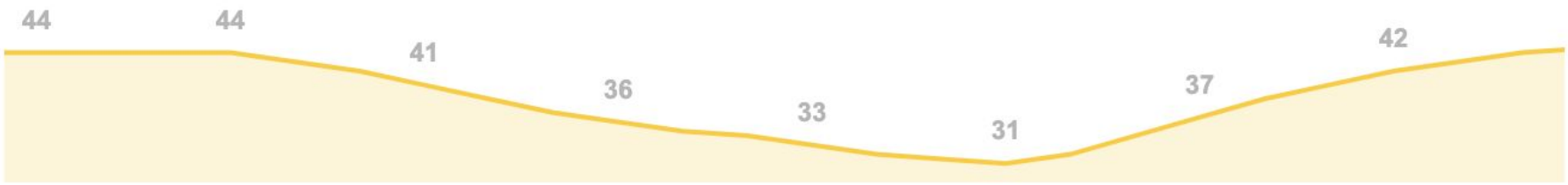
keep true

three strategies to guide AI engagement

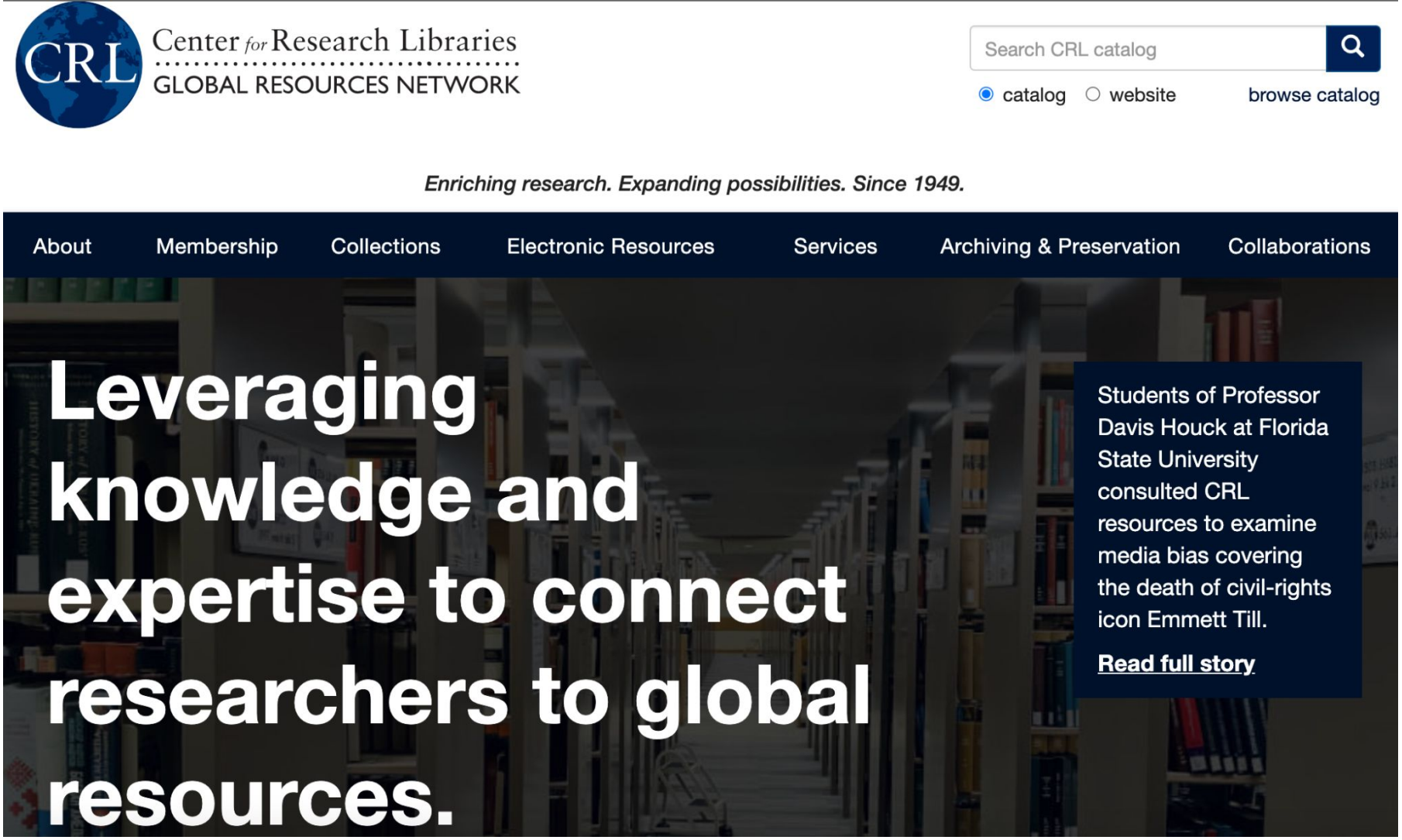
thomas padilla, @thomasgpadilla

greetings from mordor

Temperature | Precipitation | Wind



4 PM	7 PM	10 PM	1 AM	4 AM	7 AM	10 AM	1 PM
Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue
45° 31°	46° 31°	46° 32°	46° 33°	47° 33°	46° 32°	45° 32°	43° 31°


CRL
Center for Research Libraries
GLOBAL RESOURCES NETWORK
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website
browse catalog
Enriching research. Expanding possibilities. Since 1949.
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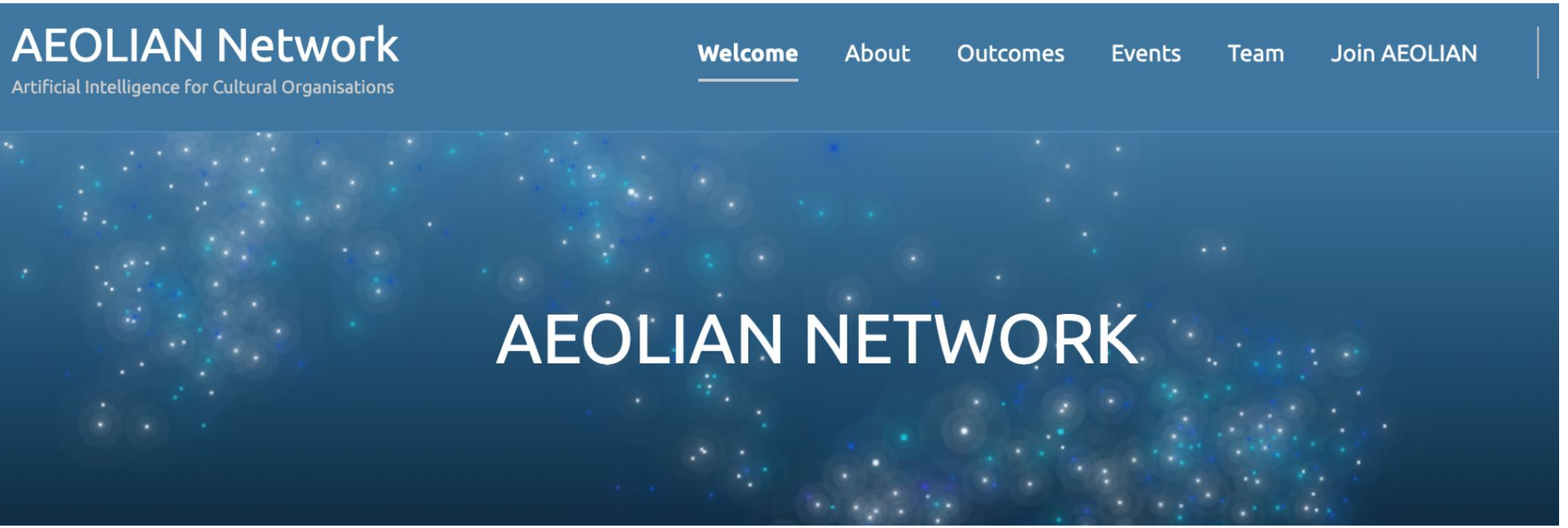
Leveraging knowledge and expertise to connect researchers to global resources.
Students of Professor Davis Houck at Florida State University consulted CRL resources to examine media bias covering the death of civil-rights icon Emmett Till.
Read full story


