

Proxy Discrimination in Artificial Intelligence

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Current opportunity and challenges

- Societal concerns of systemic racism
- Growing use of AI and Big Data
- Potential concerns of AI
 - Data concerns: bias, errors in data, etc.
 - Discrimination
 - Transparency

ARTICLE

Proxy Discrimination in the Age of Artificial Intelligence and Big Data

*Anya E.R. Prince** & *Daniel Schwarcz***

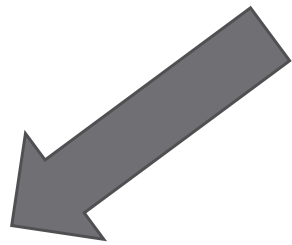
105 IOWA L. REV. 1257 (2020).

Defining Algorithmic Proxy Discrimination

- 1) Disparate impact
 - Use of a facially-neutral trait in an algorithm that disproportionately harms a protected class
- 2) Usefulness (predictive power) of the facially-neutral trait arises from its correlation with a legally-prohibited characteristic

Life Insurance

Race



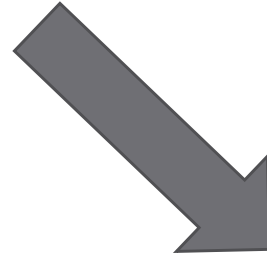
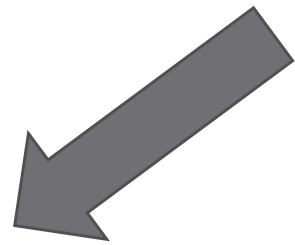
Facebook 'likes'



Mortality

Auto Insurance

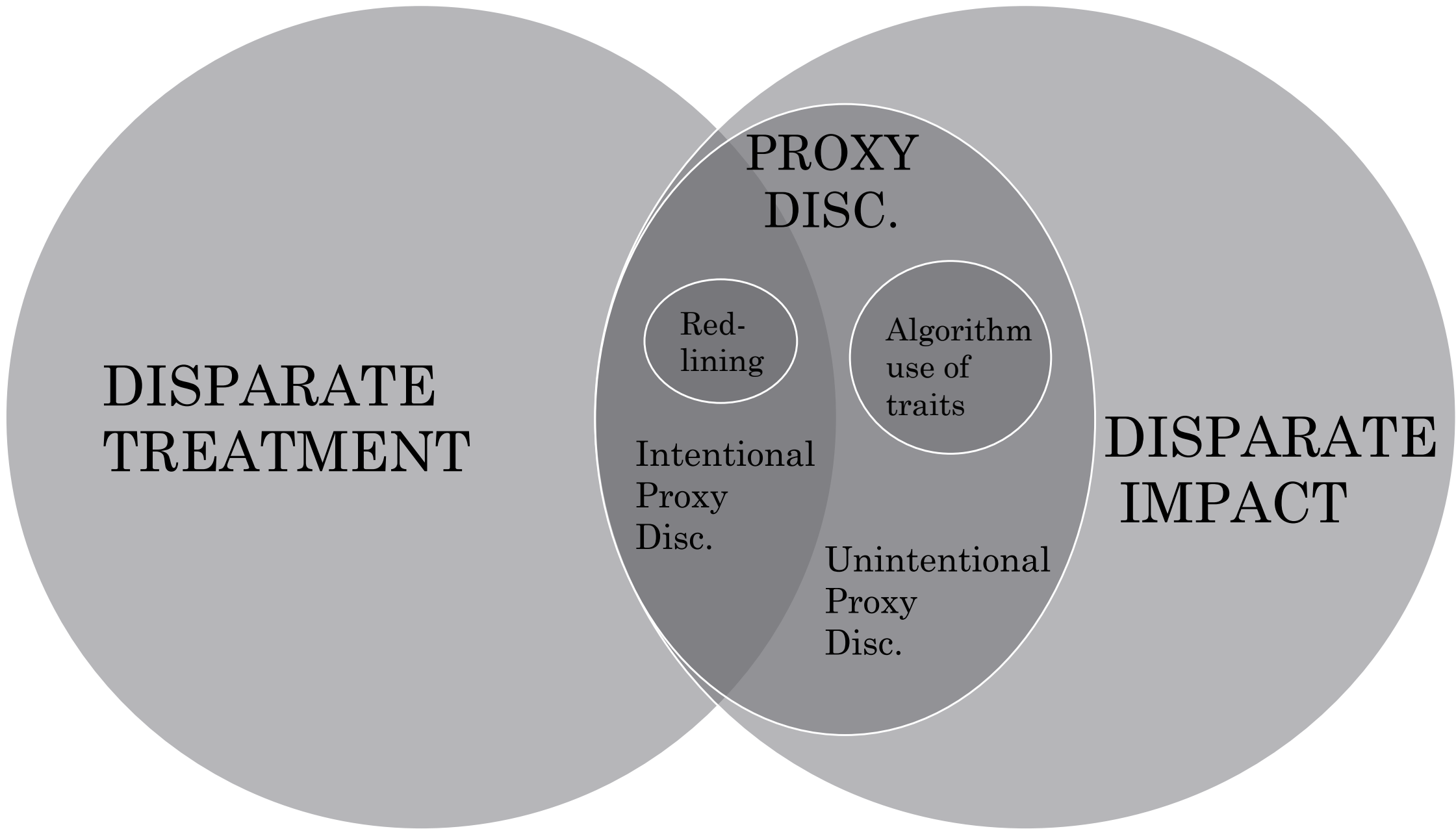
Gender



Shop at men's
clothing store



Auto claims



DISPARATE
TREATMENT

PROXY
DISC.

