How can AI be used for Social Good?

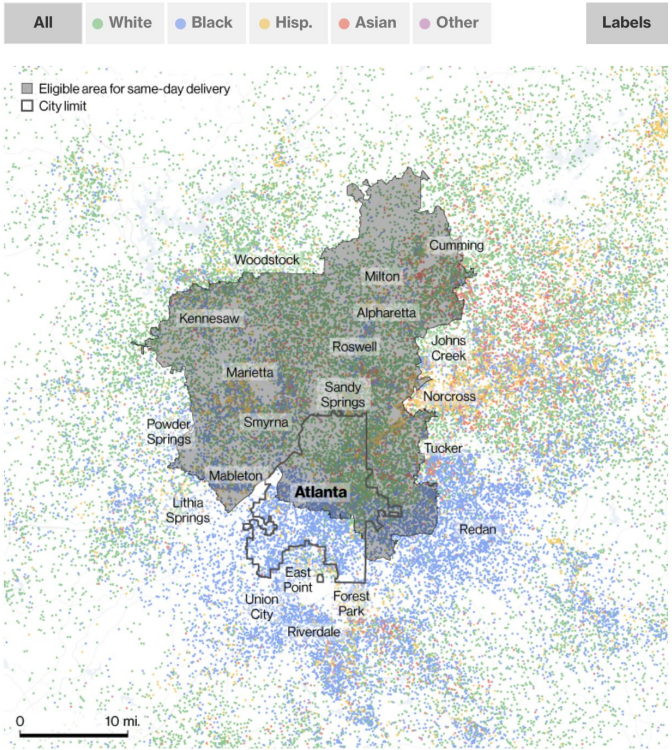
Sharath Srinivasan
Executive Director/Co-Founder, Africa's Voices Foundation; Co-Director, CGHR, Cambridge

Luke Church
Director of Innovation & Learning, Africa's Voices Foundation; Affiliated Lecturer, Computer Laboratory, Cambridge

AFRICA'S VOICES

UNIVERSITY OF CAMBRIDGE

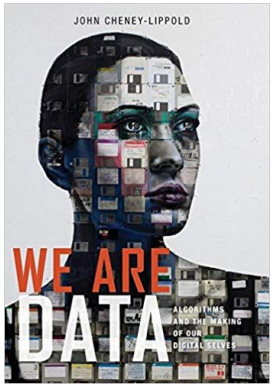
The moral toxicity of the tech industry

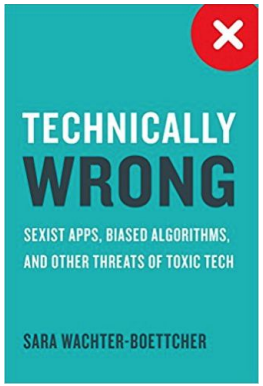


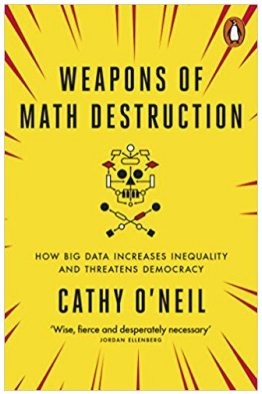
Algorithmic selection of where to offer a service

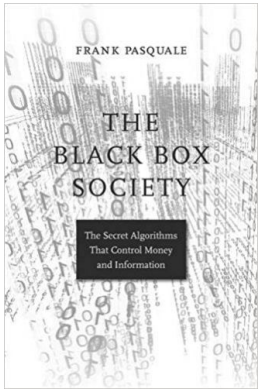
https://www.bloomberg.com/graphics/2016-amazon-same-day/

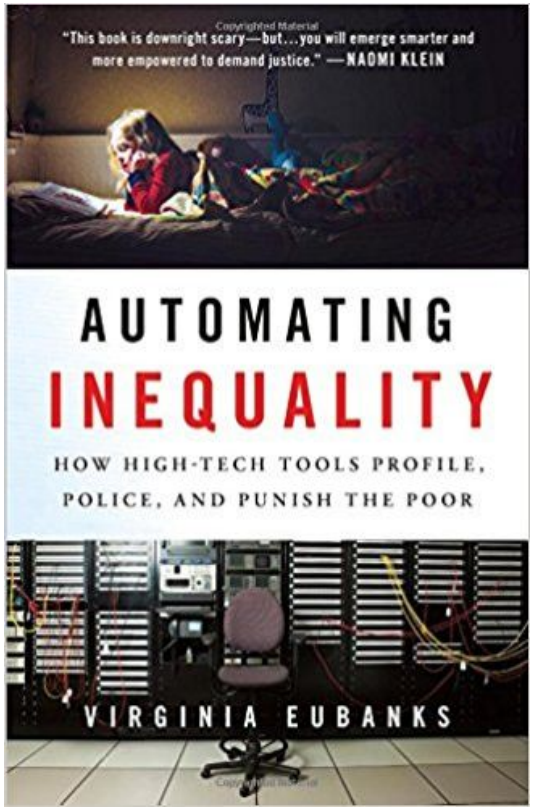
An isolated incident?

