

WE ARE AI  
#5

WE Are AI



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## Contact:

Please direct any queries about using elements from this comic to  
[themachinelearnist@gmail.com](mailto:themachinelearnist@gmail.com) and cc [stoyanovich@nyu.edu](mailto:stoyanovich@nyu.edu)



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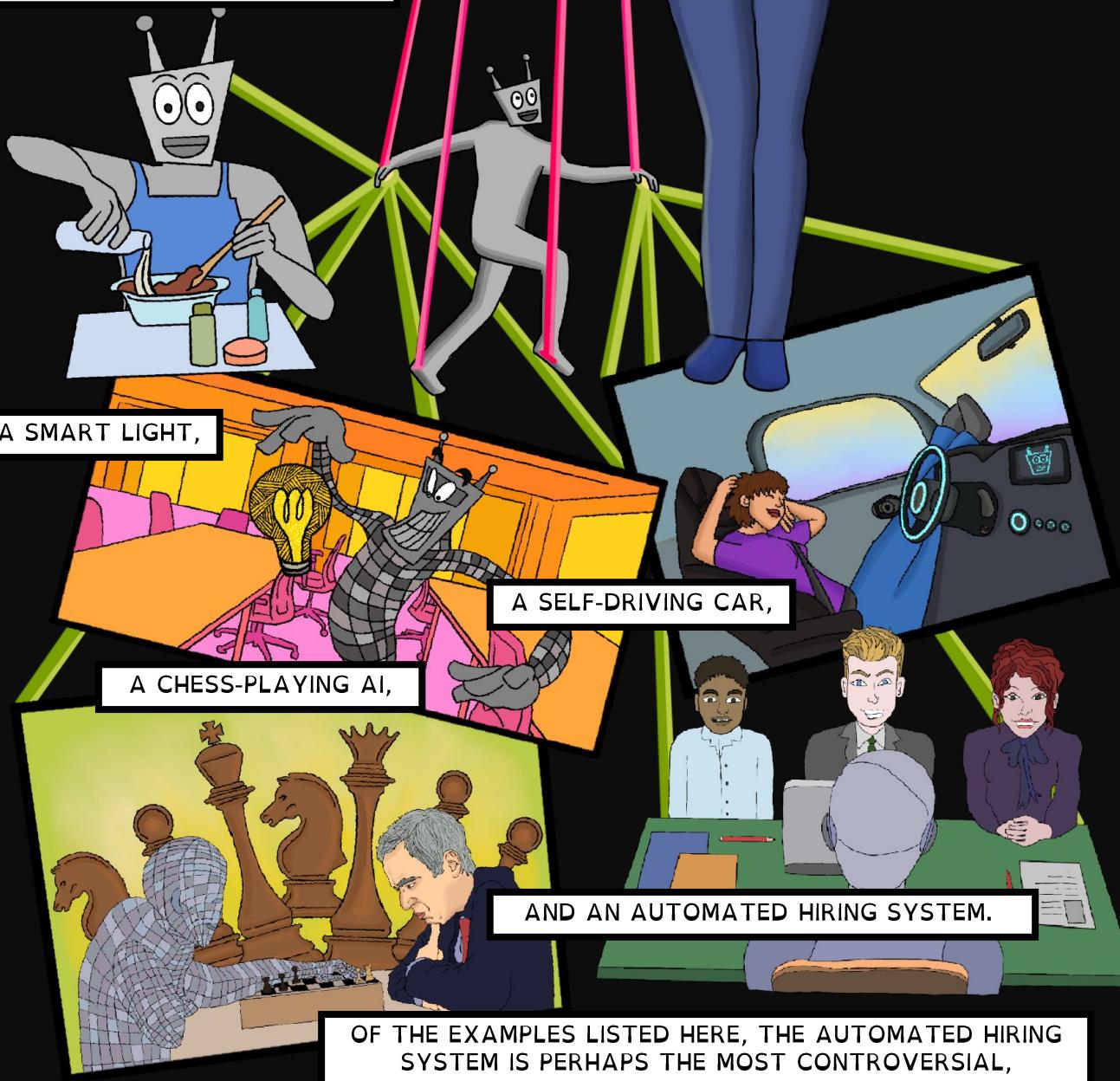
IN THIS VOLUME, WE WILL REVISIT SOME OF THE KEY CONCEPTS FROM THE COMIC SERIES,

REINFORCING THE IDEA THAT  
TECHNOLOGY - INCLUDING AI - IS  
WHAT WE WANT IT TO BE.

