

ELEVATING PRESENTATION DESIGN IN ECONOMICS EDUCATION

SIMPLE, ACTIONABLE TOOLS FOR INSTRUCTORS

Christopher Clarke, PhD
Washington State University

Morgan Taylor, PhD
University of Georgia



**Dr.
Morgan
Taylor**

University of Georgia

Lecturer (2020–Present)

Large Principles of Microeconomics (300+)

Intermediate Microeconomics (40–50)

Instructional Resources

MacMillan (2021–Present)

- **Micro and Macro PowerPoints**
2e & 3e Stevenson & Wolfers;
Decisions Points; Question Bank

Review Online Interactive Materials

- McGraw Hill (2023)
 - Mateer & Coppock
- Norton (2025)
 - Asarta & Butters

econchrisclarke

Christopher Clarke

Follow

Message

...

286 Following

148.4K Followers

1.7M Likes

Economist

Prof

WSU

Ceteris Paribus

No, I won't DM you to buy crypto.


econchrisclarke.wordpress.co...

III Videos

Reposts


Liked

Playlists




Housing Affordability

36 posts



Immigration & Trade

18 posts




Great Britain's Great

1 post

Videos

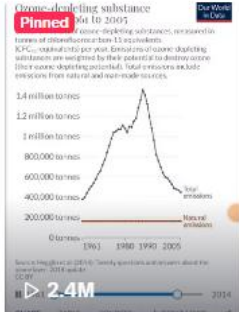
Pinned



on the Palenque field in front of
Minas T'irih

684.6K

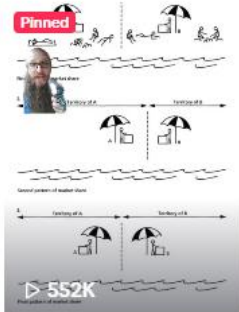
Pinned



Greenhouse gas emissions


2.4M

Pinned




Climate change

552K




Climate change


221.9K





Climate change


17.8K














Social Media Economic Video Content Creator

INTRODUCTION



Business Explains The World •

@BusinessExplainsTheWorld • 46.2K subscribers • 18 videos

Hey Dynamos! I'm Nicholas Carlson, CEO and founder of video network Dynamo and Editor...more

dynamomedia.com and 6 more links



Subscribed ▾

Home

Videos

Shorts

Posts



Videos



I Visited Abandoned Oil Rigs
— and Found Something...

1M views • 7 days ago



How Millennials Ruined
Roller Coasters

338K views • 1 month ago



The Real Reason Rush Hour
Traffic Keeps Getting Worse

85K views • 2 months ago



Videos of Euro Basketball
Crowds Shocked Me—So I...

175K views • 2 months ago



How America's Trucks
Became Inferior to Europe's

2.3M views • 2 months ago



I Played a \$14 Million Violin
to See Why It Costs So Much...

258K views • 2 months ago

We're Amateurs Visual Creators

But Amateurs Can Still Level Up
We Need It

Power Point presentation is the number one teaching method in economics courses.

But time is the great constraint.
We'll focus on easy things.