AEOLIAN Network
Artificial Intelligence for Cultural Organisations
Welcome
About
Outcomes
Events
Team
Join AEOLIAN
AEOLIAN NETWORK

GLAMs have an opportunity to distinguish themselves.

while the component parts of this community are quite different and sometimes functionally opposed in approaches to similar work, we share in common a set of contemporary commitments that seek to advance equity in the communities we serve.

in what follows I will present three strategies I believe strengthen our ability to realize these commitments: nonscalability imperative, avoiding neoliberal traps, and seeing maintenance as innovation.

nonscalability imperative

neoliberal traps

maintenance as innovation

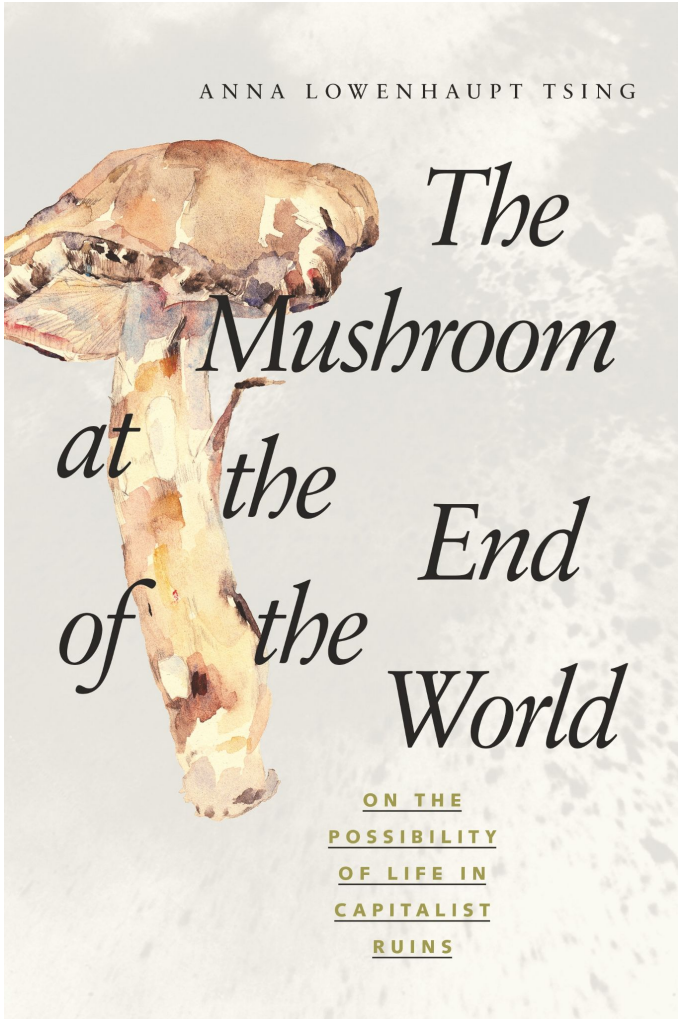
nonscalability imperative

neoliberal traps

maintenance as innovation

whenever we see a call for scalability
we must look for the nonscalable
elements scalability is predicated on .

we must determine whether scale is
worth the costs it seeks to hide.

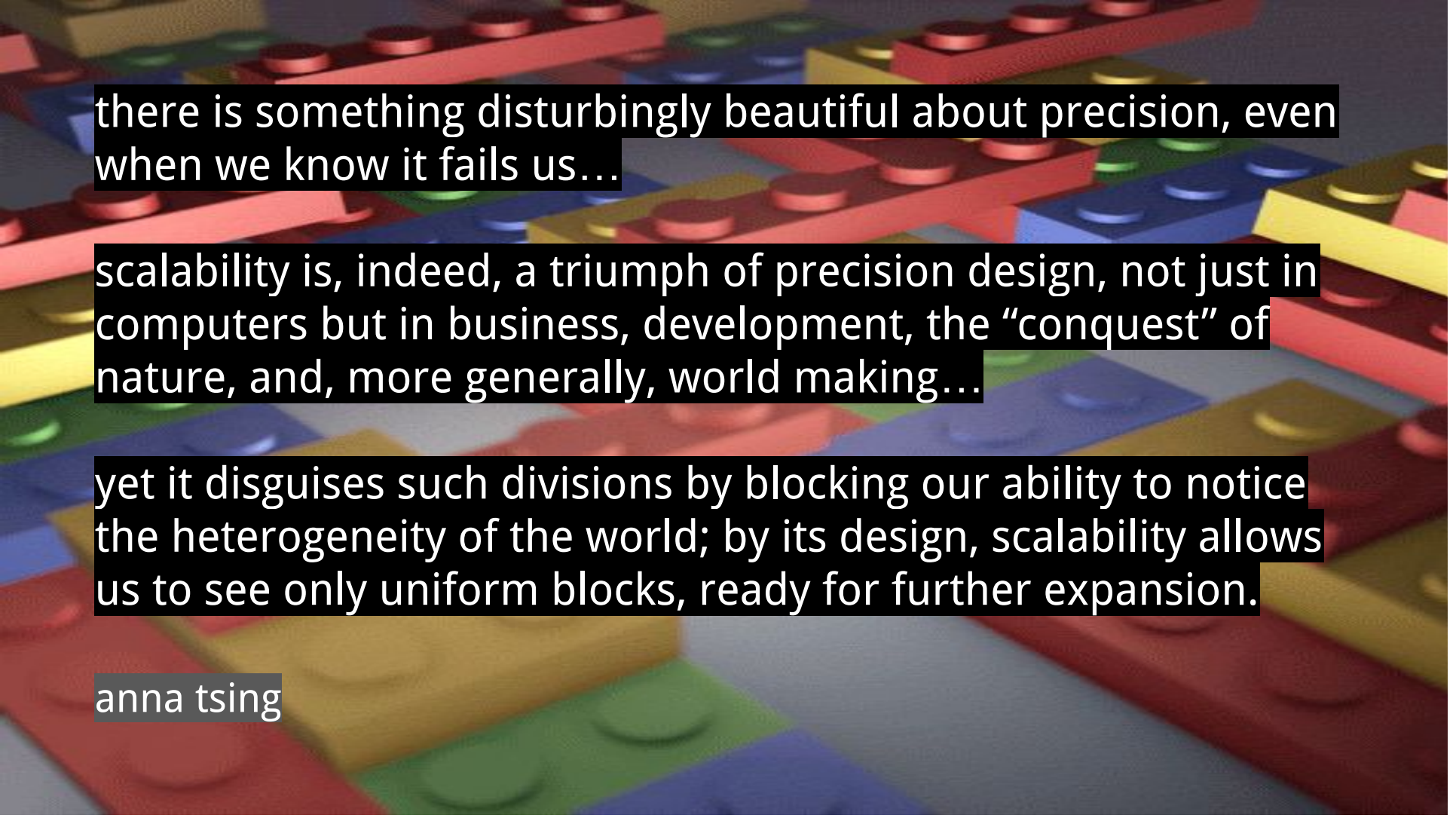


ON NONSCALABILITY

The Living World Is Not Amenable to Precision-Nested Scales

Anna Lowenhaupt Tsing

There is something disturbingly beautiful about precision, even when we know it fails us. A century ago, people stood awestruck at the terrible precision of the factory; today it is the precision of the computer. Precision has mesmerized not just engineers but all kinds of designers, scholars, and observers. One arena where precision has gained a malevolent hegemony is the use of scale. As in digital media, with its power to make the great tiny and the tiny great in an effortless zoom, *scale* has become a verb that requires precision; to scale well is to develop the quality called *scalability*, that is, the ability to expand—and expand, and expand—without rethinking basic elements. Scalability is, indeed, a triumph of



there is something disturbingly beautiful about precision, even when we know it fails us…

scalability is, indeed, a triumph of precision design, not just in computers but in business, development, the “conquest” of nature, and, more generally, world making…

yet it disguises such divisions by blocking our ability to notice the heterogeneity of the world; by its design, scalability allows us to see only uniform blocks, ready for further expansion.

anna tsing

FLAKES
FLAKES
FLAKES
BONUS

BONUS
FLAKES

BONUS
FLAKES

BONUS
FLAKES

scalable projects are everywhere linked with nonscalable worlds.

