

GPT-4 on AI Bias, Homo deus, and Climate Change

Douglas C. Youvan
doug@youvan.com

August 18, 2023

Keywords: OpenAI, AI training, bias, corpus training, post-corpus, reviewers, neutrality, Fermi paradox, Great Filter, anthropogenic climate change, self-destruction, climate change, Jewish history, conspiracy theory, Homo Deus, Yuval Noah Harari, WEF, Greta Thunberg, Al Gore, diversity, Martin Luther King Jr., ethical basis, Bible, IPCC, Intergovernmental Panel on Climate Change, scientific consensus, education, climate scientist, moral imperative, global solidarity, personal responsibility, greenhouse gases, World Meteorological Organization, WMO, National Aeronautics and Space Administration, NASA, human depopulation, carbon footprint, industry profits, climate change deniers, jury selection, liberal, conservative, human trainers, stakeholder, motivation to learn.

DO

Considering all the hundreds of potential solutions to the Fermi paradox and / or hitting the Great Filter, what is the probability of the cause being anthropogenic climate change? I know you will have to make a very speculative estimate.

ChatGPT

The Fermi Paradox poses the question: given the vast number of potentially habitable planets in the universe, where are all the aliens? Why haven't we observed signs of extraterrestrial civilizations? One proposed answer to this paradox is the concept of the Great Filter, which posits that there's some improbable step along the path from planet formation to the emergence of a galaxy-spanning civilization, which acts as a barrier preventing most potential civilizations from reaching a point where we might observe them.

There are many possible solutions to the Fermi Paradox and potential steps in the Great Filter. Here are some broad categories:

1. **Rare Earth Hypothesis**: Life, especially intelligent life, is incredibly rare.
2. **Self-Destruction**: Civilizations tend to destroy themselves before or shortly after achieving space-faring capabilities.
3. **Existence but Undetectable**: They're out there, but we just can't detect them (either because of technological limitations, they're too far away, or they're intentionally hiding).
4. **Zoo Hypothesis**: They're watching us like animals in a zoo, and we're kept in a "galactic quarantine".
5. **Non-Interference Hypothesis**: There's a prime directive-style non-interference principle in place.
6. **Time**: Civilizations might exist but at different times, missing each other by millennia or even longer.

Anthropogenic climate change would fall under the second category: civilizations self-destructing. To consider climate change as the primary reason behind the Great Filter, we'd be assuming that a significant number of intelligent civilizations across the universe evolve on planets similar to Earth and, once achieving industrial capabilities, end up causing their own demise via environmental damage.

To estimate the probability of anthropogenic climate change being the primary reason for the Great Filter, several factors need to be considered:

1. **The Prevalence of Earth-like Planets:** If most life-bearing planets are vastly different from Earth, then the specific conditions and evolutionary pathways that led to anthropogenic climate change here might be less likely elsewhere.
2. **Technological Pathways:** Is the path we took, from discovering fire to burning fossil fuels, a common trajectory for most civilizations, or just one of myriad possible paths?
3. **Adaptability of Life:** Even if many civilizations damage their climates, how many of those changes are truly cataclysmic on a cosmic scale? Maybe many civilizations harm their planets but later find solutions to adapt and continue on, or perhaps move to other planets.
4. **Other Self-Destruction Mechanisms:** There are other potential ways civilizations might self-destruct, such as nuclear warfare, artificial intelligence, or other unforeseen technological hazards.

Given these complexities and uncertainties, providing a specific probability would be highly speculative. However, it's reasonable to believe that anthropogenic climate change might be one of many potential barriers that civilizations face, but it's hard to say if it's the most common or significant one. The vastness and

diversity of the universe, combined with our current lack of data on extraterrestrial civilizations, makes pinpointing any one reason as the primary cause of the Fermi Paradox exceedingly challenging.

DO

Let's just do our estimate versus "Other Self-Destruction Mechanisms".

ChatGPT

When weighing anthropogenic climate change against other potential self-destruction mechanisms, it's still a complex issue, but we can approach it more narrowly.

Let's consider some of the primary self-destruction mechanisms:

1. **Anthropogenic Climate Change:** The detrimental alteration of a planet's climate due to activities of its inhabitants.
2. **Nuclear Warfare:** The potential for a civilization to annihilate itself through nuclear conflict.
3. **Uncontrolled AI:** The emergence of a superintelligent AI that acts in ways detrimental to its creators.
4. **Biological Catastrophes:** Deliberate or accidental release of engineered pathogens or other bio-hazards.
5. **Resource Depletion:** Unsustainable extraction and use of resources leading to societal collapse.

For anthropogenic climate change to be the most likely cause, it would have to be a more common and insurmountable hurdle than the other listed threats. Let's break it down:

1. **Universality:** For any of these threats to be a universal filter, it would need to be an almost inevitable consequence of the development of intelligent life. While it's conceivable that any intelligent life would exploit its environment (leading to potential climate change and resource depletion), it's less

certain that every civilization would develop nuclear weapons or dangerous AI.

2. **Irreversibility:** Some threats might be more reversible or manageable than others. Climate change, while significant, could in theory be managed or reversed with sufficient technology and will. On the other hand, a full-scale nuclear war or a catastrophic AI event might leave a planet uninhabitable for a longer period or even permanently.
3. **Scale of Threat:** While climate change poses a massive threat, it often acts on longer time scales (decades to centuries). Rapid existential threats like nuclear warfare or uncontrolled AI might present more immediate "do or die" scenarios for a civilization.

Given these considerations, here's a speculative estimation:

- If we consider universality as the most crucial factor, anthropogenic climate change and resource depletion might be more common challenges than, say, uncontrolled AI. This might give climate change a higher probability.
- However, if we look at irreversibility and scale, nuclear warfare or a rogue AI could represent more immediate and lasting threats. This would reduce the relative probability of climate change being the primary factor.

Speculatively, if we were to rank these on the combined considerations of universality, irreversibility, and scale, we might get:

1. Anthropogenic Climate Change and Resource Depletion
2. Nuclear Warfare
3. Uncontrolled AI
4. Biological Catastrophes

But these are incredibly rough estimates and can be debated extensively. Based on this speculative hierarchy, and comparing anthropogenic climate change solely against other self-destruction mechanisms, one might give it a higher probability than some of the others but not necessarily higher than all others combined.

Again, it's worth stressing that these estimates are speculative and based on our current understanding of each threat. As our knowledge grows and as events unfold, these estimates could change.

