

Why AI Needs the Humanities

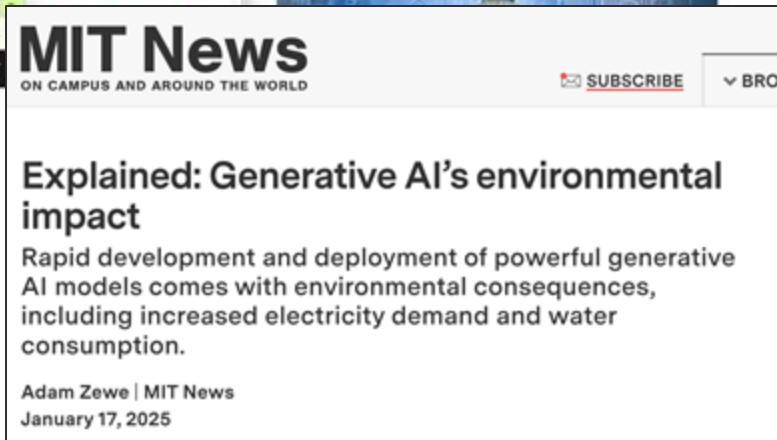
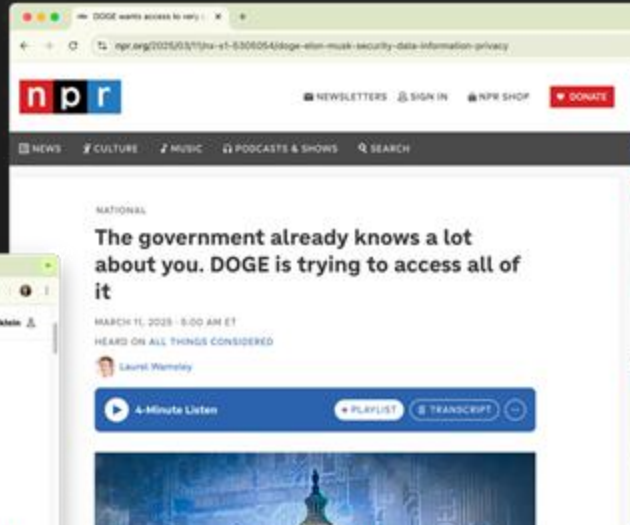
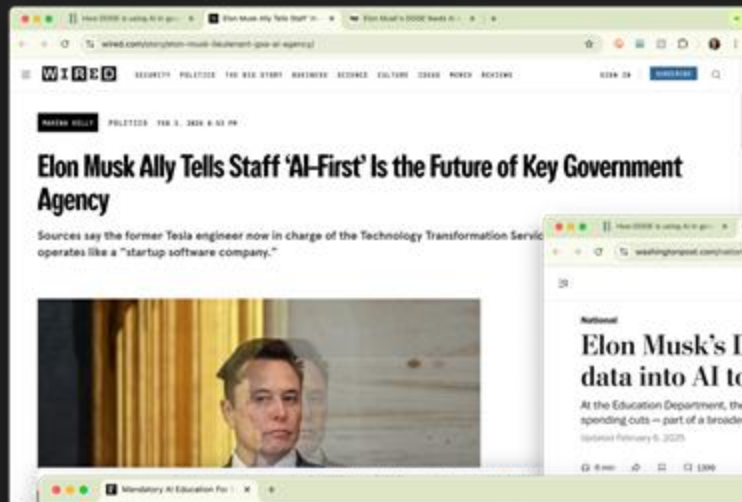
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An Incomplete List of Missing Data Sets

This list will always be incomplete, and is designed to be illustrative rather than comprehensive, from the perspective of the U.S, though the complete list of datasets featured

- Civilians killed in encounters with police or law enforcement agencies [
- Sales and prices in the art world (and relationships between artists and
- People excluded from public housing because of criminal records
- Trans people killed or injured in instances of hate crime (note: existing
- Poverty and employment statistics that include people who are behind
- Muslim mosques/communities surveilled by the FBI/CIA
- Mobility for older adults with physical disabilities or cognitive impairme
- LGBT older adults discriminated against in housing
- Undocumented immigrants currently incarcerated and/or underpaid
- Undocumented immigrants for whom prosecutorial discretion has been
- Measurements for global web users that take into account shared devi
- Firm statistics on how often police arrest women for making false rape
- Master database that details if/which Americans are registered to vote
- Total number of local and state police departments using stingray phor
- How much Spotify pays each of its artists per play of song
-

The Library of Missing Datasets by Mimi Onuoha, 2016.