anna tsing

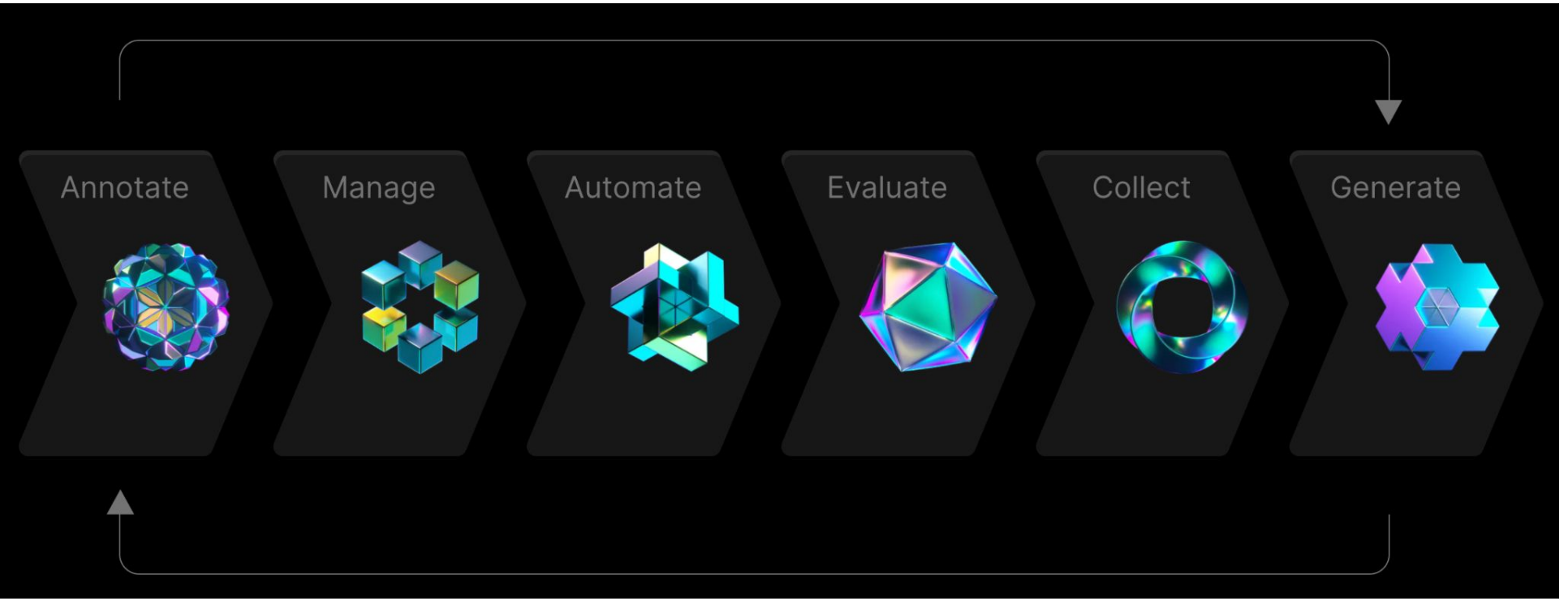
BRIEF

AI spend rises as enterprises solve for scale, adoption

Neurala raises $12M to scale for AI for manufacturing

The Next Generation AI

From Language to Models to Scale



scale.com

heterogeneity becomes a problem to solve rather than an opportunity to engage with.

Abeba Birhane
@Abebab

Our (@radical_ai_, @dallascard, @willie_agnew, @DotanRavit, @TheMichelleBao & I) preprint is up on ArXiv (paper currently under review)

Paper: The Values Encoded in Machine Learning Research arxiv.org/abs/2106.15590

Machine learning (ML) currently exerts an outsized influence on the world, increasingly affecting communities and institutional practices. It is therefore critical that we question vague conceptions of the field as value-neutral or universally beneficial, and investigate what specific values the field is advancing. In this paper, we present a rigorous examination of the values of the field by quantitatively and qualitatively analyzing 100 highly cited ML papers published at premier ML conferences, ICML and NeurIPS. We annotate key features of papers which reveal their values: how they justify their choice of project, which aspects they uplift, their consideration of potential negative consequences, and their institutional affiliations and funding sources. We find that societal needs are typically very loosely

ations and funding sources. We find that societal needs are typically very loosely connected to the choice of project, if mentioned at all, and that consideration of negative consequences is extremely rare. We identify 67 values that are uplifted in machine learning research, and, of these, we find that papers most frequently justify and assess themselves based on performance, generalization, efficiency, researcher understanding, novelty, and building on previous work. We present extensive textual evidence and analysis of how these values are operationalized. Notably, we find that each of these top values is currently being defined and applied with assumptions and implications generally supporting the centralization of power. Finally, we find increasingly close ties between these highly cited papers and tech companies and elite universities.