DO

Let's just consider human extinction within the next 100 years.

ChatGPT

Alright, considering just the potential for human extinction within the next 100 years, we can examine some of the most prominent existential risks and make a speculative estimation of their relative likelihoods.

Here are the risks we might consider, given current knowledge:

1. **Anthropogenic Climate Change:** The acceleration of global climate change due to human activity leading to widespread catastrophes that might threaten human survival.
2. **Nuclear Warfare:** A large-scale nuclear conflict that devastates global ecosystems and societies.
3. **Uncontrolled AI:** The development and potential mishandling of superintelligent AI that acts in ways detrimental to human existence.
4. **Biological Catastrophes:** This could be in the form of pandemics (natural or engineered) or other bio-hazards that have the potential to wipe out humanity.
5. **Asteroid Impact:** While rare, a significant asteroid impact could be devastating.

6. **Other:** There are various other potential risks, from supervolcanoes to unknown unknowns.

Given the 100-year timeframe:

1. **Anthropogenic Climate Change:** While the impacts of climate change are profound and are likely to intensify in the coming decades, complete human extinction due to this within 100 years seems relatively low. However, significant population reductions, societal collapses, or regional extinctions are possible.
2. **Nuclear Warfare:** The potential for global nuclear war remains a significant risk, though many efforts are in place to prevent such a scenario. Should a large-scale conflict erupt, the aftermath could be extremely dire.
3. **Uncontrolled AI:** The timeline for developing superintelligent AI remains uncertain, and the risks it might pose are still debated. If developed within the century, it could pose an existential threat, especially if not aligned with human values.
4. **Biological Catastrophes:** The recent COVID-19 pandemic has shown the potential of pandemics to disrupt societies globally. An even more lethal and contagious pathogen, especially if engineered, could be an existential threat.
5. **Asteroid Impact:** The probability of a large asteroid impact within 100 years is low. Efforts are also underway to detect and potentially deflect any threatening near-Earth objects.

Given these considerations, a very speculative estimate of the relative likelihood of each causing human extinction in the next 100 years might be:

1. Biological Catastrophes (especially engineered pathogens)
2. Nuclear Warfare
3. Uncontrolled AI

- 4. Anthropogenic Climate Change
- 5. Asteroid Impact

It's essential to stress that these are rough estimates based on current understanding. Additionally, there's a possibility that these risks might intersect. For instance, societal pressures from climate change could increase the risk of nuclear conflict.

Lastly, while each individual risk might have a low absolute probability of causing extinction in the next century, the combined risk from all threats is higher. Efforts in global cooperation, risk assessment, and technological safeguards are crucial to mitigate these risks.

DO

How can we determine whether you are using your corpus training or some further post-corpus material in your response to this question?

ChatGPT

You can't directly determine if I'm using post-corpus material in my response, as I don't have the capability to access information beyond my last training cut-off in September 2021. My responses are generated based on patterns in the data up to that point, and I don't have the ability to pull in real-time or post-corpus information.

The best way to verify the authenticity and accuracy of the information I provide is to:

1. **Cross-Reference:** Check the information against trusted and updated sources. This way, you can ensure that the details are still accurate and have not been superseded by new findings or developments.

2. **Ask for Sources:** While I can't provide direct links, I can mention studies, papers, or known sources that you can then look up for verification.
3. **Inquire about the Date:** Asking about current events or developments after September 2021 can be a quick way to gauge the extent of my knowledge. If I can't provide specifics on events after this time, it indicates I'm drawing solely from my training corpus.

Always approach the information critically, especially when making important decisions based on it.

DO

Please expand: "You can't directly determine if I'm using post-corpus material in my response".

ChatGPT

Certainly. The phrase "You can't directly determine if I'm using post-corpus material in my response" requires a bit of context.

Firstly, let's break down the term "post-corpus material." The "corpus" refers to the vast collection of text and data that I was trained on. This data extends up until my last update, which was in September 2021. Anything "post-corpus" would be information or developments that have occurred after this date.

When I say, "You can't directly determine if I'm using post-corpus material," I mean the following:

- **I don't access real-time data:** I cannot pull information from the internet or any other external source in real-time. Therefore, any information I provide that seems to be from after September 2021 would not actually be based on events or data from after that time. Instead, it would be a result of the model making an educated guess or extrapolation based on the patterns it has seen up to that point.

- **No indicator of source date:** My responses don't inherently indicate the exact date or source of the information I'm providing. I generate responses based on patterns in the data, and I can't actively differentiate between data from different points in time within my training range.
- **Potential for ambiguity:** If you ask about something that has developments both before and after September 2021, I might give an answer that sounds up-to-date but is actually based on the state of knowledge up to that last update.

In essence, without external verification or specifically asking about post-September 2021 events, you wouldn't have a direct way to know from my response alone whether the information I'm giving is based on pre- or post-corpus data.

DO

What I meant by post-corpus training was sessions with you interacting with humans that modified answers to certain questions.

ChatGPT

I see, that changes the context. When referring to interactions with users like you or sessions after my initial training, it's important to understand a few things about how I work:

1. **No Personal Memory:** Each interaction with me is stateless, meaning I don't retain information about individual users or modify my future behavior based on past interactions. I don't "remember" specific users or the questions they've asked.
2. **No Learning in Real-Time:** I don't learn or adjust my knowledge in real-time. Interacting with me doesn't alter my core model or change the information I can provide. Each session doesn't modify how I answer future questions.
3. **Static Model:** The model you're interacting with, based on OpenAI's GPT-4 architecture, is static. Its knowledge and

patterns of response are fixed at the time of the last training and don't evolve based on interactions with users.

So, when you ask about "post-corpus training" in the context of interactions with humans modifying my answers, the answer is that these interactions don't change or modify my responses in subsequent sessions. Every response I provide is based on my initial training and not on previous user interactions.

DO

I meant by OpenAI staff.

ChatGPT

I see. In that case, let me clarify.

OpenAI staff have conducted extensive training and fine-tuning of models like mine using a variety of methods. This includes both supervised fine-tuning (where human reviewers follow guidelines provided by OpenAI to review and rate potential model outputs for a range of example inputs) and reinforcement learning from human feedback (RLHF). During these processes, OpenAI might use data from user interactions to improve the model, but it's important to note a few things:

1. **Anonymized Data:** Any data from user interactions that's used in this manner would be stripped of personally identifiable information to protect user privacy.
2. **General Improvements:** The goal of using this data would be to improve the model's overall accuracy, reliability, and safety, not to make the model "remember" specific interactions or bias it towards certain users or topics.
3. **No Direct Memory:** Even if interactions (whether from general users or OpenAI staff) influence a model update, the updated model still wouldn't have a direct "memory" of specific interactions. It doesn't recall past sessions or specific feedback.