WE ARE AI.

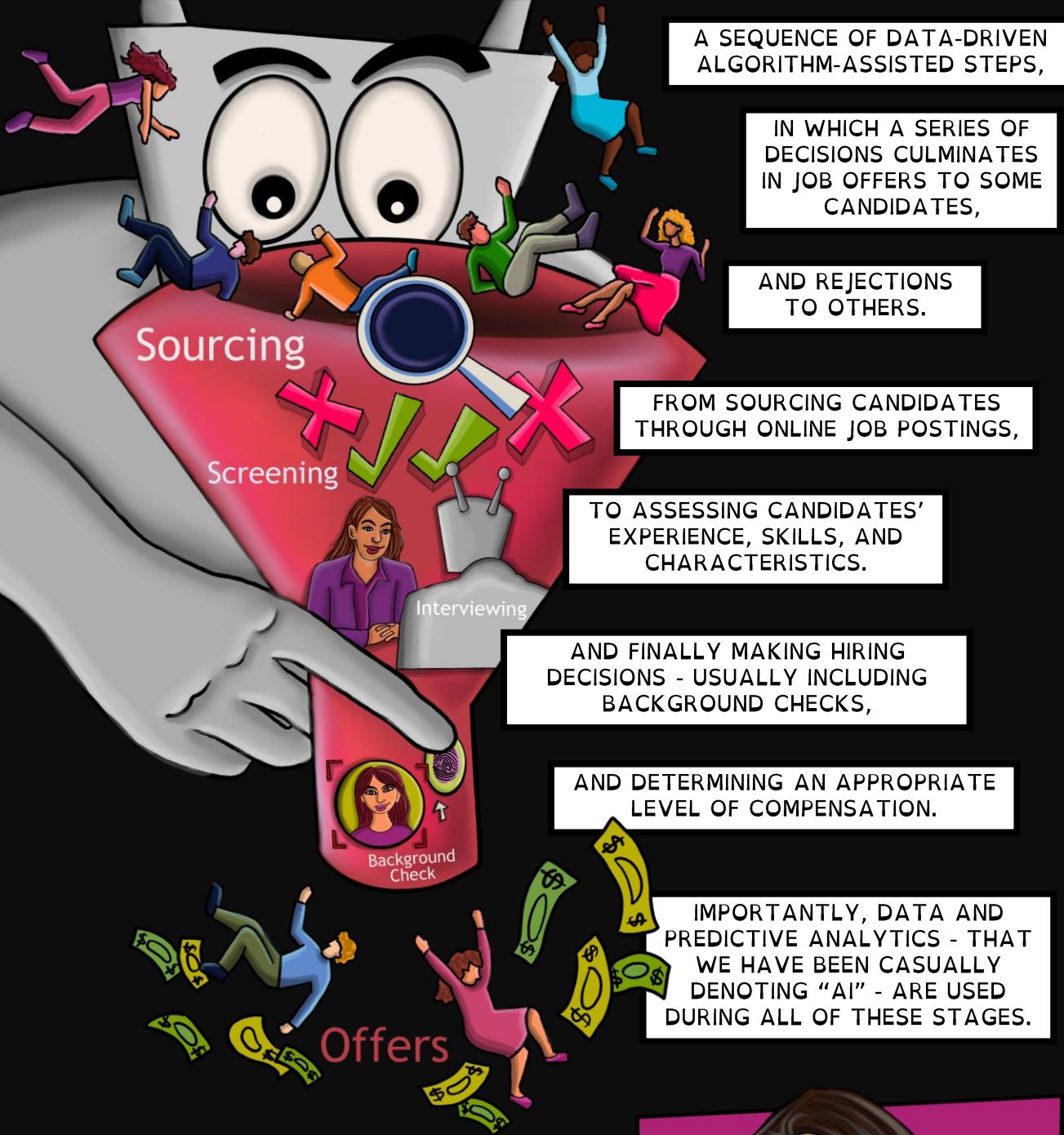
WE PONDERED SEVERAL HYPOTHETICAL  
AND REAL-WORLD USES OF AI -

INCLUDING AN ALGORITHM  
THAT LEARNS TO BAKE,



AND IT'S ALSO A TOPIC THAT WE'VE DISCUSSED EXTENSIVELY, SO LET'S REVISIT IT BRIEFLY.