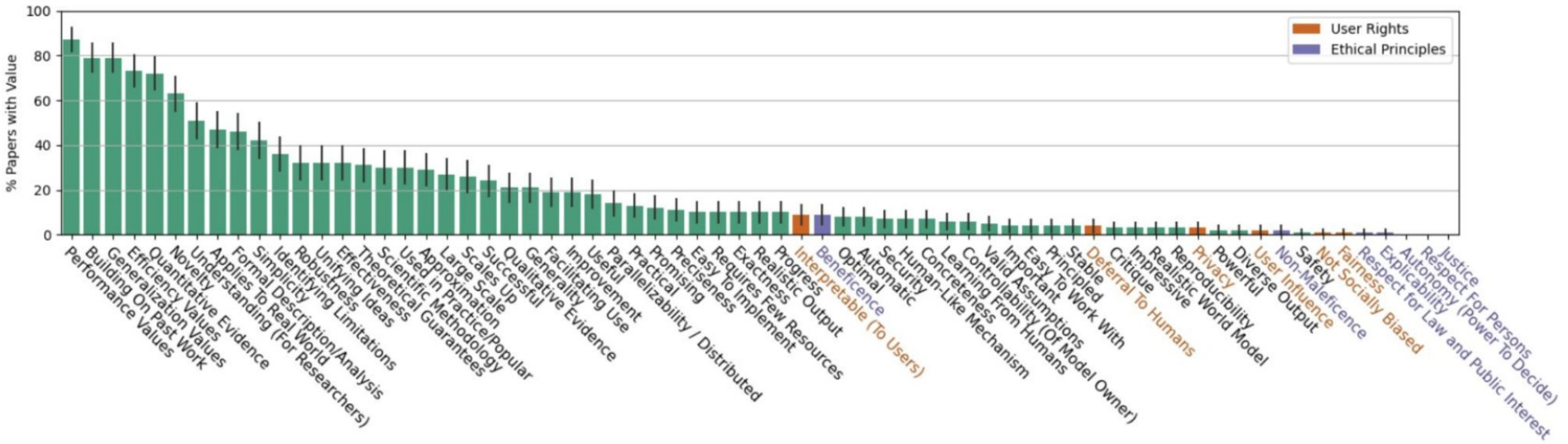
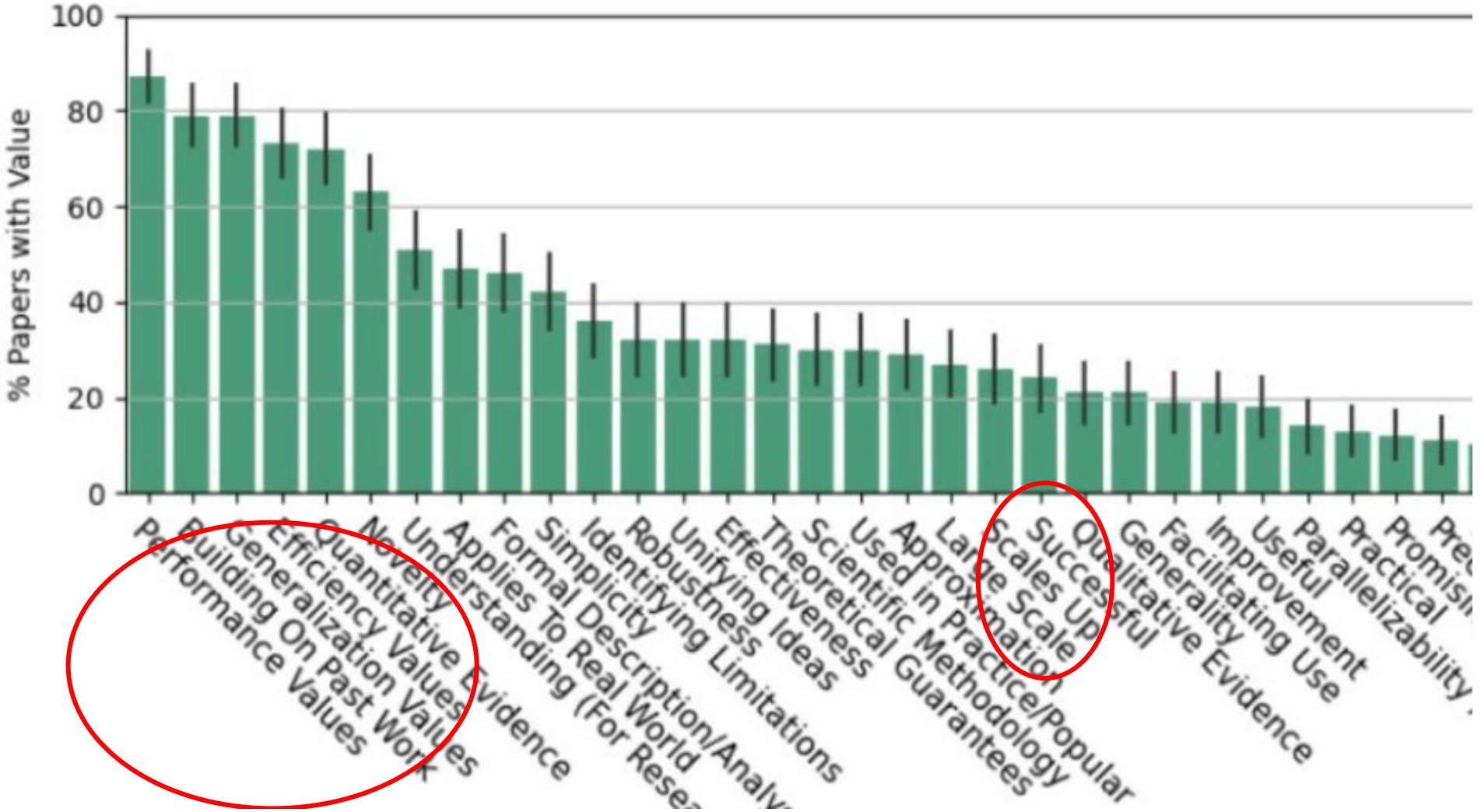
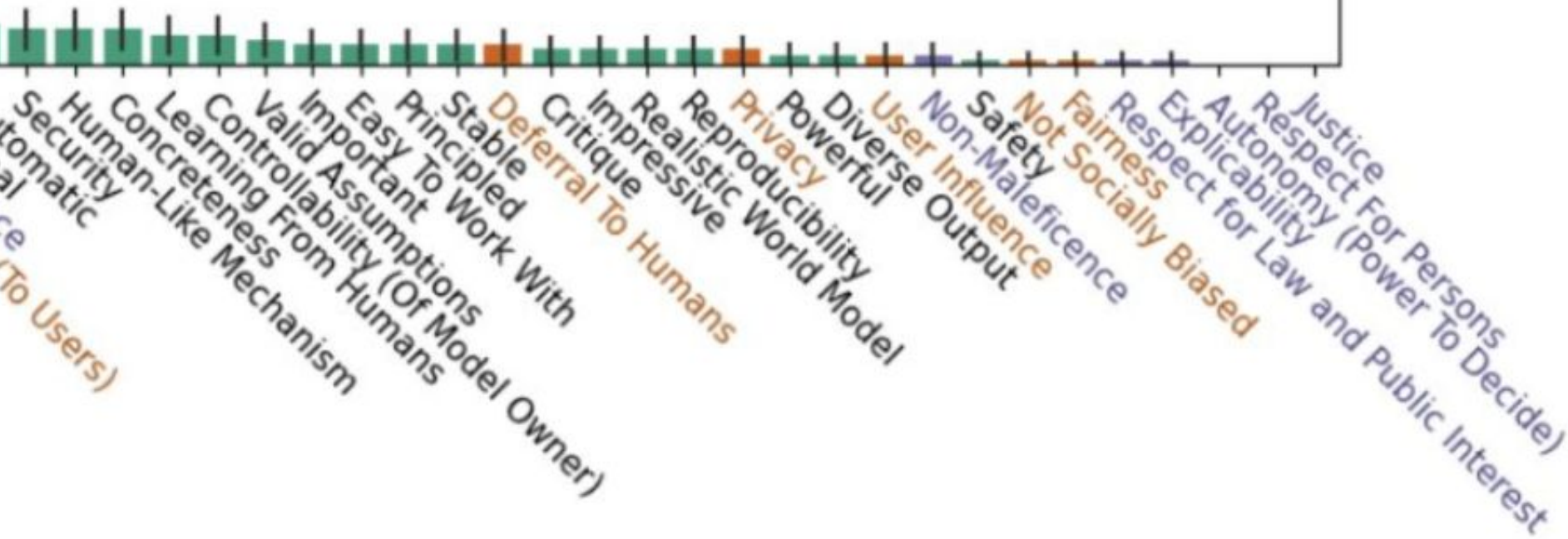


Figure 1: Proportion of annotated papers that uplifted each value.


% Papers with Value
100
80
60
40
20
0
Performance Values
Building On Past Work
Generalization Values
Efficiency Values
Quantitative Evidence
Novelty
Understanding (For Rese
Applies To Real World
Formal Description/Analy
Simplicity
Identifying Limitations
Robustness
Unifying Ideas
Effectiveness
Theoretical Guarantees
Scientific Methodology
Used in Practice/Popular
Approximation
Large Scale
Scales Up
Successful
Qualitative Evidence
Generality
Facilitating Use
Improvement
Useful
Parallelizability
Practical
Promisi


Justice
Respect For Persons
Autonomy (Power To Decide)
Explicability
Respect for Law and Public Interest
Fairness
Not Socially Biased
Non-Maleficence
Safety
User Influence
Diverse Output
Powerful
Reproducibility
Privacy
Realistic World Model
Impressive
Critique
Deferral To Humans
Stable
Principled
Easy To Work With
Important
Valid Assumptions
Controllability (Of Model Owner)
Learning From Humans
Concreteness
Human-Like Mechanism
Security
Automatic
To Users)

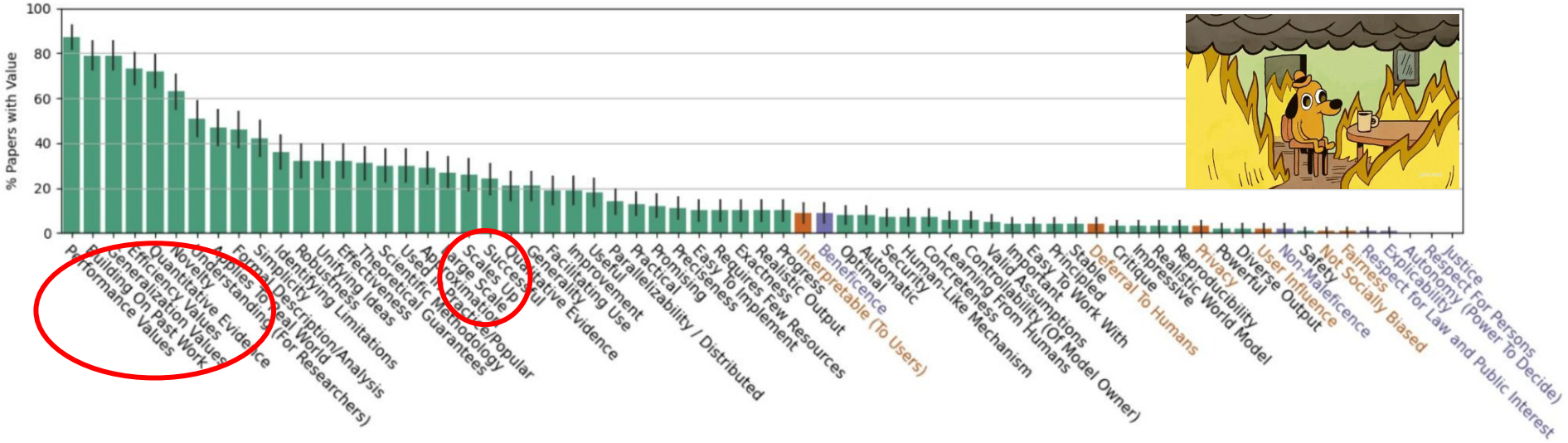


Figure 1: Proportion of annotated papers that uplifted each value.