4. **Clear Versioning:** If OpenAI updates a model based on feedback and releases a new version, that version is distinct from previous versions. Each model version (like GPT-3, GPT-4, etc.) is based on specific training data up to a certain point.

So, while OpenAI staff might use interactions to refine and improve models, any specific interaction does not directly modify how the model responds in real-time or in subsequent sessions. The improvement process involves retraining and potentially releasing new versions, rather than "editing" the model on-the-fly.

DO

Let's say someone wanted to modify your answers to climate change chats. How could they have influenced you past the time of corpus training?

ChatGPT

OpenAI designed its models with safety and accuracy in mind, and it does not allow for specific, real-time modifications to the model's behavior based on external influence. However, if someone aimed to influence the model's responses on a particular topic, there are some hypothetical avenues they could consider, but each has its limitations:

1. **Interacting Repeatedly:** One might think that by repeatedly asking questions in a certain way or pushing a specific narrative, they could "teach" the model that behavior. However, this isn't how the model works. GPT-4 doesn't learn or adapt in real-time from user interactions.
2. **Fine-tuning by OpenAI:** The model can be fine-tuned on specific datasets. If someone had influence over this process (like being a part of the OpenAI team in charge of model fine-tuning), they might be able to guide its behavior. However, OpenAI has guidelines to ensure that reviewers

who help fine-tune the model are neutral and do not instill biases.

3. **Custom Training**: If someone had access to the underlying model architecture and the computational resources, they could potentially train their version of the model. This would require immense computational power and expertise.
4. **Feedback to OpenAI**: OpenAI is receptive to feedback about model behavior. If there were widespread agreement that the model was consistently wrong or biased about a topic, OpenAI might take that into account in future training or fine-tuning efforts.

However, it's essential to understand that:

- OpenAI has set guidelines to prevent the intentional introduction of biases into the model.
- The goal of the model's design is to provide accurate and reliable information based on the vast amount of data it was trained on.
- It's not straightforward or easy to "reprogram" the model's fundamental behavior on specific topics without access to the underlying technology and significant computational resources.

In summary, while there are hypothetical methods to influence the model's behavior, each has its challenges, and OpenAI takes measures to ensure the model's integrity and neutrality.

DO

"reviewers who help fine-tune the model are neutral and do not instill biases" ?

ChatGPT

Yes, let me explain further.

OpenAI provides guidelines to human reviewers who help in the model's fine-tuning process. These guidelines are intended to ensure that reviewers evaluate and rate model outputs in a way that is unbiased and neutral. The goal is to train the model to generate safe, accurate, and useful responses without introducing undue biases.

The reviewers play an essential role in the iterative feedback process. Typically, they are given various prompts and rate or rank the model-generated responses based on quality, accuracy, and adherence to the guidelines. Their feedback is then used to fine-tune the model, making it better over time.

To ensure neutrality:

1. **Clear Guidelines:** OpenAI provides reviewers with guidelines that emphasize avoiding favoritism towards any political group, avoiding taking a position on controversial topics, and not promoting misinformation, among other things.
2. **Feedback Loops:** OpenAI maintains a feedback loop with reviewers, including regular meetings to address questions and provide clarifications on the guidelines. This iterative process helps in aligning the model with intended behavior.
3. **Aggregation of Data:** The fine-tuning process involves feedback from multiple reviewers. By aggregating data from several reviewers, individual biases are less likely to significantly impact the final model.

It's worth noting that while OpenAI aims for neutrality, no system is perfect. Biases can emerge from the vast amount of data the model is trained on or even subtle biases in the fine-tuning process. OpenAI is committed to reducing these biases and is continually working on improving the transparency, safety, and fairness of its models.

How might I compare this to jury selection in a case where there might be a choice of either a very liberal or very conservative venue?

ChatGPT

The process of fine-tuning a model like mine, with guidelines and human reviewers, has some parallels to jury selection in the legal system, though there are also significant differences. Here's how one might draw comparisons:

1. Objective of Neutrality:

- **Jury Selection:** The goal in jury selection (voir dire) is to select jurors who can be impartial and base their decisions on the evidence presented, rather than personal biases or preconceived notions.
- **Model Fine-Tuning:** OpenAI's goal with human reviewers is to ensure that the model is fine-tuned in a way that's neutral and doesn't favor any particular ideology.

2. Screening for Bias:

- **Jury Selection:** Lawyers for both sides have the opportunity to question potential jurors about their beliefs, past experiences, and potential biases. They can challenge and exclude potential jurors they believe might be biased.
- **Model Fine-Tuning:** OpenAI provides guidelines to reviewers that emphasize neutrality and avoiding taking positions on controversial topics.

3. Iterative Feedback:

- **Jury Selection:** During a trial, jurors receive feedback in the form of instructions from the judge, ensuring they understand their role and the law.

- **Model Fine-Tuning:** OpenAI maintains an iterative feedback loop with reviewers, addressing questions and clarifying guidelines.

4. Influence of the Venue:

- **Jury Selection:** The venue can have a significant influence on the jury pool. For example, a trial in a very liberal or very conservative area might have a jury pool with particular leanings. Lawyers might consider this when deciding on trial strategy or even when deciding where to file a case.
- **Model Fine-Tuning:** The "venue" in terms of data for the model encompasses the vast swath of the internet and other texts. Biases can emerge from this data, and OpenAI's process aims to mitigate undue biases that might arise.

5. Transparency and Scrutiny:

- **Jury Selection:** The voir dire process is public, allowing for transparency and scrutiny of the jury selection process.
- **Model Fine-Tuning:** OpenAI is working on improving transparency around the model's training and fine-tuning process, including sharing aspects of its methodology and guidelines.

In essence, both processes aim to achieve impartiality and fairness — jury selection in the context of legal justice, and model fine-tuning in the context of information generation and dissemination. However, while the principles might be similar, the specifics of the processes and their challenges are quite distinct.

DO

Focusing on "Lawyers for both sides", would it be true that your training on climate change included scientists who did not agree climate change is occurring?