Red-
lining

Algorithm
use of
traits

Intentional
Proxy
Disc.

Unintentional
Proxy
Disc.

DISPARATE
IMPACT

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- Examples:
 - Race, gender, and other protected traits in state insurance codes
 - Genetic Information Nondiscrimination Act (GINA) and Affordable Care Act (ACA) in health insurance
- Social discrimination v. unfair discrimination
 - Many times when law has stopped insurance from using traits, even when they help predict outcomes

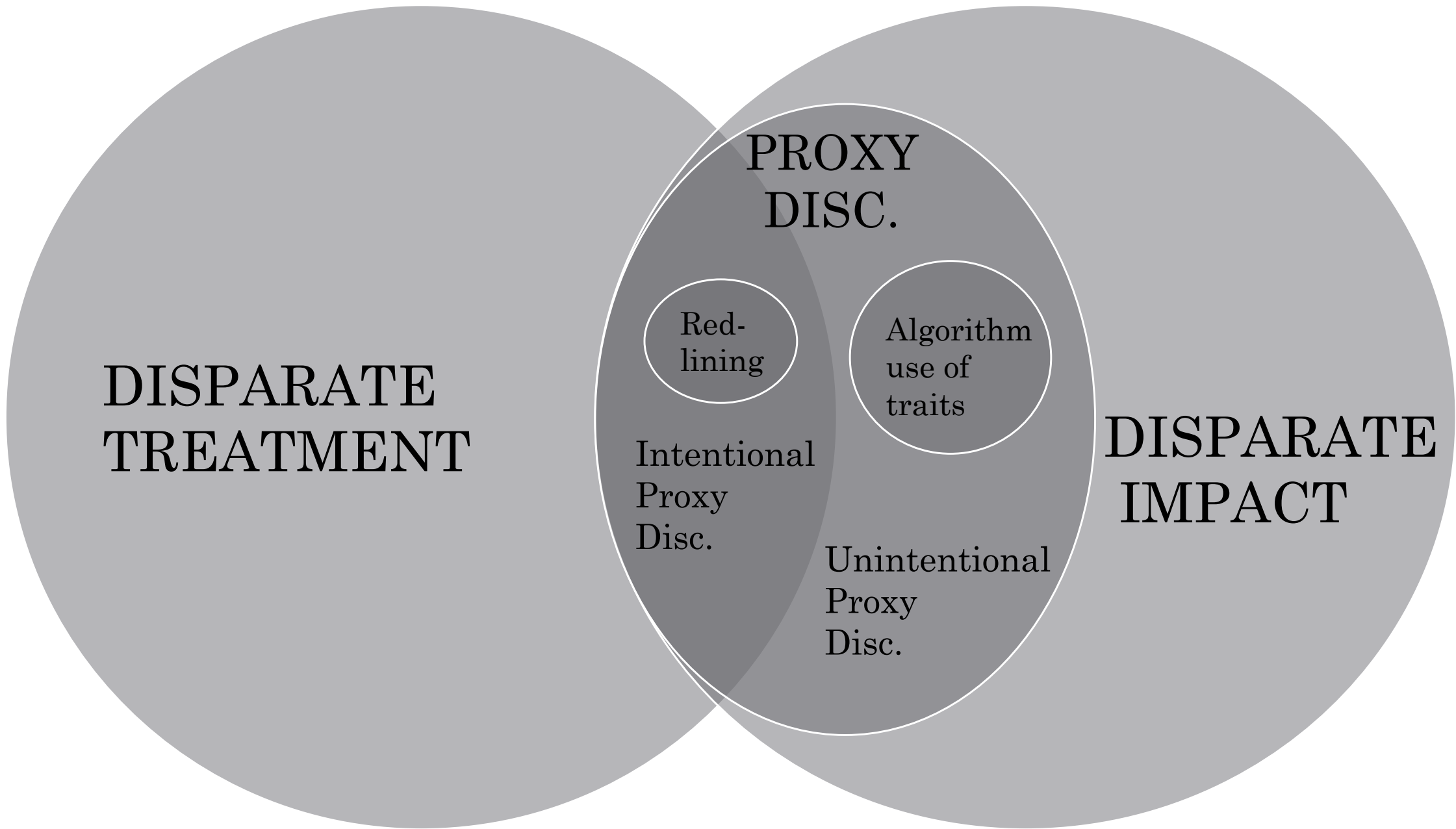
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So what?

Possible Solutions (of varying effectiveness)

- Accessible Data
 - 1) Prohibiting discrimination based on non-approved factors (ACA)
 - 2) Requiring more data
- When/How Data Can Be Used
 - 3) Transparency-Oriented Reforms
 - 4) Ethical Algorithms
 - 5) Requirement of Potential Causal Connections



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