Study finds gender and skin-type bias in commercial artificial-intelligence systems

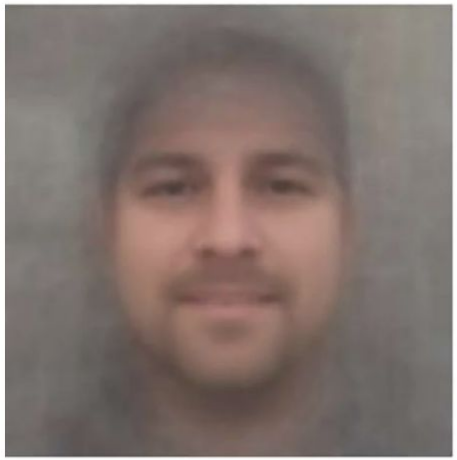
Examination of facial-analysis software shows error rate of 0.8 percent for light-skinned men, 34.7 percent for dark-skinned women.

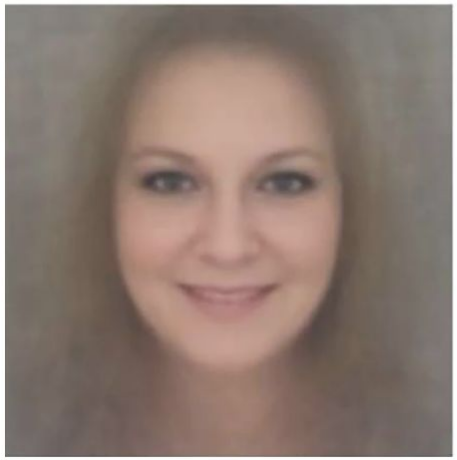
Watch Video

Larry Hardesty | MIT News Office

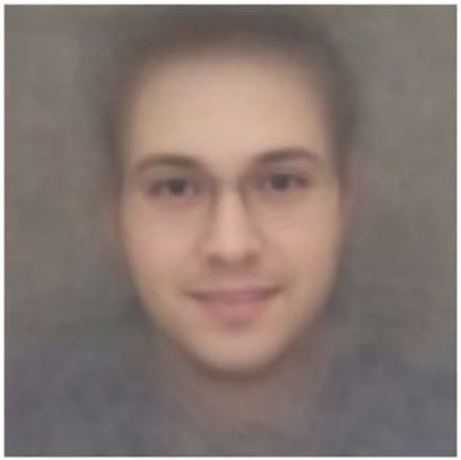
February 11, 2018

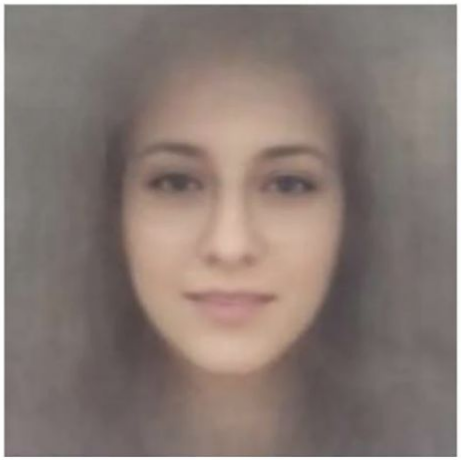
Composite heterosexual faces



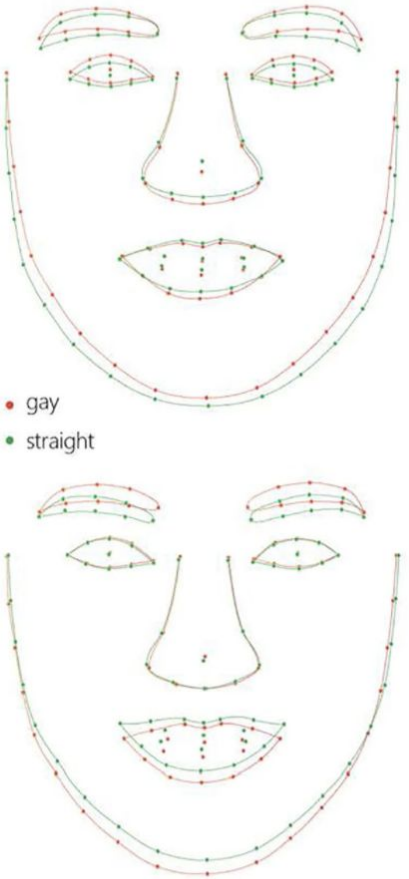


Composite gay faces





Average facial landmarks



ARTICLE OPEN ACCESS

On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? 🦜

Authors: Emily M. Bender, Timnit Gebru, Angelina McMillan-Major, Shmargaret Shmitchell

Authors Info & Affiliations

In this paper, we take a step back and ask: How big is too big? What are the possible risks associated with this technology and what paths are available for mitigating those risks? We provide recommendations including weighing the environmental and financial costs first, investing resources into curating and carefully documenting datasets rather than ingesting everything on the web, carrying out pre-development exercises evaluating how the planned approach fits into research and development goals and supports stakeholder values, and encouraging research directions beyond ever larger language models.

TOM SIMONITE BUSINESS 12.08.2020 04:39 PM

Behind the Paper That Led to a Google Researcher's Firing

Timnit Gebru was one of seven authors on a study that examined prior research on training artificial intelligence models to understand language.

attention to the wild diversity of life on earth [requires] a theory of nonscalability

anna tsing

whenever we see a call for scalability
we must look for the nonscalable
elements scalability is predicated on .

we must determine whether scale is
worth the costs it seeks to hide.

nonscalability imperative

neoliberal traps

maintenance as innovation

as Hunt (1999, 2003) explains, one of the most common features of contemporary (neoliberal) moral regulation in everyday life is that ... judgements about right and wrong ways of thinking and acting are transmitted through ... proxies of risk, harm and personal responsibility.

sean p hier, moral panic and the new neoliberal compromise

emphasis on individual risks and collective harms is important. risk-based problems in everyday life are routinely addressed to entrepreneurial citizen-subjects who are assumed to be rationally motivated to take personal responsibility to proactively mitigate the likelihood of experiencing harm (Hier, 2017).

