

Studying Social Inequality with Data Science

INFO 3370 / 5371
Spring 2023

Social Class

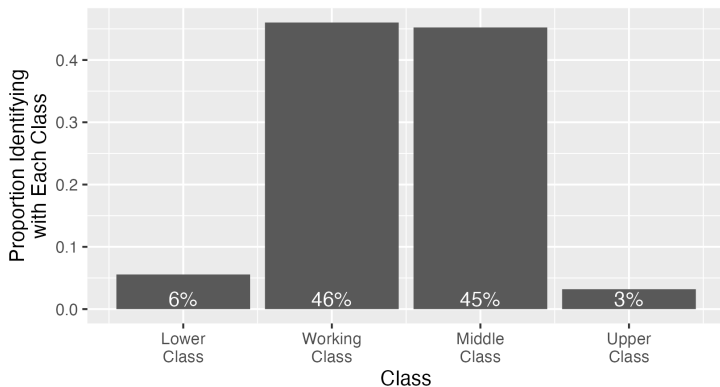
Learning goals for today

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

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How do we see this today?

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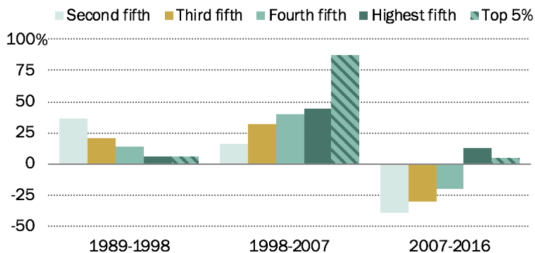
- ▶ describe stock market returns that exceed growth
- ▶ describe home values that rise faster than inflation
- ▶ describe the consolidation of capital in fewer hands

Class as ownership of capital

Pew Research Center

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%



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).

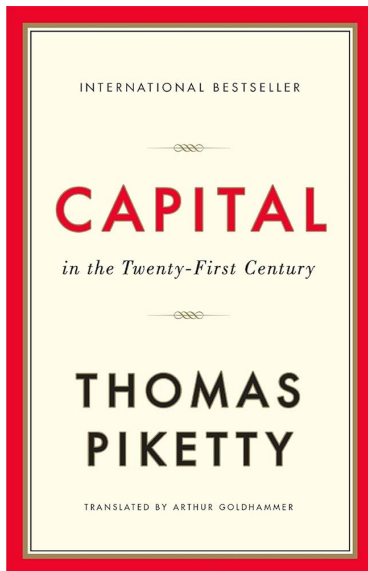
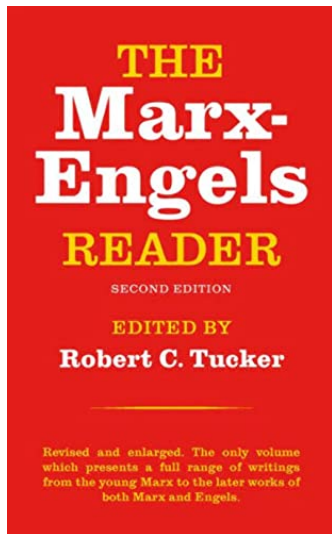
Source: Pew Research Center analysis of the Survey of Consumer Finances.

"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

Wright, 1997. [Class Counts](#)

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?

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- ▶ authority over others
- ▶ possession of scarce skills

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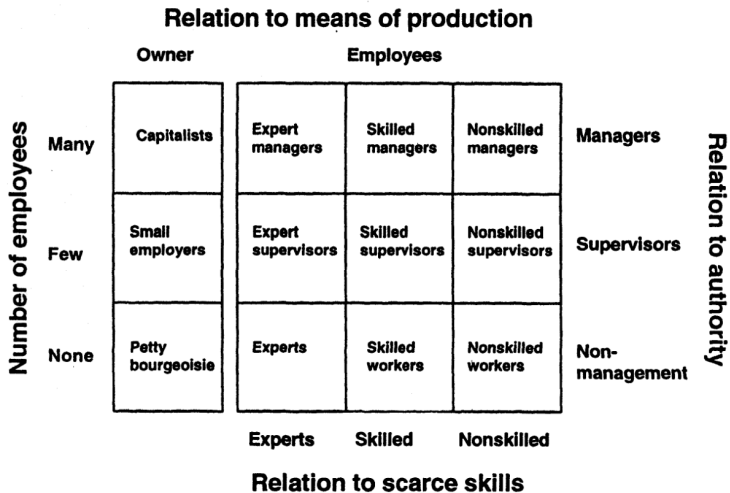


Figure 1.3 *Elaborated class typology*

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

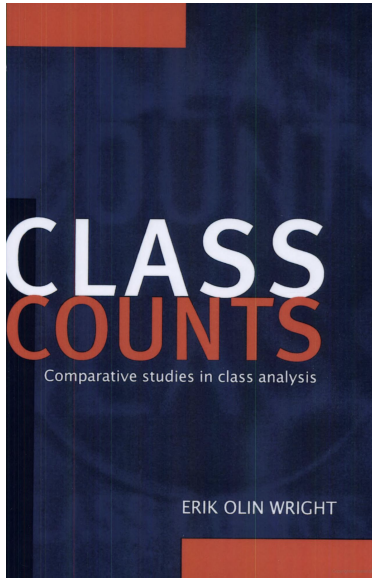
Beyond two classes: Class mobility

From a [working paper](#) with Daniel Molitor and Jennie Brand.

