DISCUSSION DOCUMENT

CLIMATE DISINFORMATION: CONSEQUENCES AND SOLUTIONS

UNPACKING THE EFFECTS OF DISINFORMATION ON CLIMATE CHANGE AND ENVIRONMENTAL HARMS

MEDIAMONITORING AFRICA

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INTRODUCTION

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Climate change has been labelled as the greatest crisis ever faced by our species.[1] We are currently at the tipping point, with delayed climate action resulting in quite literally life-threatening consequences on the one side, and mitigation and adaptation measures through urgent action on the other. Climate disinformation poses a significant risk to climate action and may tip us towards unstoppable consequences. If we don't take the relevant actions we will move past a point of no return.

It is within this context that this discussion paper is presented. The purpose of this paper is to explain how climate disinformation erodes efforts in the fight for climate justice and undermines information and human rights, with an aim of developing solutions to combat climate disinformation and highlight the importance of access to accurate information as an integral component of achieving climate justice.

This discussion document will carry out this purpose through discussing the following:

- First, through a human rights lens, we begin by looking at climate change.
- Second, we provide a high-level overview of disinformation.
- Third, climate disinformation is discussed, setting out some of the motivations behind climate disinformation, the role of technology in the dissemination of climate disinformation, as well as the effects of climate disinformation on children.
- Forth, we reflect on the impact of climate disinformation.

[1] Center for Countering Digital Hate, "The Toxic Ten: How ten fringe publishers fuel 69% of digital climate change denial" (2021) (accessible here).

CLIMATE CHANGE 101

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It is crucial to understand what climate change is in order to understand why disinformation fuels it and the adverse effects thereof. This section contains a high-level explanation of climate change, sets out its detrimental effects and human rights implications, and touches on common climate change myths. It further unpacks the intersection between climate change, access to information and freedom of expression.

Understanding climate change

Climate change refers to long terms shifts in temperatures and weather patterns. Human activity, such as the burning of fossil fuels like coal, oil, and gas, is the main driver of climate change.[2] The burning of fossil fuels generates greenhouse gas emissions that get trapped in the Earth's atmosphere, trapping the sun's heat, and raising temperatures.[3] This is known as global warming. The main greenhouse gases that cause climate change and subsequent global warming are carbon dioxide and methane.[4]

Table of key terminology

Term	*Description*
Fossil fuels	Fuels derived from the remains of living organisms. These fuels are a significant source of energy but release huge amounts of carbon emissions.
Carbon emissions	The release of carbon into the atmosphere which results mainly from burning fossil fuels and deforestation.
Greenhouse gases	Gases in the atmosphere that trap heat and contribute to global warming.

[2] United Nations, "What is Climate Change?" (accessible here).
[3] Id.
[4] World Bank: Climate Change Knowledge Portal, "What is Climate Change?" (accessible here).

	Carbon dioxide and methane are examples of this.
Global warming	The long term increase in the Earth's average temperature, caused mainly by human activity.
Climate change	Long term changes in temperatures and weather patterns.
Mitigation measures	Actions aimed reducing the emission of greenhouse gases so as to limit climate change.
Adaptation measures	Actions aimed at reducing vulnerability to the harmful impacts of climate change.

The detrimental effects of climate change

Human induced climate change has resulted in widespread adverse impacts and related losses and damages to nature and people that stretch far beyond the natural variation in climate.[5] It is seen that these adverse effects span across all sectors and regions. However, they affect the most vulnerable people the most.[6]

Fundamentally, climate change results in an increase in the amount of carbon dioxide in the atmosphere. This leads to an increase in the frequency and intensity of climate and weather extremes,[7] including hot extremes on land and in the ocean, heavy precipitation, and drought and fire weather. These extremes have caused, and will continue to cause, substantial damage and increasing irreversible losses in all ecosystems.[8] Climate change impacts ecosystems through changes in average conditions and climate variability. Furthermore, increased carbon dioxide leads to increased ocean acidification.[9] Ocean

[5] Independent Panel on Climate Change, "Summary for Policymakers" (2022) *Climate Change 2022: Impacts, Adaptation and Vulnerability* (accessible here) at 9.
[6] Id.
[7] Id.
[8] Id.
[9] Yadvinder Malhi, Janet Franklin, Nathalie Seddon, Martin Solan, Monicia G. Turner, Christopher B. Field and Nancy Knowlton, "Climate change and ecosystems: threats, opportunities and solution" (2020) *Phil. Trans. R. Soc.* (accessible here).

acidification refers to the decrease in the pH of the ocean, which is caused predominantly by an uptake of carbon dioxide from the atmosphere.[10] The change in the ocean's chemistry results in certain ocean organisms being unable to build and maintain shells and other calcium carbonate structures that they need to survive, and others being unable to detect predators.[11] This places whole food webs and ecosystems at risk.[12] Healthy ecosystems are crucial for natural processes to occur as they should, and ultimately to maintain a healthy environment that is crucial to human health and wellbeing.

A healthy environment

Section 24 of the Constitution of the Republic of South Africa, 1996 ("the Constitution") states that everyone has a right to an environment that is not harmful to their health and wellbeing. Furthermore, everyone has the right to have the environment protected for the benefit of current and future generations through reasonable legislative and other measures that prevent pollution and ecological degradation; promote conservation; and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. It is clear that climate change and the effects thereof infringe on this right. This has been confirmed by various courts in South Africa.[13] Due to climate change resulting in the Earth being increasingly unsuitable for human life, future generations will be unable to live in an environment that is not harmful for their health and wellbeing. Again, this infringes on section 24 of the Constitution.

Food, water, and healthcare

Climate change has reduced food and water security. Over the last 50 years, it has slowed the growth of agricultural productivity globally.[14] Ocean warming and ocean acidification, caused by climate change, has adversely affected food

[10] National Oceanic and Atmospheric Administration, "What is Ocean Acidification?" (2024) (accessible here).
[11] Id.
[12] Id.
[13] *Earthlife Africa v Minister of Environmental Affairs and Others* 2017 2 ALL SA 519 (GP) (accessible here).
[14] Independent Panel on Climate Change, "Summary for Policymakers" (2022) *Climate Change 2022: Impacts, Adaptation and Vulnerability* (accessible here) at 9.

production from shellfish aquaculture and fisheries in oceanic regions. Increasing weather and climate extreme events have exposed millions of people to acute food insecurity and has also reduced water supply drastically. These impacts have been observed to be the largest in communities in Africa, Asia, and Central and South America. Sudden losses of food production and access to food, compounded by decreased diet diversity, has led to malnutrition in many communities. Roughly half of the world's population currently experience severe water scarcity for at least part of the year due to climate change.[15]

Besides the food and water shortages, the effects of climate change compounds the existing burden of disease and exacerbates existing barriers to accessing health services.[16] Section 27 of the Constitution guarantees everyone the right to health care services and sufficient food and water. From the above, it is clear that the effects of climate change threaten these rights. Over 20% of South Africans already face food and water insecurity,[17] and many do not have access to health care services.[18] The effects of climate change will compound the infringement of these rights.

