Last Thoughts

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Key concepts

Reinforced

- Expectation/Mean
- Standard deviation
- Law of large number
- Central limit theorem
- Conditional expectation
- Populations/Samples
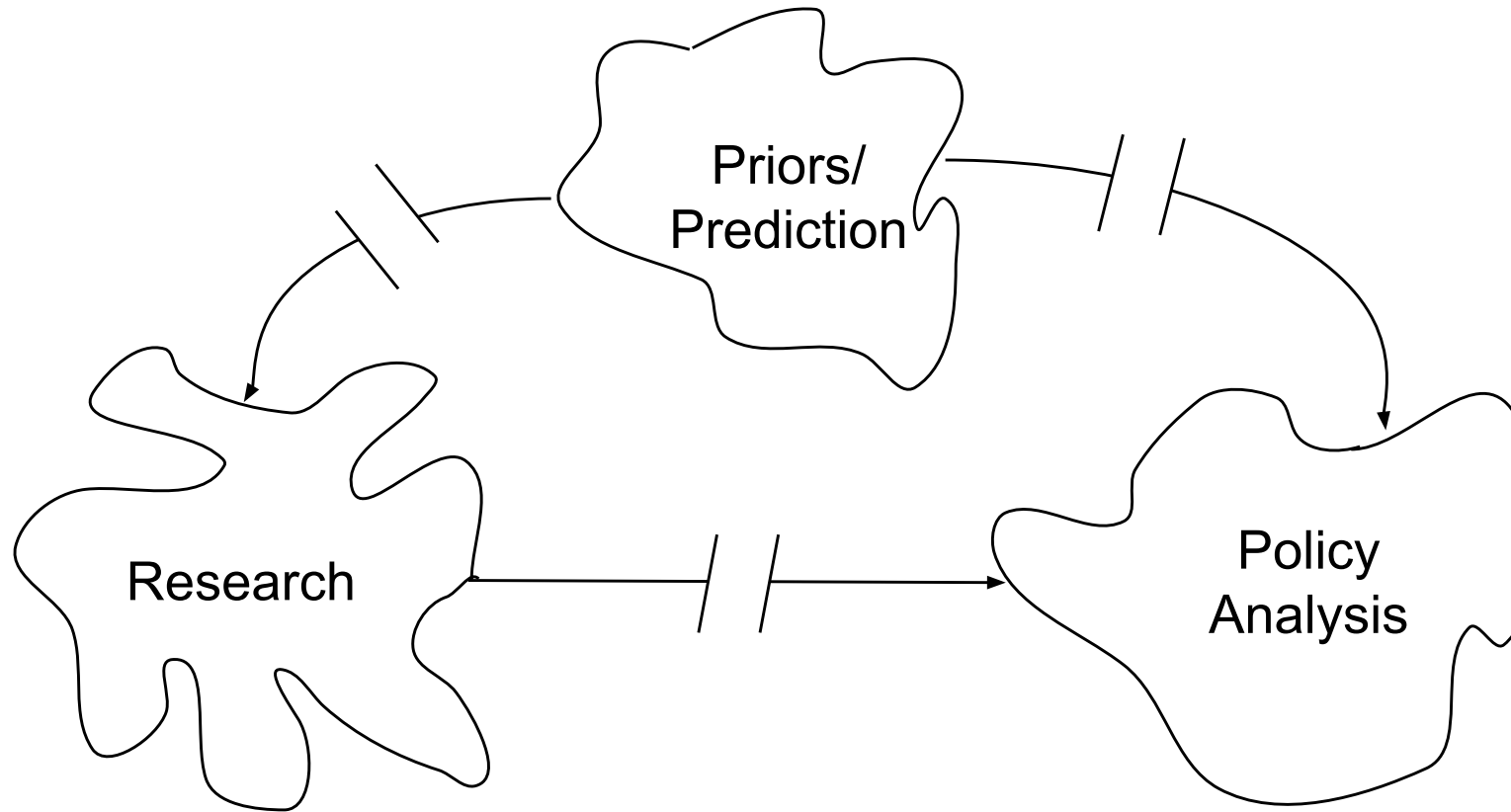- Hypothesis test/P-value

New

- Selection Bias
- Potential outcomes

- Independence
- Randomized Control Trials
- Regression as matching
- Regression as conditional expectation
- Regression as line fitting
- Regression anatomy
- Omitted variable bias
- Collinearity
- External validity
- Instrumental variables
- Regression discontinuity
- Difference in Difference
- Bad controls