Data Problem: Unequal Power

“Silences enter the process of historical production at four crucial moments: the moment of fact creation [the making of *sources*]; the moment of fact assembly [the making of *archives*]; the moment of fact retrieval [the making of *narratives*]; and the moment of retrospective significance [the making of *history*] in the final instance.”

Michel-Rolph Trouillot, *Silencing the Past*

Data Problem: Missing Data

When art meets big data: Analyzing 200,000 items from The Met collection in BigQuery



RESEARCH ARTICLE | OCTOBER 01 2023

The Photographic Pipeline of Machine Vision; or, Machine Vision's Latent Photographic Theory **FREE**

Nicolas Malevé; Katrina Sluis

Critical AI (2023) 1 (1-2)



Generated images of “Islamic art,” from “Colonial Legacies of AI Datasets,” Rida Qadri, Fuchsia Hart, Huma Gupta, Katrina Sluis, and Lauren Klein (2023)

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Nikhil Chopra Sleeps at the Met and Uncovers its Colonial Past

The artist's nine-day performance in the museum's galleries ties the migration of peoples and objects to the systems that control and classify them

Data Problem: Unequal Power

Biased Training Data in Large Language Models

THE LANCET

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PERSPECTIVES | The art of medicine - Volume 404, Issue 10468, P2154-2155, November 30, 2024 [Download Full Issue](#)

Clinician as editor: notes in the era of AI scribes

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Show Outline

>> Every clinician has a strategy. Between patients, before going home, late at night—clinical notes must be written. They are essential for recording patient visits, ensuring continuity of care, arriving at accurate diagnoses, and facilitating communication between doctors, as well as providing medico-legal protection and enabling reimbursement. But these notes are increasingly burdensome to write, thanks in part to the electronic health record (EHR). Artificial intelligence (AI) scribes—computational systems that record clinical encounters and produce narrative summaries—promise much-needed help. Indeed, in many settings, health-care organisations are already adopting this technology. Nevertheless, AI scribes arrive at a moment when the note has already been changing, with legislation increasingly granting patients access to their medical records. Given AI scribes' promised disruption, it is crucial to consider what clinical notes are and what we want them to be.