Life

The increase in extreme weather conditions caused by climate change places human lives at risk. Increased, drastic, and unpredictable heat, drought, wildfires, tropical cyclones, and heavy precipitation has led to an increase in human mortality.[19] Section 11 of the Constitution states that everyone has the right to life. Clearly climate change increases death, and therefore infringes on this right.

Equality

While climate change effects everyone, people whose health is being harmed first and the worst are the people who contribute the least to its causes, and who are least able to protect themselves against it. Namely, people in low-income and

[15] United Nations, "Water- at the center of the climate crisis" (accessible here).
[16] World Health Organization, "Climate Change" (2023) (accessible here).
[17] Asanda Mtintsilana, "Hunger in SA: 1 in 5 at risk" (2023) (accessible here).
[18] South African Government, "Health" (accessible here).
[19] Independent Panel on Climate Change, "Summary for Policymakers" (2022) *Climate Change 2022: Impacts, Adaptation and Vulnerability* (accessible here) at 9.

disadvantages countries and communities.[20] The risks created by climate change are felt disproportionately by the most vulnerable and disadvantaged people in our population, including women, children, people with low incomes, displaced persons, and those with underlying health conditions.[21] The climate crisis threatens to, and in fact is already, undo the last 50 years of progress in development, global health, and poverty reduction. This will further widen existing health inequalities between and within populations.[22] In South Africa, there are already massive inequalities based on socio-economic status and race. Climate change threatens to widen these inequalities within the country, as well as between South Africa and more developed countries. This poses a significant threat to section 9 of the Constitution, which states that everyone is equal before the law, and has the right to equal protection and benefit of the law. It states that equality includes the full and equal enjoyment of all rights and freedoms. Given that climate change effects the vulnerable the most, this right will be infringed. Other rights, such as the right to dignity as found in section 10 of the Constitution, are also threatened.

Children

It is seen above that climate change affects children, being a vulnerable group, the most. In South Africa, section 28 of the Constitution provides that every child has the right to basic nutrition, shelter, basic health care services and social services. A child's best interests are of paramount importance in every matter concerning the child. The effects of climate change significantly infringe on this right, due to their impact on the health and wellbeing of children. Therefore, both current and future generations of children are placed at risk.

Safety and security

As resources, such as food, water, and arable land, become scarcer due to the effects of climate change the competition for such resources increases. Competition for these resources will inevitably lead to violence between individuals and between larger groups of people. This places the right to freedom

[20] World Health Organization, "Climate Change" (2023) (accessible here).
[21] Id.
[22] Id.

and security of the person, as guaranteed by section 12 of the Constitution, at risk. Interconnected rights, such as the right to human dignity, will also be negatively affected.

Myths, misnomers and misunderstandings

One of the most common arguments attempting to discredit climate change science is that the Earth's climate is constantly changing and that this has nothing to do with human behaviour.[23] Disinformation pushers often use this to argue that people therefore do not need to adjust their behaviour. Denying or downplaying the human influence on the planet is a typical disinformation strategy. While it is true that the world has in the past experienced warmer or colder periods that were not due to human interference, these periods do not come near to the changes in climate experienced due to the increased amount of carbon dioxide in the atmosphere as a result of human activity. The gases that are found trapped in cores of polar ice indicate that the levels of carbon dioxide in the atmosphere now are 35% greater than they have been in at least the last 650 000 years.[24] From the composition of this gas, it is clear that this is due to the burning of fossil fuels and other human activity.[25] Furthermore, the global annual average temperatures from the years 1880-2022 have increased at an unprecedented rate.[26]

Another element of climate change that often leads to controversy, and is therefore often a target of disinformation campaigns, is that the effects thereof are not always immediately felt. A commonly heard argument is "if global warming is real, why is it so cold?". For example, a study conducted in 2014 found that more than one quarter of Americans did not believe in climate change because it was getting colder where they live.[27] This is an example of cherry picking. The long-term trends are ignored in favour of focusing on isolated pieces of data or specific time periods to support a particular argument. This controversy does not acknowledge the difference between weather, which is what one experiences on

[23] The Royal Society, "Climate Change Controversies: a Simple Guide" (accessible here) at 3.
[24] Id.
[25] Id.
[26] World Bank: Climate Change Knowledge Portal, "What is Climate Change?" (accessible here).
[27] Natasha Bertrand, "Here's Why People Don't Believe In Climate Change" (2014) (accessible here).

a day-to-day basis, and climate, which represents long terms patters of temperature; precipitation; wind etc. in a given region.[28]

The properties of greenhouse gases, such as carbon dioxide, are such that they strongly absorb heat.[29] However, sceptics and denialists argue that carbon dioxide only makes up a small amount of the atmosphere and therefore cannot be responsible for global warming. Given the properties of carbon dioxide, tiny concentrations thereof have a huge effect on our climate.[30] The lack of scientific understanding that the general public has allows disinformation campaigns to target this, and other misleading or skewed facts, in order to create controversy. Most people do not understand how complex the Earth is and how various factors affect each other constantly. This ultimately leads to confusion and an easy target for disinformation strategies.

International and regional guidance on the intersection between climate change, access to information and freedom of expression

International and regional guidance on the intersection between climate change, access to information, and freedom of expression has been developed, providing useful insight on how these concepts play into each other. While the below instruments do deal with some of the complexities of the right to access to information, it is submitted that they do not adequately or holistically address disinformation:

- **Rio Declaration:** Principle 10 of the Rio Declaration states that access to information, access to public participation and access to justice are the key pillars of thorough environmental governance.[31] These rights are essential in promoting transparent, inclusive, and countable environmental governance as they empower the public to participate in decision and policy making processes in an informed manner, taking the needs of the community into

[28] NASA, "What's the difference between weather and climate" (accessible here).
[29] The Royal Society, "Climate Change Controversies: a Simple Guide" (accessible here) at 4.
[30] Id.
[31] United Nations Environment Programme, "Implementing Principle 10 of the Rio Declaration" (accessible here).

account. Freedom of expression ensures that the public's views can be heard without fear of retribution.