International Review of Economics Education

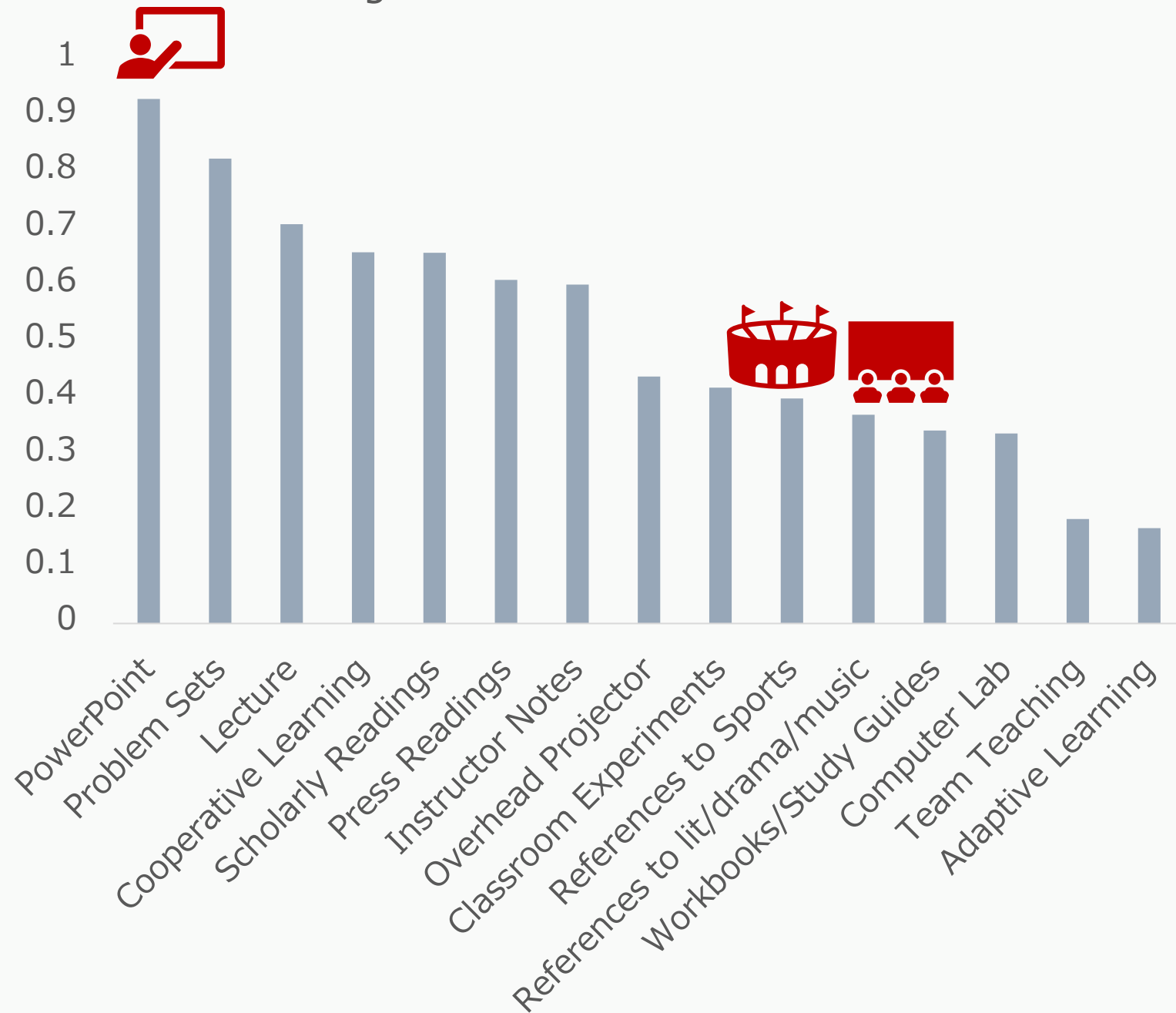
Volume 44, November 2023, 100270

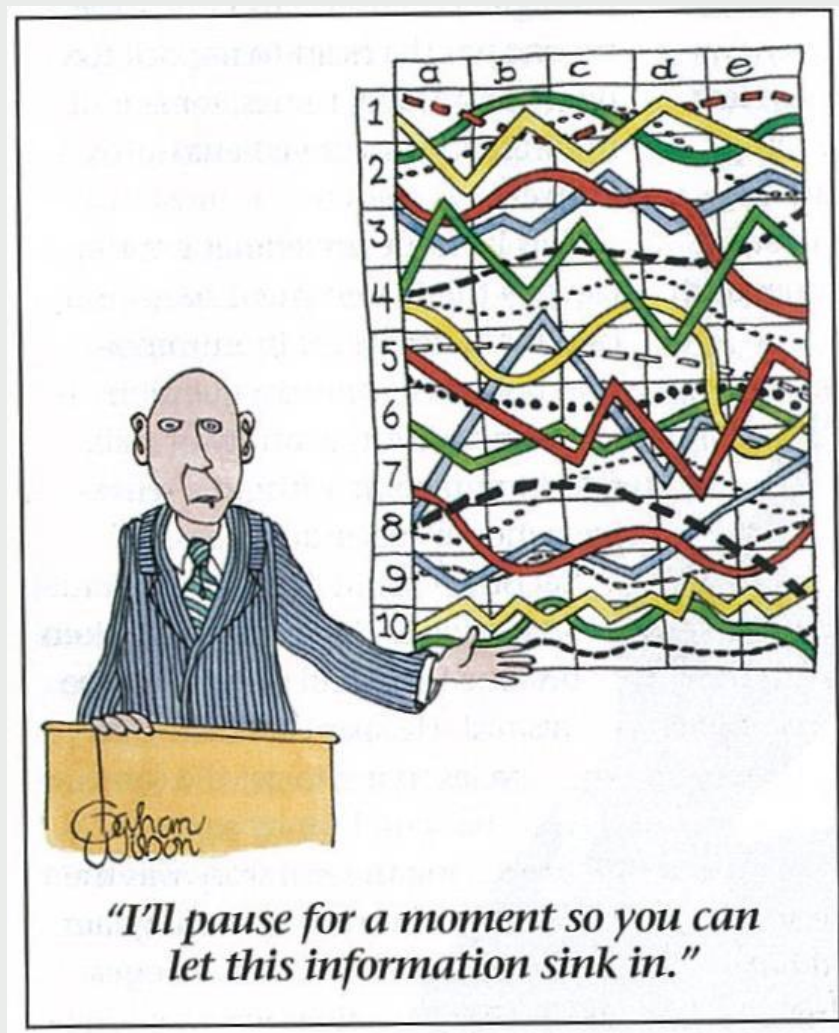


Teaching methods and materials in undergraduate economics courses: School, instructor, and department effects

Laura J. Ahlstrom ^a ✉, Cynthia Harter ^b, Carlos J. Asarta ^c

Teaching Methods in Economics Courses