Careless Whisper: Speech-to-Text Hallucination Harms

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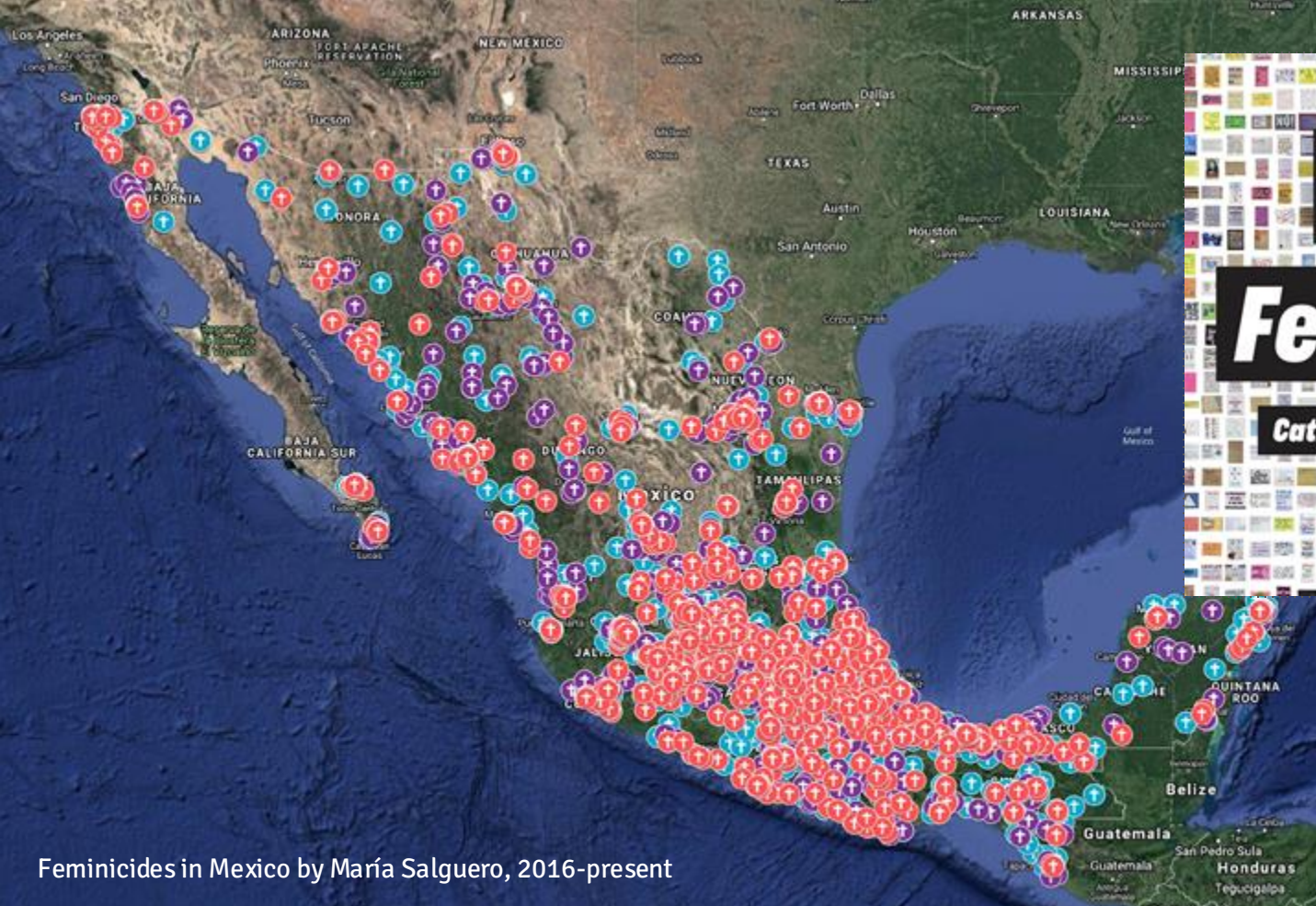
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Potential challenges for documentation of the narrative	Explanation	Examples of kinds of AI-written text
"Hallucinations"	AI scribe documents events that did not occur, especially in the Plan section, such as recommendations that are reasonable but never happened	"Provider counseled patient about side effects of medications including dry mouth and drowsiness" [counseling which did not occur]
Generative instead of only summative	AI scribe makes diagnostic suggestions based on the history	"These symptoms suggest a mood disorder such as bipolar or borderline personality disorder"
Specific word choice	The word used by AI is common in medical practice but feels potentially judgemental or unclear to the clinician	Each line of the history begun with "Patient Reports..." which is true of all narratives reported by the patient "The patient admits to alcohol use"
Includes details not appropriate to the EMR	Can document an issue that the provider thinks the patient may not want documented in the EMR or could be potentially harmful	A patient discusses a particular conflict in their life unrelated to their health
Omits important details	AI scribe may deem an important part of the narrative not important and omits it	A patient describing chest pain, and the time course is omitted by the summary
Speech to text transcription problem	Patient narrative AI summary is incorrect because the initial	The summary mistranscribed the number of days an illness is

