

Applying Logical Reasoning to a Social Policy

Using Deductive,
Inductive, and
Abductive
Reasoning

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SOWK 588
Summer 2026 Week 04

Plan for Week Four

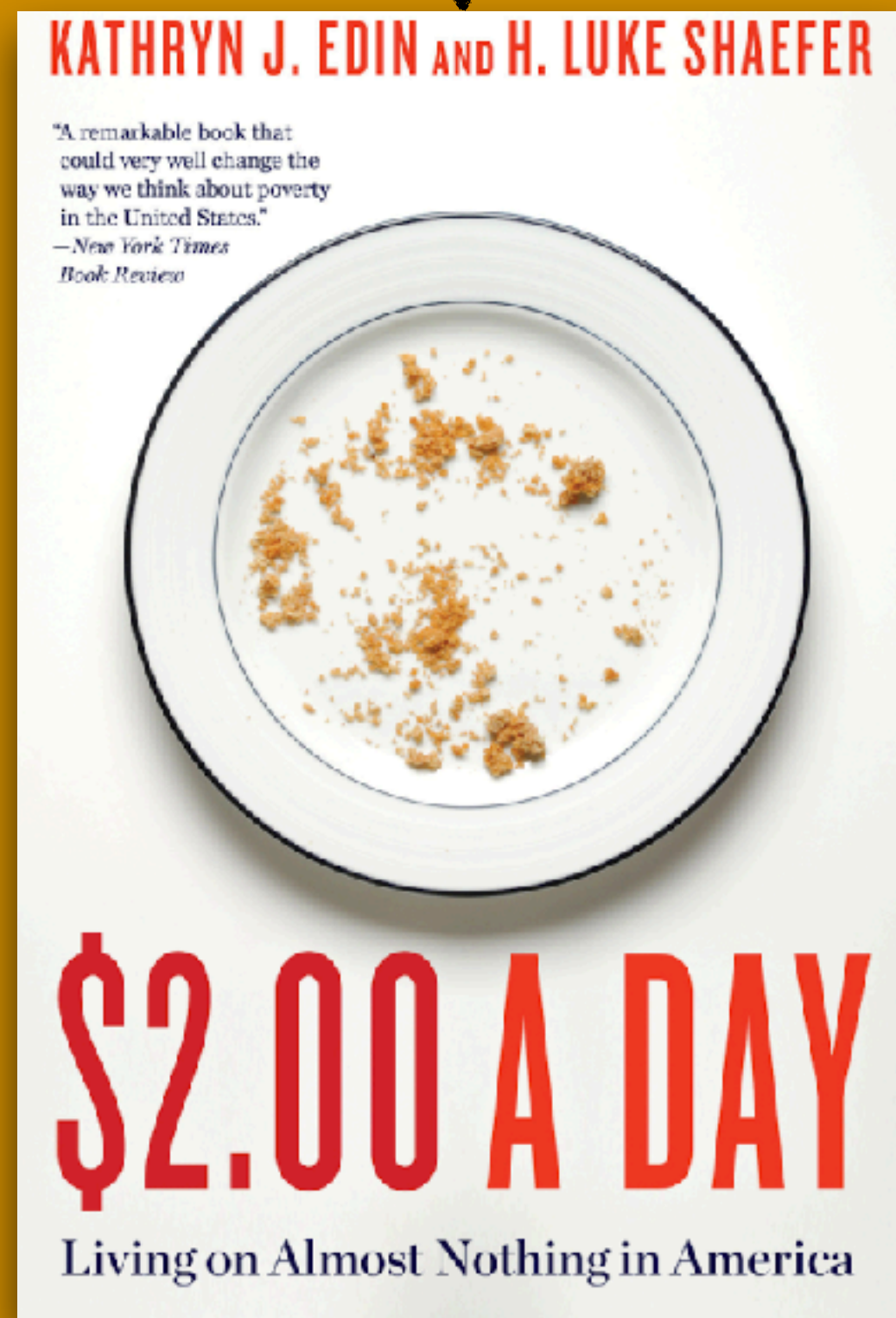
Agenda