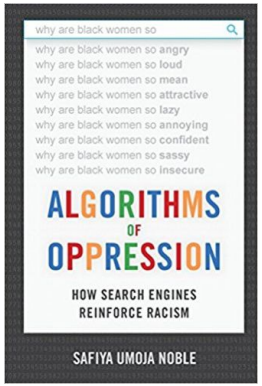


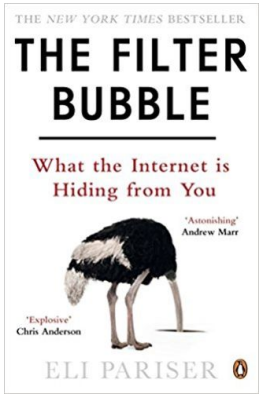


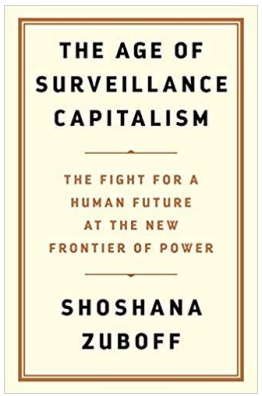


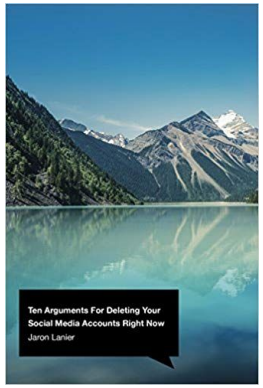




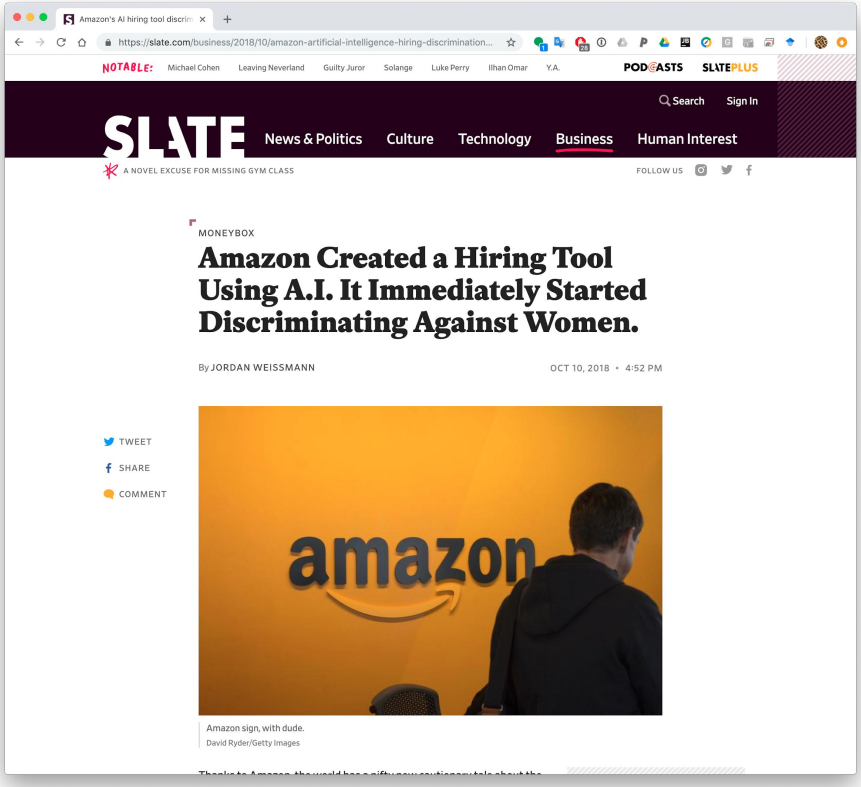








2 years later



Algorithmic selection of whom to offer a job to

https://slate.com/business/2018/10/amazon-artificial-intelligence-hiring-discrimination-women.html

Digital anxieties for social scientists

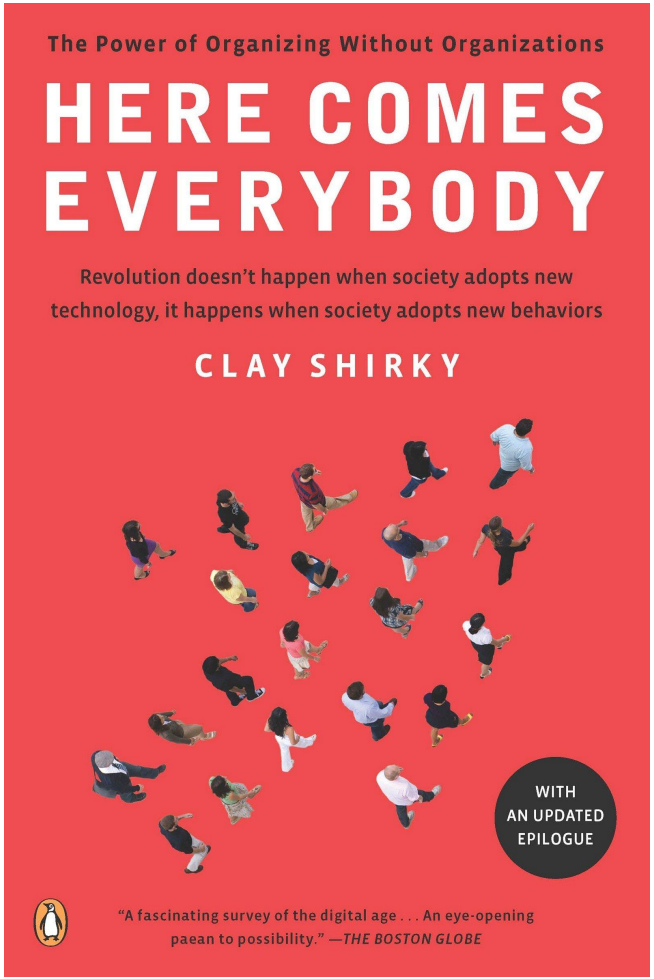
‘Everybody’ is a data collector
Everybody is an analyst
Everybody is a researcher
Everybody is an expert … or nobody is … or

only the Kings of Computation are...

This is a world where massive amounts of data and applied mathematics replace every other tool that might be brought to bear. Out with every theory of human behavior, from linguistics to sociology. Forget taxonomy, ontology, and psychology. Who knows why people do what they do? The point is they do it, and we can track and measure it with unprecedented fidelity. With enough data, the numbers speak for themselves. … The big target here isn't advertising, though. It's science.

Correlation supersedes causation, and science can advance even without coherent models, unified theories, or really any mechanistic explanation at all.

There's no reason to cling to our old ways. It's time to ask: What can science learn from Google? - Chris Anderson, WIRED, 23.06.2008



A futile or dangerous quest?

“That’s another thing we’ve learned from your Nation,” said Mein Herr, “map-making. But we’ve carried it much further than you. What do you consider the largest map that would be really useful?”

“About six inches to the mile.”

“Only six inches!” exclaimed Mein Herr. “We very soon got to six yards to the mile. Then we tried a hundred yards to the mile. And then came the grandest idea of all! We actually made a map of the country, on the scale of a mile to the mile!”

“Have you used it much?” I enquired.

“It has never been spread out, yet,” said Mein Herr: “the farmers objected: they said it would cover the whole country, and shut out the sunlight! **So we now use the country itself, as its own map, and I assure you it does nearly as well.**

Sylvie & Bruno Concluded: The Man in the Moon **(Lewis Carroll)**

Critical reflections on Social Science

Our methods are *political*

Our methods are *material*

Our methods are also *self-interested and pragmatic*

To scale social research:
We shift the interpretive burden to others: we 'instrument' research subjects, or
We abstract away inescapable role of interpretation: we take data as fact

World Bank, Living Standards Measurement Study

Burden of interpretation?

Critical reflections on Technology & Data

Our methods are *covert politics*

Our methods are *essentialist*

Our methods are *capitalist*

We seek to reduce/'clean' reality into formalisms
We then reify the formalised representation
We 'scale' by outsourcing the labour of formalisation on 'customers', whilst concentrating benefits of aggregation to ourselves

On imprinting errors

"In all this I feel a grave danger, the danger of what might be called **cosmic impiety**. **The concept of 'truth' as something dependent upon facts largely outside human control has been one of the ways in which philosophy hitherto has inculcated the necessary element of humility**. When this check upon pride is removed, a further step is taken on the road towards a certain kind of madness - the intoxication of power which invaded philosophy with Fichte, and to which modern men, whether philosopher or not are prone. I am persuaded that this intoxication is the greatest danger of our time and that any philosophy which, however unintentionally, contributes to it is **increasing the danger of a vast social disaster**"

A History of Western Philosophy **(Bertrand Russell)**

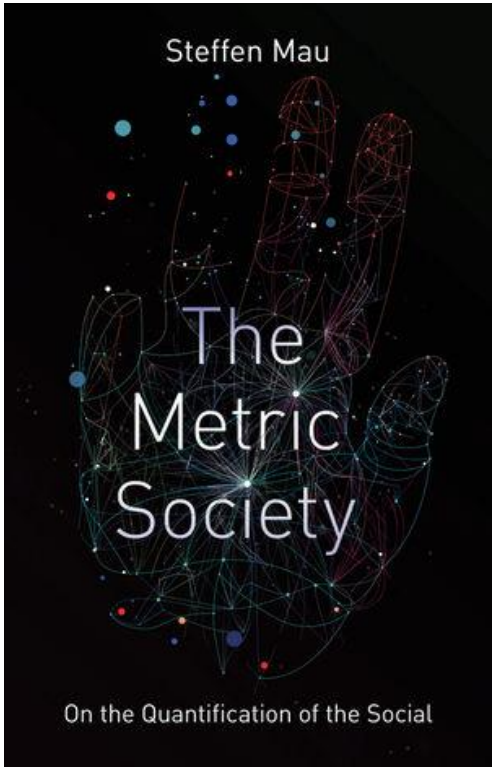
Interdisciplinarity that builds the worst of both worlds