- **Bali Guidelines**: In order to accelerate implementation of Principle 10, States adopted the Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters ("the Bali Guidelines").[32] The Guidelines provide, as the name suggests, guidelines for States to utilise in implement Principle 10. While they are not binding, an Implementation Guide has been developed.[33] The Guidelines and Implementation Guide have been used to develop national environmental legislation in a number of countries.[34] The Guidelines state that the public should be able to request and have access to environmental information in a structured, cost-effective, user-friendly way.[35] Further, that public authorities should gather and structure information in such a way so as to facilitate this.[36] States should ensure opportunities for public participation in environmental decision making, and should ensure all relevant information available to enable this.[37] While the Guidelines play an important role in furthering the understanding and implementation of Principle 10, they do not fully deal with the nuances of the right to access to information. They do not specify the type of information that must be provided, nor do they indicate that such information must be accurate or up to date. Further, the provisions are only applicable to government bodies, and not to private entities.

- **Aarhus Convention***:* The Aarhus Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters ("the Aarhus Convention") was promulgated by the European Union and came into force on 30 October 2001. It is based on the

[32] United Nations Environment Programme "Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters" (2010) (accessible here).
[33] United Nations Environment Programme, "Bali Guideline Implementation Guide" (2015) (accessible here).
[34] United Nations Environment Programme, "Implementing Principle 10 of the Rio Declaration" (accessible here).
[35] United Nations Environment Programme, "Bali Guideline Implementation Guide" (2015) (accessible here).
[36] Id.
[37] Id.

idea that increased public awareness of, and involvement in, environmental matters will improve environmental protection.[38] It obliges States to ensure public access to environmental information held by public authorities; to foster public participation in decision-making which affects the environment; and to extend the conditions of access to justice in environmental matters.[39] The Convention states that public authorities must keep the information they hold up to date and may only refuse access thereto on certain restrictive grounds.[40] There are no provisions that deal with the publication of information. Again, these provisions only apply to requests to state entities, and not to private bodies.

- **Escazú Regional Agreement***:* The Escazú Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean ("the Escazú Agreement") was the first regional environmental human rights treaty in Latin America and the Caribbean. It guarantees the right to access to environmental information to participate in environmental decision-making, thereby promoting access to information in environmental matters. It stipulates that States must provide "adequate knowledge and assistance to the public, including vulnerable communities, to help them effectively exercise the rights specified in the agreement". This framework, and its contributions towards strengthening environmental democracy and the interrelated right to access to information, is welcomed. However, this instrument also lacks provisions that will ensure that the information provided by authorities and other actors is accurate. Similarly, to the above, the Escazú Agreement falls short of addressing disinformation.

- **General comment No.26***:* In August 2023, the UN Committee on the Rights of the Child published General comment No.26(2023) on children's rights and the environment, with a special focus on climate change ("GC 26"), which provides guidance on the Convention on the Rights of a Child. GC 26 provides that: *"Access to information is essential for enabling children and*

[38] EU, "Access to information, public participation and access to justice in environmental matters" (2005) (accessible here).
[39] Id.
[40] Id.

their parents or caregivers to comprehend the potential effects of environmental harm on children's rights. It is also a crucial prerequisite for realizing the rights of children to express their views, to be heard and to effective remedy regarding environmental matters".[41] Importantly, GC 26 states that children have the right to access accurate and reliable environmental information. [42] Further, it stipulates that States are obliged to protect children from misinformation concerning environmental risks.[43] While not explicitly mentioning disinformation, the GC 26 plays an important role in guiding States towards adopting policies and legislation that ensure that children are protected from false or misleading information and provides them with a right to demand information that is accurate and reliable. This is particularly important given the vulnerability of children to the effects of climate change, as has been discussed above.

- **Special Rapporteur's report on Promoting Environmental Democracy:** In October 2023, the UN Special Rapporteur on Human Rights and the Environment issued a call for comment to inform the entity's report on the procedural elements of the human right to a clean, healthy and sustainable environment, including access to information, public participation and access to justice.[44] As of the date of publication of this discussion document, this report has not yet been published. However, it is set to provide guidance on States' obligations and businesses' responsibilities related to the right to access to information in environmental matters. Therefore, it may provide useful guidance on obligations and responsibilities related to mitigating climate change disinformation.

[41] Committee on the Rights of the Child, "General Comment No. 26 (2023) on Children's Rights and the Environment with a Special Focus on Climate Change" (2023) (accessible here) at para F.
[42] Id.
[43] Id at part IV, para A, sub para 70.
[44] Special Rapporteur on Human Rights and The Environment, "Promoting Environmental Democracy: Procedural elements of the human right to a clean, healthy and sustainable environment" (2023) (accessible here).

DISINFORMATION 101

DISINFORMATION 101

While there are no universally accepted definitions of misinformation and disinformation, particularly in the context of the online world, we can draw comparative guidance from evolving understandings of these types of information.[45] The two concepts relate to types of information that are distinguished on the basis of **harm** and **falseness**, as well as on the **assumed intention** of the person creating or sharing the content. UNESCO distinguishes the two terms as follows:[46]

- **Misinformation** is generally used to refer to "misleading information created or disseminated without manipulative or malicious intent."

- **Disinformation** is generally used to refer to "deliberate (often orchestrated) attempts to confuse or manipulate people through delivering dishonest information to them."

The key difference between the terms is the **intention**, misinformation may be unwittingly shared while disinformation is deliberately created and distributed with the **intent** to deceive or harm. According to UNESCO, "[b]oth are problems for society, but disinformation is determine dangerous because it is frequently organised, well resourced, and reinforced by automated technology."[47] Moreover, the consequences of disinformation can be far-reaching, causing public harm. **Public harm** may, for example, manifest in hampering the ability of the public to make informed decisions or putting the public's health, security, and environment at risk. In assessing if content may be mis or disinformation a crucial consideration especially around climate change is whether the information has the potential to cause public harm.

When unpacking intention and public harm it is necessary to recognise that people engage with content differently and different content may impact people

[45] Media Monitoring Africa, "Disinformation: Through a Children's Rights Lens" (2022) (accessible here).
[46] Id.
[47] UNICEF, "Digital misinformation / disinformation and children 10 things you need to know" (2021) (accessible here).

differently. While a post circulating, for instance, on a class WhatsApp group may be regarded as a harmless post when viewed individually, it can have significant consequences on how someone on that WhatsApp group might come to view the world and interact with people, especially those that are different from them. When platforms gather disinformation and scale it, in coordinated, amplified, and directed ways, it can have a significant impact, especially on people who are undecided or vulnerable.

Disinformation may lead to the erosion of the right to access to information and freedom of expression. As stated by the Association for Progressive Communications, and which will be expanded on below:

> *"Disinformation causes confusion and has a chilling effect on freedom of expression and information. It directly impacts the level of trust in the public sphere as a space for democratic deliberation. People no longer feel safe to express their ideas for fear of online harassment and of being targeted by disinformation campaigns; others feel paralysed and silenced by the puzzlement and incertitude created by the surrounding information pollution and remove themselves from public debate concerning key issues of public interest."*[48]

Disinformation tactics are used in an attempt to discredit the facts of climate change. This is known as climate disinformation. This is done by various actors for various reasons and will be discussed below.