History of Econ Thought/Graphs



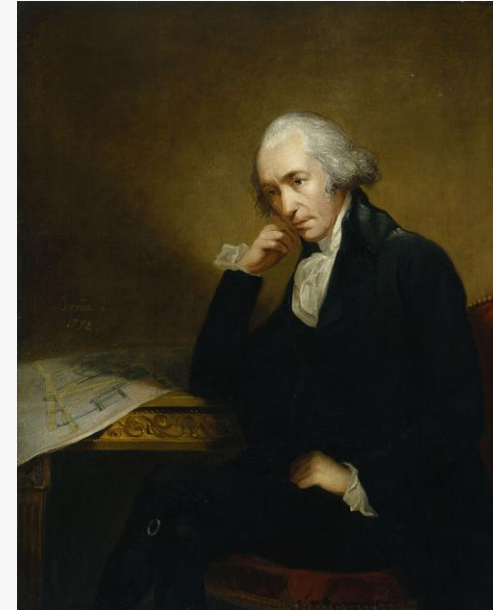
Adam Smith
Founder of Economics



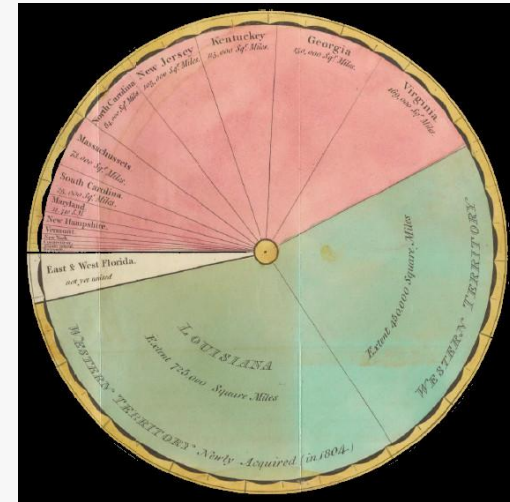
David Hume
Philosopher



James Hutton
Founder of Geology



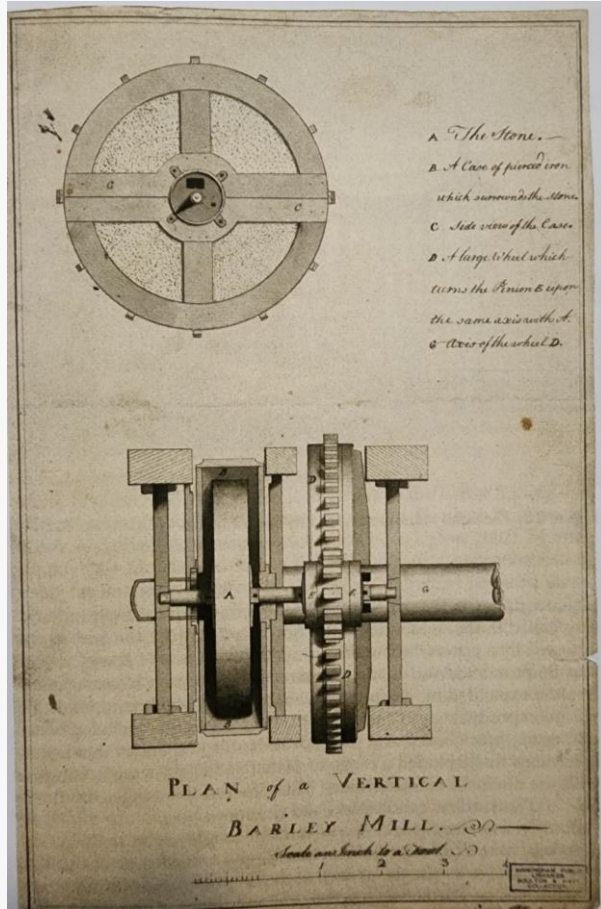
James Watt
Inventor of
Watt Steam Engine



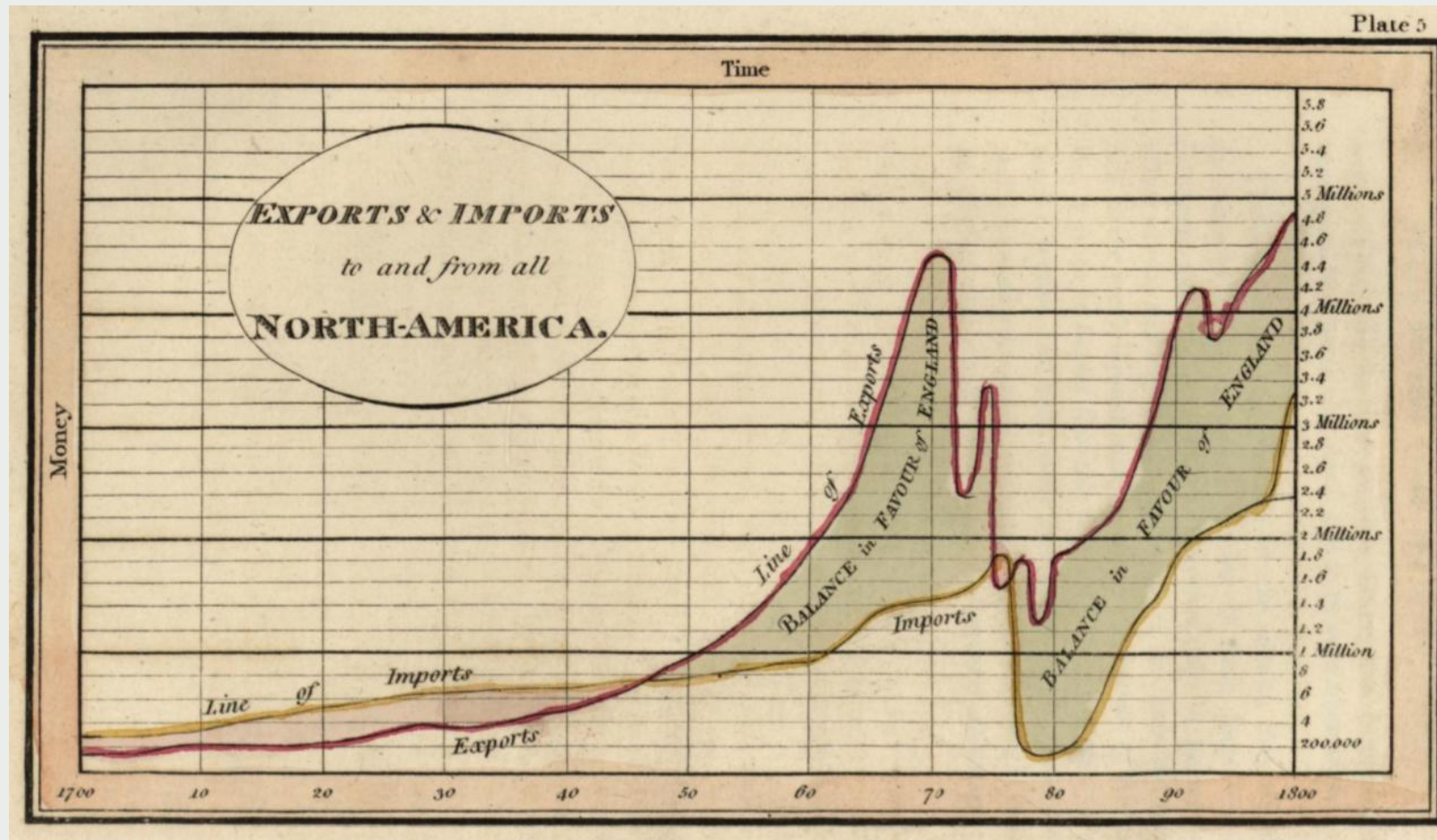
William Playfair
Founder of Modern
Data Visualization