- Week four tasks
- Applying logical reasoning to a social policy

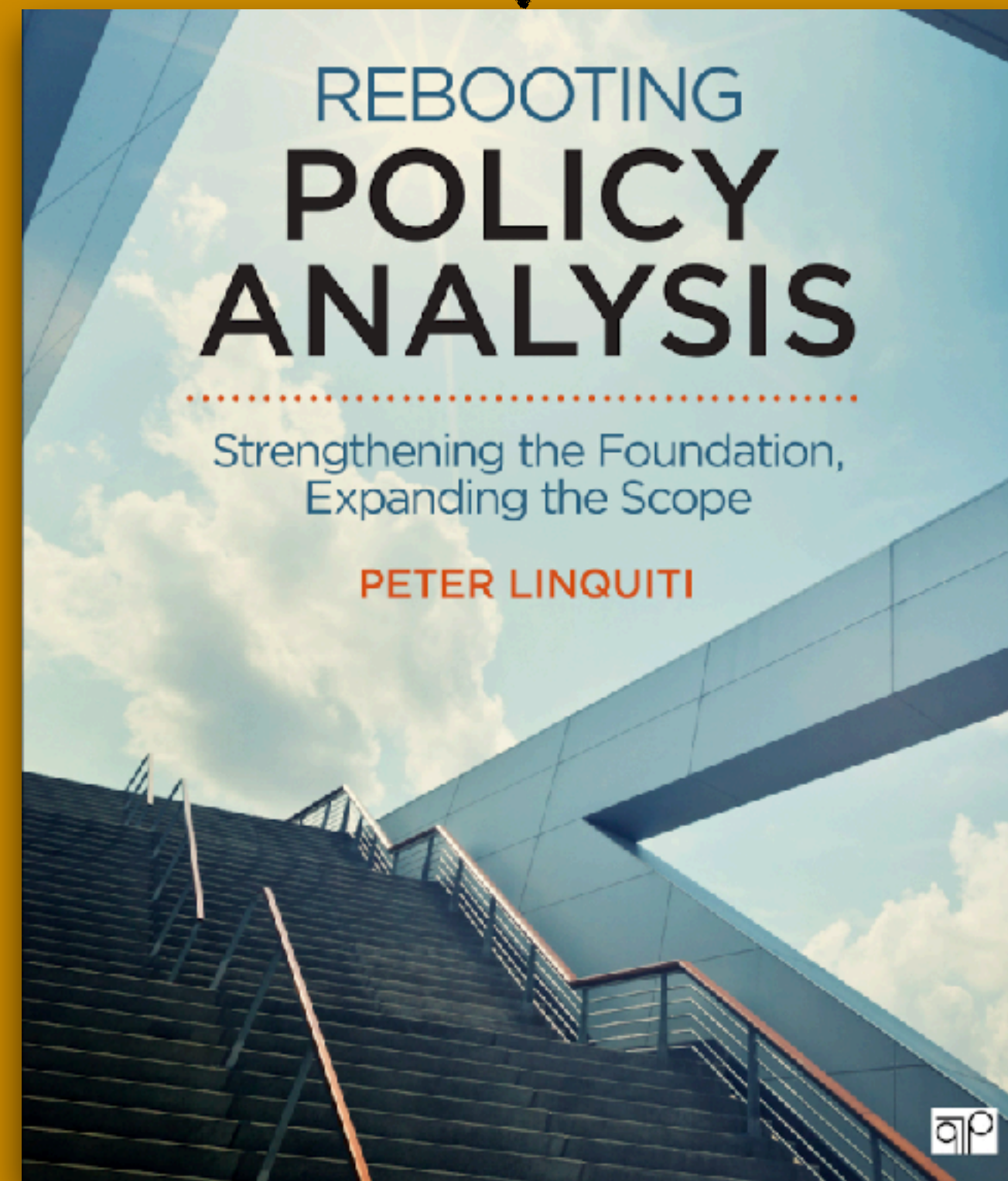
Learning Objective

Distinguish between deductive, inductive, and abductive reasoning and identify how each applies to social policy analysis