[48] APC, 'Submission to UN Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression on Disinformation and freedom of expression (2021) (accessible here) at 6.

UNPACKING CLIMATE DISINFORMATION

UNPACKING CLIMATE DISINFORMATION

Climate disinformation refers to deceptive content that:

- Undermines the existence or impacts of climate change, the plain human influence on climate change, and the need for corresponding urgent action;

- Misrepresents scientific data, including by omission or cherry picking, in order to wear away at trust in climate science, climate focused institutions, experts, and solutions; and

- Falsely publicises efforts as supportive of climate goals, where they in reality contribute to climate change or contravene the scientific consensus on mitigation or adaptation.[49]

Climate disinformation shares common elements with other forms of disinformation.[50] Namely, that it tends to have a kernel of truth to it – it may refer to a recent event, study, issue, or outcome – and then subvert it. It will pull on emotions, usually with the intention of heightening fear, anxiety, and anger. Further, it tends to simplify complex issues and suggests links to conspiracy theories or deep state governance, suggesting manipulation by global, foreign or outside forces. Climate disinformation, and disinformation more generally, may seek to place blame on specific groups of people, according to race, gender, and nationality for example, thereby perpetuating negative stereotypes.

Climate disinformation is a major threat to climate action. It obfuscates the truth by overwhelming people with claims and questions, designed in bad faith, to confuse people so that climate action is delayed.[51] Climate disinformation creates a distorted or false perception of what climate change is, and the solution to it. It weakens the public mandate for effective policies and actions aimed at

[49] Climate Action Against Disinformation, "Misinformation and disinformation are major threats to climate action" (accessible here).
[50] Cybersecurity and Infrastructure Security Agency, "Tactics of Disinformation" (2021) (accessible here).
[51] Center for Countering Digital Hate, "The Toxic Ten: How ten fringe publishers fuel 69% of digital climate change denial" (2021) (accessible here).

climate change mitigation and adaptation. The amount of climate disinformation is so vast and is compounded to such an extent by social media, that various climate and anti-disinformation organisations formed a global coalition in 2021 to safeguard public debate and mitigate disinformation attacks against COP26.[52] Various actors engage in climate disinformation to further specific goals and do so through various mechanisms. This will be discussed below.

Climate misinformation – misleading information about climate change that is shared without malice – also poses a threat to climate action. Climate change is a complex topic that can cause genuine confusion. Low public trust in the government, low trust in each other, and low trust in sources of information makes it difficult for people to believe what an authority tells them, even if that information is true. This creates a breeding ground for both mis- and disinformation. It is therefore crucial to address the drivers of a low trust society – corruption, opaque decision making, a lack of proactively making information available – in order to really tackle the myths, misnomers and misunderstandings that some take advantage of, and others unintentionally spread.

The intersection of technology and climate disinformation

The increased use of certain types of technology can lead to an increase in the spread of disinformation due to the speed and ease at which information can be communicated. However, as will be discussed later in this paper, the same technology could be used as a very effective tool to tackle the spread of disinformation.

Social media and online forums

The nature of social media and online forums creates a perfect environment for the spread of climate disinformation and compounds the risk of certain emergent technology. In particular, the following factors of social media and online forums generally create this environment:

[52] Climate Action Against Disinformation, "Misinformation and disinformation are major threats to climate action" (accessible here).

- **Speed of dissemination**: Online platforms use algorithms that promote content based on user engagement i.e., likes, comments, and shares, in order to maximise user engagement.[53] The effect of this is that when content gets attention, it spreads faster and to a larger audience. This is known as algorithmic amplification.[54] When content gets liked, shared, or commented on, it reaches the user's direct connections but then is also more likely to be promoted by the platform's algorithm. This then leads to even more visibility, creating a feedback loop. Therefore, whether a piece of information is true or false, if it captures attention and triggers responses, algorithms will promote it and amplify its visibility.

- **Persistence of information**: Once information has been posted, it is pretty much impossible to erase it completely due to speed at which it is disseminated. While a user can delete content after posting it, the information may have already been shared, screenshot, or archived. Online platforms use algorithms that retain information and then resurface posts based on its relevance, an example of this would be the 'memory' feature on Facebook.[55]

- **Anonymity and lack of accountability**: On online platforms, it is possible for users to post content anonymously. It can therefore be very difficult to hold such users responsible for posts that amount to climate disinformation.

- **Integration of automation and bots**: Integration with automation and bots refers to the inclusion of automated features in online platforms and the prevalence of autonomous bots that operate on them.[56] A bot is a software program that automates specific tasks and often mimics human interactions on online platforms.[57] Bots can be created by third parties to perform a variety of tasks- such as spread certain information. Because of their persistent presence, bots can ensure that a particular post or information

[53] Institute for Internet & Just Society, "Algorithms in Social Media Platforms" (2021) (accessible here).
[54] Arvind Narayanan, "An Introduction to My Project: Algorithmic amplification and society" (2022) (accessible here).
[55] Tech Crunch, "Facebook launches ' Memories,' a new home for reminiscing" (2018) (accessible here).
[56] Bryce Emley, "Robotic process automation: RPA meaning and how to integrate it into your business" (2023) (accessible here).
[57] Cloudflare, "What is a bot?" (accessible here).

remains visible and continuously disseminated. Thus, disinformation can be spread incredibly quickly to a huge network.

Artificial intelligence and emergent technology

Artificial intelligence ("AI") can be used as a tool to quickly spread climate disinformation and make it very difficult for people to discern what is true and what is not. It is useful to distinguish between AI in the weak sense and in the strong sense:

- **Weak AI**: Weak AI, otherwise known as narrow AI, is designed to complete specific tasks while *simulating* human cognition. It can automate time consuming tasks and analyse data in ways that humans sometimes can't.[58] An illustrative example would be content recommendation algorithms that structure "For You" pages on social media platforms.
- **Strong AI**: Strong AI, also known as artificial general intelligence, can apply knowledge from one domain to another and find a solution by itself. It can perform a variety of functions and it is predicted that it could eventually teach itself to solve for new problems – in time, it would *develop* its own human-like cognition.[59] This is the key distinction between strong AI and weak AI.

Boths forms of AI have implications for the spread of climate disinformation. Weak AI can shape the structure of what information is accessible by deciding what kind of content to amplify online. Strong AI could act as a participant in the information ecosystem by generating false content itself or creating infrastructure to prop up certain content, such as creating a fake news site.