Scottish Enlightenment

William Playfair (1759 – 1823)

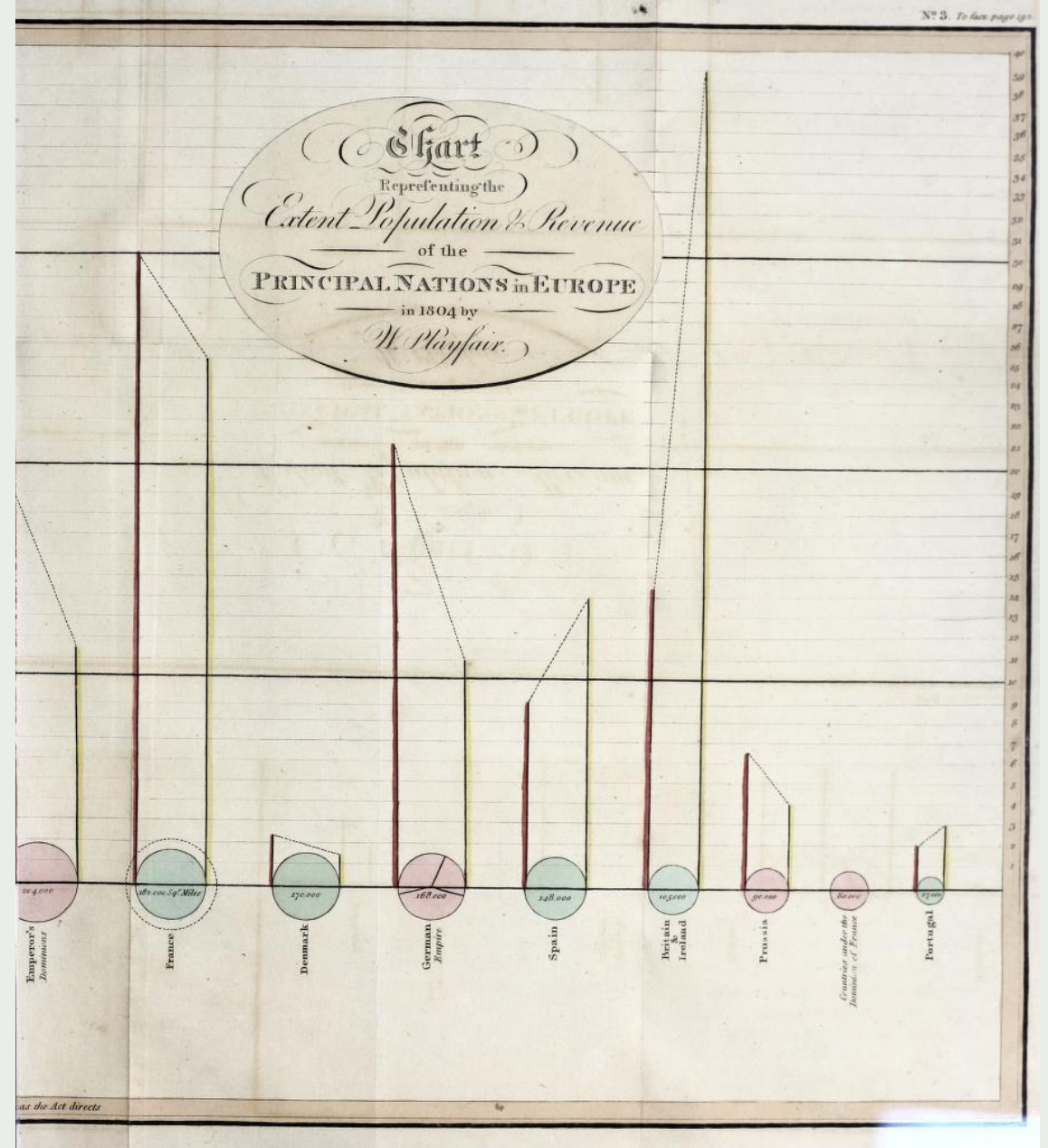
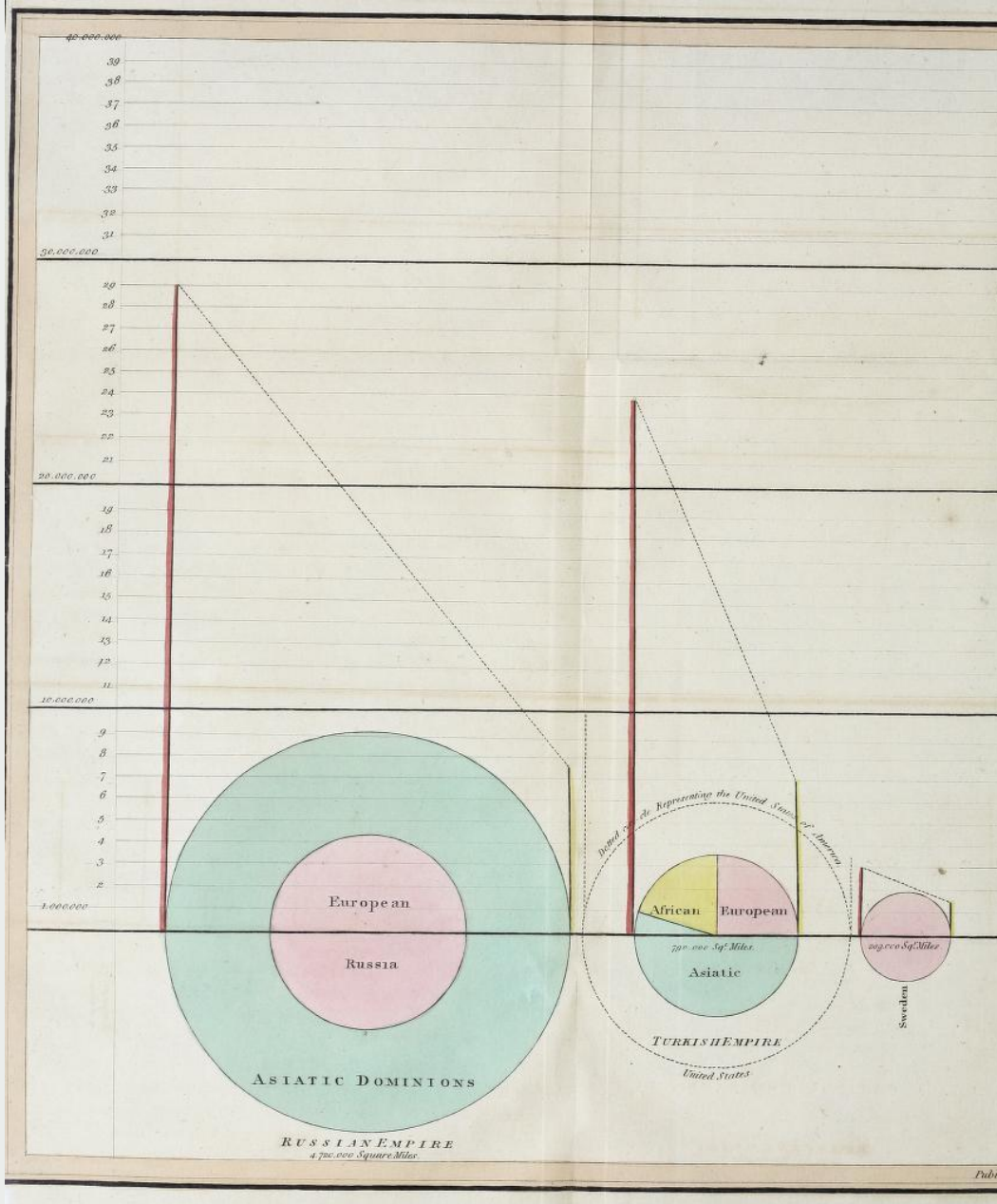