Read



Edin and Shafer (2016) Chapter 3:
A Room of One's Own



Linquiti (2022) Chapter 5: *Using Logic to Identify Tentative Truths* and Chapter 6: *Collecting and Evaluating Evidence for Use in Policy Analysis*

*Complete Take Home Exam 01

*Complete at least five replies across any of the six forums

- Reflection on Challenges of Housing in the \$2 per Day Community
- Chapter Five/Six Discussion Questions
- Reasoning Examples
- Identification of Evidence Related to Your Social Policy Paper
- Characterization of Advocates versus Policy Analysis Professionals

Policy Example - HUD's Housing Choice Voucher Program

United States Housing Act of 1937, 42 U.S.C. § 1437f(o) (2024)

The statute allows assistance payments to private landlords on behalf of eligible low-income families, allowing participants to choose their own rental housing in the private market rather than being placed in government-owned units.

- The nation's largest federal rental assistance program
- Subsidizes the rents of more than 2.3 million households (5 million people)
- Administered locally by roughly 2,100 public housing authorities

(McCarty, 2023)

The program cuts the chances of families becoming homeless and reduces how often a family has to move.

(Edin & Shafer, 2016)

The Five Reasoning Types

Deductive reasoning

Multistep reasoning that opens with a general principle, layers in a specific case, and derives a conclusion from the two

Abductive reasoning

An iterative loop uses evidence, deduction, and observation

Causal reasoning

A specialized form of deduction that posits a mechanism linking a cause to an effect

Probabilistic reasoning

Handles uncertainty by assigning likelihoods to tentative conclusions either as numeric probabilities or as estimative words

Inductive Reasoning

begins with observations of particular instances and tries to infer the principles, patterns, and mechanisms that account for them

Deductive Reasoning

Valid Logic
but False
Premise

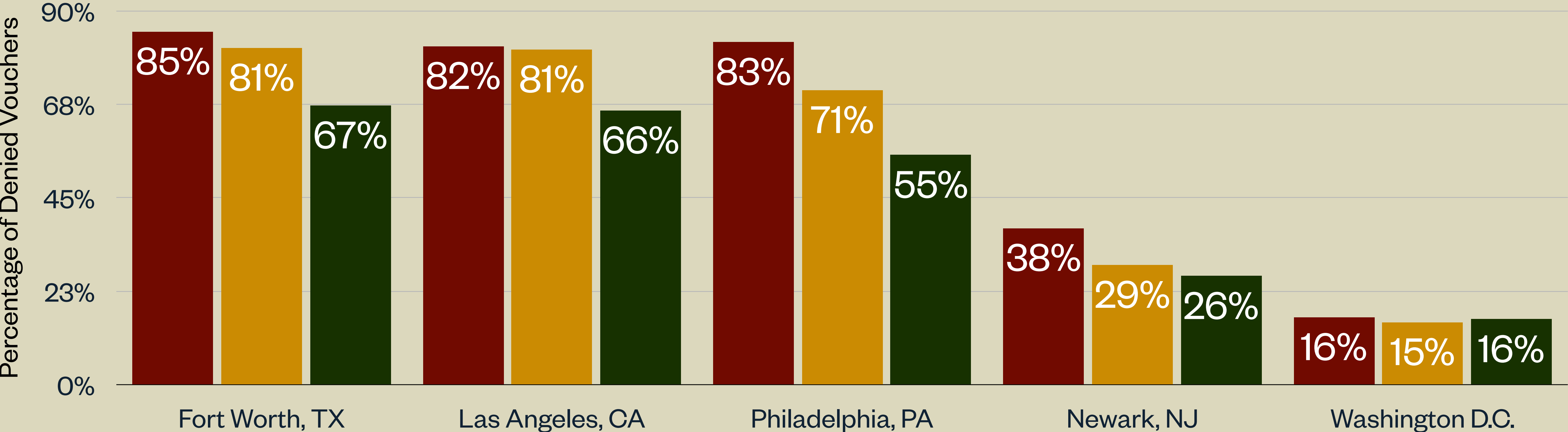
- **Premise 1:** Under 42 U.S.C. § 1437f(o), a family is income-eligible for a Housing Choice Voucher only if their income does not exceed 50% of the area median income (AMI) for their location.
- **Premise 2:** A family of four in Yakima, WA earns income at 48% of the local AMI.
- **Conclusion:** This family meets the federal income eligibility threshold for a Housing Choice Voucher.