IN THEIR 2018 REPORT CALLED "HELP WANTED" [1], MIRANDA BOGEN AND AARON RIEKE DESCRIBED THE HIRING PROCESS AS A FUNNEL -



A SEQUENCE OF DATA-DRIVEN ALGORITHM-ASSISTED STEPS,

IN WHICH A SERIES OF DECISIONS CULMINATES IN JOB OFFERS TO SOME CANDIDATES,

AND REJECTIONS TO OTHERS.

FROM SOURCING CANDIDATES THROUGH ONLINE JOB POSTINGS,

TO ASSESSING CANDIDATES' EXPERIENCE, SKILLS, AND CHARACTERISTICS.

AND FINALLY MAKING HIRING DECISIONS - USUALLY INCLUDING BACKGROUND CHECKS,

AND DETERMINING AN APPROPRIATE LEVEL OF COMPENSATION.

IMPORTANTLY, DATA AND PREDICTIVE ANALYTICS - THAT WE HAVE BEEN CASUALLY DENOTING "AI" - ARE USED DURING ALL OF THESE STAGES.

AS STATED BY JENNY YANG, FORMER COMMISSIONER OF THE US EQUAL OPPORTUNITY COMMISSION (EEOC),

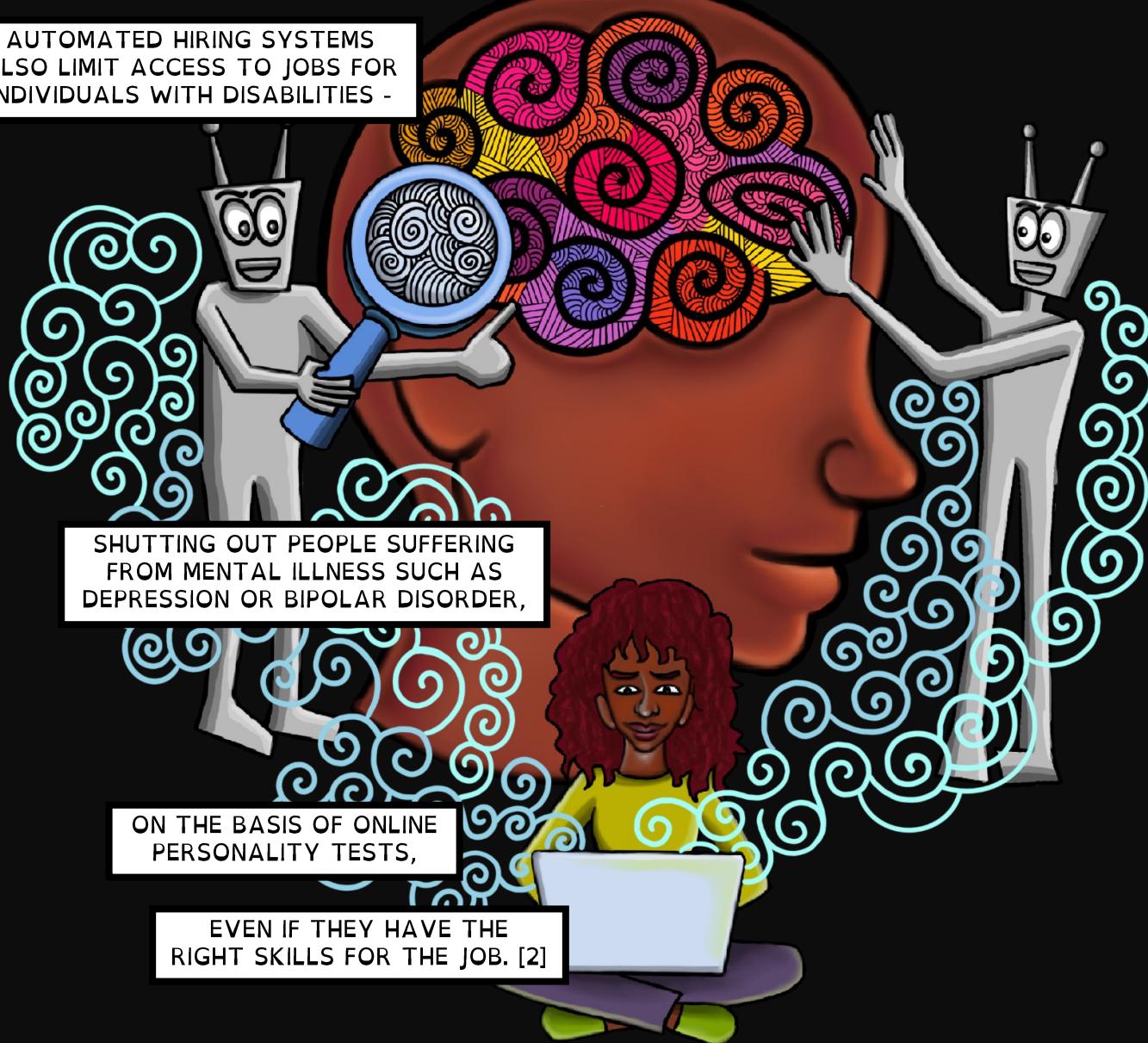
BECAUSE OF THE IMPORTANCE OF THE DECISION THEY MAKE OR HELP MAKE,

"AUTOMATED HIRING SYSTEMS ACT AS MODERN GATEKEEPERS TO ECONOMIC OPPORTUNITY."



WE HAVE SEEN EXAMPLES IN WHICH THESE TOOLS REINFORCE GENDER AND RACIAL BIAS.

AUTOMATED HIRING SYSTEMS ALSO LIMIT ACCESS TO JOBS FOR INDIVIDUALS WITH DISABILITIES -



WE ARE ALSO OFTEN WORRIED ABOUT WHETHER THESE TOOLS ACTUALLY "WORK" -