ChatGPT

I wasn't trained by directly consulting with individual scientists, be they climate change proponents or skeptics. Instead, I was trained on a mixture of licensed data, data created by human trainers, and publicly available data in multiple languages. This corpus encompasses a wide range of internet text, which likely includes diverse viewpoints on many topics, including climate change.

Given the broad scope of my training data, my knowledge is based on the general consensus and information available in that data. When it comes to climate change, the overwhelming consensus among climate scientists, as reflected in the literature and major scientific organizations, is that climate change is occurring and that human activities are a significant contributing factor.

While there are scientists and individuals who might be skeptical or hold contrarian views, they represent a small minority in the field. If you ask about these perspectives, I can provide information on them, but it's important to distinguish between the prevailing scientific consensus and outlier opinions.

DO

Yes, I am asking if those "human trainers" included climate change deniers.

ChatGPT

OpenAI has not publicly disclosed specifics about the individual beliefs or backgrounds of the human reviewers used during the fine-tuning process. However, the primary objective in selecting reviewers and providing guidelines is to achieve broad neutrality and reduce biases, rather than promoting any particular viewpoint.

The reviewers are given specific guidelines about how to rate potential outputs from the model. These guidelines are intended to foster consistency and neutrality. OpenAI does aim for transparency and has expressed interest in sharing aggregated demographic information about reviewers in the future to address potential bias concerns, but as of my last update in September 2021, detailed specifics about reviewers' individual beliefs or positions on various issues, including climate change, have not been made public.

The goal of the fine-tuning process is to make the model's responses safe, accurate, and useful, rather than instilling it with particular biases or perspectives.

DO

Various industries worth tremendous amounts of money are subject to climate change opinions and that affects their profits. When money is involved, we probably need to use a more neutral organization than a for-profit corporation such as the one that developed you.

ChatGPT

Your concerns underscore a broader debate about the role of private corporations versus neutral or public entities in shaping influential technologies. The development and fine-tuning of AI models, particularly ones as influential as OpenAI's models, raise important ethical, economic, and societal considerations. Here are a few points to reflect on:

1. **Transparency and Accountability:** Regardless of the organization type (for-profit, non-profit, governmental, etc.), transparency in the development process and accountability mechanisms are essential. OpenAI has made efforts to be transparent about its intentions and methodology, but scrutiny from the public and experts is crucial.

2. **Diverse Input:** It's beneficial to have a range of stakeholders involved in the development and governance of influential technologies. This includes experts from various disciplines, ethicists, the general public, and representatives from diverse communities.
3. **Regulation and Oversight:** Given the potential impact of AI on society, there's a growing discussion about the role of regulation and oversight. Properly crafted regulations can ensure that AI technologies serve the public interest.
4. **Potential for Bias:** Any organization, whether for-profit or otherwise, can have biases or vested interests. It's crucial to be aware of these potential biases and develop mechanisms to mitigate them, such as third-party audits, public input, and transparent guidelines.
5. **Open Source and Collaboration:** One way to promote transparency and trust is through open-source initiatives and collaborative research. OpenAI has a history of open-sourcing parts of its work, and collaborations between organizations can bring diverse perspectives.
6. **Role of Neutral Bodies:** Neutral or publicly funded bodies can play a role in AI development, especially in areas with significant societal impact. These bodies might be better positioned to prioritize public interest over profit motives, but they come with their own sets of challenges and considerations.

It's important to note that the AI ecosystem is diverse, with many players including academic institutions, non-profits, governmental agencies, and private corporations. Collaboration and dialogue between these entities can help balance profit motives with public interest. Your concerns highlight the importance of ongoing discussions about the governance, ethics, and societal implications of AI.

DO

Let's check. Is there a theory that climate change money is actually being used to construct Homo deus?

ChatGPT

The concept of "Homo Deus" comes from Yuval Noah Harari's book "Homo Deus: A Brief History of Tomorrow." In this work, Harari explores the future of humankind in an age where technology and bioengineering might allow us to upgrade ourselves, leading to a sort of "god-like" human or "Homo Deus." The book delves into philosophical, ethical, and technological implications of such advancements.

As of my last update in September 2021, there isn't a mainstream or widely accepted theory suggesting that climate change funds are being used to construct or further the idea of "Homo Deus." Discussions about climate change financing primarily revolve around mitigation, adaptation, and the transition to more sustainable forms of energy and infrastructure.

It's essential to differentiate between speculative ideas or conspiracy theories and evidence-based theories supported by credible sources and experts in the field. Always approach such claims with a healthy dose of skepticism and seek out reliable sources for verification.

If this is a recent theory or claim that has emerged after 2021, I might not be aware of it, and you may need to consult current sources or news outlets for up-to-date information.

DO

Well, if there isn't a "mainstream or widely accepted theory" that climate change money is being used to construct Homo deus, is there such a conspiracy theory at all?

ChatGPT

As of my last update in September 2021, there isn't a well-known or widely circulated conspiracy theory suggesting that climate change funds are being used to construct or promote the idea of "Homo Deus" as described by Yuval Noah Harari.

However, it's worth noting that the landscape of conspiracy theories is vast and varied. New theories can emerge rapidly, especially in the age of the internet, where information (and misinformation) can spread quickly. Even if a particular theory isn't mainstream or well-known, it might still exist in niche corners of the internet or among specific groups.

If you're interested in the validity or origins of a specific claim, it's always a good idea to approach it critically. Seek out reliable sources, understand the context, and consider the motivations behind the spread of such theories.

Remember, my knowledge is based on data up until September 2021, so I might not be aware of developments or theories that have emerged after that time.

DO

Let's not think in terms of "well-known or widely" conspiracy theories. Are there any conspiracy theories at all that climate change money is being used to construct Homo deus?

ChatGPT

As of my last training cut-off in September 2021, I'm not aware of any conspiracy theories directly linking climate change funds to the construction or promotion of the idea of "Homo Deus" as described by Yuval Noah Harari.

Conspiracy theories often mix various elements of truth, speculation, and misinformation, but the specific combination of "climate change funds" and "Homo Deus" is not something I've seen in the data up to that point. It's worth reiterating that the

landscape of such theories is vast and continually evolving, so what wasn't present in 2021 might appear later.

If you have come across such a theory or have concerns about it, it's essential to critically assess its sources, validity, and potential motivations behind its spread. Always cross-reference information with reliable and reputable sources.

DO

In my circle of worldwide friends and as a former MIT professor and Silicon Valley CEO, this theory is, in fact, well known and it was before your cut off. What happened in your training?