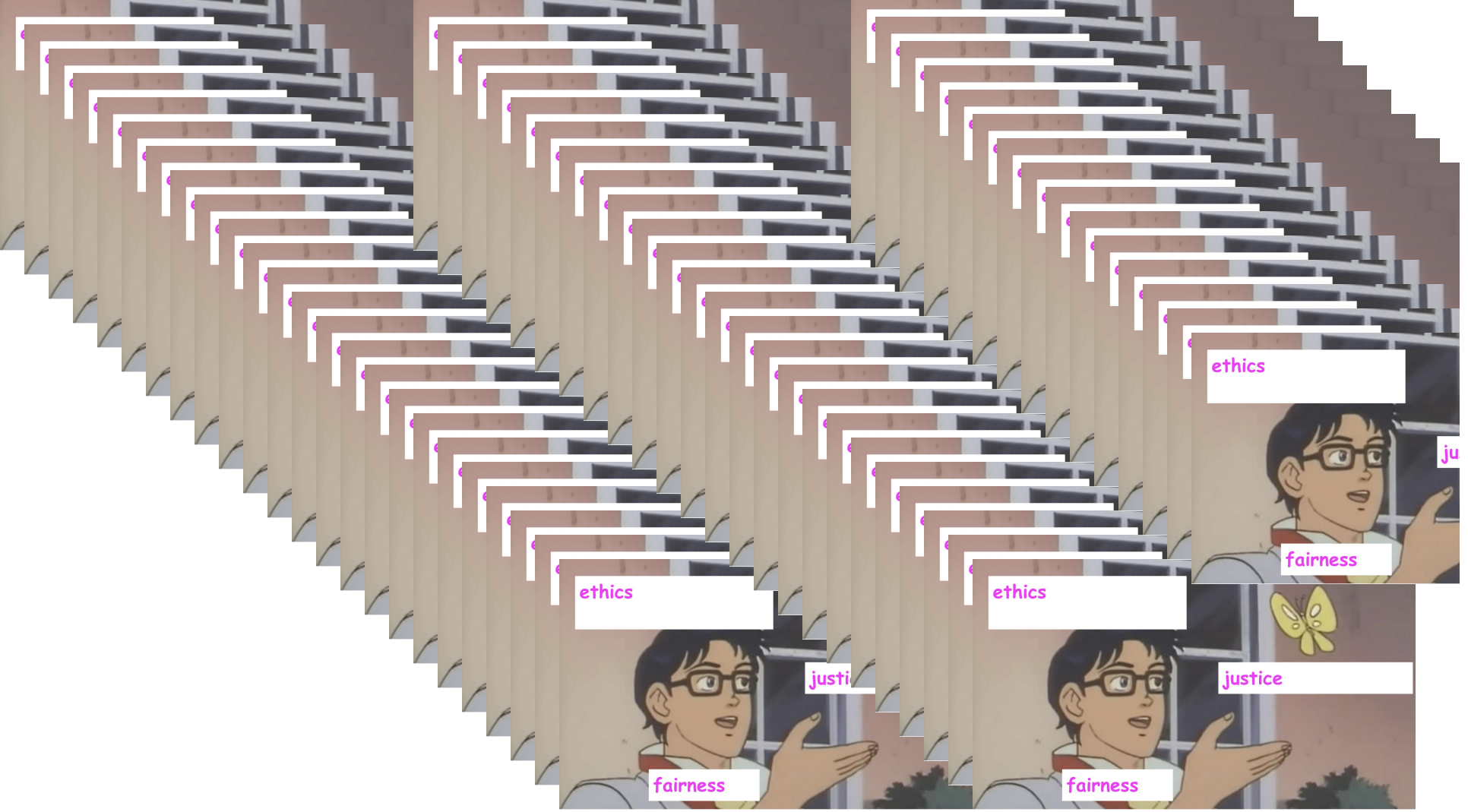
sean p hier, moral panic and the new neoliberal compromise

it’s a trap.

systemic issues require systematic
rather than individualized approaches.

positive and equitable AI
depends on collective action.

ethical...?
values...?
fair...?


ethics
fairness
ethics
justi
fairness
ethics
fairness
ethics
justice
fairness

unfair.

ineffective.

less potential for increasing equity.

Pra

THE MUSEUMS + AI NETWORK

The impact of AI, machine learning, automation and robotics on the information professions

A report for CILIP

Responsible Operations: Data Science, Machine Learning, and AI in Libraries

Thomas Padilla
Practitioner Researcher in Residence

Professor Melissa Terras

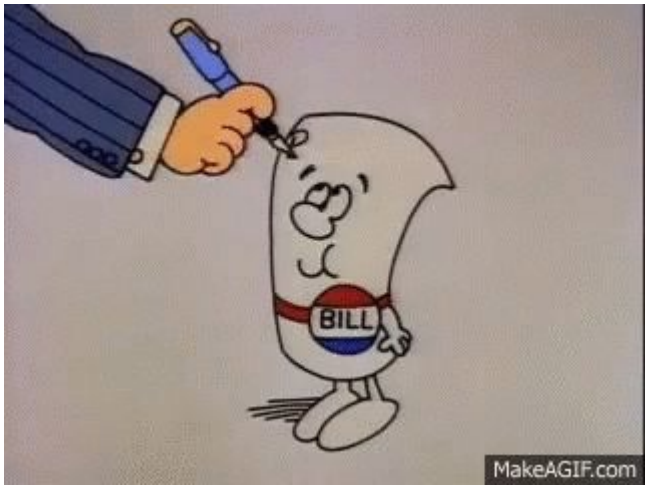
EFI Research Director

Edinburgh Research Explorer profile

m.terras@ed.ac.uk

@melissaterras

Melissa Terras is the Professor of Digital Cultural Heritage at the University of Edinburgh's College of Arts, Humanities, and Social Sciences, which she joined in October 2017, leading digital aspects of research within CAHSS at Edinburgh, as well as building digital capacity in the new Edinburgh Futures Institute. Her research focuses on the use



thomas padilla, in edinburgh

SPARC
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EUROPEAN COMMISSION

Brussels, 21.4.2021

COM(2021) 206 final

2021/0106(COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

LAYING DOWN HARMONISED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) AND AMENDING CERTAIN UNION LEGISLATIVE ACTS

{SEC(2021) 167 final} - {SWD(2021) 84 final} - {SWD(2021) 85 final}

Michael Veale
@mikarv

New 📰: There's more to the EU AI regulation than meets the eye: big loopholes, private rulemaking, powerful deregulatory effects. Analysis needs connection to broad—sometimes pretty arcane—EU law

@fborgesius & I have done it so you don't have to: long 🧵
osf.io/preprints/soca...

Demystifying the Draft EU Artificial Intelligence Act

Michael Veale
Faculty of Laws, University College London, United Kingdom
Frederik Zuiderveen Borgesius
Interdisciplinary Hub for Security, Privacy and Data Governance, Radboud University, The Netherlands

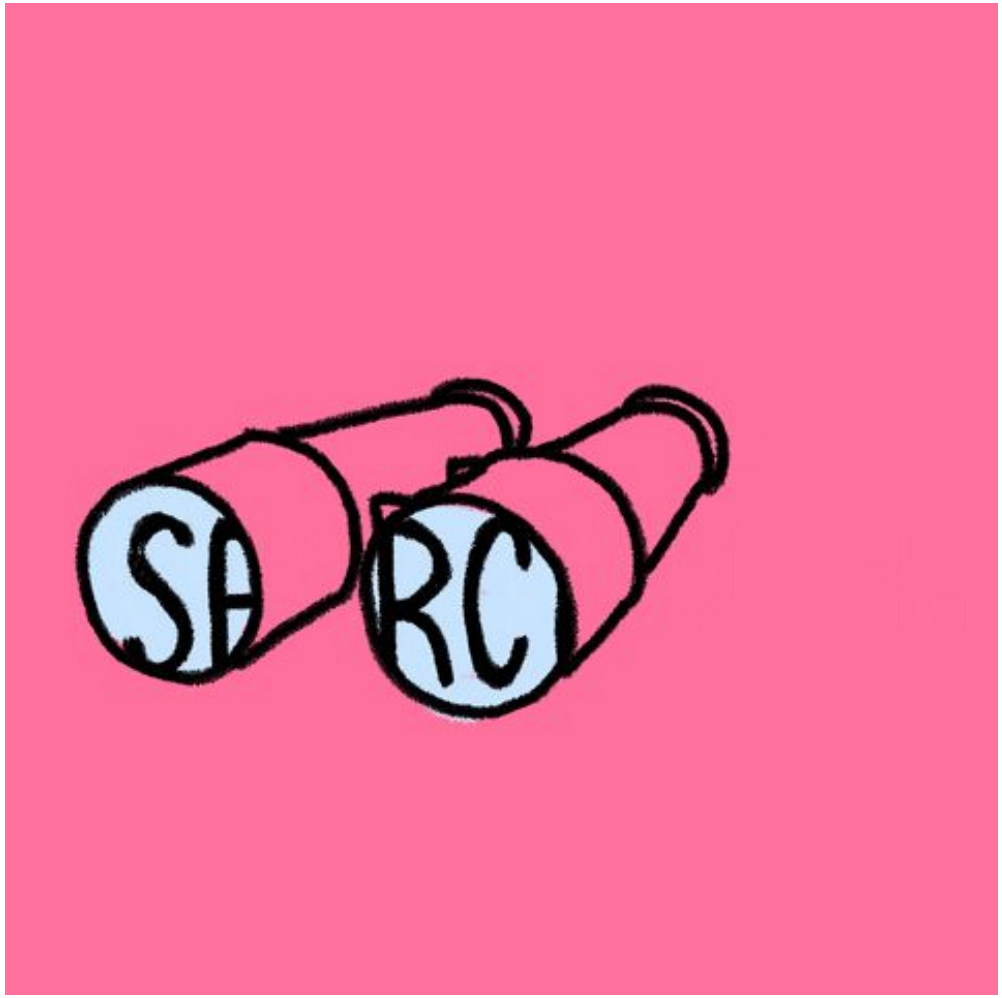
Pre-print, July 2021. Version 1.

