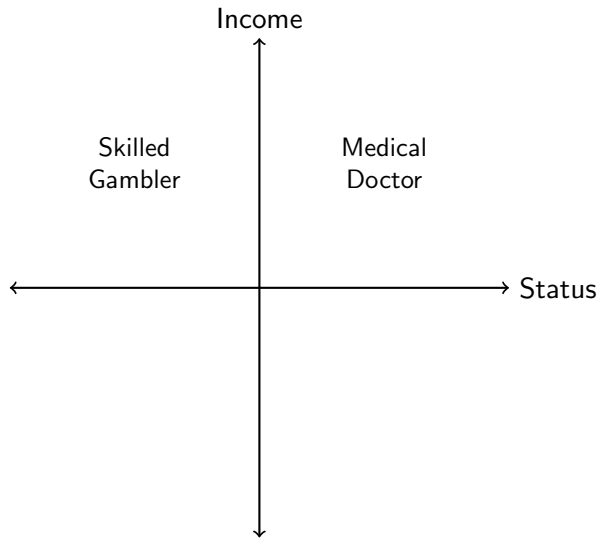
Pay might be equal.

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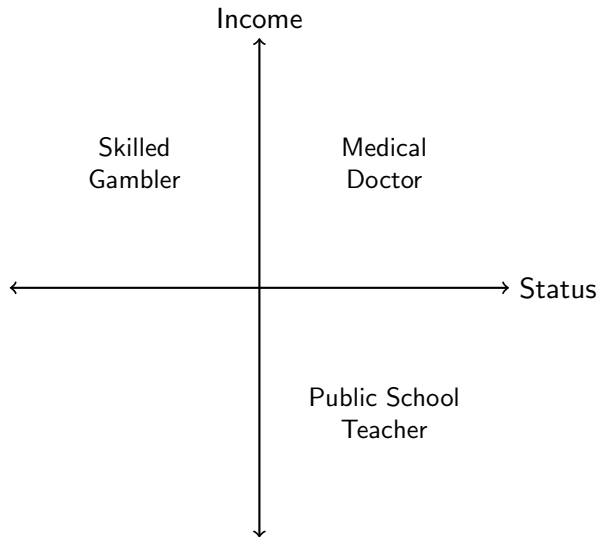
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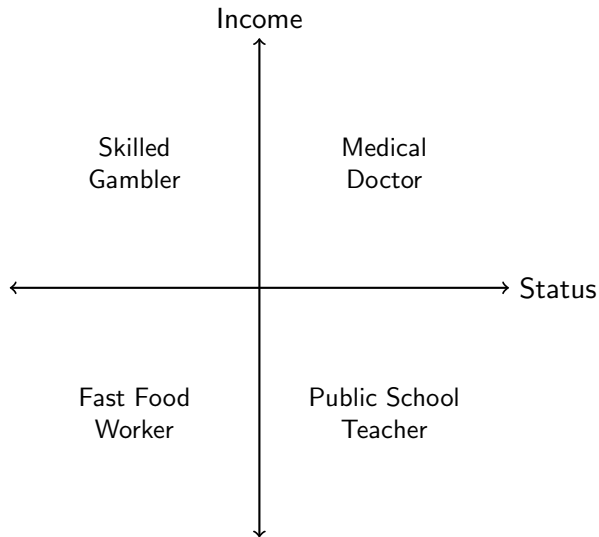
Pay might be equal. These differ in **status**

Status

Status

Status

Status: Measuring with data science

Example from Smith & Son 2014

Respondents given 90 occupations on paper cards

TOP
MIDDLE
BOTTOM

"please put the card in the box at the top of the ladder if you think that occupation has the highest possible social standing. Put it in the box of the bottom of the ladder if you think it has the lowest possible social standing. If it belongs somewhere in between, just put it in the box that matches the social standing of the occupation."

In surveys like the GSS,
respondent occupations can be mapped
to numeric prestige scores

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