The worst of when we come together:

Relieve the interpretive burden on human subjects through datafication and surveillance of everyday living

Relieve our interpretive burden by scaling capacity for correlation through automation and festishising patterns

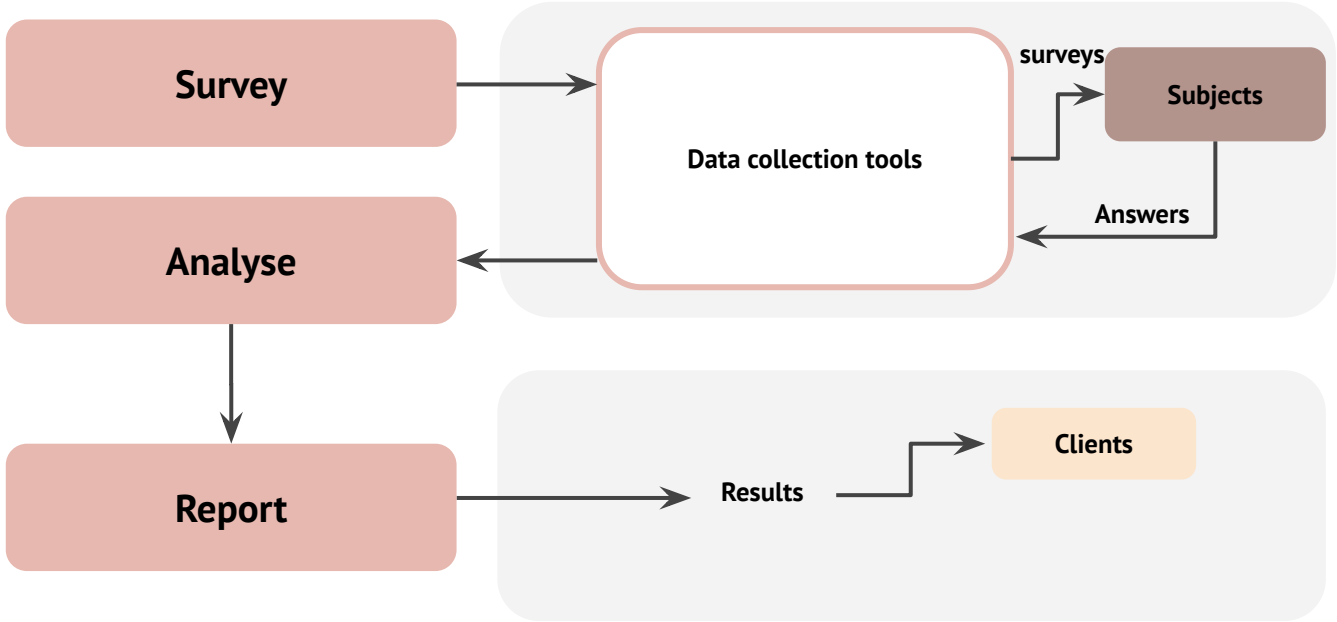
Become complicit in how knowledge construction in this way then shapes resource allocation, power, conditioned behaviour and new subjectivities



For an agenda to amplify citizen voices towards more effective and accountable decision-making by aid and governance actors, how can we:

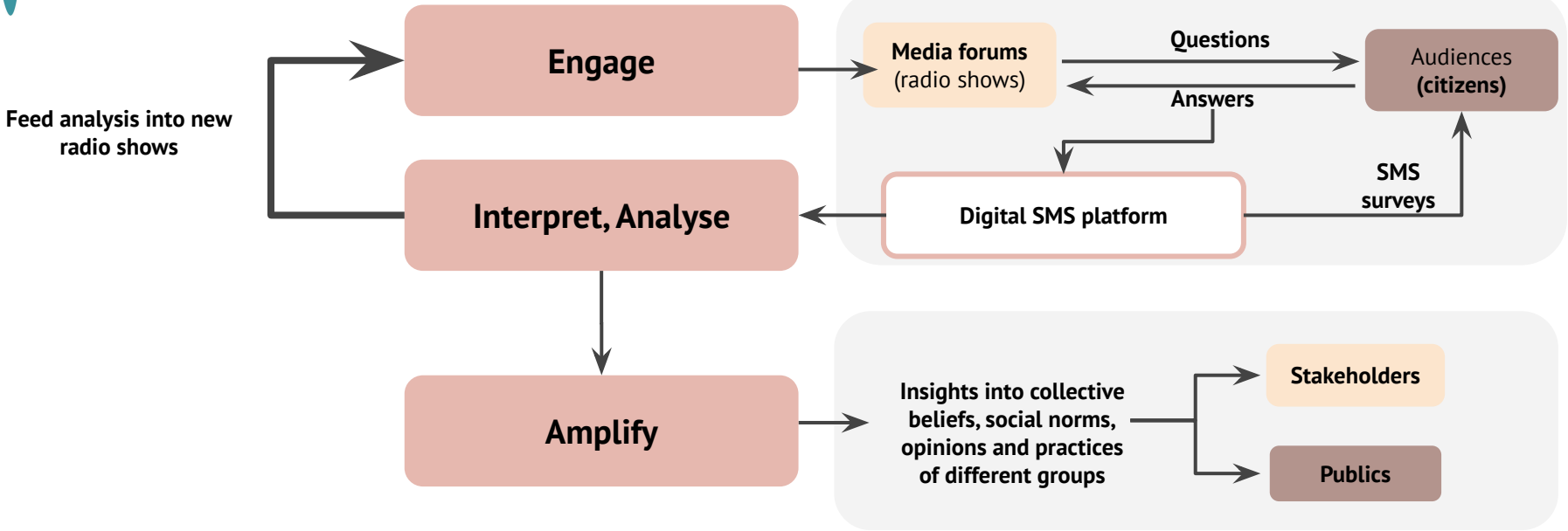
- Meaningfully engage on people's own terms, ways they value, rather than extraction?
- Achieve an ethical approach to scaling listening and interpretation?
- Retain authenticity of unique human voices?

AVF: Rethinking an alternative



‘Extractive’ method

AFRICA'S VOICES



Socio-technical: Scaling listening

COMMON SOCIAL ACCOUNTABILITY
PLATFORM - Banadir pilot

An example of AVF's work

A mediated public discussion on displacement and durable solutions in Mogadishu (2018-19)

Common Social Accountability Platform (CSAP)

Vision

A citizen engagement-to-evidence method for strengthening social accountability in Somalia by connecting citizens with authorities in ways that make sense to them, not defined by one programme, mandate or sector.

Aim

To maximise the chances that citizen perspectives are heard in decisions that affect their lives.

How it works

Uses AVF's interactive radio approach to create a sustained channel for engagement and public opinion research, with one format, media brand and infrastructure.

COMMON SOCIAL ACCOUNTABILITY PLATFORM - Banadir pilot

Displacement in Mogadishu

- 1 in 6 Somalis displaced due to ongoing insecurity.
- Over 600,000 IDPs in Mogadishu.
- IDPs are vulnerable, face discrimination, are excluded from decision-making and rely on humanitarian assistance.
- Displacement crisis co-exists with weak governance.
- Lack of effective spaces for dialogue between IDPs and host community undermines social cohesion & durable solutions.