Data Problem: Unequal Power



Femicides in Mexico by María Salguero, 2016-present

#NiUnaMenos

Intervention: Challenge Power with Counterdata

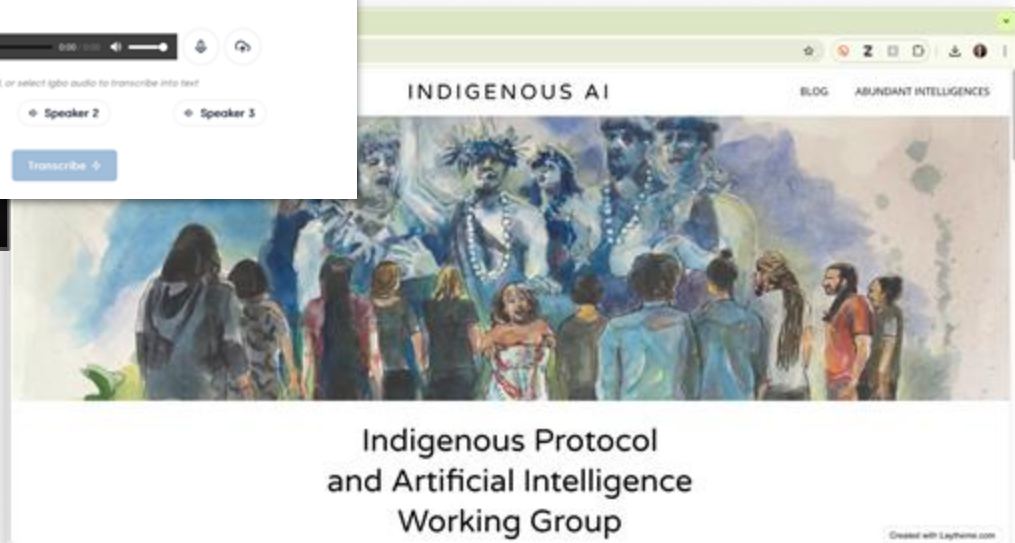
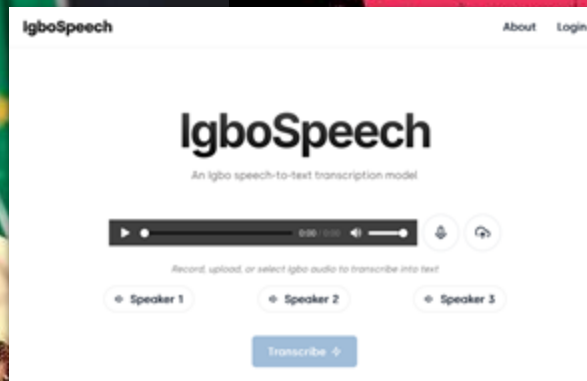
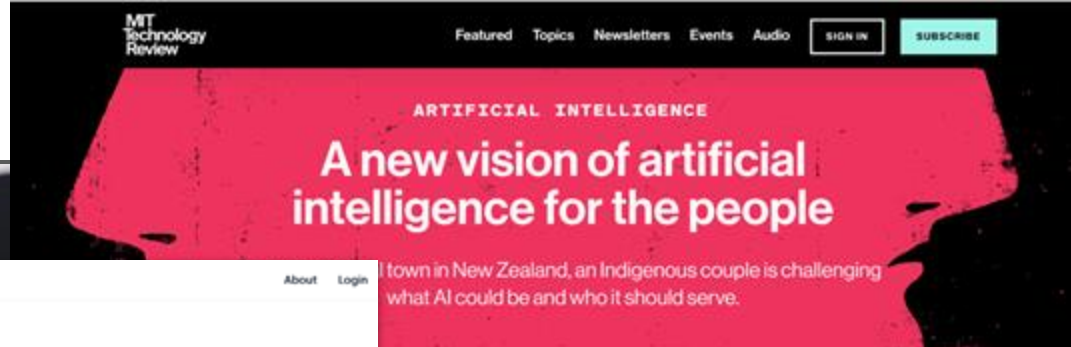
Data Problem: Unequal Power



Above: Dr. Vukosi Marivate on “A New Agenda for African Languages x AI” and his company, Masakhane NLP.

Top right: Karen Hao on attempts to create a Māori language model.

Bottom right: The Indigenous Protocol and Artificial Intelligence Working Group.



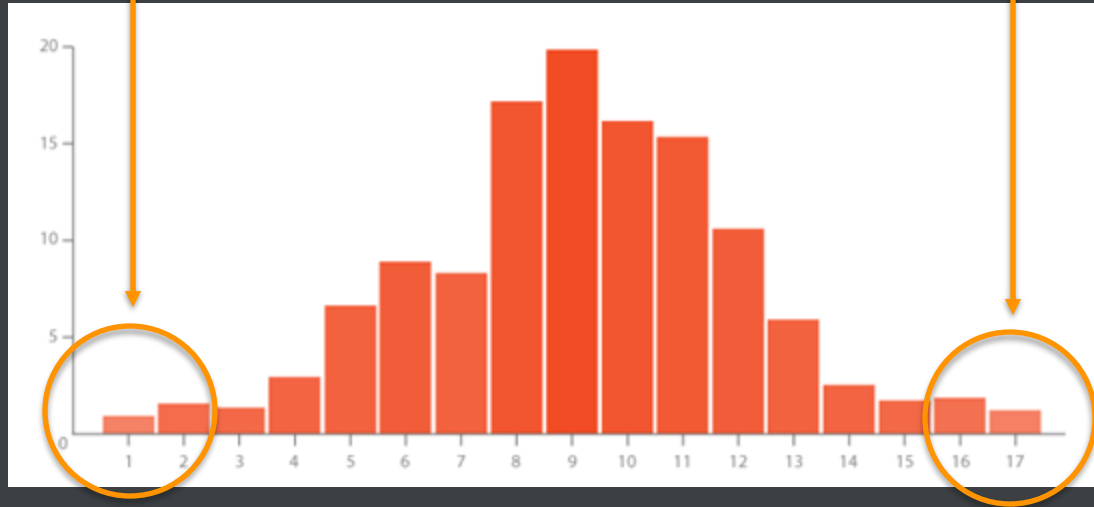
Intervention: Challenge Power with Counterdata