AI tools can be dangerous in the wrong hands, as they allow anyone to create realistic but untrue material without investing the time, resources or expertise previously needed to do so. This technology is powerful enough to write academic essays, pass law exams, mimic someone's voice and even produce realistic looking images of a person.[60] Some companies with AI technology have

[58] Jake Frankenfield, "Weak AI: Examples and Limitations" (2022) (accessible here).
[59] IBM, "What is strong AI" (accessible here).
[60] Kristoffer Tigue, "AI Can Spread Climate Misinformation 'Much Cheaper and Faster,' Study Warns" (2023) (accessible here).

responded to growing concerns about their products by developing safety systems including content filtering, operational monitoring, and abuse detection.[61] However, it is still possible for nefarious actors to fool AI chatbots into creating climate disinformation.

NewsGuard is a company that monitors and researches online disinformation. In March 2023 it released a study that showed that the leading AI developers had failed to implement effective guards to prevent users from generating potentially harmful and untrue content.[62] NewsGuard found that it could get ChatGPT-4, which is developed by OpenAI, to develop false and misleading narratives in the form of news articles, Twitter threads, TV scripts that mimic state-run media outlets, as well as well-known people in response to all of its leading prompts relating to 100 false narratives.[63] This study demonstrated that ChatGPT-4, or a tool like it using the same underlying technology, can be used to spread climate disinformation at scale- despite this being in violation of OpenAI's usage policies.[64]

Deepfakes are videos, audio clips or images that are created using AI.[65] This technology can convincingly replicate how people look and sound. As this technology improves, the potential for it to be used effectively in disinformation campaigns increases. A recent example of where deepfakes were used to spread disinformation was in Venezuela, where this technology was used by a state-owned television station to spread fake news coverage about their county from an American news agency.[66] Deepfakes can be used to spread climate disinformation by creating fraudulent content that appears to be from credible sources. For example, fake videos of credible scientists could be created in which they state that climate change is not real. Not only can this promote false narratives, but it can also undermine the public's trust in genuine scientific findings and thereby hinder collective climate action.

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[61] Id.
[62] News Guard, "Misinformation Monitor: March 2023" (2023) (accessible here).
[63] Id.
[64] Id.
[65] Dave Johnson and Alexander Johnson, "What are deepfakes? How fake AI-powered audio and video warps our perception of reality" (2023) (accessible here).
[66] Maria Luisa Paul, " 'Noah' and 'Daren' report good news about Venezuela. They're deepfakes" (2023) (accessible here).

It appears that AI may be used to increase the output and quality of climate disinformation online. This presents huge challenges to climate action, as it can be used to further narratives by various actors to discourage people from acting. However, as will be discussed below, AI could also be used as a tool to detect climate disinformation.

Targeting climate activists

Climate activists have been subject to disinformation campaigns by various actors, often in attempts to discredit their work or undermine their causes. There have been widely reported instances of this. For example, Greta Thunberg became a widespread target after she gained traction. Narratives surrounding her mental ability and accusing her of being a puppet being used by others with vested interests spread online, particularly through Twitter and Reddit.[67] These narratives, which have the effect of negating her efforts, were further spread by the likes of Trump.[68]

Another example of a widespread climate disinformation campaign has become known as Climategate. In 2009 emails from climate scientists were hacked and published, with certain phrases taken out of context to suggest that these scientists were manipulating data to exaggerate the extent of climate change.[69] While many independent investigations found this to be false,[70] the controversy created by the incident cast doubt onto those scientists' reputation and no doubt on climate science generally.

South African climate activists have been similarly targeted. Minister Mantashe made statements in 2021 claiming that objections to Shell conducting seismic blasting due to environmental concerns constituted "apartheid and colonialism of a special type".[71] Again, this disinformation unjustifiably rebuts activists

[67] Aashka Dave, Emily Boardman Ndulue and Lara Schwartz-Henderson, "Targeting Greta Thunberg: A Case Study in Online Mis/Disinformation" (2020) (accessible here).
[68] Id.
[69] Robin Mckie, "Climategate 10 years on: what lessons have we learned?" (2019) (accessible here)
[70] Nature Geoscience, "Climategate closed" (2010) (accessible here). 7
[71] Lisa Steyn, " 'Special apartheid': Mantashe accuses anti-Shell lobby of 'oppressing' development" (2021) (accessible here).

'scientifically based arguments and derails climate activism, ultimately stifling climate action.

The fossil fuel agenda

Actors who have interests in keeping people reliant on fossil fuels have been found to be spending huge amounts of money on campaigns aimed at sowing doubt about climate science.[72] A 2021 analysis found that 16 of the world's biggest polluters, which are major fossil fuel companies, were responsible for 1700 adverts on Facebook which spread false and misleading content about renewable energy and reform of the energy sector.[73] Collectively, these adverts gained roughly 150 million impressions and earned Facebook nearly 5 million US dollars.[74]

The spread of climate disinformation by those with vested interests in the continued use of fossil fuels is not new. The Global Climate Coalition ("GCC") was a coalition founded in 1989 by several large businesses and trade associations from oil, gas, and car industries in America.[75] Internally, the group acknowledged the role of human activity in climate change but publicly questioned the scientific consensus on climate change and emphasised the costs of reducing greenhouse gas emissions in order to advocate for their collective interests i.e., to sell oil, gas, and cars.[76]

Social media and AI technology makes it easier for these actors to spread climate disinformation in order to protect their interests. As seen from the above-mentioned analysis, social media companies often gain financially from such disinformation campaigns and therefore may not be motivated to hold those intentionally spreading climate disinformation on their platforms to account.

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[72] Melissa Fleming, "Rampant climate disinformation online is distorting dangers, delaying climate action" (2022) (accessible here).
[73] Eco-Bot.Net, "Data drops" (accessible here).
[74] Jeff Turrentine, "Climate Misinformation on Social Media is Undermining Climate Action" (2022) (accessible here). h
[75] Robert J. Brulle, "Advocating inaction: a historical analysis of the Global Climate Coalition" (2022) *Environmental Politics* (accessible here) at 1.
[76] Id at 2.

While regulation of this is improving,[77] it is imperative that this issue be quickly and comprehensively addressed.