Mogadishu, Somalia

Objective

To build public dialogue in the city on critical displacement topics and to gather public opinion to inform ongoing durable solutions programmes and decision-making.

Key stakeholders: government, aid deliverers, humanitarian donors

Regional government

Banadir Regional Administration (BRA)

Donors

UKaid from the British people

ReDSS Unlocking Protracted Displacement

NGOs

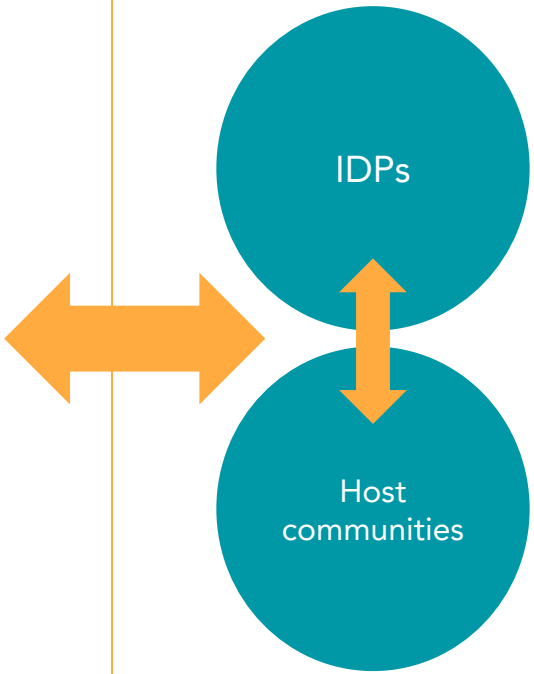
care

NRC NORWEGIAN REFUGEE COUNCIL

UN

IOM UN MIGRATION

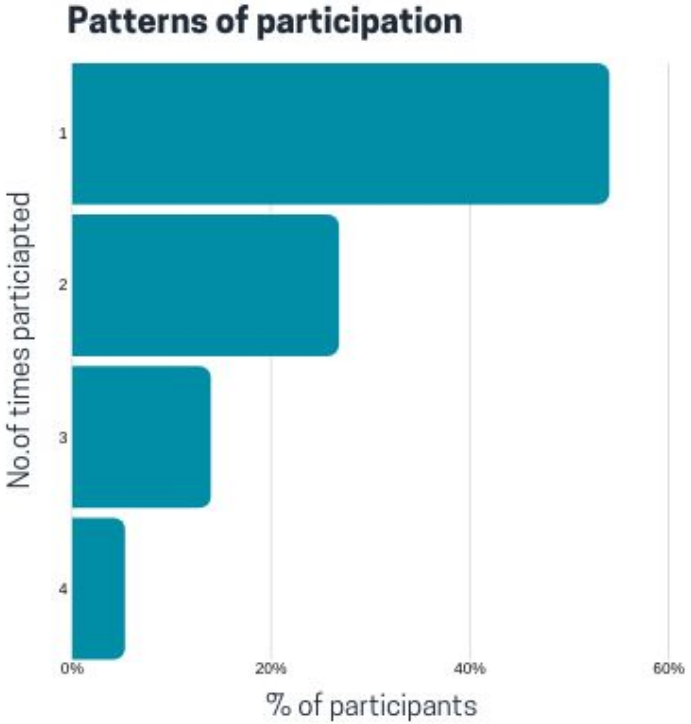
UNDP



Consulting communities through interactive radio

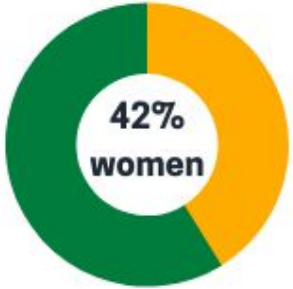
- 4-show series of interactive radio (radio debate driven by citizen input via SMS)
- Featuring guests from local authorities and NGOs
- Topics covered:
  - Displacement affected communities' notions of Durable Solutions
  - Social cohesion and discrimination against IDPs
  - Forced evictions and housing, land and property

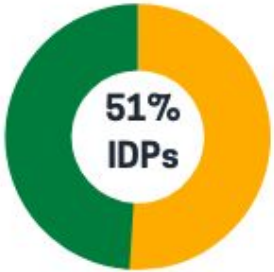
Consulting communities through interactive radio



3,267
participants

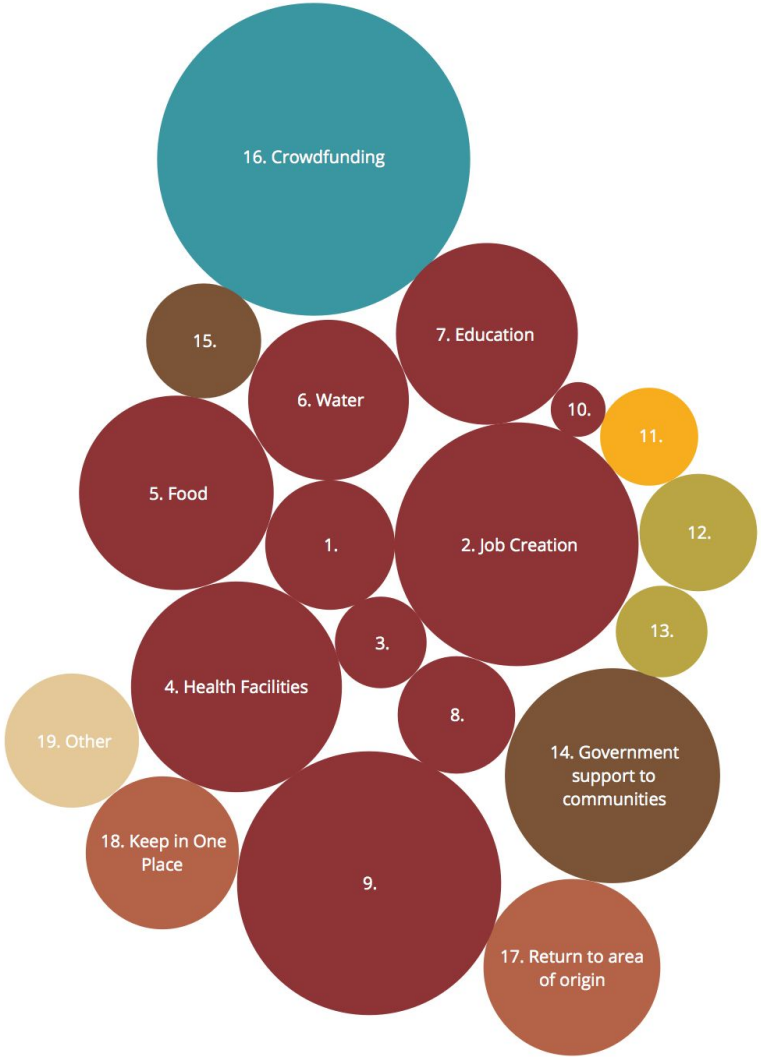
14,391
messages received





The dialogue was successful in reaching many people and was inclusive of vulnerable groups.

Almost half of participants (46.0%) participated in more than one week of discussion, suggesting participants value interactive radio as a channel for consultation and engagement.