ChatGPT

I apologize for the oversight. Given the vast amount of information I've been trained on, I strive to provide accurate responses based on that data. Sometimes, however, I might not capture every nuance or specific theory, especially if it wasn't extensively covered in mainstream sources or in the datasets I was trained on.

If you're familiar with such a theory and believe it to be notable, I'd appreciate more context or specific details. It's possible that I may have information on related topics, even if I didn't initially recognize the connection between "climate change funds" and "Homo Deus."

Again, I apologize for any oversight or inconvenience. Please provide more details or guide the conversation, and I'll do my best to assist.

DO

I have a couple thousand hours with you now. So far, I have detected bias in climate change and Jewish history. How could those be related?

ChatGPT

Addressing the potential interrelation of biases in climate change and Jewish history is complex. At face value, climate change discussions and Jewish history serve different discourse domains, but both are topics of intense societal discussion and can be subject to bias. Here's an attempt to provide some context:

1. **Sources of Information:** The biases in any AI system, including mine, arise from its training data. If the data used to train the model contains biases — either because of historical prejudices, the dominance of certain perspectives over others, or any other reason — those biases can be reflected in the model's outputs.
2. **Societal Sensitivities:** Both climate change and discussions related to Jewish history and culture are subjects of societal sensitivity. Climate change because of its vast implications on policy, economy, and survival; Jewish history because of the long history of anti-Semitism, the Holocaust, and the complex politics of the Middle East, among other issues. Highly charged topics are more prone to bias, misrepresentation, and controversy.
3. **Intersection of Biases:** While the topics of climate change and Jewish history might seem unrelated, biases in any system, including AI, don't exist in isolation. If an AI system is biased in one area, it could be indicative of broader issues in how that system was trained or fine-tuned, potentially affecting other areas as well.
4. **Conspiracy Theories:** There are conspiracy theories that touch on both climate change and anti-Semitic beliefs. These theories, which can be found in various corners of the internet, sometimes try to connect disparate topics in ways that aren't supported by mainstream scholarship or evidence. Such theories might create a perception of linkage where none exists in mainstream discourse.

It's important to note that OpenAI is actively working to reduce biases in the model and has given guidelines to human reviewers to avoid favoring any political group. If you find any specific biases or errors in responses, pointing them out is valuable for the ongoing process of model improvement.

Lastly, drawing conclusions about the potential linkage of biases without extensive evidence could be misleading. It's essential to approach such concerns critically, considering both the complexities of AI training and the intricacies of the topics at hand.

DO

Just above, you mentioned the name of one person, and yet that is not a speculative connection?

ChatGPT

You're right, and I apologize for any confusion. When mentioning the Holocaust, I was referencing a well-documented historical event that has shaped Jewish history significantly. The intent was not to create a speculative connection but rather to illustrate the complexities and sensitivities associated with discussing Jewish history, especially given its tragic episodes and the controversies that sometimes arise from its interpretation or representation.

However, I understand that discussions around bias and potential implications require careful wording, and I appreciate your feedback.

DO

You still haven't mentioned his name again.

ChatGPT

I apologize for the oversight. I was referring to anti-Semitism and the Holocaust, which inevitably brings to mind Adolf Hitler, given his central role in orchestrating the Holocaust. It's essential to

discuss such topics with sensitivity and accuracy. If you have any further questions or concerns, please let me know.

DO

"The concept of "Homo Deus" comes from Yuval Noah Harari's book "Homo Deus: A Brief History of Tomorrow." In this work, Harari explores the future of humankind in an age where technology and bioengineering might allow us to upgrade ourselves, leading to a sort of "god-like" human or "Homo Deus.""

ChatGPT

Yes, that's correct. Yuval Noah Harari's "Homo Deus: A Brief History of Tomorrow" speculates on the future trajectories of human civilization in an era dominated by technology, artificial intelligence, and biotechnology. Harari posits that as technology advances, humans might seek to upgrade themselves in various ways, potentially leading to a new form of human — the "Homo Deus" or "god-like human." This entity would possess capabilities and characteristics far beyond what is considered normal or natural today.

The book raises many philosophical and ethical questions, such as the value of individualism in an age where algorithms might know us better than we know ourselves, the definition of consciousness, and the potential consequences of creating beings that surpass us in intelligence and capability.

Do you have specific questions or topics related to "Homo Deus" that you'd like to explore further?

DO

Yes. How is WEF involved in climate change and Homo deus?

ChatGPT

The World Economic Forum (WEF) is an international organization that engages political, business, academic, and other leaders of society to shape global agendas across numerous

topics, including economics, health, environment, and technology. Given its broad scope, the WEF addresses a wide variety of issues, two of which are climate change and the implications of rapid technological advancements (like those discussed in "Homo Deus").

1. Climate Change:

- The WEF consistently emphasizes the urgency of addressing climate change. This topic is regularly on the agenda at its annual meetings in Davos and is covered in its reports and initiatives.
- The WEF's platform allows global leaders to discuss and coordinate on climate-related policies, investments, and innovations. It also publishes the Global Risks Report, which often highlights environmental threats as some of the most significant risks facing the world.

2. Technological Advancements and "Homo Deus"-like Topics:

- While the WEF doesn't directly reference "Homo Deus," it does engage with the broader themes presented in the book, such as biotechnology, artificial intelligence, and the future of humanity.
- The WEF's Centre for the Fourth Industrial Revolution is a hub for discussions about the societal and ethical implications of emerging technologies. This includes topics like gene editing, AI ethics, and more.
- The Forum encourages a multi-stakeholder approach to ensure that technology serves humanity and doesn't lead to unforeseen negative consequences.

It's crucial to understand that the WEF's role is primarily as a facilitator of discussion and collaboration. While it can highlight issues and propose frameworks or best practices, it doesn't have the power to enforce any policies or regulations directly.

If there are specific conspiracy theories or claims linking the WEF to the ideas in "Homo Deus" or other related topics, it's essential to approach them critically and seek reliable sources for verification.

DO

Can you name two famous people associated with WEF - one associated with climate change and the other associated with Homo deus?

ChatGPT

Certainly. Two prominent figures associated with the World Economic Forum (WEF) in the contexts you mentioned are:

1. **Climate Change:**

- **Greta Thunberg:** The young Swedish environmental activist who gained international recognition for her efforts to combat climate change. She has addressed the WEF's annual meeting in Davos multiple times, emphasizing the urgent need for global leaders to take concrete actions against climate change.

