



Electoral Institute for Sustainable Democracy in Africa

**THE IMPACT OF ARTIFICIAL ECHO  
CHAMBERS ON AFRICAN ELECTIONS  
AND DEMOCRATIC IDEALS**

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# policy brief

Barry Morisse

## THE IMPACT OF ARTIFICIAL ECHO CHAMBERS ON AFRICAN ELECTIONS AND DEMOCRATIC IDEALS

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## EXECUTIVE SUMMARY

Propaganda has always been a stain on democratic ideals, but social media technology has enabled a level of granularity and scale like we've never seen before. Malicious actors can interfere in elections from thousands of kilometres away with the help of engagement-focused algorithms and a basic understanding of confirmation bias. The echo chambers that are created lead to citizens not having informed choice, undermining a key pillar of democracy itself.

I argue that elections rely on informed choice, which isn't fully present when social media algorithms control the information that citizens are exposed to. When these are controlled by third parties, they can be manipulated through echo chambers and confirmation bias.

I propose three policy recommendations to mitigate this risk in the African context:

1. Lobby for significant improvement in contextual African fact-checking and content moderation to mitigate some of the most damaging disinformation campaigns.
2. Lobby for algorithmic choice to give citizens a right to control their information diet and how it impacts their vote.
3. Educate the African populace about the dangers of disinformation to provide them with the mental immune system they need to evaluate the quality of information.

## FAIR ELECTIONS RELY ON INFORMED CHOICE

Democracy is, at its core, a war of ideas. In an ideal setup, the political system will generate a wide range of different ideas, principles, and manifestos for how a state should be governed – which are then presented to the people themselves who will vote on the sort of society that they want to live in.

Each individual casts a vote for their elected representative whose role it is to take those ideas and execute them. Group consensus helps us to separate good ideas from bad and you arrive at a system of governance that is decided by the majority rather than something drawn up by a few elite decision-makers.

Of course, in practice, democracies are never perfect at achieving this, but the idea itself is rather beautiful. The war of ideas gives every voice a chance to persuade citizens that they would be better off with that particular set of principles, with the result being that the cream rises to the top.

In order for it to work effectively, democratic reason relies on three key pillars:

- Citizens need to be aware of the full spectrum of ideas that are available to be voted upon.
- Citizens need to have a nuanced and robust understanding of what each idea actually entails.
- Citizens need to be able to attach their reasoned ideas to a political party that will make the best choices for the common good.

When any of these pillars is compromised, then the war of ideas loses its integrity because it isn't a fair fight. Democratic ideals rely on informed choice where the electorate has all the information that they need to make a decision. This is not to say that we'll ever reach a point of perfect information, but without a reasonable approximation of the entire landscape, elections can be subtly manipulated by those who control access to that information.

## ALGORITHMS CREATE ECHO CHAMBERS

The rise of social media technology has created a unique situation when it comes to how ordinary citizens receive their information. Large platforms like Facebook, Twitter, Instagram, and TikTok have grown to an enormous scale, becoming vital components in the lives of billions across the world. For the vast majority of us, these newsfeeds have become our sole source of information, shifting away from more traditional media outlets. They represent the lenses through which we see the world.

However, we don't all see the same feed. Due to the nature of the algorithms that drive these platforms, each individual is given a unique combination of information that is crafted specifically for them, based on their behaviour in the past.<sup>1</sup> This is achieved using advanced machine learning models that look for patterns in our product usage and optimize the newsfeed according to what will keep us on the app for as long as possible. This is because the longer they keep users on the platform, the more profitable it is for the company because they can maximize the number of advertisements that can be displayed.

The downside of this curated personal experience is that it naturally leads to a warped view of the world where we see only a small fraction of what is actually out there. And thanks to the nature of the aforementioned economic incentives, we tend to disproportionately see two types of content:

- Things that we already agree with; and
- Things that will cause us extreme emotion (often negative).

<sup>1</sup> Cinelli, Matteo & Morales, Gianmarco & Galeazzi, Alessandro & Quattrociocchi, Walter & Starnini, Michele. (2021). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences*, 118. e2023301118. 10.1073/pnas.2023301118.