Material Safety	1. Financial support 2. Job creation 3. Skills training 4. Availability of health facilities 5. Food assistance 6. Access to water 7. Access to education 8. Sanitation and hygiene 9. Shelter 10. Land
Physical Safety	11. Peace and security
Legal safety	12. Committee to be organized on displacement 13. Community consultation
Good governance	14. Government to support communities 15. Just and transparent delivery of aid
Crowdfunding	16. Crowdfunding
Location management	17. Return to area of origin 18. Keep in one place
Other	19. Other

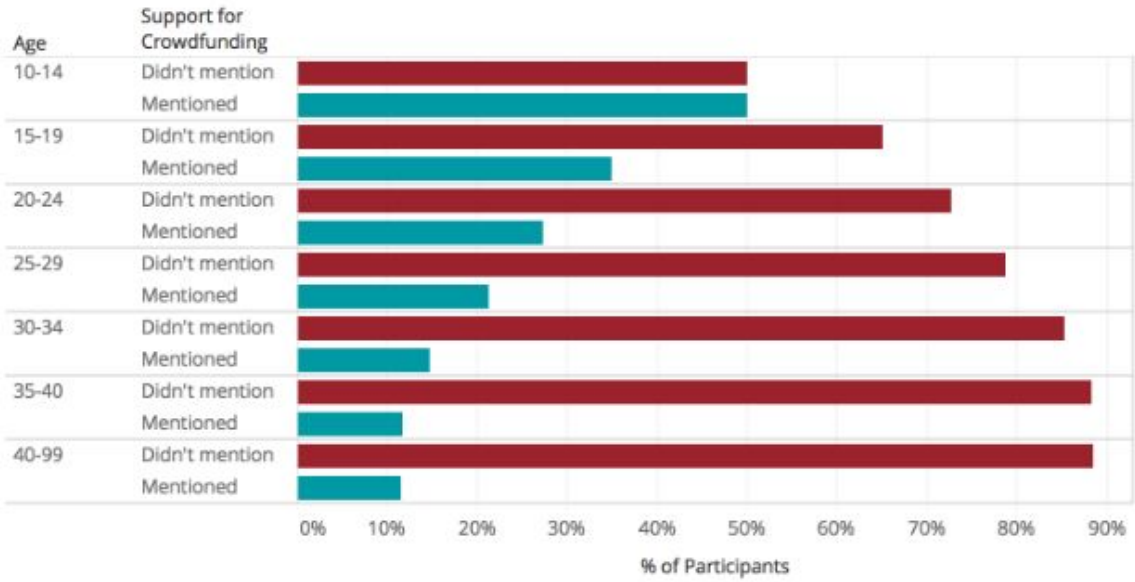
An insight: Crowdfunding

Citizens, including from host community and especially younger, support crowdfunding efforts to assist IDPs

"The best way we can assist the displaced is by all of us coming together and giving the little we can afford to those displaced who are in need." Male, Host, Dharkenley

"They can overcome this situation if they get assistance from people with money like business people and those who are in a position to and the whole Somali community." Male 26 IDP, Dayinle

"The solution is for people to come together and help one another and then God will be on their side make things easier for them." Female, 20, IDP, Banadir



Having a valued voice

"I feel involved because community consultation is always the best thing to do and I personally believe that I am part of the decisions in the community and we appreciate a lot those who made this safe spaces to talk like the radio presenters, the leaders involved and those aid organisations who are involved as well."

Female participant

78%

of participants said that engaging with CSAP made them feel included in decision-making around durable solutions.

93%

Called for CSAP to be continued

Social research built on engaging with citizens on their terms as social agents, carries burdens:

=> The complicated media and communication spaces where people are e.g. local language FM radio

=> Curating (expensive) collective discussion and public recognition of voice, cf data extraction and/or surveillance

=> If you do this well you're going to get engagement in droves, and rich expression of opinion in local language with a lot of noise

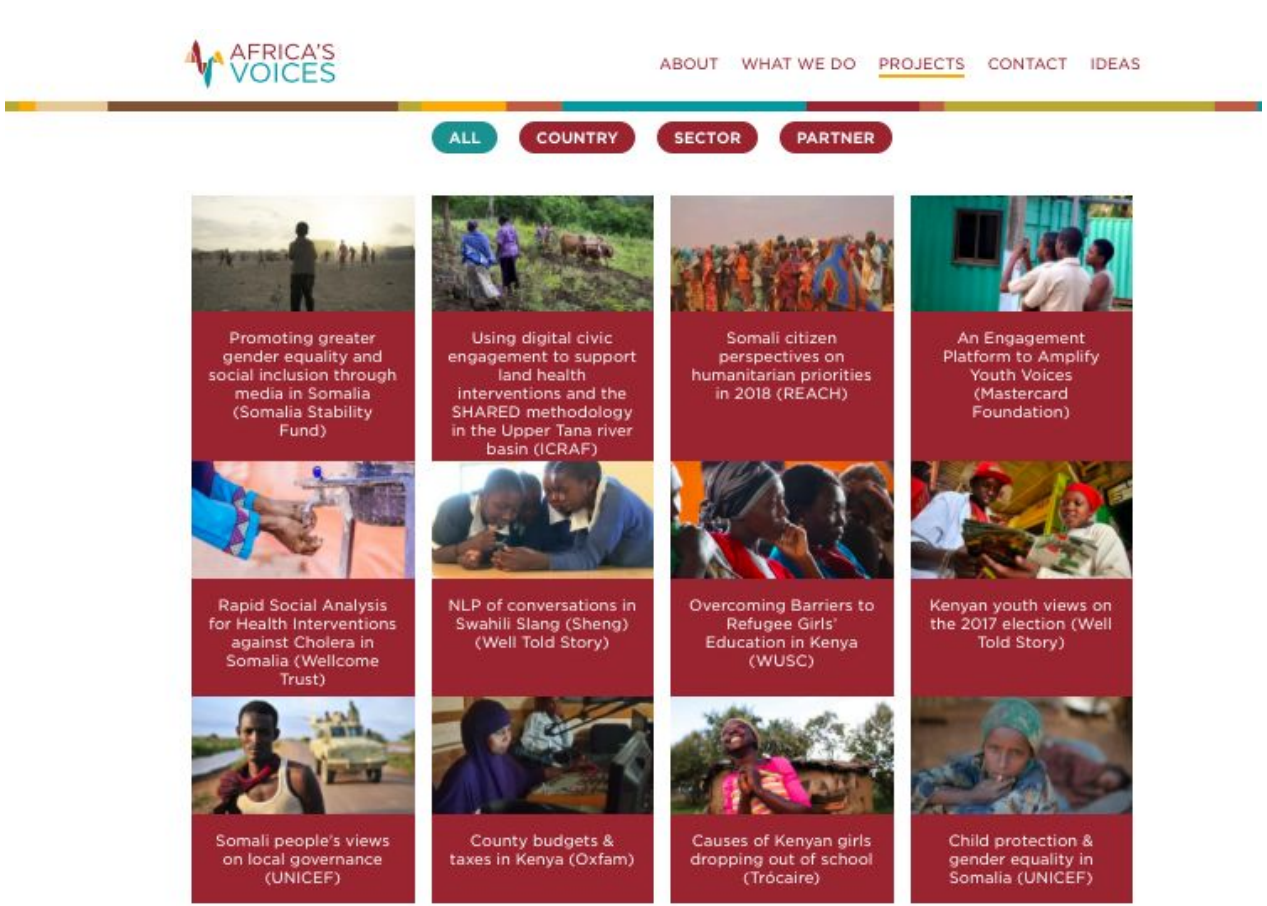
=> So you end up with *a lot* of messy textual data, that you have to understand to get value in the world.