Sound
Argument

- **Premise 1:** If a family receives a Housing Choice Voucher, they can afford stable housing.
- **Premise 2:** This family has a voucher.
- **Conclusion:** Therefore this family has stable housing.

Inductive Reasoning

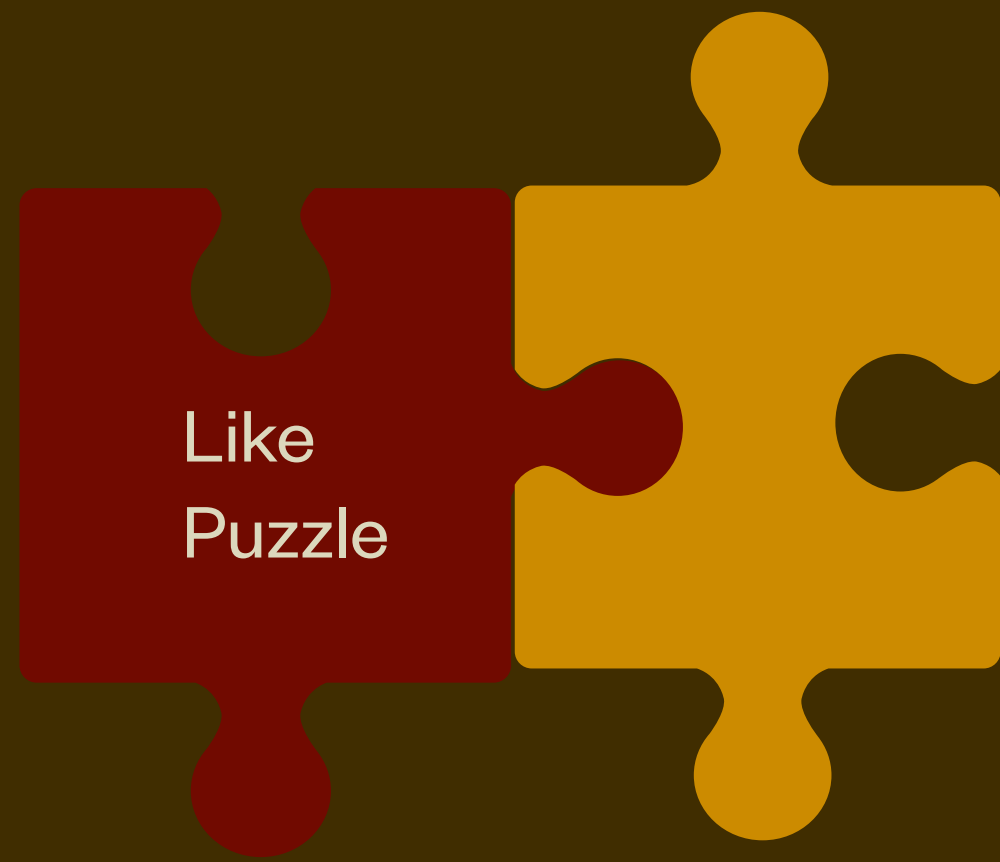
■ Low Poverty ■ Medium-poverty ■ High Poverty



(Cunningham et al., 2018)

Claims: Landlord refusal of vouchers is a widespread, structural barrier. Voucher holders face the most rejections precisely in the neighborhoods that would get them out of high-poverty settings.

Abductive Reasoning



An observed outcome that doesn't match expectations and demands an explanation

Some potential hypotheses:

- Payment standard limits
- Landlord discrimination
- Information and social network barriers
- Constrained search windows

Children whose families used vouchers to move to lower-poverty neighborhoods before age 13 had substantially better long-term outcomes (higher earnings, higher college attendance, and lower rates of single parenthood for daughters).

(Chetty et al., 2016)