Political agendas

Politicians may engage in climate disinformation to further their political interests. There are examples of this across the world. Climate disinformation for this purpose does not necessarily manifest in outright climate change denial. Politicians have been known to mispresent the economic impacts of climate action; downplay the impact of climate change; or discredit climate science or promote the idea that there is significant disagreement among scientists regarding the fundamentals of climate change. Examples of this, as well as outright denial, has been seen across the world, for example:

- The most notorious politician who was known throughout his presidency as someone who unashamedly denied climate change was former President Donald Trump. Trump repeatedly questioned the science behind climate change, at one point even calling climate change a hoax orchestrated by China, incorrectly stating that wind turbines cause cancer and dismissing a scientific report produced by the federal government's own scientists.[78] Trump's presidential term was marked by climate denial and regression on environmental policy. A particularly key demonstration of this cumulated in his withdrawal of the United States from the Paris Agreement in 2017.[79] Trump's motivation for spreading climate disinformation seem to be tied to political strategy. A large segment of his voter segment included individuals and communities tied to fossil fuel industries.[80] Therefore, in order to foster support for him as a politician, he played into these affiliations.

- Former Brazilian President, Jair Bolsonaro, has continuously downplayed the effects of deforestation and dismissed international criticism to his approach to the environment and climate change, particularly with respect

[77] The Digital Services Act (accessible here).
[78] Justin Worland, "Donald Trump Called Climate Change a Hoax. Now He's Awkwardly Boasting About Fighting It" (2019) (accessible here).
[79] United States, "On the U.S. Withdrawal from the Paris Agreement" (2019) (accessible here).
[80] Peter Stone, " 'Swampy symbiosis': fossil fuel industry has more clout than ever under Trump" (2019) (accessible here).

to deforestation in the Amazon rainforest. In 2019 former President Bolsonaro spoke at the United Nation's General Assembly General Debate, where he falsely asserted that the Amazon is practically untouched and blamed a "lying and sensationalist media" for propagating disinformation about its destruction.[81] This was particularly shocking given that in 2019 the Amazon experienced a high number and intensity of forest fires, most of which were set by humans in order to clear land for cattle and farming.[82] President Bolsonaro has consistently prioritised economic growth over environmental protection, ignoring the fact that a healthy environment is imperative to life (let alone the economy) in favour of short term economic gain. These strategies of climate disinformation appeal to segments of his political base, including rural agricultural communities and industries who are convinced that climate action limits their economic potential.[83]

- Minister Gwede Mantashe is South Africa's Mineral Resources and Energy Minister. South Africa's energy sector is currently dominated by coal and is responsible for 80% of South Africa's greenhouse gas emissions.[84] South Africa is obliged by international and consequent domestic law to reduce its greenhouse gas emissions.[85] Despite this, Minister Mantashe has time and time again made blinkered and misleading statements about the economic effects of moving away from coal. While Minister Mantashe does not state outright that South Africa should not move away from coal, the way that he frames narratives about the loss of jobs and negative effects of such a transition dampens public appetite for tackling climate action.[86] He does not emphasise jobs that would be created by a just transition away from coal, or the long-term economic benefits that moving to renewable energy has. This is cherry picking, and a form of disinformation. The amount of unemployment in South Africa[87] may be prompting Minister Mantashe to make such

[81] Jon Lee Anderson, "At the UN, Jair Bolsonaro Presents a Surreal Defense of His Amazon Policies" (2019) (accessible here).
[82] Id.
[83] Jeff Wallenfeldt, "Jair Bolsonaro: president of Brazil" (2024) (accessible here).
[84] Jonathan Hanto, Akira Schroth, Lukas Krawielicki, Pao-Yu Oei, Jesse Burton, "South Africa's energy transition-Unraveling its political economy" (2022) (accessible here).
[85] Id.
[86] Helen Reid and Alexander Winning, "South Africa should not 'rush' move away from coal, says Mantashe" (2021) (accessible here).
[87] StatsSA, "Beyond unemployment – Time-Related Underemployment in the SA labour market" (2023) (accessible here).

statements to gain politically. Further, Minister Mantashe has been accused of having vested interests in the coal industry,[88] which may also be motivating his spread of climate disinformation.

These examples demonstrate how politicians have used climate disinformation as a tool to further their own agendas, despite the costs of doing so on the people who they are supposed to serve.

Children and climate disinformation

As has been previously discussed, children in South Africa have the right to have their best interests protected.[89] This standard is given effect to regionally and globally, although to varying degrees.[90] It is imperative that children have meaningful access to digital technologies in order to support and realise their full range of civil, political, cultural, economic, and social rights.[91] However, children develop at different paces have had different life experiences, which impacts the way in which they are able to make decisions and engage with online content.[92] As children do not always have the cognitive or emotional capacity to identify climate disinformation, they may be particularly vulnerable to it.[93]

Children are active users of social media, and online platforms are often their sources of young people.[94] Children are therefore being exposed to the types of climate disinformation as discussed above. Today's youth are the people who will be most affected by climate change. It is therefore crucial that they are informed of the causes of climate change and effective mitigation and adaptation strategies. Climate disinformation significantly impedes this and prevents children from making climate action and advocating for their future.

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[88] Daily Investor, "Mantashe accused of having vested coal interest" (2023) (accessible here).
[89] The Constitution of the Republic of South Africa, 1996 (accessible here) at section 28.
[90] Convention on the Rights of the Child, 1990 (accessible here); African Charter on the Rights and Welfare of the Child, 1990 (accessible here); Constitution of the Republic of South Africa, 1996 (accessible at here); Children's Act 38 of 2005 (accessible here).
[91] Committee on the Rights of the Child, "General Comment No. 25 on children's rights in relation to the digital environment" (2021) (accessible here).
[92] Media Monitoring Africa, "Disinformation: Through a Children's Rights Lens" (2022) (accessible here) at 17.
[93] Id at 20.
[94] Id at 18.

MMA and the Web Rangers' submissions to the CRC

In 2023, the Committee on the Rights of the Child ("CRC") called for inputs on the Draft General Comment on Children's Rights and the Environment with a Special Focus on Climate Change. The Web Rangers, a group of young South Africans who participate in a digital literacy programme run by MMA, asked the CRC to distinguish between mis- and disinformation and highlighted the dangers of both practices. They advocated for heightened obligations on states regarding providing children with access to information, in order for children to be empowered to take climate action.

MMA similarly urged the CRC to place further emphasis on the intersection of access to information and children's right and responsibilities in the context of environmental justice and climate change. Further, MMA encouraged the CRC to bolster children's right to access all climate change-related information by limiting the use of language which could be used by states and others to censor climate information from children. MMA asked the CRC to distinguish between mis-and disinformation and to explicitly recognise the harms of climate disinformation, in order to strengthen children's right to access to information.

THE IMPACT OF CLIMATE DISINFORMATION

THE IMPACT OF CLIMATE DISINFORMATION

Climate disinformation is created by various actors for various reasons and affects different demographics of the population in different ways. This section will set out how climate disinformation exacerbates climate change, and thereby increasing harm to the environment. The below consequences of climate disinformation give rise to people not implementing climate solutions and not holding government accountable in implementing them. This results in more harm to the environment and consequently more people being harmed by the effects of climate change. Furthermore, the impacts of climate disinformation undermine peoples' right to freedom of expression and access to information.