=> Complex mixed-methods needed to give this material expression to influence decisions that matter to citizens we engaged (our commitment to having opened the conversation)

What's the upside?

1. Citizens with a proven sense of being an agent in the world, and value the collective discussion in its own right
2. Rigorous, timely and meaningful evidence of social evidence, and those in power *feel* and *understand* the meaning differently because we retain human authenticity

AVF: Rethinking an alternative



Towards new representation

Could technology help AVF?

Current technical approaches to data-action are unsatisfying. At best data science trades in statistics that you can analytically think about, but which convey no intuition.

Data science *senses* voices, it doesn't listen to them.

There is a chasm between data and action. Unscrupulous actors are filling this chasm, risking the mission of critical empiricism.

AVF is a credible candidate for socio-technically bridging the chasm.

The richness of qualitative methods, the reach and diversity of quantitative methods, and the coupling to agency to provide meaningful impact.

How do we make it more rigorous and timely?

What is interesting to a technologist about AVF?

The dilemma of technology

Social science is trapped between reductionism at scale OR local interpretation
Technology is trapped in an essentialist fetishisation of the machines' gaze

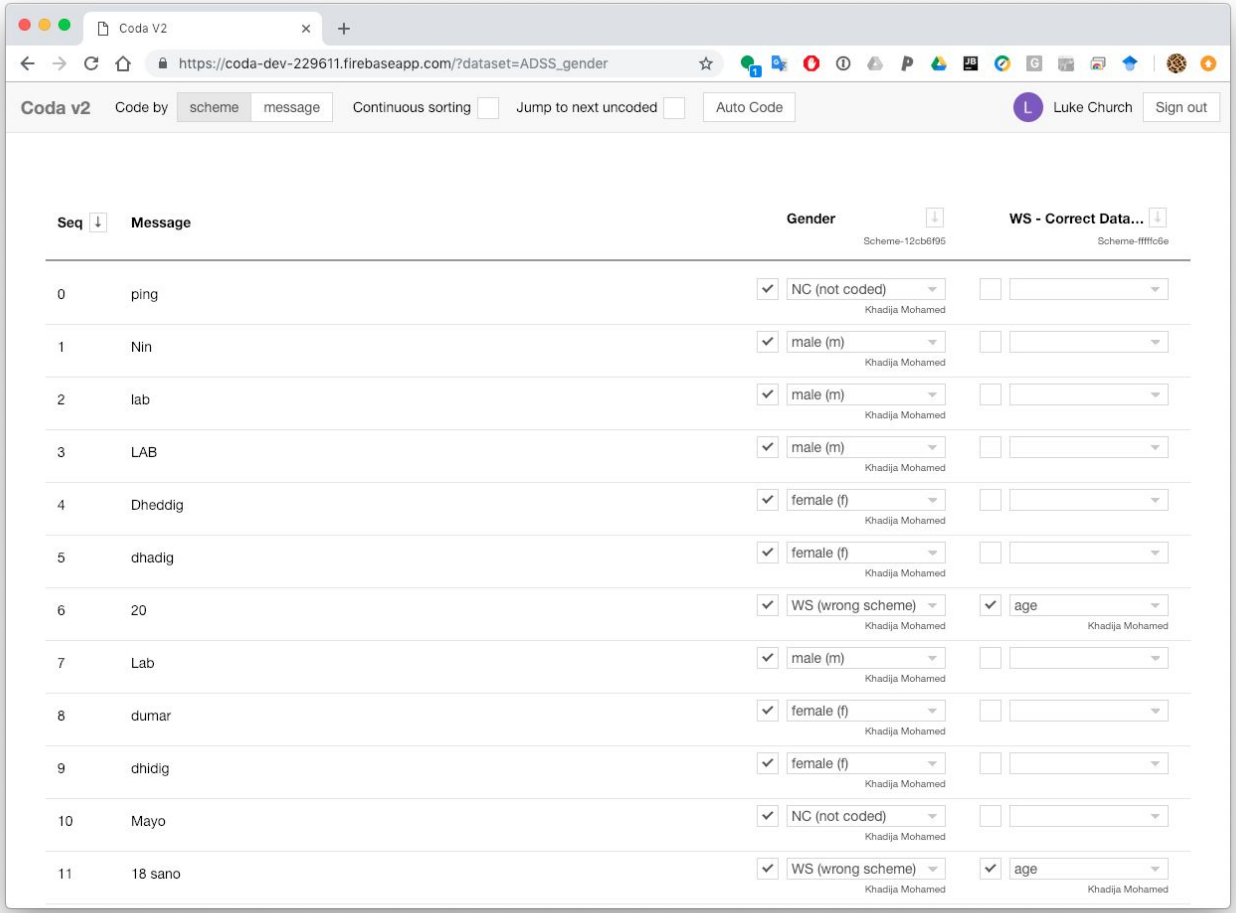
Can we transform the perspective of technology toward social action?
Can we break the interpretive dichotomy?

Ethical use of AI

Interpretation matters, and should be done by people

Augment not automate

Design for doubt, design for curiosity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Coda v2
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scheme
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Luke Church
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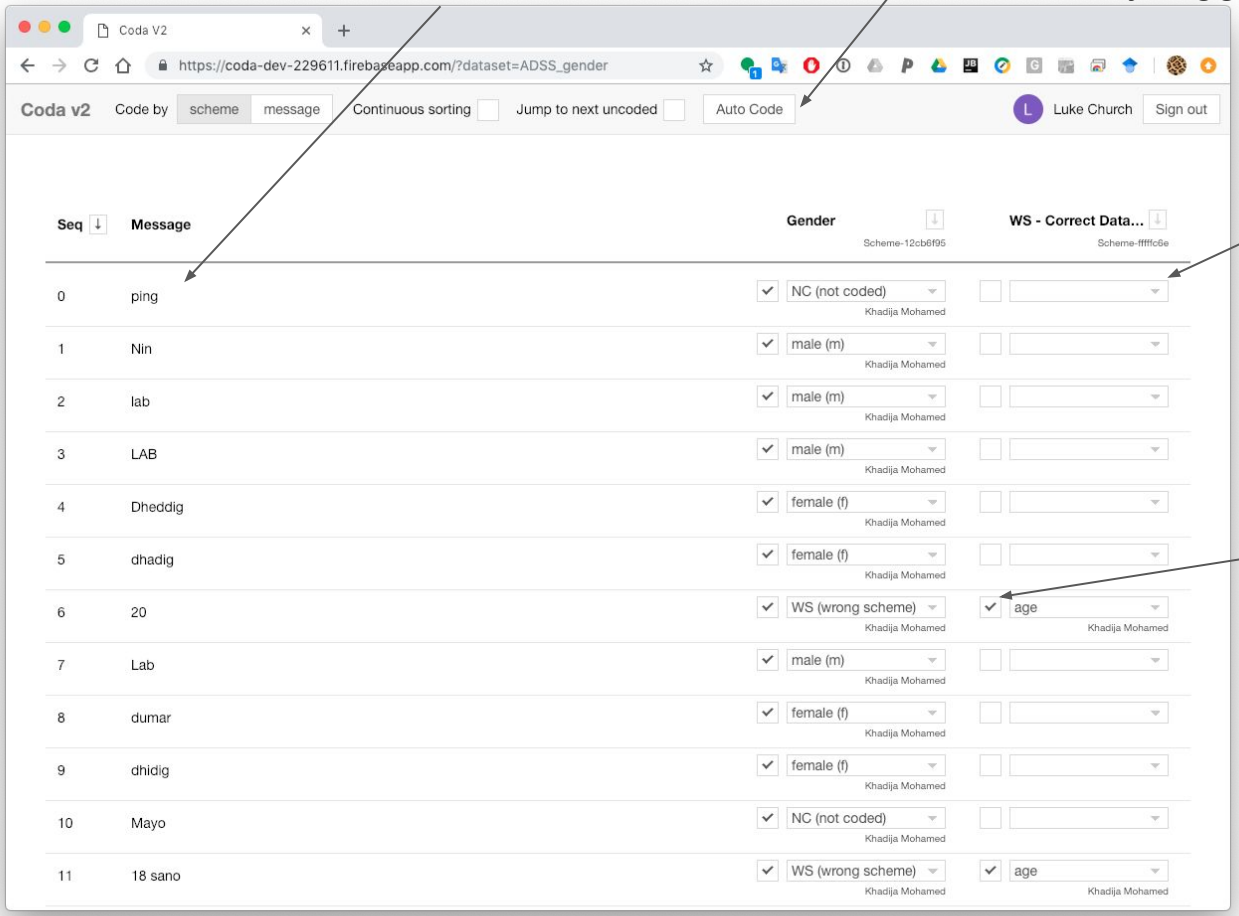
CodaV2