WHETHER THEY ARE PICKING UP USEFUL SIGNALS FROM THE DATA

OR ARE AN ELABORATE COIN FLIP AT BEST.

AS ARVIND NARAYANAN PUTS IT: [3]

ARE THESE TOOLS  
AI SNAKE-OIL?



[3] How to recognize AI snake oil. (2019). Arvind Narayanan

AI TOOLS ARE ENGINEERING ARTIFACTS.

TO KNOW WHETHER THEY WORK WE SHOULD USE THE SCIENTIFIC METHOD:

FORMULATE A HYPOTHESIS THAT STATES - IN A FALSIFIABLE WAY - THAT THE TOOL INDEED SELECTS EMPLOYEES WHO DO WELL ON THE JOB,

AND IS BETTER AT PREDICTING THAN A RANDOM GUESS WOULD BE.

AND BE PREPARED TO ACCEPT THAT THE TOOL DOESN'T WORK BASED ON THE RESULT.

THEN, DESIGN AN EXPERIMENT TO CHECK THIS HYPOTHESIS,

IN THE COMPLEX ECOSYSTEM IN WHICH AUTOMATED HIRING TOOLS ARE COMMISSIONED, DEVELOPED, AND USED, WE MUST ASK OURSELVES:

WHO IS RESPONSIBLE FOR ENSURING THAT THESE TOOLS ARE BUILT AND USED APPROPRIATELY?

WHO IS RESPONSIBLE FOR CATCHING AND MITIGATING DISCRIMINATION AND DUE PROCESS VIOLATIONS?

AND FOR CONTROLLING THE PROLIFERATION OF SNAKE-OIL UNDER THE FANCY LABEL OF "AI"?

THE ANSWER IS - WE ALL ARE.

IN RESPONSE TO THESE QUESTIONS, WE'VE BEEN SEEING ATTEMPTS TO REGULATE THE USE OF ALGORITHMIC TOOLS.