These two types of content have been psychologically proven to increase your engagement on the site<sup>2</sup> and so that's what dominates your feed. Without realizing it, you find yourself in an echo chamber that reinforces the ideas that you already have and presents a straw-man version of arguments and ideas that you disagree with.

You never even have to confront an alternate point of view or a different way of looking at things. Instead, your existing beliefs are reinforced without a fair fight from other competing ideas.

## CONFIRMATION BIAS AND HOW MALICIOUS ACTORS LEVERAGE IT

This is a dangerous state of affairs during election time because if you are seeing only a small fraction of what society actually looks like, then you aren't making an informed choice. You are unknowingly following the dictates of the information that is being put in front of you, and the ideas and beliefs that you've inherited from your past. There is no room for original thought.

In psychology, it is known as confirmation bias.<sup>3</sup> As citizens, we all tend to be quite lazy. While we should be working to inform ourselves, the vast majority don't want to go through that effort. And this means that confirmation bias becomes the path of least resistance for us. And it opens the door for significant interference in electoral situations because malicious actors can use this psychological technique to misinform, persuade, and polarize communities – which seriously threatens the democratic ideals that we strive to uphold.

Malicious actors can craft nuanced disinformation campaigns that aim to provoke highly targeted groups of people, in an attempt to sway their vote illegitimately. Of course, we've had propaganda for centuries now, but the real difference here is the ease with which this can be done. With access to the internet, anyone can leverage the tools that social media companies provide to interfere in elections thousands of kilometres away without ever stepping foot on the ground. And they can do so with incredible precision due to the highly advanced targeting that is possible on these platforms.

For example, there have been some very serious allegations about unethical electoral interference in Kenya and Nigeria that caused both countries to pass strict data privacy laws in response.<sup>4</sup> In these cases, a company called Cambridge Analytica used highly targeted personal information to craft campaigns that were eerie in their effectiveness, rocking the core of

what each election was all about. By mining user data, the company was able to create highly precise fake news campaigns that were designed for psychological manipulation in service of one particular candidate.

Unfortunately, this didn't receive the level of global scrutiny that it deserved until the company became famous because of their role in the US election of 2016, where it played a non-trivial role in the election of President Donald Trump, helping to stoke divisions within the country and creating a level of political polarization that we hadn't seen in decades.

This is one example of many where electoral processes were undermined by targeted information campaigns designed to prey on citizens who rely on that information to make decisions. This is a worrisome state of affairs as we consider the future of our democratic systems across Africa.

While it's true that technology offers a number of benefits – including the democratization of information, the ability to gather large communities at scale, the support of grassroots movements, and giving a voice to the voiceless – all of this pales into significance if our algorithms are held hostage by influential actors who control what we see and therefore what we think.

### How do we fight back?

## POLICY RECOMMENDATIONS

I don't have all the answers because this is a nuanced and challenging problem. But I am optimistic that we can tackle this head-on and craft policies and regulations that help to mitigate these risks, strengthening our democracies as we do so. It's worth noting that these social media giants are less than 20 years old. We are still learning to live with them and integrate them fully into our society – so as we discover these obstacles, there are ways we can shape the future to protect the democracy that we've fought to preserve.

Here are three recommendations that I believe would make a significant difference in terms of Africa's political reality:

### 1. Lobby for significant improvement in African-specific electoral fact-checking and content moderation

One of the ways that Facebook, for example, attempts to push back against third-party interference concerns is by employing and empowering human fact-checkers to assess and take action on broad swaths of content

<sup>1</sup> Cinelli, Matteo & Morales, Gianmarco & Galeazzi, Alessandro & Quattrociocchi, Walter & Starnini, Michele. (2021). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences*, 118, e2023301118. [10.1073/pnas.2023301118](https://doi.org/10.1073/pnas.2023301118).

<sup>2</sup> Schreiner, M., Fischer, T. & Riedl, R. Impact of content characteristics and emotion on behavioral engagement in social media: literature review and research agenda. *Electron Commer Res* 21, 329–345 (2021). <https://doi.org/10.1007/s10660-019-09353-8>

<sup>3</sup> Nickerson, R. S. (1998) 'Confirmation Bias: A Ubiquitous Phenomenon in Many Guises', *Review of General Psychology*, 2(2), pp. 175–220. doi: [10.1037/1089-2680.2.2.175](https://doi.org/10.1037/1089-2680.2.2.175).

