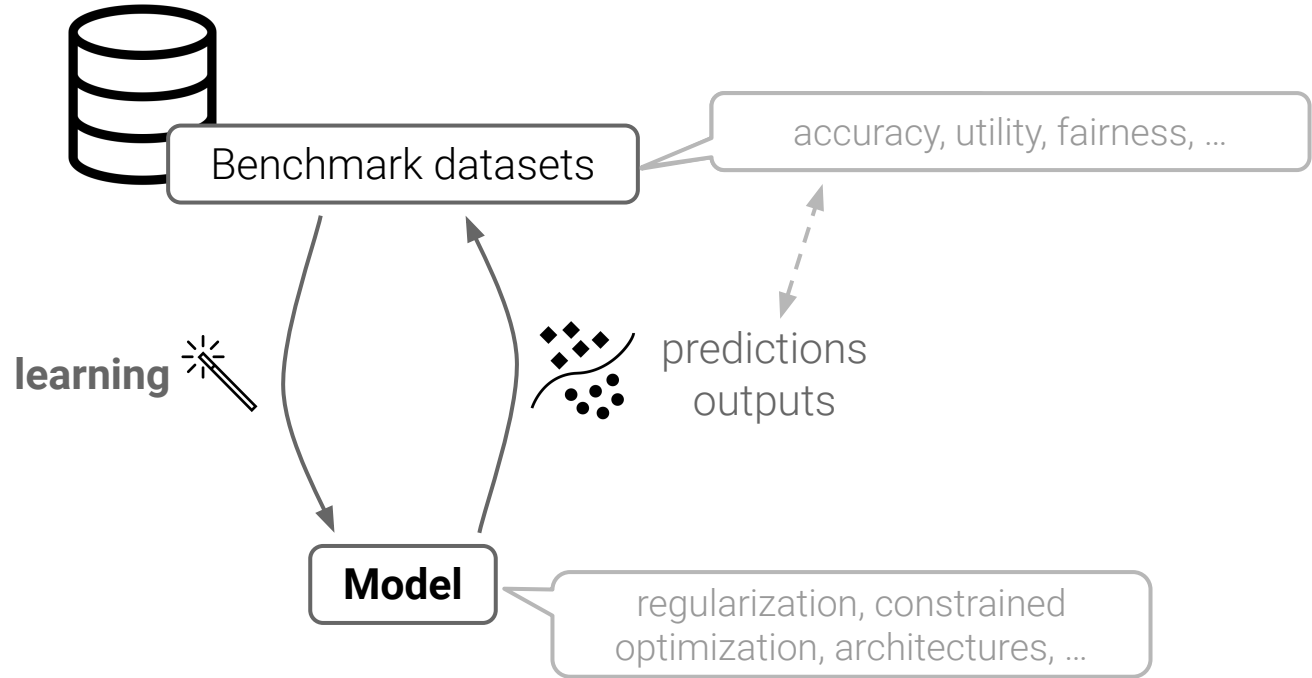


ML-research (+ fairness)