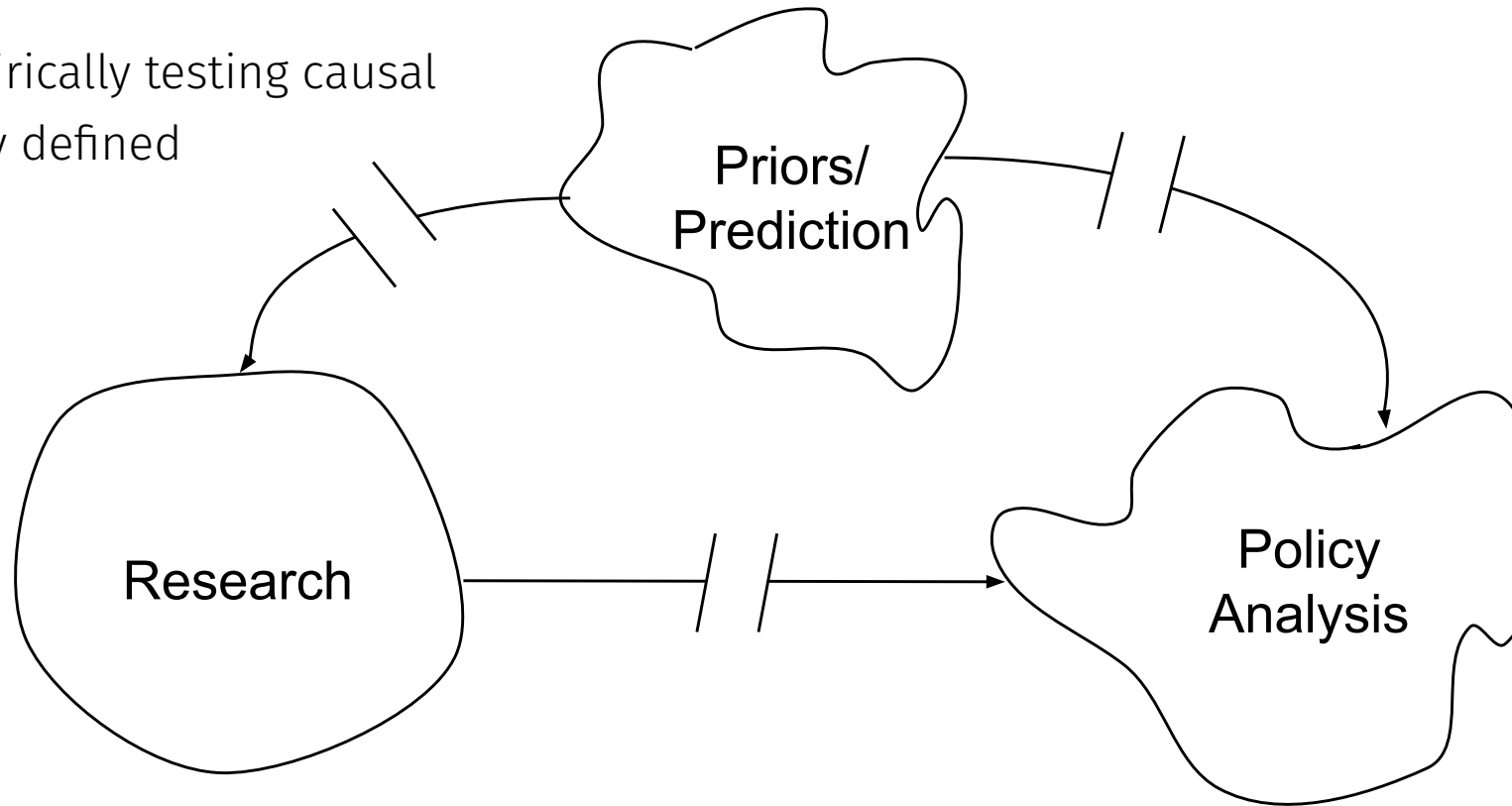**Pre-Credibility** -- Cred. Revo. (1990s) -- Open Science+ (2010s) -->

What's wrong with the Evidence-to-Policy Pipeline?