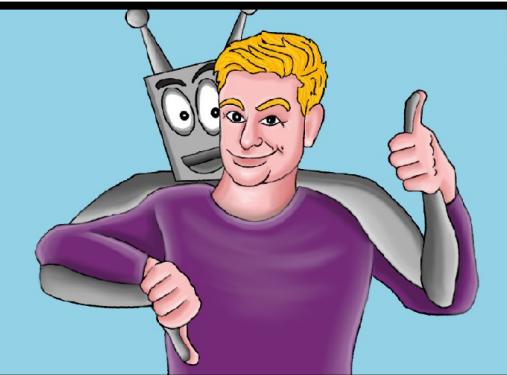
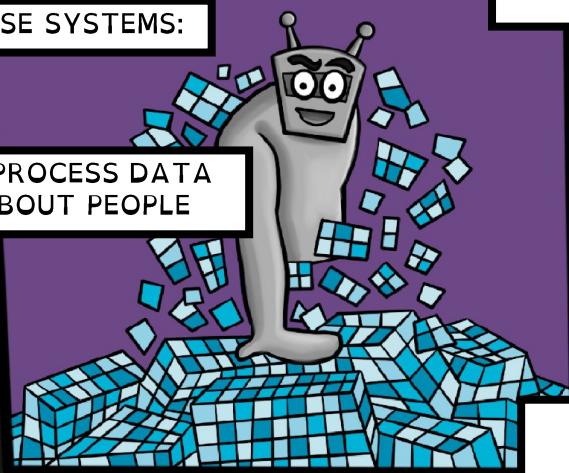
LET'S NOW STEP BACK FOR A MORE SYSTEMATIC VIEW OF

### "AUTOMATED DECISION SYSTEMS" OR ADS.

THESE SYSTEMS:

2. ASSIST - EITHER IN COMBINATION WITH HUMAN DECISION MAKING OR AUTONOMOUSLY -

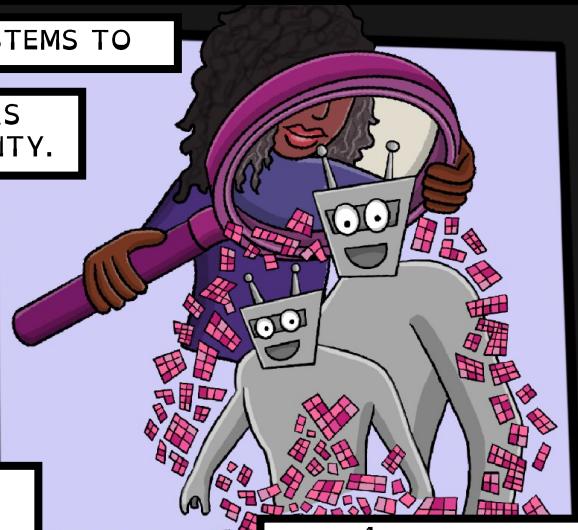
1. PROCESS DATA ABOUT PEOPLE



IN MAKING CONSEQUENTIAL DECISIONS THAT IMPACT PEOPLE'S LIVES AND LIVELIHOODS

ADDITIONALLY, WE WOULD WANT SUCH SYSTEMS TO

3. HAVE A SPECIFIC, STATED GOAL - SUCH AS IMPROVING EFFICIENCY AND PROMOTING EQUALITY.



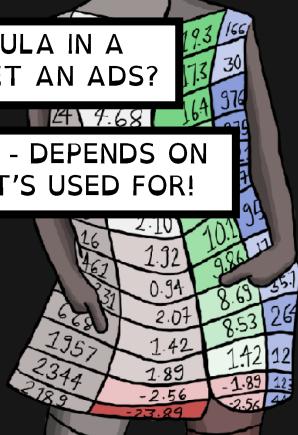
AT THE VERY LEAST, THEY MUST NOT HINDER EQUITABLE ACCESS TO OPPORTUNITIES

4. BE PUBLICLY DISCLOSED AND SUBJECT TO LEGAL AUDITS.

IS A FORMULA IN A SPREADSHEET AN ADS?

14 7.68

PERHAPS - DEPENDS ON WHAT IT'S USED FOR!



IS IT AN AUTOMATED HIRING TOOL?

DEFINITELY SO!

IS IT AN AUTOMATED HIRING TOOL?

DEFINITELY SO!



BUT IS A CALCULATOR AN ADS?

THE ANSWER IS - NO!

HOW MIGHT WE GO ABOUT REGULATING ADS?

AND SHOULD WE EVEN ATTEMPT TO?