- Engineer and Apprentice Under Andrew Meikle (inventor of Thresher Machine) and James Watt
- “Millwright, engineer, draftsman, accountant, inventor, silversmith, merchant, investment broker, economist, statistician, pamphleteer, translator, publicist, land speculator, convict, banker, ardent royalist, editor, blackmailer, and journalist. Some of his business activities were questionable, if not downright illegal, and it may be fairly said that he was something of a rogue and scoundrel”
- Spence & Wainer
- Joined a citizen militia during the French Revolution
- Participated in the Scioto Land fraud (selling land in America to French Families that they did not own). Fled back to England
- Spy for England during French revolutionary Wars. Worked to devalue the *assignats*, the burgeoning French republic’s currency, by printing counterfeits.
- Imprisoned for failure of The Original Security Bank (1802)

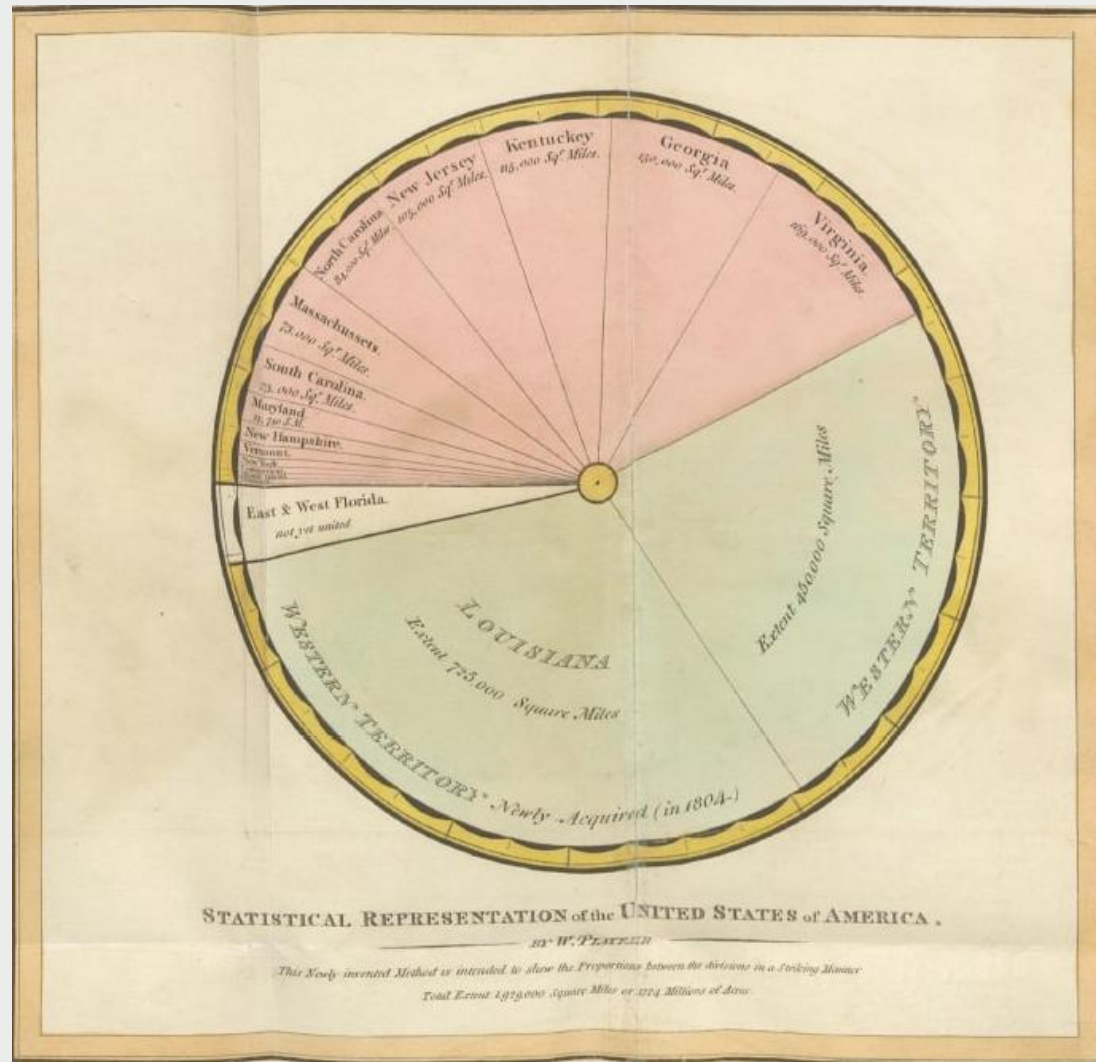


Invented Time Series Line Charts

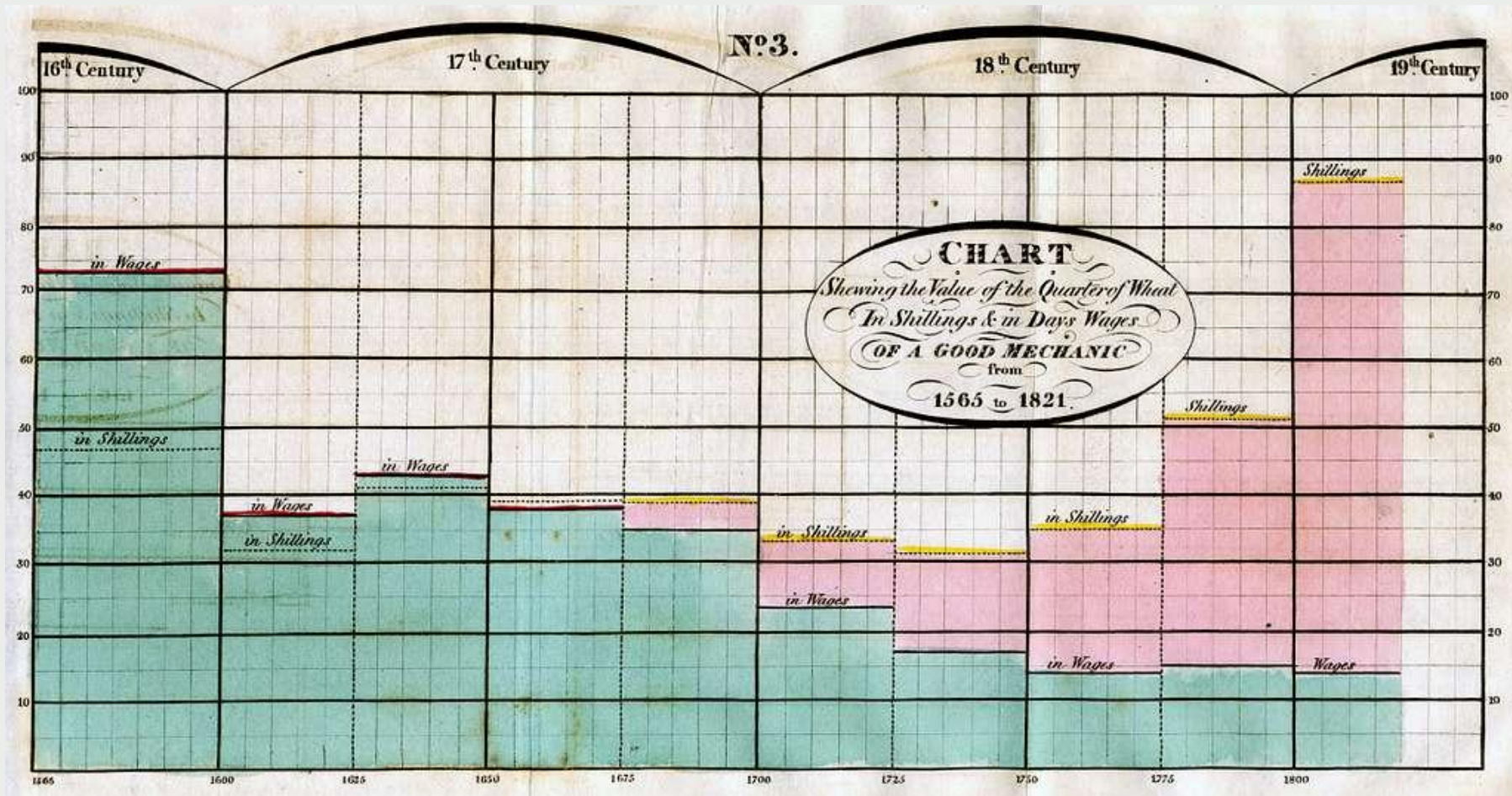
<https://archive.org/details/PLAYFAIRWilliam1801TheCommercialandPoliticalAtlas/page/n47/mode/2up>



1805. An inquiry into the permanent causes of the decline and fall of powerful and wealthy nations, illustrated by four engraved charts. "Chart representing the extent population and revenue of the principal nations of Europe in 1804 by W. Playfair" <https://archive.org/details/inquiryintoperma00play/page/n217/mode/2up>



The First Pie Chart. "Statistical Representation of the United States of America W. Playfair"
 Statistical Account of the United States of America. (1805)



First Bar Charts

First Chart printed in the
American Economic Review

“Seasonal Variations in the
New York Money Market
1890–1908”

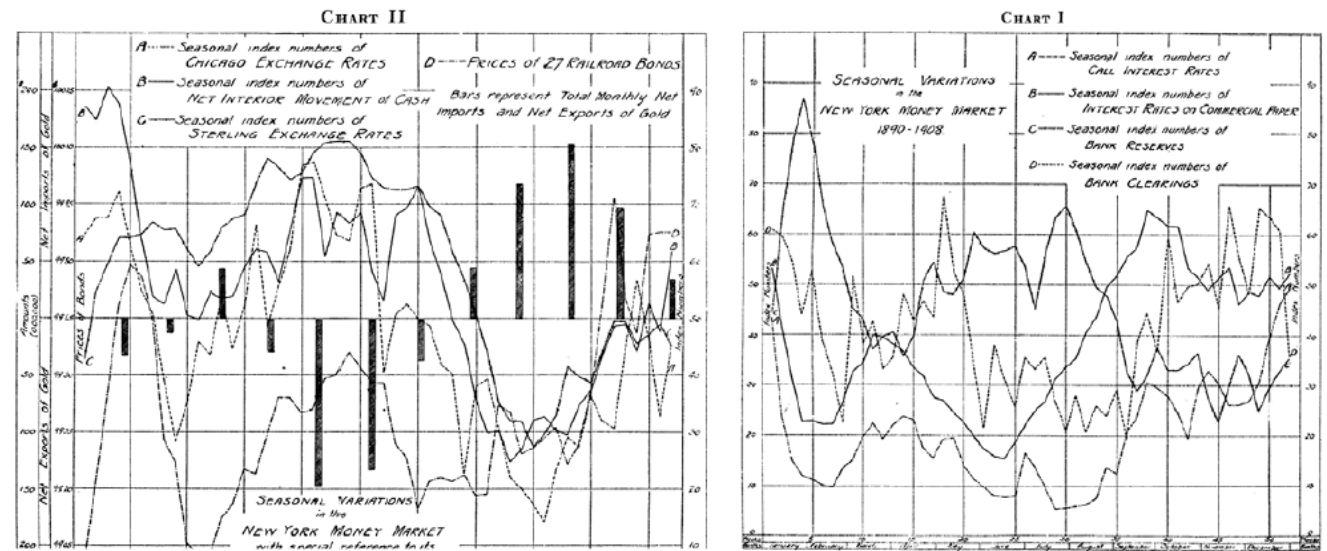


Figure 1. Chart I from Kemmerer (1911).

Only Present The Necessary Information

Teaching is the act of curation.

We take a wide impossibly complex world and choose

- the supporting evidence
- salient bits
- that support our narrative.

“As the knowledge of mankind increases, and transactions multiply, it becomes more and more desirable to abbreviate and facilitate the modes of conveying information”

-William Playfair (1798)



BETTER PRESENTATIONS

A Guide for Scholars, Researchers, and Wonks

Jonathan Schwabish



DATA VISUALIZATION IN EXCEL

A Guide for Beginners, Intermediates, and Wonks

Jonathan Schwabish

CRC Press
Taylor & Francis Group
AN A K PETERS BOOK



BETTER DATA VISUALIZATIONS

A Guide for Scholars, Researchers, and Wonks

Jonathan Schwabish



ELEVATE THE DEBATE

A MULTILAYERED APPROACH TO COMMUNICATING YOUR RESEARCH

EDITED BY
JONATHAN A. SCHWABISH

WILEY



Role	Name	ID	Start Date	Quarterly Profit	Percent Change
Operations	Waylon Dalton	A1873	May-11	5692.88	34.1
Operations	Justine Henderson	B56	Jan-10	4905.02	43.522
Operations	Abdullah Lang	J5867	Jun-14	4919.53	38
Operations	Marcu Cruz	B395	Dec-13	9877.52	37.1
Research	Thalia Cobb	C346	Apr-13	3179.49	-9
Research	Mathias Little	D401	Mar-11	5080.26	3.2
Research	Eddie Randolph	A576	Jul-18	7218.24	43.1
Contracts	Angela Walker	B31	Feb-18	6207.53	-1.788
Contracts	Lia Shelton	C840	Jan-16	1070.61	4.31
Contracts	Hadassah Hartman	D411	Nov-15	3735.96	3.01

Role	Name	ID	Start Date	Quarterly Profit	Percent Change
Operations	Waylon Dalton	A1873	May-11	\$5,693	34.1
	Justine Henderson	B56	Jan-10	4,905	43.5
	Abdullah Lang	J5867	Jun-14	4,920	38.0
	Marcu Cruz	B395	Dec-13	9,878	37.1
Research	Thalia Cobb	C346	Apr-13	3,179	-9.0
	Mathias Little	D401	Mar-11	5,080	3.2
	Eddie Randolph	A576	Jul-18	7,218	43.1
Contracts	Angela Walker	B31	Feb-18	6,208	-1.8
	Lia Shelton	C840	Jan-16	1,071	4.3
	Hadassah Hartman	D411	Nov-15	3,736	3.0

Better Data Visualizations (2021)

Chapter: Tables

Rule 1: Offset Header From Table

Country	Too many decimals	Too few decimals	About right
China	6.12380	6	6.1
India	5.88984	6	5.9
United States	0.74279	1	0.7
Indonesia	3.84530	4	3.8
Mexico	1.58236	2	1.6
Pakistan	3.43865	3	3.4
Average	2.63104	3	2.6