Echo chambers of lies gives rise to climate change denial

Algorithms used on social media platforms plays a significant role in what users see on these platforms.[95] Social media algorithms use a variety of factors to determine what to show users, with the goal of keeping users on the platform for as long as possible. Such factors include:

- Personalisation: algorithms use information about users, such as past behaviour, interactions, and shared interests to personalise content. For example, if a user often likes certain content, the algorithm learns to show them more of that content.[96]

- Relevance: algorithms consider the likely relevance of content. They predict this based on factors such as how recently content was posted and how other people who have already seen the content react to it.[97]

[95] Ozgul Polat & Ebru Aydin "The effect of mind mapping on young children's critical thinking skills" (2020) 38 *Thinking Skills and Creativity* (accessible here) at 2.
[96] Dorcas Adisa, "Everything you need to know about social media algorithms" (2023) (accessible here).
[97] Id.

- Networks: algorithms consider users' network i.e., they people or pages that they follow and interact with the most. Content from these sources is more likely to be displayed.[98]

As a result of these factors, users often end up seeing content that aligns with their existing beliefs and interests.[99] They are not exposed to any narratives that they disagree with, or with which they have not previously interacted with.[100] This is known as an echo chamber. If a user often interacts with content that contains climate disinformation, algorithms will only show them that kind of content. This leads to people not being exposed to alternative views and believing that the view postulated by climate disinformation is more widely held than it actually is.[101] Social media platforms often do not label posts as disinformation,[102] therefore people caught in echo chambers do not even realise that they are being fed false or misleading information. This then leads to people denying climate change, and not engaging in climate activism or holding authorities accountable for climate change mitigation and adaptation. Further, it results in people not having access to a holistic view of climate change and thereby infringing on their right to access to information.

Polarisation of public opinion results in inaction

Climate disinformation plays a significant role in perpetuating polarisation about climate change through undermining scientific consensus; appealing to political ideologies; promoting conspiracy theories; fuelling fear and mistrust; creating false equivalences between the majority of scientists who agree on climate change and the small minority of those who don't; and by creating echo chambers of lies.[103] Such polarisation can lead to inaction and delays in taking effective

[98] Id.
[99] Elizabeth Dubois and Grant Blank, "The echo chamber is overstated: the moderating effect of political interest and diverse media" (2018) (accessible here) at 729
[100] Id.
[101] Id.
[102] Center for Countering Digital Hate, "The Toxic Ten: How ten fringe publishers fuel 69% of digital climate change denial" (2021) (accessible here).
[103] Aditi Tandon, "Misinformation leads to misperception, polarisation causing delay in climate action: IPCC report" (2022) (accessible here).

climate action,[104] as it disregards scientific consensus, the risks of climate change, and the urgency of action required.[105]

Democratic systems require a level of consensus and a willingness to compromise. When opinions are so polarised, it is very difficult to achieve this, and politicians become weary of comprising for fear of alienating their support base. This can lead to a gridlock, where little to no progress is made.[106] The divide created by climate disinformation results in it being extremely difficult to build broad public support for climate action. Furthermore, where climate policy is enacted, it becomes vulnerable to changes in political power because if one side enacts climate policies the other side promises to repeal them. This results in policy instability that hinders long terms planning and investment. It is therefore clear that extreme polarisation, fuelled by climate disinformation, hinders climate action sometimes even to the point of inaction.

Extreme polarisation breads environments of violence as it divides the population who are unwilling to compromise or yield power.[107] This violent atmosphere, which has been visibly in the United States of late, leads to people being unwilling to speak up and hold people to account for fear of retaliation. Again, this leads to climate inaction. This limits the right to freedom of expression.

Lack of public participation due to confusion and climate defeatism

Climate disinformation campaigns, especially when created by AI tools which can present very academic and accurate sounding narratives, create confusion about climate science and the solutions to climate change. This can lead to people feeling overwhelmed by all of the countering information and narratives, and thereby experiencing decision paralysis.[108] People affected by climate

[104] Frank Newpoer, "The Impact of Increased Political Polarization" (2019) (accessible here).
[105] Aditi Tandon, "Misinformation leads to misperception, polarisation causing delay in climate action: IPCC report" (2022) (accessible here).
[106]Scope, "Polarisation in US Politics is Leading to Policy Inaction and Uncertainty" (2017) (accessible here).
[107] Stephanie Forrest and Joshua Daymude, "Reducing extreme polarization is key to stabilizing democracy" (2022) (accessible here).
[108] UN, "Communicating on Climate Change" (accessible here).

disinformation in this way are therefore less likely to engage in climate policy formulation and climate action.[109]

Climate disinformation can lead people to believe, for example, that climate change is too expensive to tackle or that it is already too late to stop, resulting in them feeling hopeless or cynical about the possibilities of meaningful action.[110] This is known as climate defeatism. Climate defeatism leads to people not participating in climate change mitigation and adaptation measures and strategies, as they believe that they will not make a difference.[111]

Confusion and climate defeatism, which can be caused by climate disinformation, results in less people being involved in climate action and solutions, and thereby in climate change not being effectively tackled.

Distrust in the media

The media plays an imperative role in tackling climate change. The media is largely responsible for bringing the problem of climate change beyond a small, expert community and into public discourse.[112] The media has a responsibility to report accurate and realistic information, thereby enabling people to make informed decisions, while encouraging solutions and progress in order to keep up public motivation. Disinformation threatens the ability of the media to achieve this. The more disinformation is spread, the more difficult it becomes to know what information published by the media is true and what is not. Consequently, the public will begin to distrust the media. In fact, this trend has already largely materialised.[113]

The media primarily serves the public by keeping them informed, and in this way acts as a check on states' power. If the media is not trusted, they will not be effective in keeping institutions accountable as investigative work is less likely to

[109] Id.
[110] Victoria Corless, "Ahead of COP27, scientists are pushing back against the growing defeatism" (2022) (accessible here).
[111] Id.
[112] UNDP, "Climate change: What is the role of the media?" (2021) (accessible here).
[113] Reuters Institute, "Bias, Bullshit and Lies: Audience Perspectives on Low Trust in the Media" (2017) (accessible here).

gain traction and thereby instigate change. Further, if the media is not trusted, nefarious characters can exploit this in order to more easily discredit reports that are critical of them. Additionally, whistleblowers will be less likely to come forward if the media loses its status as a trusted institution, as they may believe that they are exposing themselves to risk without the consequence being that the wrongdoer will be held to account. While it is beneficial to democracy for people to not blindly accept what is fed to them by the media, a balance must be struck in fostering trust in reputable sources for the reasons discussed above. Disinformation threatens to undermine this balance, and therefore threatens the ability of reputable media to hold people to account.

