

(Informal) Logic: Chapter 8

WRIT 0590: Module 2.4

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Warm-Up Exercise: Reflecting on Your Writing Journey

Prompt: Think back to your experience in college so far, especially this past semester.

- ▶ How has college challenged you as a writer?
- ▶ How do you feel about your writing now compared to when you started?

Activity:

1. Write freely for **5–7 minutes**. Don't worry about structure, just reflect.
2. Underline or highlight key insights in your response.
3. Pair up and discuss how to structure your reflections with a classmate for **5 minutes**.

Why Structural Interventions?

Problem: Machine learning can reinforce unfair systems (EX: Google Translate). Fixing bias at the algorithm level is not enough—we need to change the way ML is built and used.

Solution: Structural interventions focus on:

- ▶ Reforming institutions that use ML.
- ▶ Giving communities a say in ML decisions.
- ▶ Regulating ML to prevent harm.
- ▶ Improving the AI workforce and research practices.

Example: Predictive policing systems assume crime patterns are stable, but they often reinforce racial bias in law enforcement.

Reforming Institutions

Focus: Change institutions, not just technology.

- ▶ Some institutions adopt ML in harmful ways. Fixing them means rethinking their goals.
- ▶ **Example:** Instead of using risk prediction tools to decide who gets bail, reform the criminal justice system to focus on rehabilitation.

Historical Example:

- ▶ Elite universities changed admissions policies in the early 1900s to reduce Jewish enrollment by emphasizing “character” instead of test scores.
- ▶ Similarly, ML systems can disguise discrimination by appearing neutral.

Community Rights & Consent

Problem: ML often impacts people who never agreed to its use.

Example:

- ▶ Police access footage from home security cameras (e.g., Amazon Ring) without asking affected communities.
- ▶ Protesters and marginalized groups face surveillance without their consent.

Solution:

- ▶ Give communities the power to accept or reject technologies, not just individuals.
- ▶ Cities banning facial recognition is one example of collective action working.

Regulation

Challenge: Laws struggle to keep up with AI.

Types of Regulation:

- ▶ Using existing anti-discrimination laws to cover ML.
- ▶ Creating new rules, like Europe's GDPR, to limit harmful automation.
- ▶ Regulating AI use in high-stakes areas like hiring, policing, and finance.

Example:

- ▶ Some cities banned facial recognition, but social media ads use AI to target users unfairly with no strong regulation.

Workforce & Research Interventions

The AI Workforce:

- ▶ AI professionals shape how ML is built—who gets hired matters.
- ▶ Efforts to unionize tech workers could help enforce ethical standards.

Example:

- ▶ AI researchers of color have been pushed out of major tech companies after criticizing biased ML models.

ML Research Needs Change:

- ▶ Ethics should be a core part of AI research, not an afterthought.
- ▶ Many AI papers focus only on accuracy, ignoring social harms.

Fairness in Organizations

How Organizations Can Intervene:

- ▶ **Reallocation:** Adjust hiring/admissions to ensure fairness.
- ▶ **Bias Training:** Limited success—structural fixes are better.
- ▶ **Transparency:** Let people challenge AI decisions.

Example:

- ▶ Some companies hire with AI but don't explain why candidates are rejected.
- ▶ Fairer AI hiring would provide reasons and let candidates improve.

Key Takeaways

- ▶ ML bias is not just a technical issue—it reflects broader social structures.
- ▶ Fixing bias requires changing institutions, laws, and community involvement.
- ▶ AI researchers and tech workers play a key role in shaping ethical AI.
- ▶ Transparency and accountability are crucial to fair AI.

Final Thought: ML systems don't just predict the future—they shape it. Structural interventions ensure that they do so in a fair way.