Tables

Rule 5. Select the Appropriate Level of Precision

	2016	2016	2016
China	6,894.40	6,894.40	6,894.40
India	1,862.43	1,862.43	1,862.43
United States	52,319.10	52,319.10	52,319.10
Indonesia	3,974.73	3,974.73	3,974.73
Mexico	9,871.67	9,871.67	9,871.67
Pakistan	1,179.41	1,179.41	1,179.41
Average	12,683.62	12,683.62	12,683.62

Tables

Rule 3: Right Align Numbers and Header

Right-aligned and hard to read	Centered and even harder to read	Left-aligned and easiest to read
British Virgin Islands	British Virgin Islands	British Virgin Islands
Cayman Islands	Cayman Islands	Cayman Islands
Democratic Republic of Korea	Democratic Republic of Korea	Democratic Republic of Korea
Luxembourg	Luxembourg	Luxembourg
United States	United States	United States
Germany	Germany	Germany
New Zealand	New Zealand	New Zealand
Costa Rica	Costa Rica	Costa Rica
Peru	Peru	Peru

Tables

Rule 4: Left Align Text and Header

Table 3. Difference-in-difference results for MACT-regulated plants

	Paired industries		Potpourri industries				
	Printing and publishing	Pulp and paper	Printing and publishing	Pulp and paper	Petroleum refining	Pharmaceuticals	Wood furniture
Transition Year		*	***	***			
Compliance Year			***	***	*		
Ex post Year		***	***	***			
Production		*	**	**	*	***	***
Nonattainment	***	**	**	***			
LCV				**			

Negative
 Positive

Note: *p<0.1, **p<0.05, ***p<0.01.

Table 2. Distributions of VSL estimates by quantile

	5%	10%	25%	50%	75%	90%	95%
All-set estimates							
Whole samples	-1.7	0.4	4.5	9.7	15.4	25.5	35.7
USA	-1.7	0.9	5.3	10.3	15.4	24.8	33.4
Non-USA	-1.8	0.0	1.1	7.1	15.3	26.1	63.2
USA CFOI	1.8	4.3	7.2	11.1	16.8	27.7	35.7
USA non-CFOI	-4.9	-1.7	0.6	4.0	13.0	24.8	24.8
Best-set estimates							
Whole samples	1.2	1.5	4.3	10.1	15.7	22.7	26.4
USA	1.5	1.9	4.6	10.2	13.5	19.2	22.7
Non-USA	0.1	1.2	3.3	7.9	20.5	25.1	39.4
USA CFOI	3.3	5.4	8.3	10.2	13.5	19.7	33.1
USA non-CFOI	1.3	1.5	3.4	9.0	13.5	19.2	22.7

Tables

Heat Map in Excel

The answers fell in the following categories:

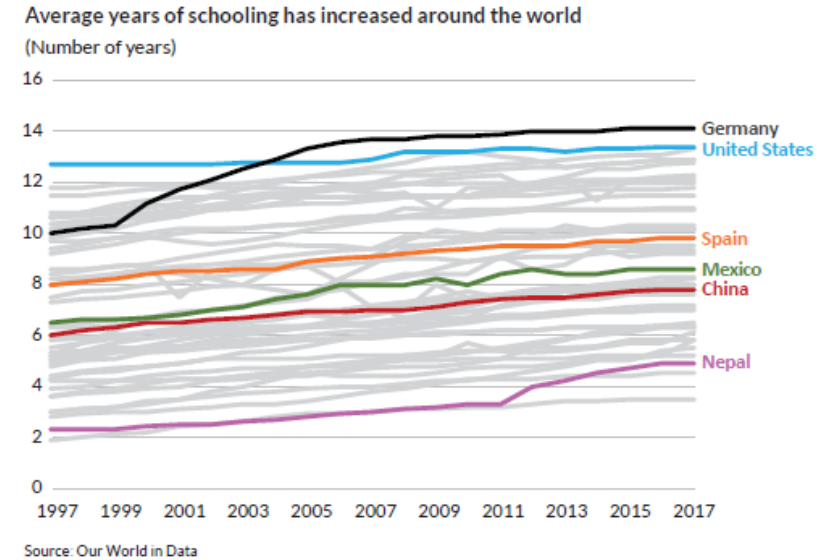
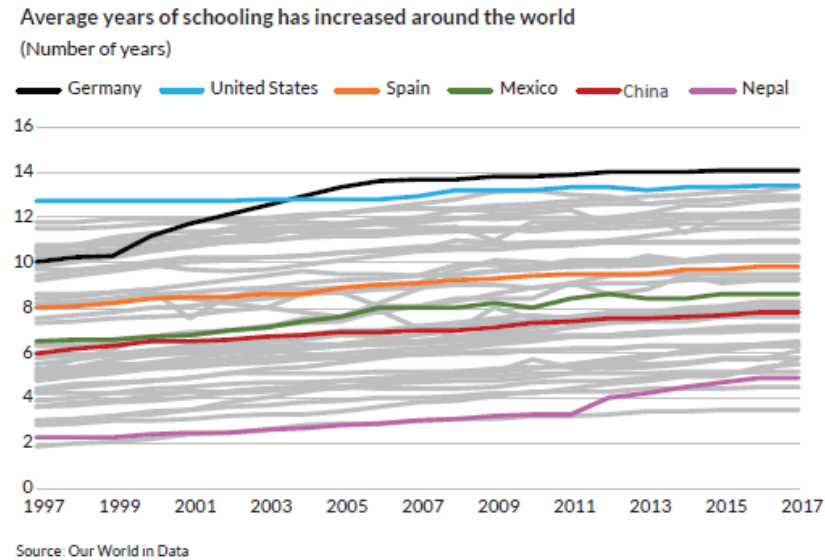
Less than \$50 – 5.26 %
\$50–\$99 – 7.77 %
\$100–\$199 – 13.28 %
\$200–\$299 – 16.79 %
\$300–\$399 – 12.78 %
\$400–\$499 – 8.77 %
More than \$500 – 35.34 %

Source: Sunstein (2019).

The answers fell in the following categories:



In Excel: Conditional Formatting, Data Bars. There is an option in the formatting to have “only bars” show for each cell.

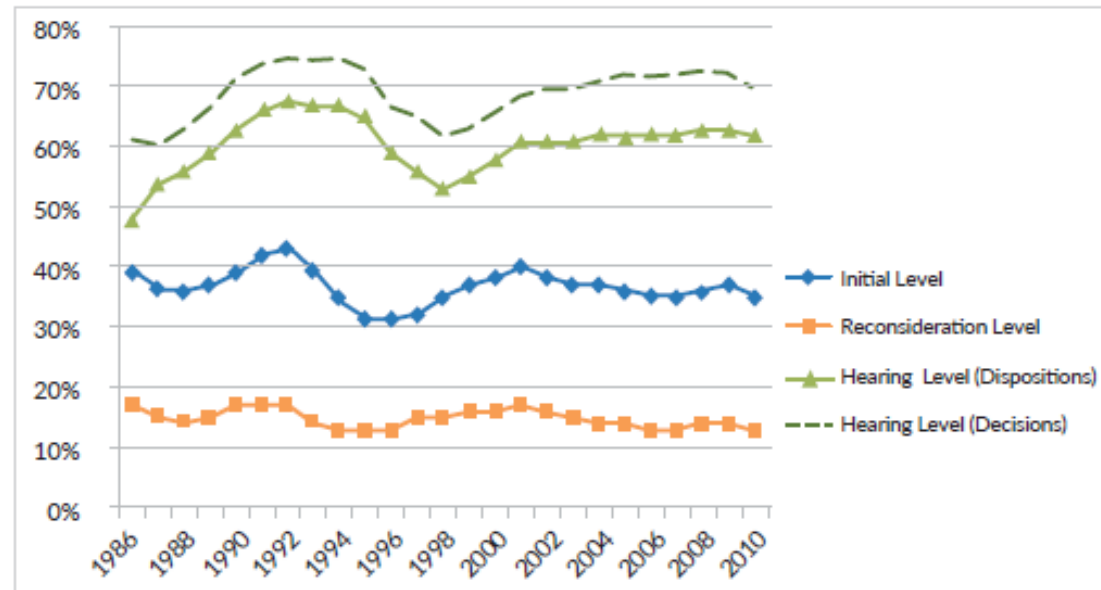


THE STUFF OF LEGEND...