Data from [NLSY79](#). Replication code [here](#).

Child Occupational Class	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
		Farmers	Unskilled Manual	Skilled Manual	Routine Nonmanual	Professional
		Parent Occupational Class				

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](#).

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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

Status

You are at a party

“Hi. What do you do?”

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“Hi. What do you do?”

▶ A: I'm a medical doctor

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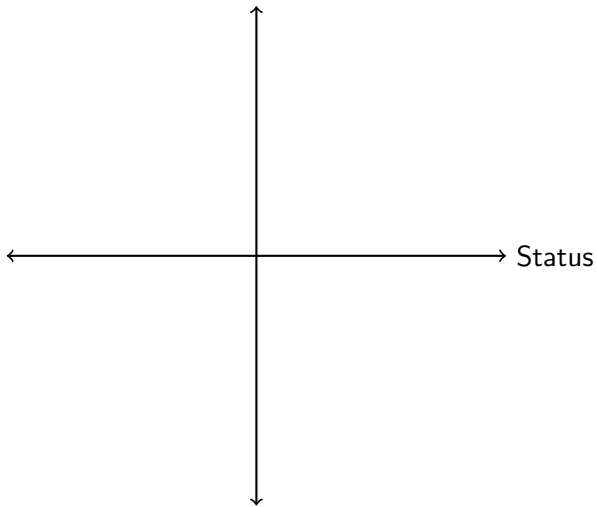
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Pay might be equal. These differ in **status**

Status

Income



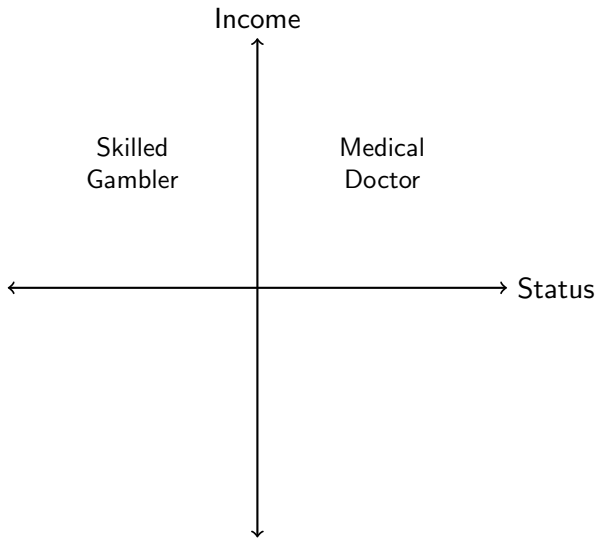
Status

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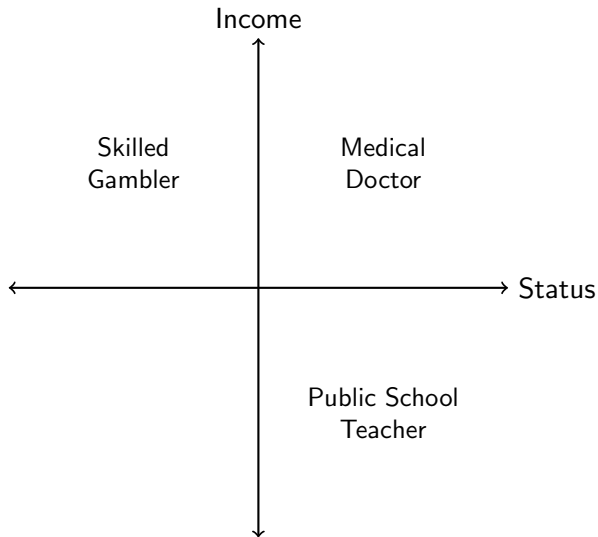
Skilled
Gambler

Medical
Doctor

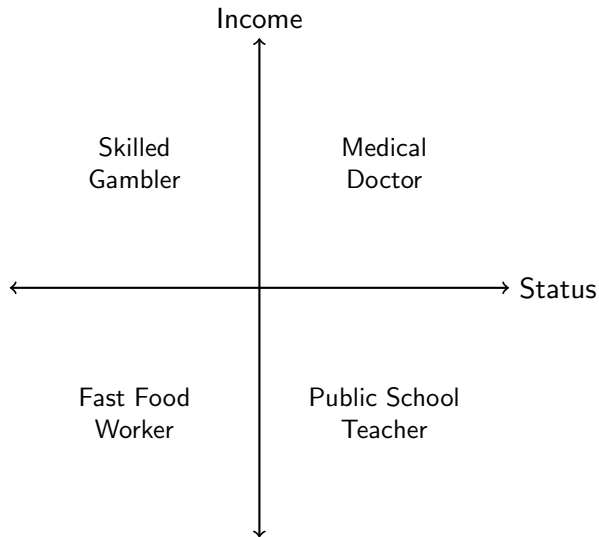
← Status →



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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