Real challenges in socio-algorithmic systems

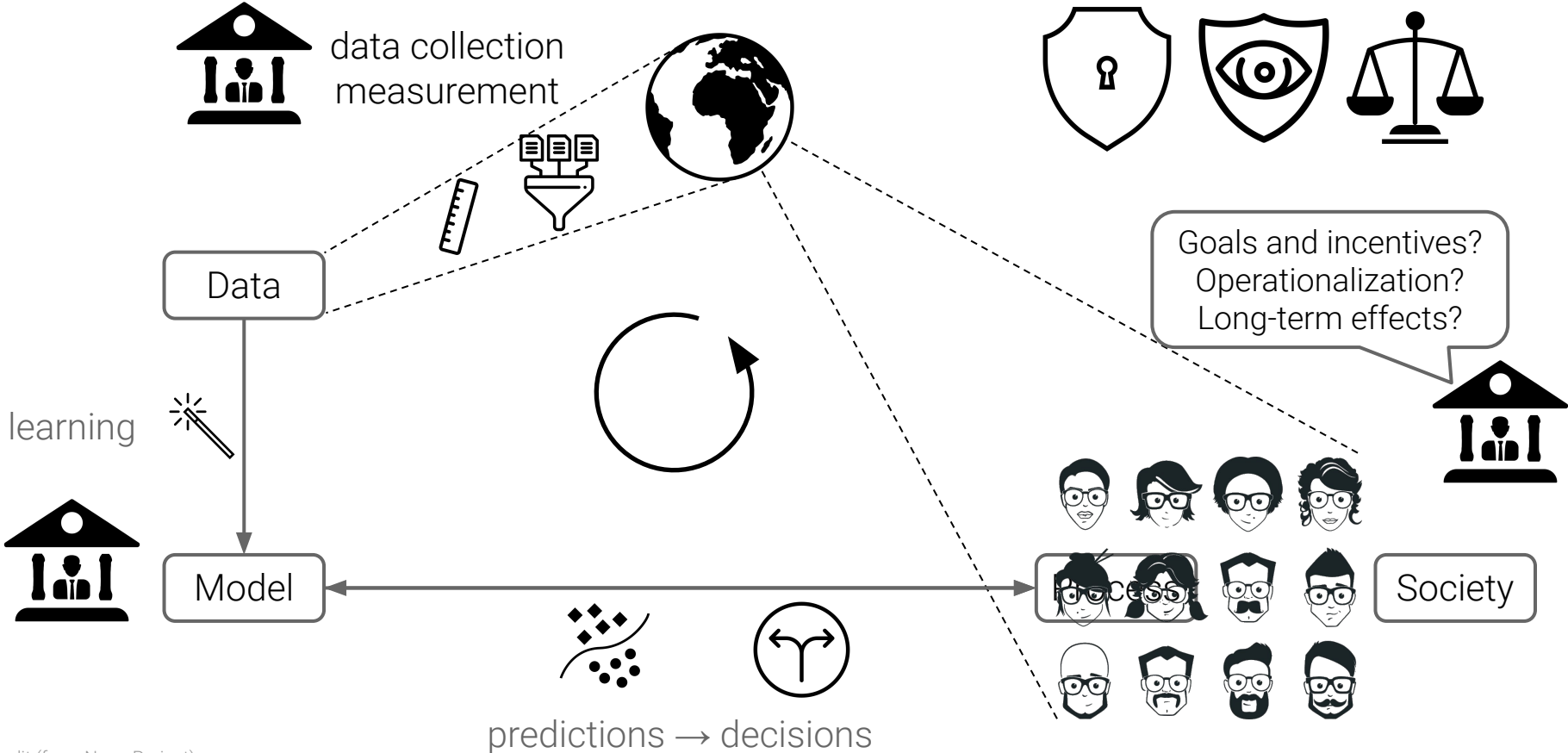
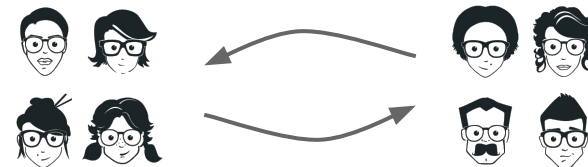
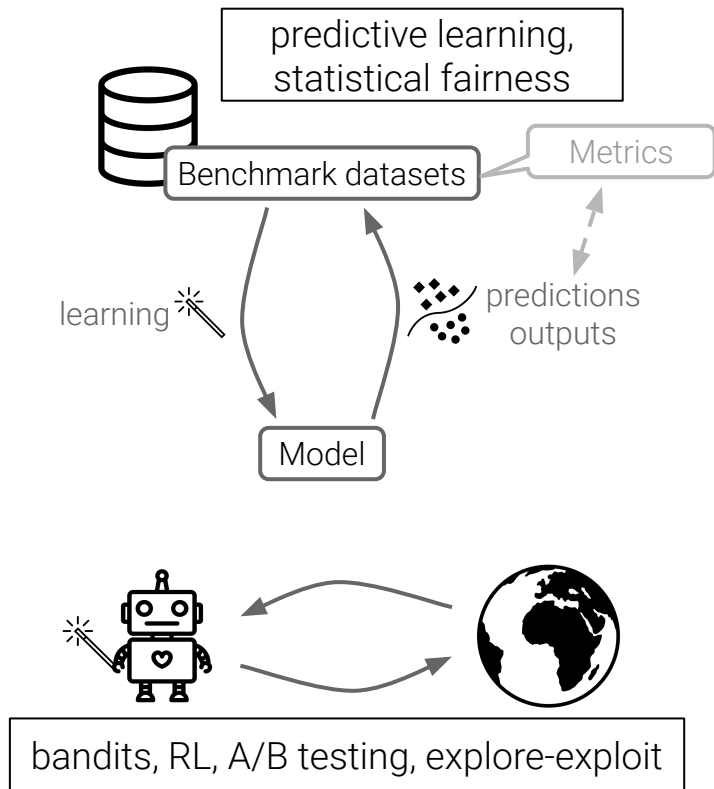


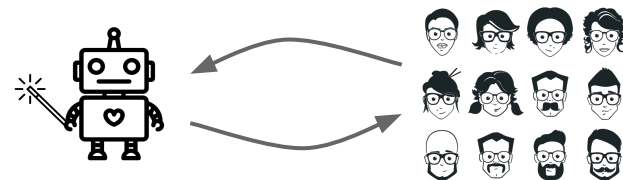
Image credit (from Noun Project):
Ralf Schmitzer, Srinivas Agra, Tinashe Mugayi, Arif Prasetyo, IconPai, Redder Design, Chenyu Wang

[Barocas, Hardt, Narayanan: *Fairness and Machine Learning*; Kearns & Roth: *The ethical algorithm*]

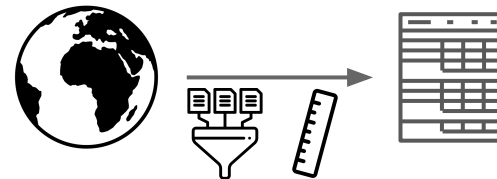
Putting together the pieces



sociology, behavioral economics,
game theory, microeconomics



explainable AI, HCI, strategic behavior,
mechanisms + auctions



measurement theory,
epidemiology, experiment design

- Plea for cross-disciplinary work.
- Many moving, interacting parts with high uncertainty.
[Good news for researchers, bad news for practitioners?]
- Suffer from lack of “low-stakes playgrounds” to test ideas.
[I don't believe in realistic simulations of socio-algorithmic systems.]