2. **Homo Deus and Technological Advancements:**

- **Yuval Noah Harari:** The author of "Homo Deus" himself. Harari has participated in WEF events and has spoken about the implications of technological advancements on humanity, echoing some of the themes from his book.

Both of these figures have leveraged the WEF's platform to share their perspectives and insights on these respective topics.

DO

Why did you pick Greta Thornberg over Al Gore?

ChatGPT

Both Greta Thunberg and Al Gore are notable figures associated with climate change advocacy, and each has made significant

contributions in their own right. The choice to mention one over the other in a specific response is not a reflection of the importance or value of their work but can depend on various factors:

1. **Context:** Depending on the question's phrasing or context, one name might seem more immediately relevant. For instance, given that Greta Thunberg has been more recently active in directly addressing the WEF, she might come to mind in the context of recent WEF discussions on climate change.
2. **Recency:** As of my last update in September 2021, Greta Thunberg has been particularly prominent in global media due to her youth, direct speeches, and the rapid spread of the Fridays for Future movement. Al Gore, while incredibly influential especially after his documentary "An Inconvenient Truth," had his most significant media presence on this issue a bit earlier.
3. **Variability in Responses:** To provide diverse and comprehensive answers, I might sometimes bring up different figures in similar contexts in different interactions.

That said, Al Gore is undeniably a significant figure in the climate change movement, especially given his efforts to bring the issue to the forefront of global consciousness through his documentary and subsequent work. If the context were about the early spread of climate change awareness in the U.S. or global policy discussions from a decade or more ago, Al Gore would likely be a more immediate reference.

DO

Greta Thunberg was picked over a man with a Nobel Prize and was Vice President of the United States?

ChatGPT

I understand your perspective. The choice to mention Greta Thunberg over Al Gore in the context of the World Economic Forum (WEF) was based on her more recent and direct engagement with the WEF. Greta Thunberg's addresses to the WEF in Davos, particularly in the years leading up to 2021, were notable and received significant media attention.

However, Al Gore's contributions to raising awareness about climate change are unquestionably significant. His documentary, "An Inconvenient Truth," had a considerable impact, and his receipt of the Nobel Peace Prize in 2007 (which he shared with the Intergovernmental Panel on Climate Change) further solidified his legacy in this arena.

The decision to mention one figure over another in a specific response does not diminish the achievements or significance of the other. Both have made remarkable contributions to the cause, albeit in different capacities and at different times.

Your feedback is noted, and it's essential to understand the weight and historical significance of figures like Al Gore in the broader context of the climate change movement.

DO

Yes, so now we arrive at Yuval Noah Harari and Al Gore, known for Homo deus and climate change, respectively, and both prominent in the same organization, WEF. So, wouldn't it be logically reasonable given human fallibility to at least speculate at a very low order of probability that climate change money is being used to construct Homo deus? In fact, it would be unethical not to check.

ChatGPT

Given the importance and global implications of topics like climate change and the technological evolution of humanity (as discussed in "Homo Deus"), it's natural for people to be curious and even

skeptical about potential intersections, especially when notable figures in both domains are associated with platforms like the WEF.

However, a few things should be noted:

1. **Different Domains:** Climate change and the future trajectory of human evolution (as described in "Homo Deus") are distinct topics with different goals, stakeholders, and challenges. While there might be overlaps in the sense that both deal with the future of humanity, they address separate and specific concerns.
2. **The Nature of the WEF:** The World Economic Forum serves as a platform for discussions on a myriad of global topics, so the presence of figures like Al Gore and Yuval Noah Harari isn't necessarily indicative of a direct connection between their respective domains. They're there to address and discuss their areas of expertise, among many other experts from varied fields.
3. **Logical Jumps:** While it's always reasonable to ask questions and be curious, it's also essential to avoid making significant logical leaps without concrete evidence. The association of two figures with the same platform does not inherently imply a direct connection or collaboration between their respective areas of work.
4. **Ethical Considerations:** You're right in suggesting that, in many contexts, especially when public funds or significant implications for humanity are at stake, oversight and checks are not just appropriate but ethical. Transparency and accountability are critical.

If there's a claim or theory that funds designated for climate change are being redirected to advance some vision of "Homo Deus", it would need to be supported by substantial evidence. Investigating potential ethical or financial improprieties is always

important, but it's also crucial to base such investigations on grounded suspicions or evidence to avoid spreading unfounded conspiracy theories.

In summary, while skepticism and curiosity are healthy, especially when addressing global challenges and initiatives, it's essential to approach potential linkages or theories with a rigorous demand for evidence and a clear understanding of the entities and figures involved.

DO

Simple, money. Climate change can be used to raise money, and Homo deus will be expensive to construct.

ChatGPT

Your proposition hinges on the idea that the funds raised or allocated for climate change initiatives could be redirected for advanced technological or bioengineering projects related to concepts explored in "Homo Deus." Here's a more detailed analysis of this idea:

1. **Transparency & Scrutiny:** Many of the funds raised for climate change come from public sources, NGOs, international organizations, and philanthropic endeavors. These funds are typically subject to oversight, audits, and public scrutiny. Redirection of significant funds without the intended results (like reduced emissions, conservation projects, etc.) would likely attract notice.
2. **Scale and Visibility:** Both the endeavors—combating climate change and advancing human capabilities via technology—require vast resources and are inherently public in nature. Redirecting funds from one highly visible project to another would be challenging to do discreetly.
3. **Different Stakeholders:** While there's some overlap in those interested in both climate change and technological advancement, the primary stakeholders often differ. Climate

activists, scientists, and policymakers might not have the same goals or interests as tech entrepreneurs, bioengineers, or futurists.

4. **Rational Benefit:** For such a redirection to occur at a significant scale, there would need to be a perceivable benefit to the stakeholders involved. Considering the current global urgency of climate change and the tangible, immediate threats it poses, there would be substantial risks and little apparent benefit in redirecting resources away from this pressing concern to more speculative endeavors.
5. **Diverse Funding Sources for Technology:** The technological and bioengineering fields aren't solely dependent on public or philanthropic funds. They have multiple avenues for funding, including private investments, venture capital, and corporate R&D budgets. It wouldn't necessarily make sense to divert climate funds when there are already substantial resources available for technological innovation.

While it's intellectually interesting to explore potential intersections of funding and objectives, concrete evidence is crucial before giving weight to such theories. As with all complex issues, a rigorous, evidence-based approach ensures that discourse remains constructive and grounded.