SOLUTIONS

SOLUTIONS

This section will set out possible solutions to climate disinformation. Such solutions include nuancing children's rights to a clean, safe, and healthy environment and access to information; bolstering digital literacy tools and the role of government in providing access to resources; increased regulation of online platforms and users in a way that does not unjustifiably hinder freedom of expression; and the urgent need to consider the role regulating AI technology, as well as the role AI could play in combatting climate disinformation.

Children's rights to a clean, safe, and healthy environment and access to information

As has been discussed above, GC 26 provides a solid foundation for ensuring that children have a right to accurate and relevant information regarding climate change in order to realise their rights to a clean, safe, and healthy environment as well as to access to information. However, it is submitted that UN commentary children's right to a clean, safe, and healthy environment and access to information must be further nuanced to strongly take a stand against climate disinformation. It is important that this is achieved so that States filter this position into domestic laws regarding children's rights. First, such commentary must address disinformation in a direct way. In order to address climate disinformation, it must be recognised directly as a threat to children's rights. Commentary must oblige States to implement mechanisms in order to negate this threat. Second, commentary must emphasise the importance of digital literacy. Climate disinformation occurs mostly online. Therefore, States must be obliged to ensure that their children are digitally literacy, so that they can navigate climate disinformation in an informed manner and thereby realise their rights.

Training journalists and the role of civil society

In order for the media to provide accurate and relevant reporting on climate change issues and solutions, they must be able to identify both mis – and disinformation. Therefore, it is important for journalists who are reporting on these

topics to receive training on the nuances and intricacies of climate change and the solutions thereto. Civil society should consider offering such training, thereby enabling the free flow of climate information which is true and not misleading- be it intentionally so or not.

Civil society should consider implementing other innovative tools for identifying and preventing disinformation. An example of this can be seen in the Real 411, a platform where anyone can report digital harms occurring on online platforms, including disinformation.

The role of government in providing access to resources

States are obliged to meet certain mitigation and adaptation goals in terms of international law and domestic legislation. In South Africa, people have a Constitutional right to access to information, and the State must enable this right.[114] In order to fulfil both of these obligations, and the intersection between them, the State must provide the public with information that is true and up to date about climate change. They have a responsibility to prevent the impacts of climate disinformation as discussed above, in order to meet climate change mitigation and adaptation goals targets. It is not sufficient for legislation to exist that allows access to this type of information. In order for people to fully utilise and realise their rights, it is submitted that they State must provide the following resources:

- Climate change education: the population must be aware of the causes and effects of climate change, as well as mitigation and adaptation measures in order for them to be able to make informed decisions. If this foundation exists in the population, people will be more sceptical of disinformation tactics, and therefore mitigate the effects thereof. It is therefore crucial that the State provide such education.

- Digital literacy: as has been discussed above, climate disinformation occurs mostly online. In order for the population to be able to navigate such terrain

[114] Section 32 of the Constitution.

and make informed decisions on what they see there, the State must ensure that the population is digitally literate.

Online platform regulation

There is a fine line between freedom of expression and preventing the harms of disinformation. While it may not be prudent for the State to overly regulate online platforms, and in this way unduly limit freedom of speech, it is clear online platforms must be obliged to take firmer action against climate disinformation. For example, the State could oblige online platforms to label posts that have been identified as climate disinformation. Failure to do this could then result in the online platform being held liable for such disinformation.

AI as an ally

At the moment, AI is not really regulated in the South Africa. It is submitted that there needs to be some regulation. However, the State must be cautious so as not to overregulate, as AI has the potential to be extremely helpful in tackling climate disinformation. AI can be, and is already, instrumental in detecting disinformation in various ways:

- **Text analysis and fact-checking**: Advanced language understanding models can analyse text and cross-reference it with known facts. They can verify the information from a wide variety of sources in multiple languages.[115] For example, if a news article claims a certain event took place at a particular time, AI can check different reliable sources to confirm or deny this. This process could be used to alert readers to potential false information.

- **Source credibility assessments**: AI can assess the credibility of a source. It can be trained to evaluate various indicators of trustworthiness, like historical accuracy, the presence of fact-checking mechanisms, and the degree of transparency about the source's funding and ownership.[116]

[115] Akin Unver, "Emerging Technologies and Automated Fact-Checking: Tolls, Techniques and Algorithms" (2023) (accessible here). 2
[116] Amit Cohen, "Enhancing Credibility Checks with AI: Exploring Benefits and Limitations" (2023) (accessible here).

- **Image and video analysis**: AI can be used to detect manipulated or deepfakes. AI can identify inconsistencies in lighting, shadows, and other visual elements, which humans may miss.[117]

- **Network analysis**: AI can analyse the patterns in which information spreads online.[118] This can be used to identify coordinated disinformation campaigns. For example, if the same message is being posted by a multitude of accounts across various platforms at the same time, it might indicate a deliberate attempt to spread false information and AI can be used to quickly expose this.

While AI can greatly assist in detecting disinformation, it's important to remember that it is a tool and is not infallible. Its effectiveness depends on how it's used. AI can be influenced by biases in the data used to train them, and this could lead to the above mechanisms producing biased results.[119] It is therefore essential that regulation of AI is rooted in transparency. AI cannot be completely overregulated so as to negate the use of these tools, but it is crucial that efforts be made to ensure transparency in their functioning.

[117] Edmund L. Andrews, "Using AI to Detect Seemingly Perfect Deep-Fake Videos" (2020) (accessible here).
[118] Amit Cohen, "Enhancing Credibility Checks with AI: Exploring Benefits and Limitations" (2023) (accessible here).
[119] Id.

CONCLUSION

CONCLUSION

Climate disinformation is a significant barrier to climate action and the fulfilment of various human rights. Solutions to counteract climate disinformation and multifaceted, and require a comprehensive approach including bolstering digital literacy, ensuring access to reliable information, and fostering a critical understanding of climate issues amongst the public and the media. A balanced approach to the regulation of online platforms, which promotes transparency and accountability while still safeguarding freedom of expression, should be developed and implemented. Further, while the development of AI does present some risks as to the spread of disinformation, AI should be seen as an ally due to its potential in mitigating disinformation. It should be regulated with this in mind, avoiding an overly rigid and limiting approach. These solutions will require collective action involving governments, civil society, the media, and industry in order to foster an engaged and informed public, thereby enabling effective climate mitigation and adaptation strategies.

DISCUSSION DOCUMENT

MEDIAMONITORING AFRICA