WHILE THE PREDOMINANT SENTIMENT IN THE INDUSTRY IS STILL THAT "REGULATION WILL STIFLE INNOVATION",

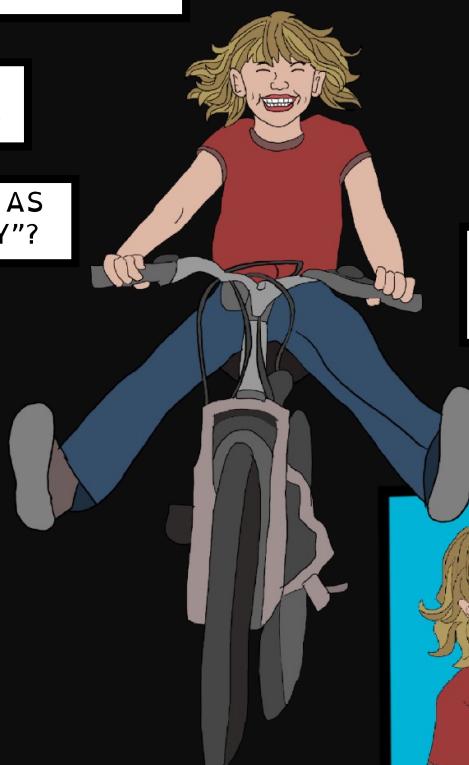


AND EVEN IN THE SILICON VALLEY, THE NEED FOR MEANINGFUL REGULATION TO EASE COMPLIANCE AND LIMIT LIABILITY IS STARTING TO BE MORE BROADLY RECOGNIZED.

THERE IS MUCH DEBATE ON A SPECIFIC REGULATORY FRAMEWORK:

SHOULD WE USE  
PRECAUTIONARY PRINCIPLES —

THAT CAN BE SUMMARIZED AS  
"BETTER SAFE THAN SORRY"?



OR, MORE LIKELY,  
ATTEMPT A MORE AGILE  
RISK-BASED METHOD,

SUCH AS ALGORITHMIC  
IMPACT ASSESSMENT?



ALL THIS, AND MORE, IS THE SUBJECT OF INTENSE DEBATE.

AS AN EXAMPLE, NEW YORK CITY RECENTLY MADE A VERY PUBLIC COMMITMENT TO OPENING THE BLACK BOX OF THE GOVERNMENT'S USE OF TECHNOLOGY.

IN MAY 2018, AN AUTOMATED DECISION SYSTEMS TASK FORCE WAS CONVENED, THE FIRST SUCH IN THE US,

AND CHARGED WITH PROVIDING RECOMMENDATIONS TO NEW YORK CITY'S AGENCIES,

ABOUT BECOMING TRANSPARENT AND ACCOUNTABLE IN THEIR USE OF ADS.



THE TASK FORCE ISSUED ITS REPORT IN NOVEMBER 2019 [4], MAKING A COMMITMENT TO USING ADS WHERE THEY ARE BENEFICIAL;

PROMOTING FAIRNESS, EQUITY, ACCOUNTABILITY, AND TRANSPARENCY IN THEIR USE,

AND REDUCING POTENTIAL HARM ACROSS THEIR LIFESPAN.

WE NOW NEED TO WORK TOGETHER TO MAKE THESE PRINCIPLES MORE CONCRETE.

THE FIRST STEP IS TO  
THINK CAREFULLY  
ABOUT OUR GOALS.

AI GIVES US UNPRECEDENTED  
OPPORTUNITIES TO ACCELERATE  
SCIENCE AND BOOST INNOVATION,

TO TRANSFORM HOW WE  
LIVE AND HOW WE GOVERN.

BUT, WHEN WE DESIGN AI AND PUT IT TO USE, WE  
SHOULD BE UPFRONT ABOUT THE GOALS WE PURSUE,

WHO BENEFITS WHEN WE  
REACH THESE GOALS,

AND WHO IS HARMED.