<sup>4</sup> Tully, B. E. M. (2020) 'Cambridge Analytica in Africa – What Do We Know?'. *Democracy in Africa*, <http://democracyin africa.org/cambridge-analytica-africa-know/>

that causes a stir on their platform. With a combination of Artificial Intelligence (AI) and human judgment, the company attempts to monitor community interactions (especially during elections) and takes action on the obvious fake news and any untoward behaviour that they find.

The problem is that their resources are disproportionately deployed to the USA, because of the stiff pressure they face in their home country. And while they have tried to invest in similar task teams for other countries around the world, these are often woefully inadequate for a number of reasons:

- They lack the cultural understanding of the elections that they are monitoring and thus don't have the context they need to do their job.<sup>5</sup>
- They often don't speak the local languages adequately to deal with content manipulation across a wide variety of languages.<sup>6</sup>
- They simply don't face the same social pressure as they do back home and so are less motivated to adopt a no-tolerance attitude.

As a continent, we should be working with the big social media companies to augment and improve the fact-checking and content moderation teams using local people who understand the language, culture, and political nuances of the countries in which they are operating. A little focus here goes a long way in helping to diffuse situations before they become big enough to cause an issue.

Africa faces unique challenges, and in order to manage them we need our own people to be working to preserve and protect democracy. We cannot rely on those in Silicon Valley to fight this for us. We should be demanding to have a seat at that table – and it starts with better leverage of regional African offices of these major technology giants. For example, the Facebook regional offices need to be better resourced so that they can work with local civil society groups in service of the larger goal.

## 2. Lobby for algorithmic choice

If we look at things at a macro-level, fighting to ensure informed choice on the part of the electorate is going to require changes to the business model of the large social media giants. The current algorithms which prioritize engagement above all else have a range of negative side effects that we are only now coming to terms with as a society. Yes, they increase shareholder value, but what do they cost us in terms of how we think and act?

As an individual, I believe that we should have the right to curate the information that we receive. We

have ceded that right to technology companies and perhaps it's time to take it back.

Imagine a social media product where you could choose how your algorithm selected content to show up on your newsfeed. You would still have the same mechanisms of being able to follow accounts and subscribe to people that you wanted to hear from, but you'd have an extra layer of precision that would determine how those posts are arranged and presented to you.

With this choice, citizens could take control of their information diet and escape the echo chamber that they're stuck in. Perhaps they could dial up the randomness on their feed in order to expose them to original ideas and points of view? Maybe they could choose to see opposing points of view more regularly to understand the other side of important issues? Some might choose to turn off specific types of content entirely because they know that it creates irrational emotional responses.

A reasonable objection to this would be that it is a tall order to assume that individuals would be self-aware enough to recognize the value of engaging with information that they don't primarily agree with. But that's the sort of paradigm shift we have to be aiming towards if we are to solve this. Offering these dials to consumers would not only be treating them with respect, but would also create more awareness in the general population about how your information diet affects how you think (and vote).

Now, I'm well aware that this is very challenging on a technical level because a lot of these permutations are hidden in complex, black-box, machine learning models. But as we craft the algorithms of the future, we have a chance to build them with this level of control in mind.<sup>7</sup> We should be lobbying the major technology companies, social media platforms, and influential technology thinkers to drive towards this long-term outcome. In addition, we might even consider lobbying for regulators to enforce this level of choice on the social media companies who have vast influence over the public discourse.

We're never going to convince everyone to turn off the automatic algorithm, but by offering consumers a choice, we open the doors for prudent and responsible citizens to access the information that they need to make informed decisions.

From there, we can let the war of ideas work its magic.