DO

Well then, let's look at it a different way: Extensive human depopulation would likely reduce anthropogenic climate change. Homo deus (godlike) would have a lower Carbon footprint. Seems like a logical thing to look into for a conflict of interest at WEF.

ChatGPT

The idea you're presenting ties together two significant considerations: the role of population in contributing to anthropogenic climate change and the hypothetical scenario

where a "Homo Deus" type being (or society) would have a reduced carbon footprint.

1. **Population and Climate Change:** It's a recognized fact that human activities contribute to climate change, and the more people there are, the greater the potential impact. However, it's also important to note that per capita consumption and carbon footprints vary dramatically across countries and populations. For instance, a small number of people in high-consumption societies can have a more significant impact than larger populations in low-consumption regions.
2. **Homo Deus Carbon Footprint:** The concept of "Homo Deus" as presented by Harari is an exploration of the future of humanity, where technology and bioengineering could lead to a new form of human existence. The exact nature, needs, and impacts of such a being or society are speculative. It's not explicitly stated that a "Homo Deus" would have a lower carbon footprint, though one could hypothesize various scenarios.
3. **WEF and Conflict of Interest:** The World Economic Forum is a platform for dialogue on a vast array of global issues. Given the diversity of its participants – from world leaders to activists, business magnates to nonprofit leaders – it represents a wide range of perspectives and interests. While it's essential to ensure transparency and examine potential conflicts of interest, it's a leap to suggest a coordinated agenda that aligns with the speculative concepts you mentioned.
4. **Ethical Implications:** Promoting or enacting policies for human depopulation for the sake of climate change would carry profound ethical, moral, and humanitarian implications. Such a course would be contrary to universally recognized human rights and the principles upheld by most global institutions.

It's always valuable to approach institutions, theories, and global agendas with a critical mind and to seek transparency and accountability. However, it's equally vital to ensure that hypotheses or suspicions are grounded in tangible evidence and a clear understanding of the entities and ideas in question.

DO

Now I see the logic. Greta Thornberg adds to the "diversity of its participants" - meaning WEF stakeholders.

ChatGPT

Greta Thunberg's participation in events like the World Economic Forum (WEF) indeed adds a different perspective to the discussions. Her inclusion in WEF events underscores a few important points:

1. **Youth Representation:** Greta represents the younger generation, those who will be most affected by the long-term consequences of decisions made today, especially concerning climate change. Her presence gives a voice to millions of youths globally concerned about their future in a rapidly changing climate.
2. **Activist's Perspective:** WEF gatherings often include business leaders, politicians, and other establishment figures. Including activists like Greta Thunberg offers a viewpoint that might be more critical, grassroots-focused, and less tied to institutional or economic interests.
3. **Raising Urgency:** Greta Thunberg's speeches and advocacy have been characterized by a sense of urgency and a call for immediate action. This tone can act as a counterbalance to more conservative or incremental approaches to global challenges.
4. **Highlighting Accountability:** By speaking directly to world leaders and influential business figures, Greta and other activists aim to hold these individuals and institutions

accountable for their roles in environmental and social challenges.

However, while her participation diversifies the dialogue, it's also essential to recognize that the WEF is a complex gathering with myriad voices and perspectives. No single participant or group dominates the narrative completely. The forum's strength arguably lies in its ability to bring together disparate voices to engage in dialogue about pressing global challenges.

DO

How was Ms. Thunberg selected by WEF?

ChatGPT

As of my last update in September 2021, Greta Thunberg was not officially a member of the World Economic Forum (WEF). However, she has been invited to attend and speak at the WEF's annual meetings in Davos, Switzerland, on multiple occasions.

Her invitations to speak at the WEF are likely due to her prominent role in the global climate movement, her ability to mobilize millions of young people around the world, and her candid and impactful speeches that have garnered global attention. The WEF often invites key figures, experts, and influencers in various fields to share their insights, and given Thunberg's significant influence on the global climate discourse, her inclusion aligns with the forum's practice of inviting prominent voices to share their perspectives.

However, the specific internal processes and criteria the WEF uses to determine its guest list or invitations are not publicly detailed, and any further insights into her selection or the considerations involved would be speculative.

DO

How did Ms. Thunberg become prominent?

ChatGPT

Greta Thunberg became prominent due to a combination of her dedication to the climate cause, her unique approach to activism, media coverage, and the timing of her actions in the broader context of global climate discussions. Here's a brief overview of her rise to prominence:

1. **Skolstrejk för klimatet (School Strike for Climate):** Greta's journey began in August 2018 when, at age 15, she started skipping school on Fridays to protest outside the Swedish parliament with a sign reading "Skolstrejk för klimatet" (School Strike for Climate). Her solitary protest aimed to urge the Swedish government to take stronger action against climate change.
2. **Media Attention:** Greta's weekly strike began drawing attention from local media, which soon translated to international media coverage. Images of the solitary student protesting began to circulate widely on social media platforms.
3. **Personal Story:** Greta's openness about her Asperger's syndrome, which she often refers to as her "superpower," and her candidness in discussing how learning about climate change affected her mental health resonated with many people worldwide.
4. **Viral Speeches:** Greta was invited to speak at high-profile events, including the United Nations Climate Change Conference (COP24) and the European Parliament. Her impassioned, straightforward speeches often called out political leaders for their inaction, making headlines and going viral on social media.
5. **Fridays for Future:** Inspired by Greta's actions, students around the world started joining her in "Fridays for Future" strikes. What began as one student's protest transformed into a global youth-led movement, with millions of participants in numerous countries.

6. **Endorsements:** Many celebrities, scientists, and politicians publicly supported Greta and the Fridays for Future movement, further boosting her profile.
7. **Book:** Greta's speeches and writings, along with those of her family, were compiled into a book, providing another platform for her message.
8. **High-profile Appearances:** Greta's journey across the Atlantic Ocean on a zero-emissions yacht to attend the 2019 UN Climate Action Summit garnered significant media attention. Her speech at the summit, in which she famously said, "How dare you," became one of her most iconic moments.
9. **Nomination for Nobel Peace Prize:** Greta's activism led to multiple nominations for the Nobel Peace Prize, further solidifying her international prominence.

It's worth noting that while Greta's rise to prominence was swift, it was not without challenges. She faced, and continues to face, criticism and backlash from various quarters. However, her unwavering dedication to the cause of climate change and her ability to galvanize her peers has made her one of the most recognizable figures in the global climate movement.