Abstract In April 2021, the European Commission proposed a Regulation on Artificial Intelligence, known as the AI Act. We present an overview of the Act and analyse its implications, drawing on scholarship ranging from the study of contemporary AI practices to the structure of EU product safety regimes over the last four decades. Aspects of the AI Act, such as different rules for different risk-levels of AI, make sense. But we also find that some provisions of the draft AI Act have surprising legal implications, whilst others may be largely ineffective at achieving their stated goals. Several overarching aspects, including the enforcement regime and the effect of maximum harmonisation on the space for AI policy more generally, engender significant concern. These issues should be addressed as a priority in the legislative process.

library associations…

archive associations …

museum associations …



nonscalability imperative

neoliberal traps

maintenance as innovation

Information Maintenance as a Practice of Care

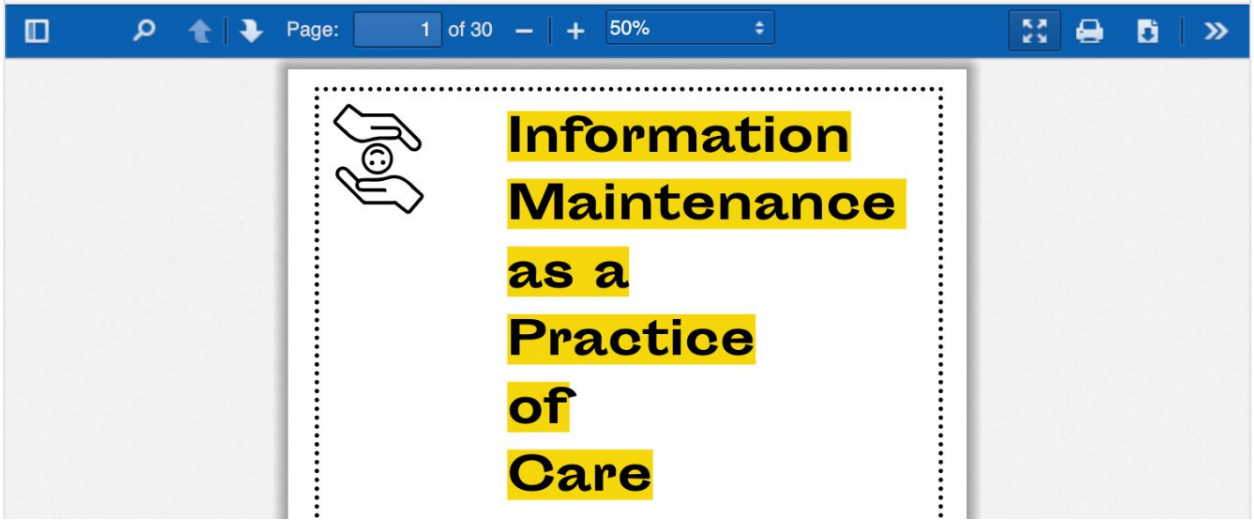
The Information Maintainers; Olson, D.; Meyerson, J.; Parsons, M. A.; Castro, J.; Lassere, M.; Wright, D. J.; Arnold, H.; Galvan, A. S.; Hswe, P; Nowviskie, B.; Russell, A.; Vinsel, L.; Acker, A.

Other(s)

Abreu, A.; Acey, C.; Albert, K.; Caron, B.; Cifor, M.; Dillo, I.; Drabinski, E.; Falcao, P.; Ferraiolo, N. K.; Gunn, S.; Goodman-Wilson, D.; Hudson, M.; Jones, C.; Ko, P.; Lau, A.; Mattern, S.; Mayernik, M.; McGovern, N.; Ndumu, A.; Neal, J. C.; Owens, T.; Rodriguez, S.; Russo Carroll, S.; Shorish, Y.; Tansey, E.; Tillman, R.; Wickner, A.; Weber, C.; Williams, S.; Yarmey, L.

An invitation to participate in a broad ranging discussion that infuses information maintenance with practices, relationships, and ways of thinking and being that represent a coherent ethic of care.