<sup>5</sup> Ilori, T. (2020) 'Content Moderation is Particularly Hard in African Countries', Slate, <https://slate.com/technology/2020/08/social-media-content-moderation-african-nations.html>

<sup>6</sup> Marinescu, D. (2021) 'Facebook's Content Moderation Language Barrier', New America, <https://www.newamerica.org/the-thread/facebook-content-moderation-language-barrier/>

<sup>7</sup> Rudin, C., & Radin, J. (2019). Why Are We Using Black Box Models in AI When We Don't Need To? A Lesson From An Explainable AI Competition. Harvard Data Science Review, 1(2). <https://doi.org/10.1162/99608f92.5a8a3a3d>

### 3. Educate the African populace about the dangers of disinformation

My last recommendation is to work on improving the mental immune system of the continent when it comes to assessing the quality of the information that they are receiving. In some ways, this is the only sustainable way to create change because there will always be technology that can be misused for personal gain. Pessimists believe that we're just playing whack-a-mole.

If we were able to help ordinary citizens understand how the information economy works and where the risks lie, we can empower them to be more prudent and wiser when it comes to casting their all-important votes.

Sometimes we forget that the leapfrog nature of Africa's technological development has thrust vast portions of our population into a society dominated by technology without the mental tools and frameworks that they need to separate fact from fiction. As a result, disinformation can be extremely harmful because it masquerades as truth. Without due scepticism and self-awareness, you are helpless to defend against confirmation bias and emotional ransom.

The psychological impacts of this phenomenon are well documented by this point, and the phenomenon continues to grow as a topic in ethics, policy, and law. It's not inconceivable that African policymakers could dedicate resources to creating awareness and educational campaigns that teach citizens about how to protect themselves from disinformation.

The fact that Africa has such a young population actually works in our favour here because any educational efforts that take place in schools on the continent can provide far-reaching and system impacts for those kids who will eventually move into these political spaces.

By crafting this mental immune system, we'd have a much better equipped electorate who would demand more transparency from their elected officials, engage more meaningfully in political life, and hopefully would strive to be better thinkers in their own lives.

This might sound idealistic to some, but if we are to protect the integrity of our elections in this new technological era, these are the sorts of actions that we'll need to take as a continent. In lieu of extraordinary regulatory constraints being placed on these large technology firms, we have to do all we can to prepare our people for what is to come.

## CONCLUSION

Technology has radically changed how we think about information transfer, for good and for bad, and I don't want to come across as a Luddite who'd prefer things to go back to how they were. It's undeniable that social media has opened up a level of connection and conversation that is good for free speech and individual empowerment. But the concerns around third-party electoral interference and the malicious usage of echo-chamber algorithms represent a serious threat to our democratic ideals.

I've laid out a few potential steps that we can take to mitigate these risks, and they require high levels of conviction, collaboration, and investment of resources. As Africans, we need to use whatever influence we have to bring these issues into the zeitgeist so we can gather the necessary support to make genuine progress in this domain.

Democracy is at stake.

**Africa** is at stake.

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# About EISA

Since its inception in July 1996 EISA has established itself as a leading institution and influential player dealing with elections and democracy related issues in the African continent. EISA has past and/or current field offices in 20 African countries. The organisation's Strategic Goals are:

- Electoral processes are inclusive, transparent, peaceful and well-managed;
- Citizens participate effectively in the democratic process;
- Political institutions and processes are democratic and function effectively; and
- EISA is a stronger and more influential organisation

The vision of EISA is "an African continent where democratic governance, human rights and citizen participation are upheld in a peaceful environment". This vision is executed through the organisational mission of "striving for excellence in the promotion of credible elections, participatory democracy, a human rights culture, and the strengthening of governance institutions for the consolidation of democracy in Africa".

Having supported and/or observed over 100 electoral processes in Africa, EISA has extensive experience in formulating, structuring and implementing democratic and electoral initiatives. It has built an internationally recognised centre for policy, research and information and provides this service to electoral management bodies, political parties, parliaments, national and local governments and civil society organisations in a variety of areas, such as voter and civic education and electoral assistance and observation. Besides its expanded geographical scope, the Institute works in the in-between election areas along the electoral and parliamentary cycle, including constitution building processes, legislative strengthening, conflict management and transformation, political party development and strengthening and supporting capacity building for members of parliament and parliamentary structures. EISA also provides technical assistance to continental and regional inter-governmental institutions, Election Management Bodies and Civil Society Organisations.

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