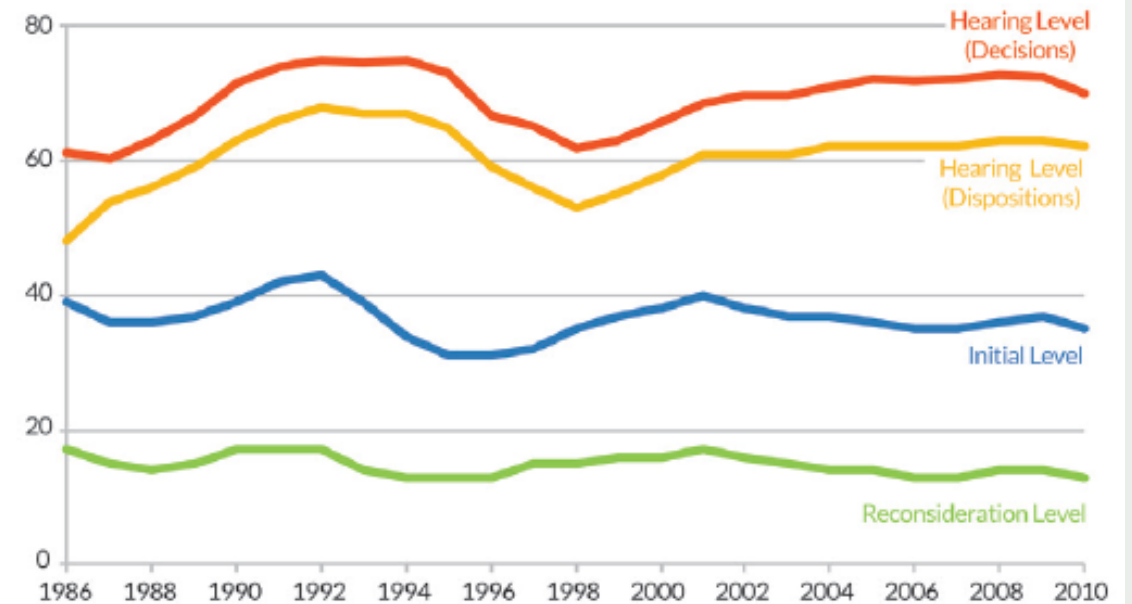
Remove legends when possible and label data directly

Use the same color for label as the line.

DI and SSI allowance rates have generally moved in tandem over the past 25 years
(Percent)



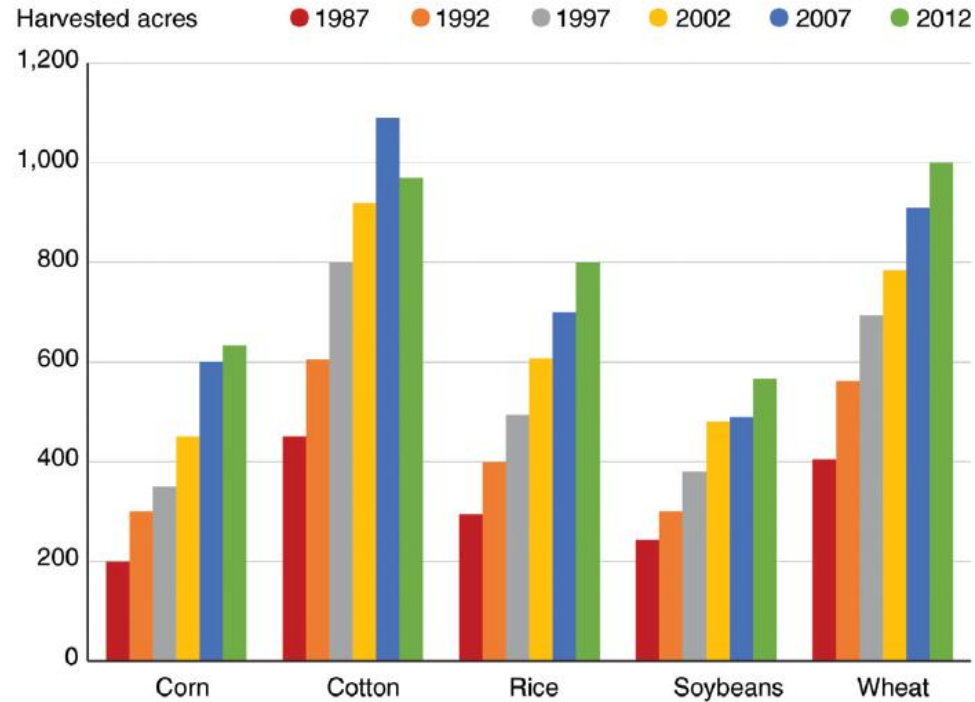
DI and SSI allowance rates have generally moved in tandem over the past 25 years
(Percent)



Notice the inconsistency between the order of the lines and the legend in the chart on the left. The redesigned version removes unnecessary clutter and directly labels the lines.

Source: Social Security Advisory Board, February, 2012.

Midpoint acreage for major field crops, 1987-2012



Note: Half of all harvested acres are on farms that harvest more than the midpoint, and half are on farms that harvest less.

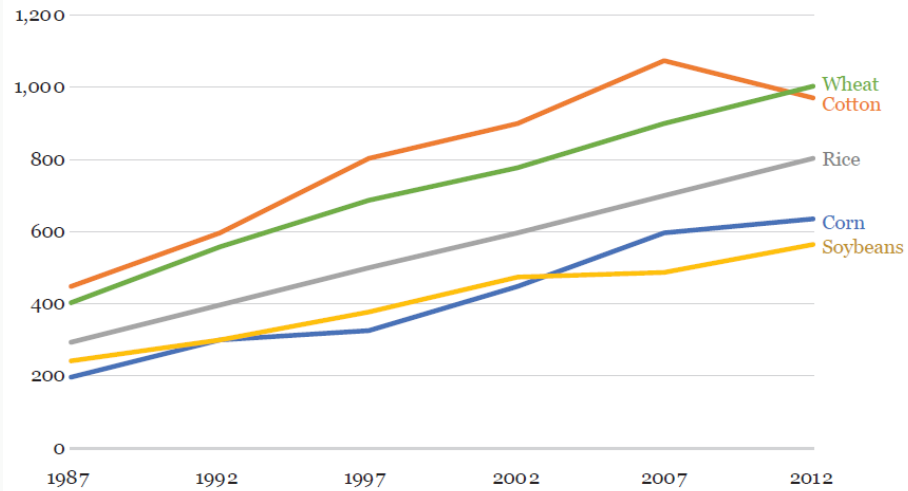
Source: USDA, Economic Research Service using data compiled from USDA, Census of Agriculture (the latest available).

Basic bar chart from the U.S. Department of Agriculture.

WHAT WOULD
YOU ALL
SUGGEST?

Midpoint acreage for major field crops, 1987-2012

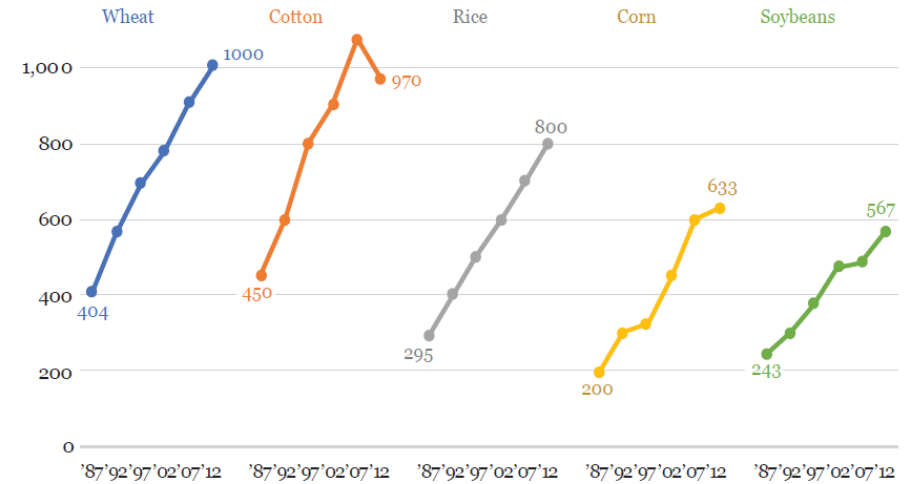
(Midpoint acreages more than doubled for all five major field crops)



Source: U.S. Department of Agriculture

Midpoint acreage for major field crops, 1987-2012

(Midpoint acreages more than doubled for all five major field crops)



Source: U.S. Department of Agriculture

Eliminate Legend

Colors are for crop type, not year.