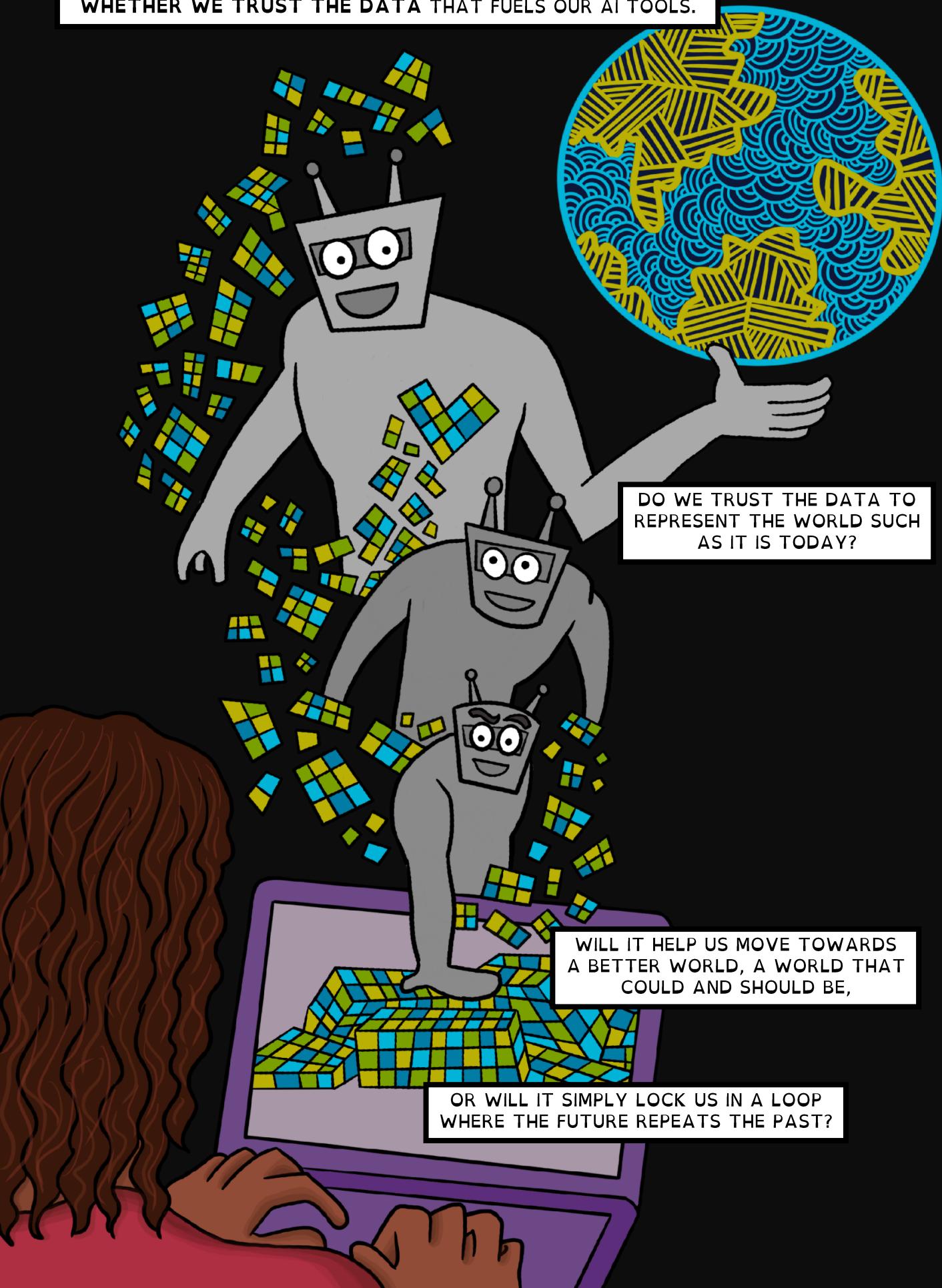
WHETHER AI WORKS FOR ALL OF US DEPENDS ON THE CHOICES WE MAKE –

SUCH AS DECIDING HOW TO  
REPRESENT VERY COMPLEX AND  
OFTEN UNMEASURABLE CONCEPTS.

WHAT ARE THE FEATURES WE  
WILL SELECT TO REPRESENT A  
PROMISING JOB APPLICANT?

BASED ON WHAT DO WE DECIDE THAT A  
CLASSIFICATION RULE SUCCEEDS OR FAILS?

WE ALSO MUST THINK CAREFULLY AND CRITICALLY ABOUT WHETHER WE TRUST THE DATA THAT FUELS OUR AI TOOLS.