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Emphasis on empirically testing causal claims with clearly defined methods. See David Card's Nobel lecture. (Ec142)

Further from physics, closer to medicine (Chetty's op ed. on NYT)

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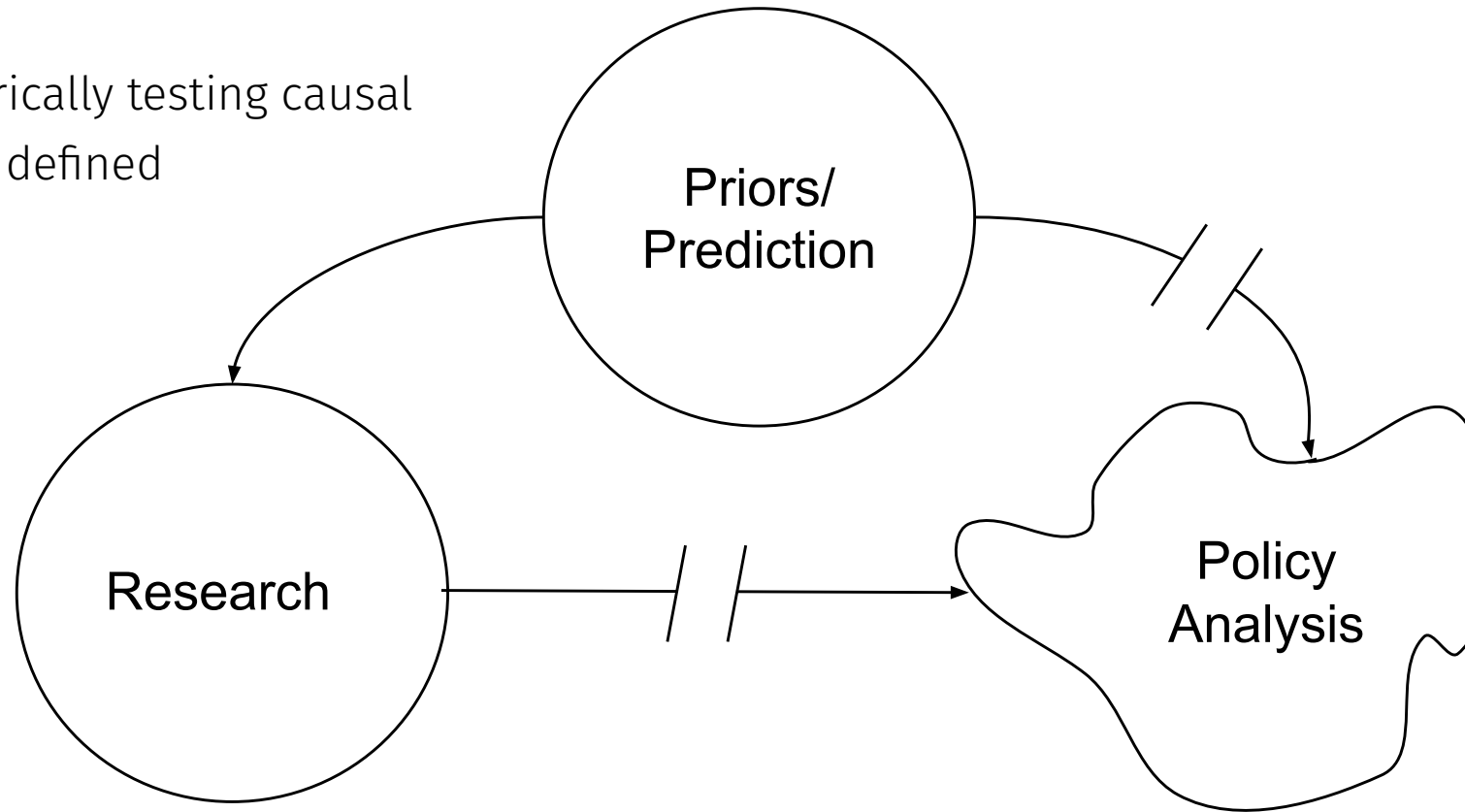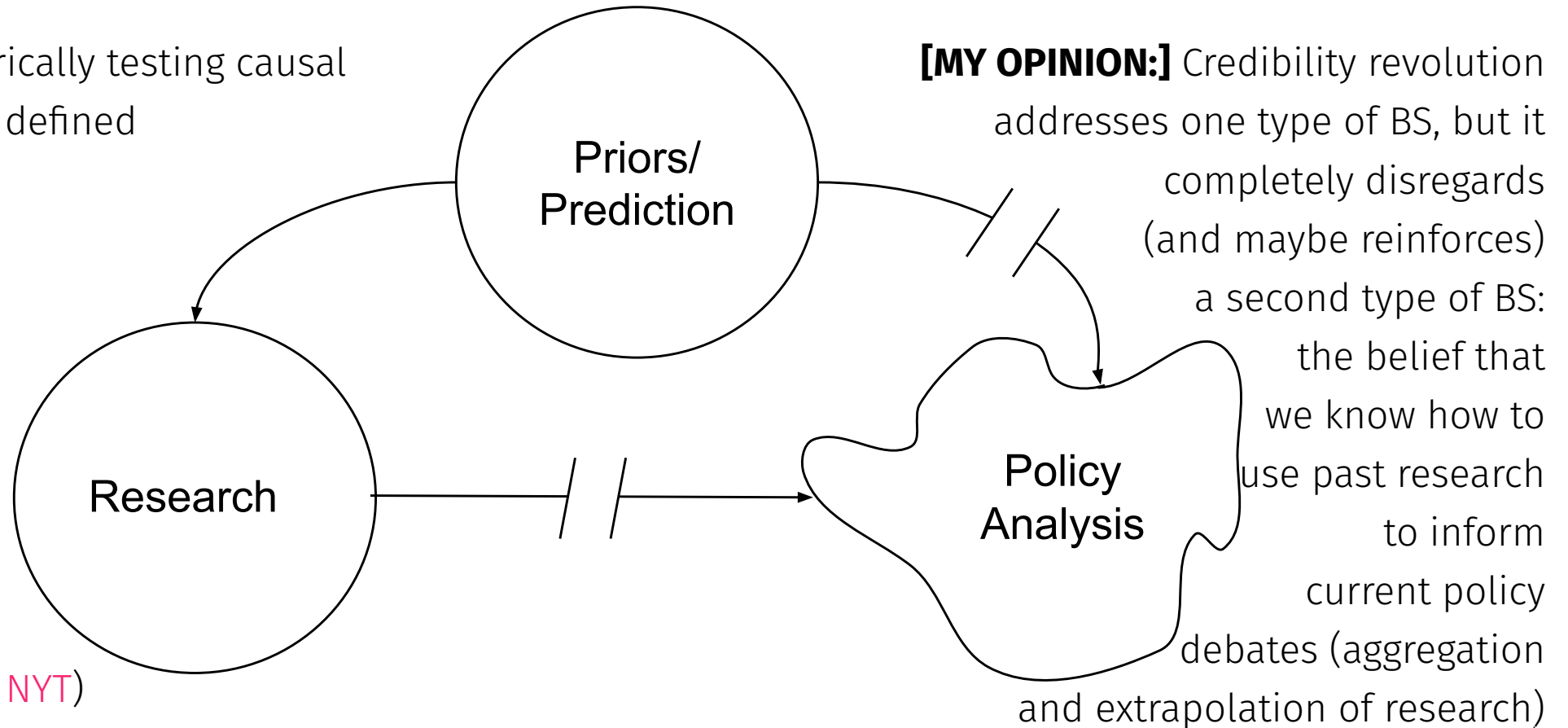Further from physics, closer to medicine (Chetty's op ed. on NYT)

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Priors/ Prediction

Research

Policy Analysis

[MY OPINION:] Credibility revolution addresses one type of BS, but it completely disregards (and maybe reinforces) a second type of BS: the belief that we know how to use past research to inform current policy debates (aggregation and extrapolation of research)

The Goal of EC140

This course gave you the tools to think about causal evidence, to explore further and generate your own causal evidence. And, hopefully, to contribute and innovate to the space of connecting evidence with policy.

Last Warning

Beware of Inaction!

Acknowledgments (for Course Content)

- Angrist and Pischke's Mastering Metrics
- Stock and Watson's Introduction to Econometrics
- Ed Rubin's multiple great courses
- Hoai-Luu Nguyen's Econoimate
- Nick Huntington-Klein multiple teaching resources
- Florian Oswald course on econometrics at Science Po
- XQCD

- Joe Blitztein's Stat 110
- Seeing Theory
- Kyle Raze's course on econometrics
- Numberphile
- Matt Hollian's teaching resources for mastering metrics
- Eddie Woo's great explanations for statistics and probability
- Jeffrey Arnold's R companion for Matering Metrics

Thank You and Good Luck!