Color

“About 4% of the global population (Olson & Brewer, 1997) has some form of color-vision deficiency.”

Contrast is key.

At minimum, **a ratio of 4:1**

<https://webaim.org/resources/contrastchecker/>

See if it works in black & white



Fig. 2. Example of what someone with the most common form of color-vision deficiency (deuteranopia) might see for these sample colors.

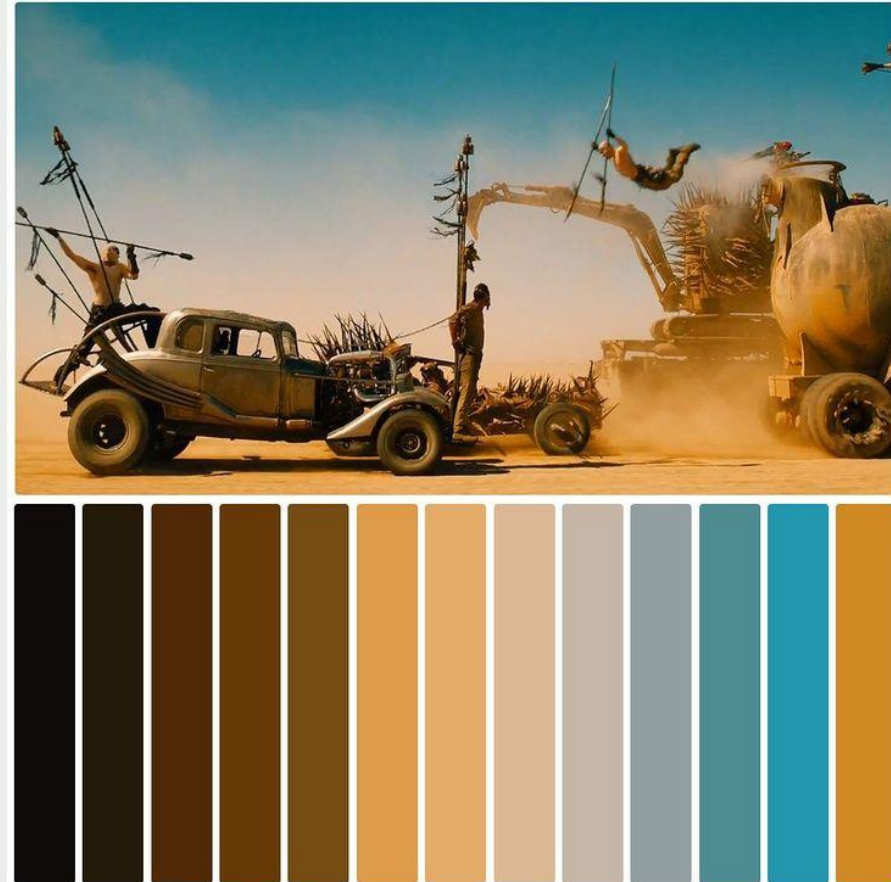
Color Palette

Brand

Power Point/Excel allow you to enter a custom palette.

- This makes it automatic

<https://coolours.co/palettes/trending>



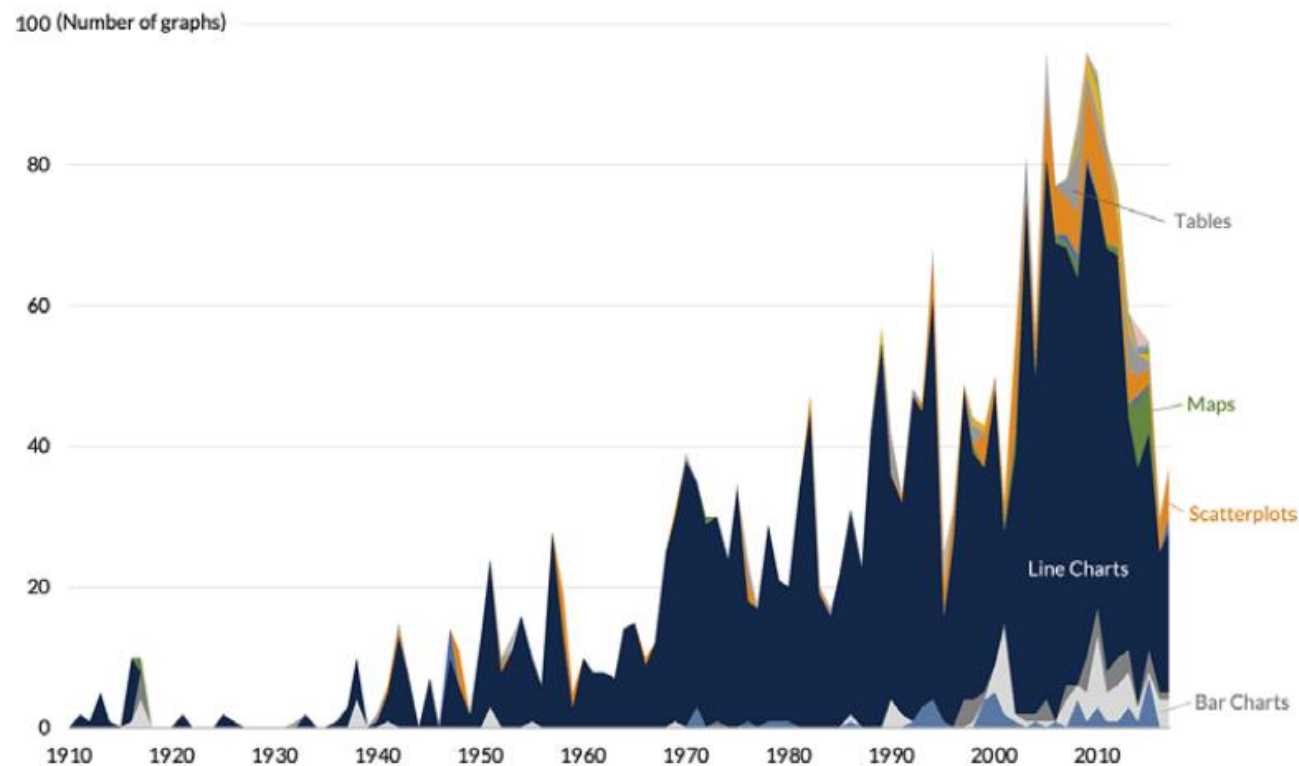
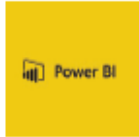


Figure 9. *Economists overwhelmingly use line charts in the AER (number of graphs of each type in each year of the AER).*



Datawrapper

RAWGraphs



Flourish



esri



HIGHCHARTS



ChartCulator



infogr.am



tableau
SOFTWARE



python™

Lower

(Primarily drag- and-drop
or click-based)

Barrier to Entry

Higher

(Primarily programming
languages)

Slides Are a Visual Medium

Paintings:

www.WikiArt.org

Photos:

<https://pixabay.com/>

<https://www.freeimages.com/>

<https://www.pexels.com/>

<https://unsplash.com/>

<https://commons.wikimedia.org/>



Giovanni Paolo Panini (1740) *Interior of a Picture Gallery with the Collection of Cardinal Silvio Valenti Gonzaga*