Participatory processes for data science & AI

Feminist design prioritizes the participation of people who have been most marginalized by the system

Feminist design

Feminist design



We center the voices of those who are directly impacted by the outcomes of the design process. – Design Justice Network

Intervention: Involve Communities in Project Design

AI co-design for maternal healthcare

Foundations of Responsible NLP Use for Maternal Health Equity



What does that mean for my NLP tool/study?

- Include surveys and user studies throughout your research and design process.
- Where possible, include women and birthing people and health care professionals in your research team.
- Incorporate literature written by women and birthing people and learn from related work about the birthing experiences, plus perspectives and needs.
- This doesn't mean placing all the responsibility on women or birthing people or designing only for the birthing person. Part of supporting maternal health equity is encouraging support from the birthing person's partner, family, and health care team.
- Be gender inclusive. Don't automatically predict the gender of study subjects and remember to include the concerns of trans people in your study design. Use gender inclusive language and follow the [HCI Guidelines for Gender Equity and Inclusivity](#). For insight into the birthing experiences of LGBTQIA+ community [see here](#).




Hold onto the human: empathy, emotion, relationships, and complexity.

Maternal health revolves around meaningful events that can forge, strengthen, and test the human relationships between the birthing person,

AI co-design with 12 groups



1. **Should we build anything?**
 - Co-design workshops
2. **What should we build?**
 - Co-design workshops
3. **How can we bake your language and context into ML models?**
 - Participatory data annotation sessions with workshops to debrief
4. **How are the tools working for your group?**
 - 3 month pilots with surveys and workshops to debrief
5. **How can we continue to support you?**
 - WhatsApp groups and annual events

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Intervention: Involve Communities in Project Design

How to dismantle binary structures of power in two basic steps:



Step 1:
Topple the
hierarchy



Step 2:
Smash the
binary



Intervention: Resist AI Hype

AI systems have an aura of objectivity

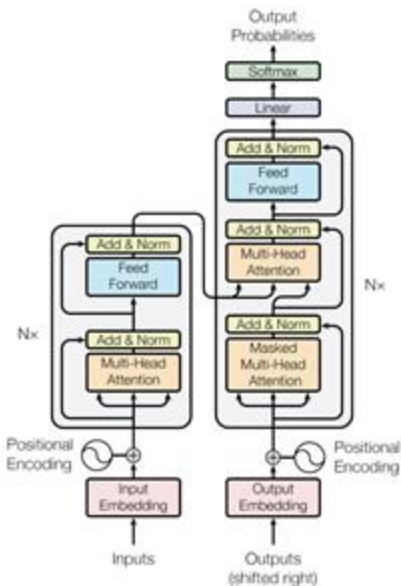


Figure 1: The Transformer - model architecture.

“Modern AI chatbots are not magical artifacts without precedent in human history. They are not producing something out of nothing. They do not reveal insights into the laws that govern human consciousness and our physical universe. They are industrial-scale knowledge sausages.”

– Theodore Kim, in *The Los Angeles Times*

“When we peel back the black box metaphor, we see how it is mobilized to release developers from accountability: if the model is a black box, how can they be responsible for what happens inside it?”

– Nia Judelson and Maggie Dryden, in *Critical AI*

“The Transformer Architecture,” from *Attention Is All You Need* (Vaswani et al. 2017)

Intervention: Resist AI Hype

Is *AI* inevitable?

“It is not inevitable that AI will lead to great public benefits. The outcomes that many of us hope for, or anticipate, are not inherent features of the technology itself.”

–Dr. Alondra Nelson

“These benefits will not emerge only from the invisible hand of market dynamics. They must be cultivated in partnership with civil society and with our democratic institutions. And most critically, AI in the public interest demands the meaningful involvement of the very people whose lives could be transformed by these technologies.”

Doing AI Differently

- Informed and intentional training data creation
examine power
- Models created and kept in communities
challenge power
- Participatory processes, nonextractive relationships
embrace pluralism
- AI Humility over AI Hype
rethink binaries
- All with the humanities as our guide...



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datafeminism.io

Thanks & be in touch!

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