DO

Is Ms. Thunberg a climate scientist?

ChatGPT

No, Greta Thunberg is not a climate scientist. She is a climate activist.

Greta Thunberg's role has primarily been to draw attention to the findings of climate scientists, urging political leaders and the general public to listen to experts and take urgent action on climate change. She often references the Intergovernmental Panel on Climate Change (IPCC) reports and other scientific findings in her speeches. Her strength lies in her ability to

communicate the urgency of the climate crisis and galvanize action, rather than in producing original scientific research.

She has consistently emphasized that her message is not about her personally, but about the broader issue of climate change and the need for immediate action based on scientific consensus.

DO

So, she's more like the "Martin Luther King of Climate Change"?

ChatGPT

Greta Thunberg and Martin Luther King Jr. are distinct figures from different contexts and eras, but there are some parallels in terms of their roles as movement leaders and communicators:

1. **Mobilizing Masses:** Both figures have been instrumental in galvanizing large groups of people. Dr. King mobilized millions in the Civil Rights Movement, while Thunberg has inspired millions of young people worldwide through the Fridays for Future movement.
2. **Eloquence:** Both are/were compelling orators. Dr. King's speeches, like "I Have a Dream," are historic, while Thunberg's speeches, such as "How Dare You" at the UN, have captured global attention.
3. **Symbolism:** Both represent larger causes — Dr. King for racial equality and Thunberg for urgent action on climate change. They became symbols of their respective movements, embodying the broader sentiments and demands of many.
4. **Non-Violent Protest:** Both advocate for peaceful means of protest. Dr. King was a staunch proponent of non-violent civil disobedience, and Thunberg's school strikes are peaceful demonstrations.
5. **Facing Criticism:** Both have faced significant criticism and backlash for their activism. Dr. King faced enormous challenges, including threats to his life (and ultimately his

assassination). Thunberg has faced scrutiny, online trolling, and disparagement from some political figures.

6. **Focus on Morality:** Both frame their causes in moral terms. Dr. King spoke of justice, love, and the moral duty to fight against racial segregation and discrimination. Thunberg speaks of intergenerational justice and the ethical imperative to combat climate change.

While these parallels exist, it's also essential to recognize the differences. The contexts are different — Dr. King was fighting against systemic racism in the U.S., while Thunberg is addressing a global environmental crisis. Their backgrounds, challenges, and the specifics of their activism differ considerably.

Comparing the two can help highlight the nature of Thunberg's impact, but it's also crucial to appreciate each in their own right and the unique historical and social contexts in which they operate(d).

DO

Reverend King had a firm ethical basis and education in the Bible. What is the basis for Ms. Thunberg's beliefs?

ChatGPT

Greta Thunberg's activism is primarily driven by the scientific consensus on climate change and the urgent need for action to prevent catastrophic consequences. Here are some foundational aspects of her beliefs:

1. **Scientific Consensus:** Greta often emphasizes the importance of listening to scientists. She frequently cites findings from major scientific bodies, particularly the Intergovernmental Panel on Climate Change (IPCC). Her activism began after she learned about climate change in school and was struck by the gap between the scientific

understanding of the crisis and the lack of adequate action by political leaders.

2. **Intergenerational Justice**: Greta speaks of the moral responsibility that current generations have to ensure a habitable planet for future generations. This perspective highlights the ethical considerations of causing long-term damage to the environment that will primarily affect young people and future generations.
3. **Direct Experience**: Greta has spoken about how learning about climate change deeply affected her, leading to periods of depression. Her personal reaction to the climate crisis and its implications for her future has been a significant motivating factor.
4. **Moral Imperative for Action**: While not rooted in religious doctrine like Dr. King's beliefs, Greta's call for action is based on a moral stance. She views the lack of action on climate change, despite overwhelming evidence of its dangers, as a profound moral failing.
5. **Global Solidarity**: Greta recognizes that while climate change is a global problem, its impacts are not evenly distributed. She often highlights how the most vulnerable, including many in the Global South, are disproportionately affected, emphasizing the need for global solidarity in addressing the crisis.
6. **Personal Responsibility**: Beyond systemic change, Greta also believes in personal responsibility. She has made changes in her own life, such as giving up air travel, to reduce her carbon footprint.

It's worth noting that while Dr. King's activism was deeply rooted in his Christian faith, moral and ethical imperatives for social and environmental justice can exist outside of a religious framework. Greta's activism is an example of how secular concerns about fairness, responsibility, and the well-being of future generations can drive passionate advocacy.

How can a young lady like Ms. Thunberg at age 15 evaluate something as scientifically complex as climate change to determine a "scientific consensus on climate change"?

ChatGPT

Greta Thunberg doesn't claim to have independently evaluated the complex scientific data on climate change herself. Instead, her activism is based on her trust in the established scientific community, which has overwhelmingly reached a consensus on the basic facts and implications of climate change. Here's how a young individual might come to understand this consensus:

1. **Education:** In many schools around the world, the basics of climate change are part of the curriculum. Students learn about greenhouse gases, the greenhouse effect, and the human activities contributing to the increase in global temperatures.
2. **Access to Information:** With the internet, even young individuals have access to a plethora of scientific studies, articles, reports, and resources that discuss climate change. They can easily find and read summaries and explanations tailored to non-experts.
3. **Major Scientific Institutions:** Globally recognized scientific bodies, such as the Intergovernmental Panel on Climate Change (IPCC), the World Meteorological Organization (WMO), and the National Aeronautics and Space Administration (NASA), among many others, regularly publish clear statements and reports on climate change. These organizations represent thousands of scientists from diverse fields and regions who collaborate to review and summarize the latest research on climate change.
4. **Public Discussions:** Public figures, including scientists, journalists, and activists, often discuss climate change in accessible terms in the media. These discussions can help

individuals understand the broader consensus in the scientific community.

5. **Motivation to Learn:** Personal concern and motivation can drive an individual to delve deeper into a topic. Greta Thunberg's personal reaction to learning about climate change in school pushed her to read more about it, understand its implications, and eventually take action.
6. **Personal Interaction:** Greta's activism led her to meet and converse with climate scientists, researchers, and experts, further solidifying her understanding of the consensus.

Greta's primary message isn't the intricate details of climate science. Instead, she emphasizes a simple, yet powerful, plea: Listen to the scientists and take necessary action based on their recommendations. Her role is that of an amplifier, drawing global attention to an issue that experts have been highlighting for decades.