Socioeconomic Portraits:
Leveraging the Production Possibilities Frontier to Expand Coverage of Inequality and Economic History in Principles Classes

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Why the Production Possibilities Frontier?

“All models are wrong, but some are useful.”

–George E.P. Box (attributed)

How can we make the PPF more useful to our students?
Common PPFs
What if we add a narrative to the PPF?

In particular, what if we focused on topics that (at least some) instructors would like to add to principles courses?

- Economic history?*
- Inequality?*


First, let’s cover a crucial event in economic history:
The Columbian Exchange
Linking the Columbian Exchange to the PPF: The Details
Modeling the Impact on Europe

Indigenous Communities Of The Western Hemisphere

Europe

Food

Food

1491

1750

All Other Goods and Services
Modeling the Impact on Indigenous Communities

[Diagram showing the impact on Indigenous Communities of the Western Hemisphere and Europe from 1491 to 1750.]
A Socioeconomic Portrait of the Columbian Exchange
Now We Integrate the Topic of Inequality Into a PPF
The 1860 U.S. Antebellum South, With a Focus on Louisiana:
Integrating 1860 Louisiana Into a PPF: The Details

Data collected from the 1860 Census


Data collected from the 1860 Census
The Five Socioeconomic Groups of 1860 Louisiana:

- European American Large Property Owners (LPO) [2%]
- European American Small Property Owners (SPO) [32%]
- Impoverished European Americans (IEA) [17%]
- Free African Americans (FAA) [3%]
- Enslaved African Americans (EAA) [47%]
Dividing Up the Output Across the Five Groups
Building the First Distribution Box (for the LPO group)
Building the Remaining Distribution Boxes

How to interpret distribution boxes: The area of a distribution box has no economic meaning. Instead, focus on how long the sides are for a given box. The length of the vertical side of a box tells you the amount of output in index terms, for the good measured on the vertical axis, that is going to the relevant group associated with the box; ditto for the length of the horizontal side of the box.
Showing Wealth Inequality in 1860 Louisiana with a PPF:

The PPF describes an economy that is:
- Highly inefficient due to intense patterns of discrimination/slavery
- Very unequal distribution of wealth
- Severe under-production of education
A Socioeconomic Portrait of 1860 Louisiana

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Thanks for your time!

Please feel free to reach out if you have any questions at all!

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