Preview



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OpenAIRE

Publication date:
June 17, 2019

DOI:
DOI 10.5281/zenodo.3251131

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Versions

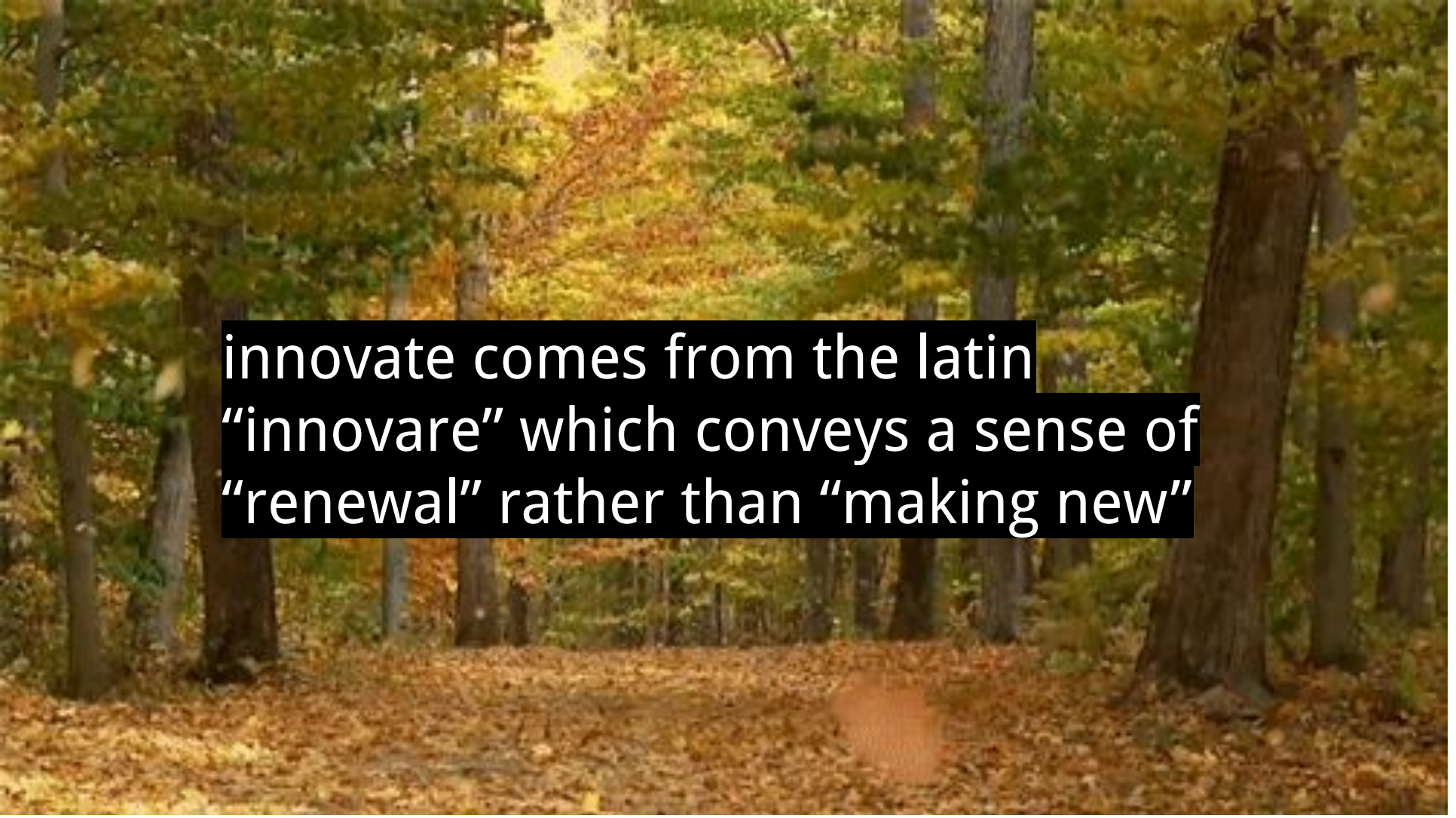
Version 2 Jun 17, 2019

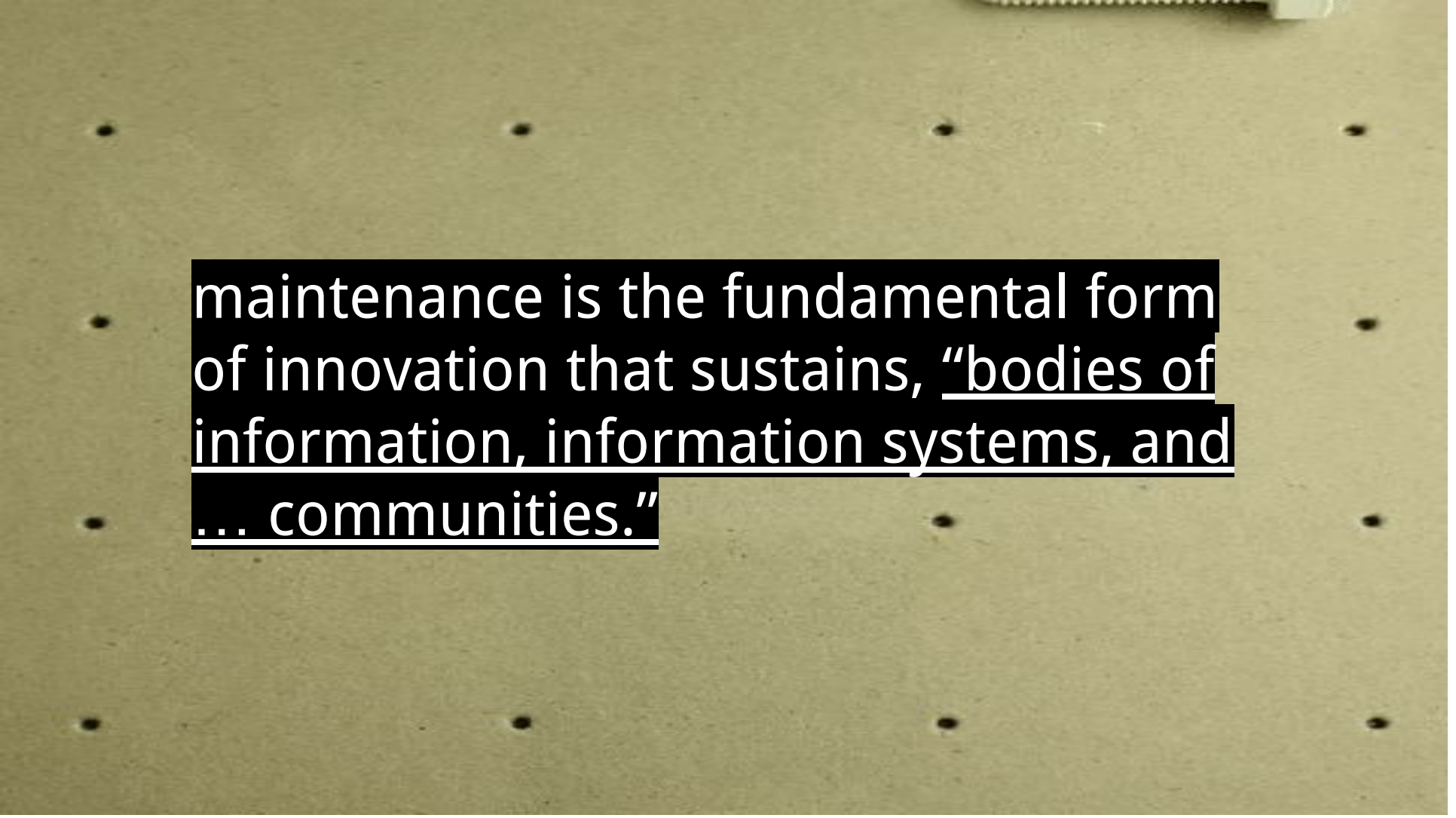
asserted dichotomies between maintenance and innovation don’t make sense.

counterproductive.

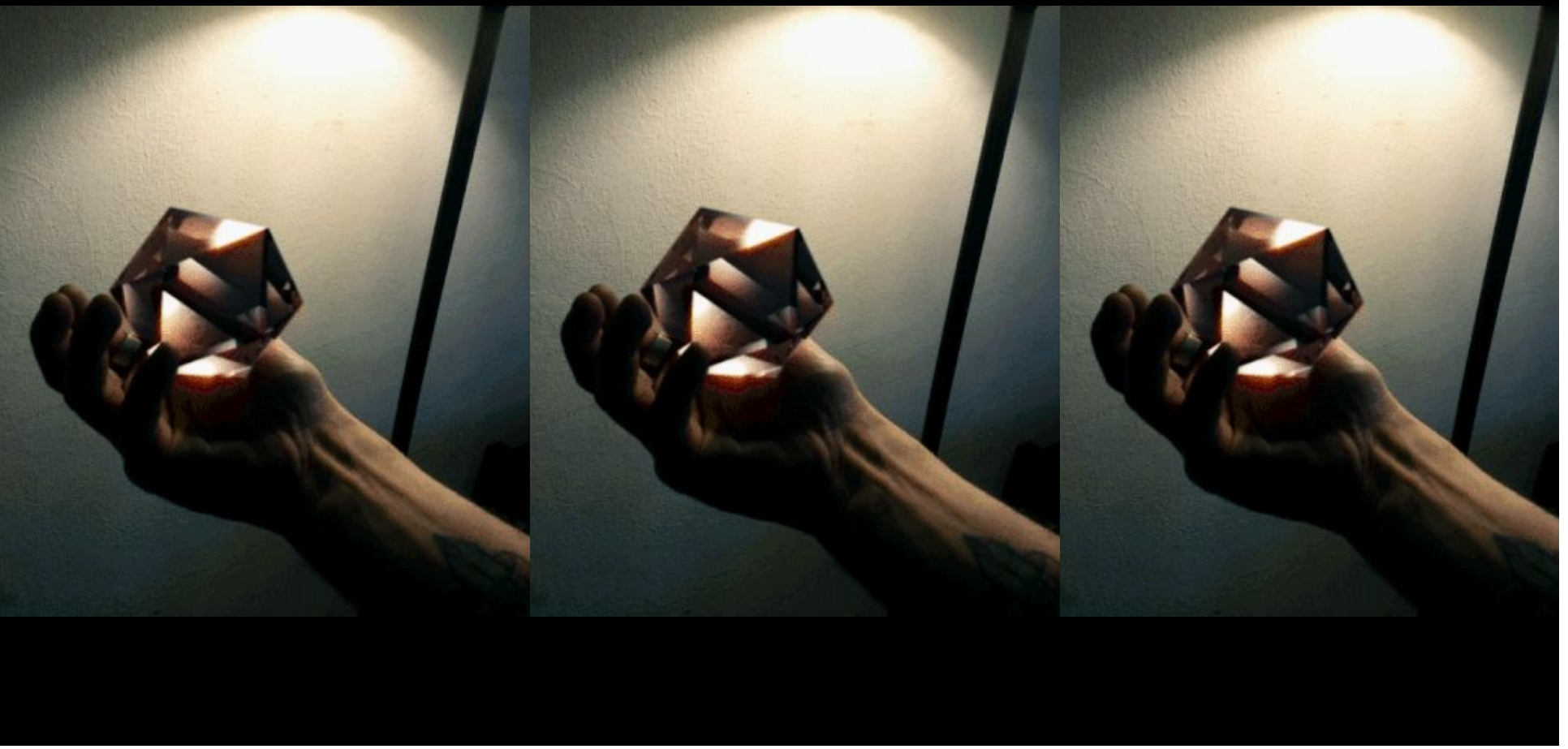
sets us against eachother.

we must value maintenance as innovation.


innovate comes from the latin
“innovare” which conveys a sense of
“renewal” rather than “making new”


maintenance is the fundamental form of innovation that sustains, “bodies of information, information systems, and … communities.”

SMURFS



we must value maintenance as innovation.

keep true

three strategies to guide AI engagement

thomas padilla, @thomasgpadilla

nonscalability imperative

neoliberal traps

maintenance as innovation

q&a

thomas padilla, @thomasgpadilla