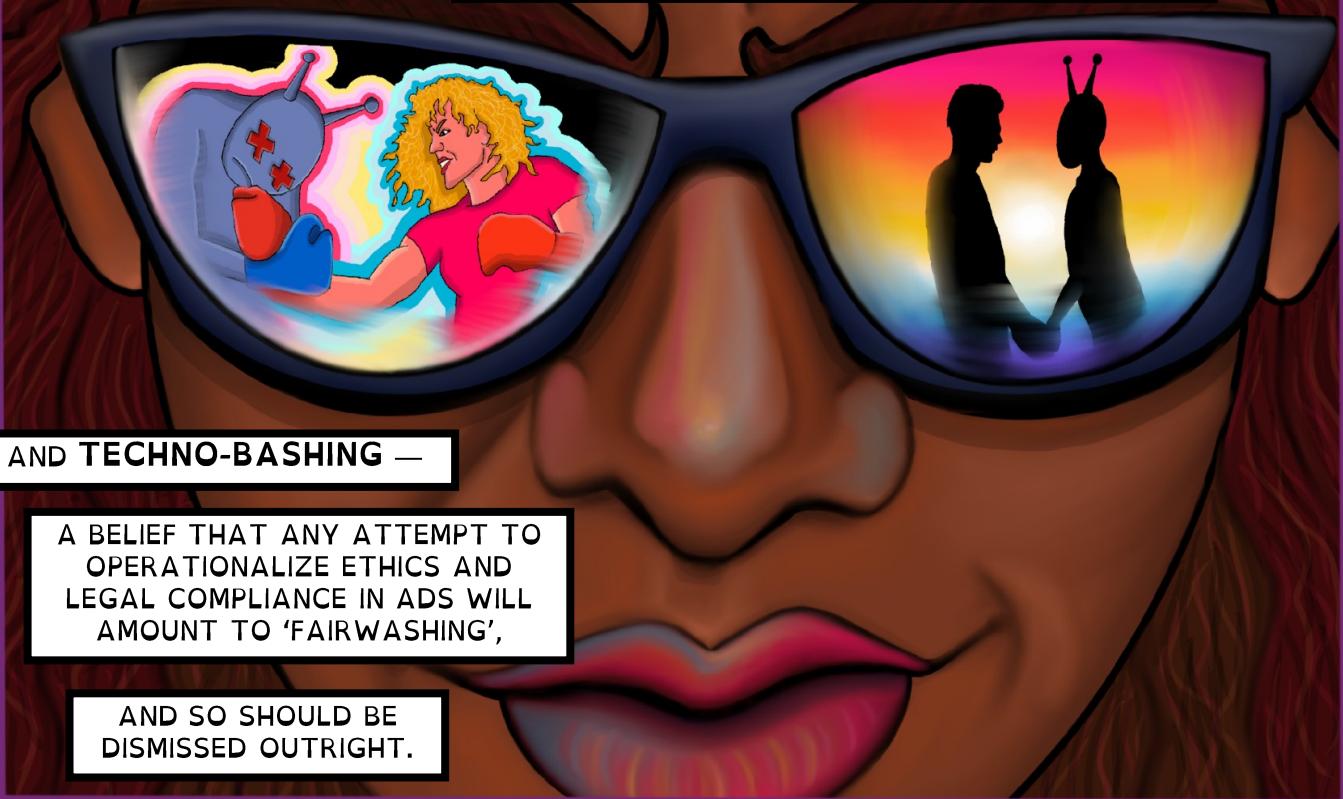


HOW CAN WE USE TECHNOLOGY TO MAKE SOCIETY BETTER?

TO DO SO, WE MUST FIND A PRAGMATIC MIDDLE GROUND  
BETWEEN THE HARMFUL EXTREMES OF

TECHNO-OPTIMISM —

A BELIEF THAT TECHNOLOGY CAN SINGLE-HANDEDLY FIX DEEP-SEATED SOCIETAL PROBLEMS LIKE STRUCTURAL DISCRIMINATION IN HIRING,



AND TECHNO-BASHING —

A BELIEF THAT ANY ATTEMPT TO OPERATIONALIZE ETHICS AND LEGAL COMPLIANCE IN ADS WILL AMOUNT TO 'FAIRWASHING',

AND SO SHOULD BE DISMISSED OUTRIGHT.

TO MAKE PROGRESS, WE ALL NEED TO STEP OUTSIDE OUR COMFORT ZONE.

WE NEED TO TAKE IT UPON OURSELVES TO MAKE THE DECISIONS MADE DURING THE DESIGN, USE, AND OVERSIGHT OF AI - OUR DECISIONS.

ONLY IF WE ALL STEP UP, WILL SOCIETY BE ABLE TO GROUND THE DESIGN OF TECHNOLOGY IN PEOPLE.



AT THE END OF THE DAY, TECHNOLOGY - INCLUDING AI - IS WHAT WE MAKE IT TO BE.

WE ARE AI.

FIN.