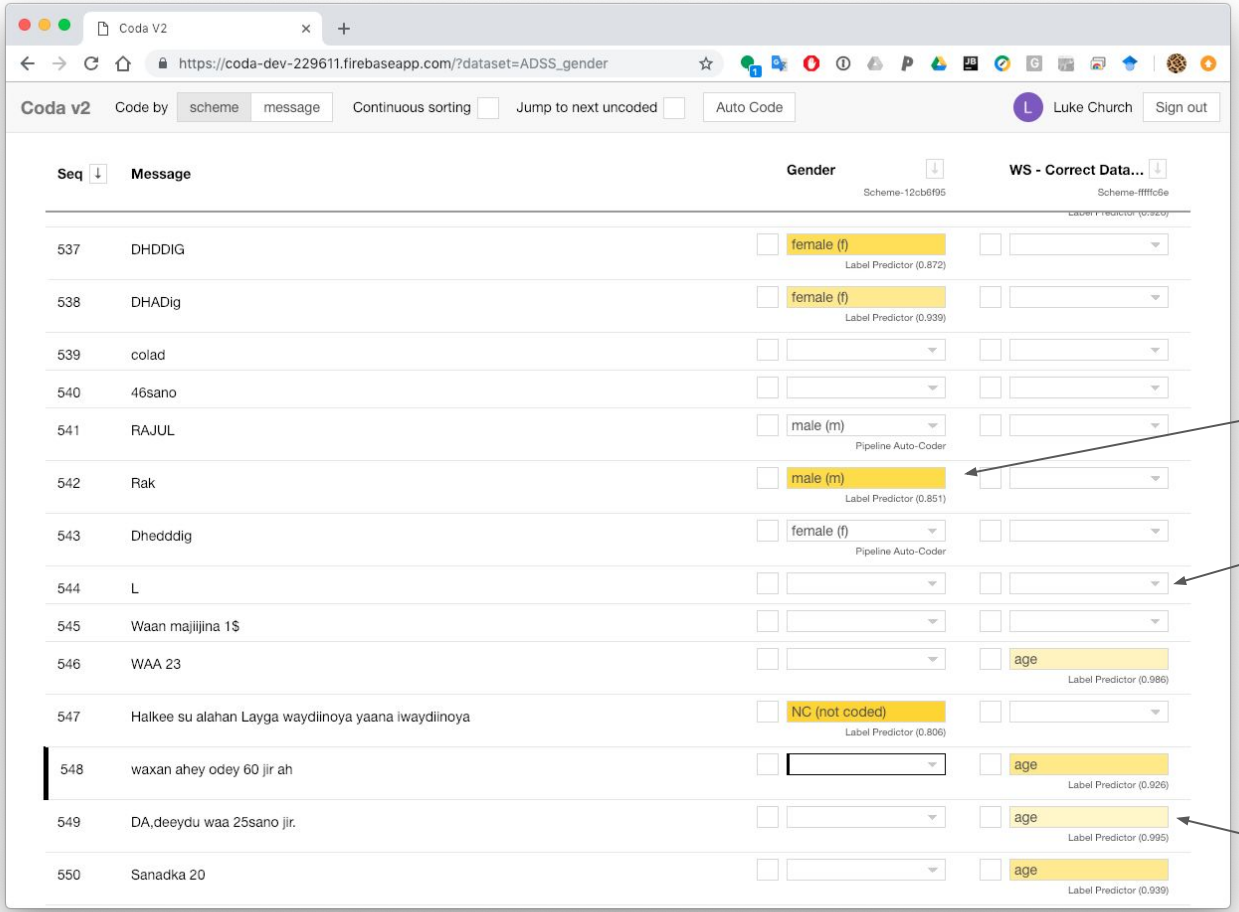
Messages

Automatically suggest labels



Efficient interface for selecting labels

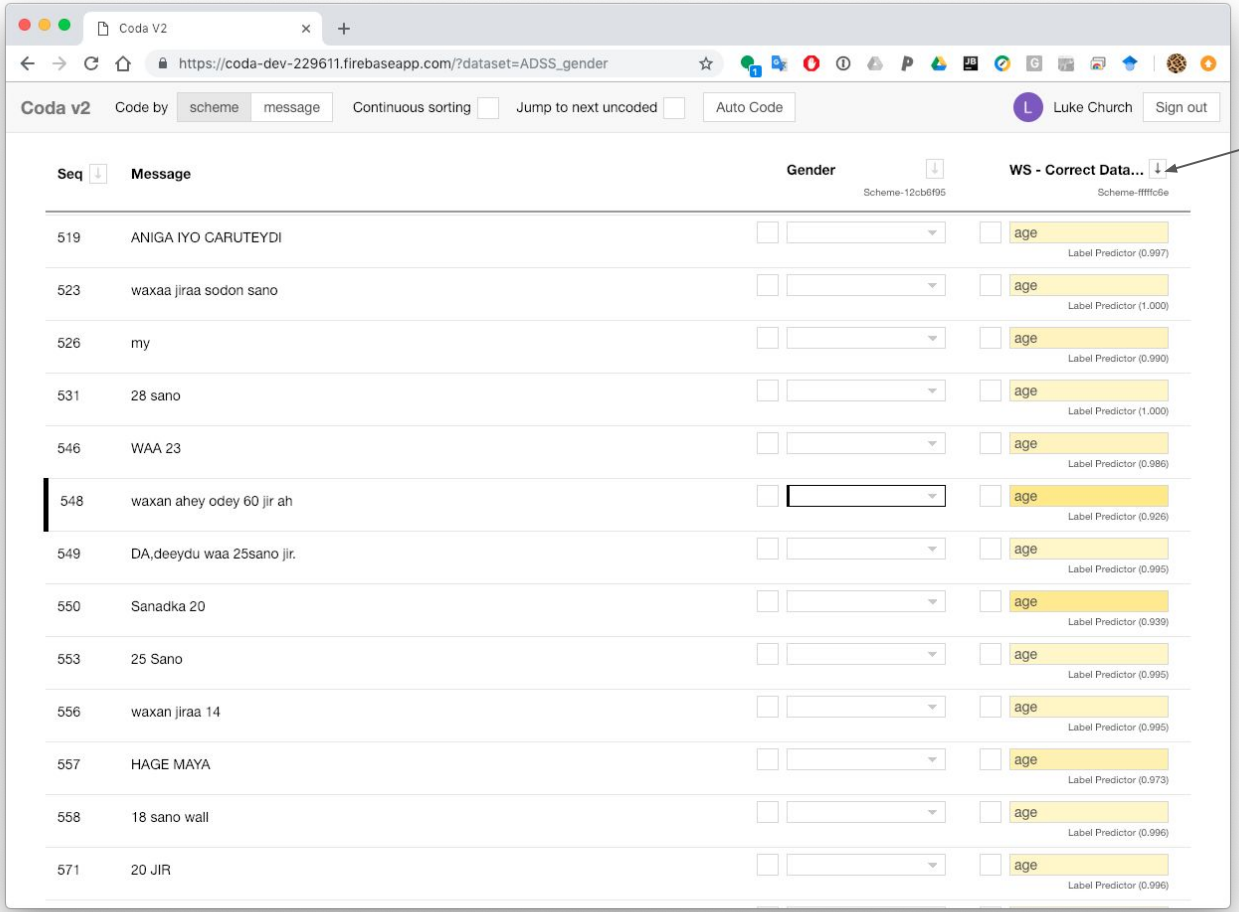
✓ Indicates human confirmed



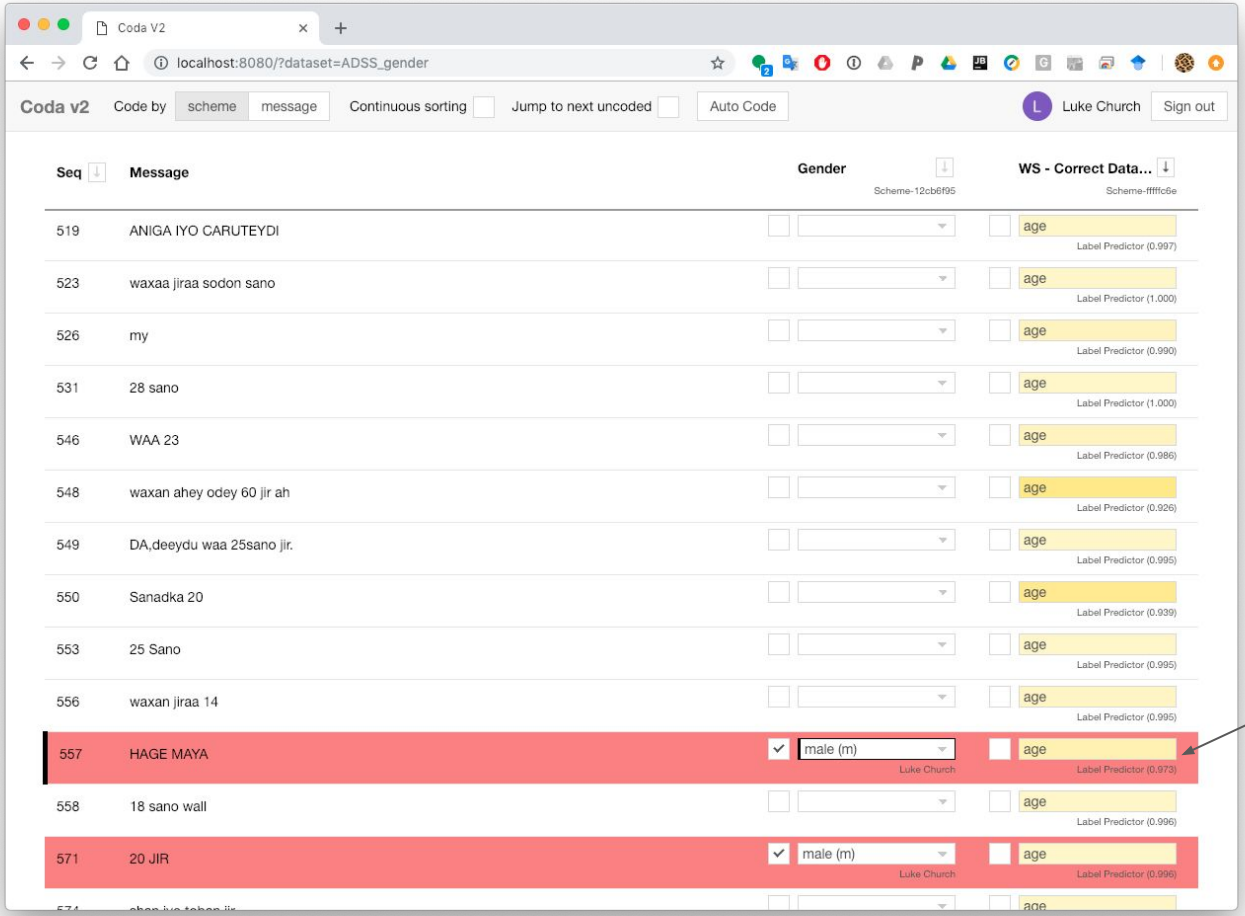
Low confidence => high salience

Insufficient confidence to give any label

Confident labelling



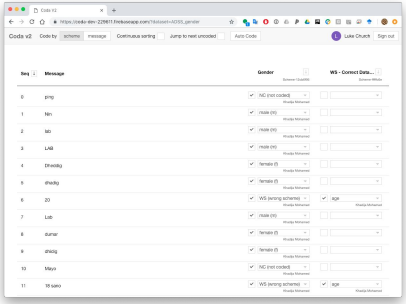
Sort by label

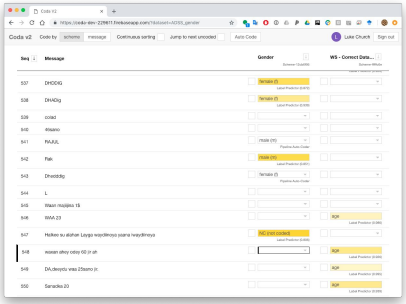


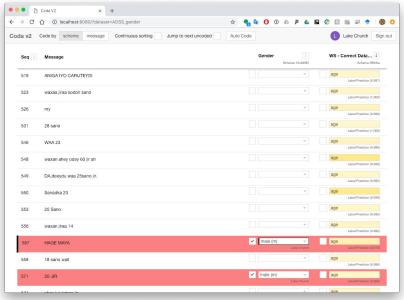
Logical inconsistency warning

(Rules provided by researchers)

Coda acts as a locus where different types of thinking are integrated







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Opinion

Source of change

Previous opinion

Provenance tracing

Technical maneuvers

Using AI to augment interpretative capacities of human researchers

Explicit representation of structural and value uncertainty

Using provenance tracing to maintain authenticity

Methods for Site Reliability Engineering applied in a humanitarian/development context

AI, used right, can help build

Engagement spaces justified by people feeling agency over decisions that affect them as well valuing the discussion in its own right

Rigorous and timely qualitative evidence and interpretive insight by humans, for decisions that matter, at scale

A different sense of 'socially-embodied' knowing, where we *feel* and *understand* differently because we retain human authenticity

I am calling for us to embrace a more complete imagination of the citizen; someone with a lifestyle, with a history [...] someone who knows things and has a capacity to make decisions. If we could elevate that discourse of citizenship then we could revive the political from the decline into which it has fallen in recent years.

Sheila Jasanoff
Cited in Leach, Scoones and Wynne (2005: 217)