





2024 "Red Carpet" Event team (left to right): Thomas Kaarsted, Charlotte Weitze, Line Laursen, Mette Fentz Haastrup, Patricia Wolf, Bryan Yazell, Karl Attard (Photo: Yazell)



#### Pitch

- Explore fiction writing as resource for young people to navigate concerns/ideas related to climate change
- Collaborate with local high schools to design teaching modules
- Design new methodology for integrating climate science and literature into classrooms
- Create public-facing database of citizen-driven stories about climate change's potential impact

#### Research Team

- Bryan Yazell, Associate Prof. (HUM)
- Patricia Wolf, Professor (SAMF)
- Karl M. Attard, Asst. Prof. (NAT)
- Leonardo Nolé, postdoc (HUM)

#### Citizen Science Team

- Mette Fentz Haastrup, High School Coordinator, SDU Library
- Thomas Kaarsted, Deputy Library Director, SDU Citizen Science
- Line Laursen, SDU Library, Afdeling for Undervisning og Formidling

## LINKED CONCERNS: GENERATING

**COLLECTIVE ACTION** 



From A Guide to Climate Emotions (Pikhala & Kamenetz)



1. Cultural basis behind climate action 'failure'



2. Climate anxiety generates feelings of inertia /dismay



What cultural forms might facilitate collective envisioning?

# METHOD: FLASH FICTION WRITING

### **Flash Fiction**

- very short fiction stories of 150-300 words
- focus on one topic, conflict and/or per son
- longhand writing (i.e., with pen and paper)

### Why?

 to gain access to visions about the future that are <u>hidden in self-</u> <u>transcending knowledge</u>





Prof. Wolf leads flash fiction writing exercise (right) and students prepare to write (above) (Photos: B. Yazell, Nov. 2022)

# Initial Conclusions from "CFF"



Photo: J.L. Akselbo (SDU Library)

- → Key takeaway for CS-authored stories:
  - → "Plausibility" less important than "imaginability"
    - →demonstrates how 'genre' frameworks drive forward-thinking scenarios
    - →Implication? Tendency to dismiss hopeful or optimistic stories!



# "Ever ending story?" (2022)

"Back in the days, Denmark was the best country you could ever imagine. We had all we needed". I tried to imagine living in a perfect country. But it could not get hold of it. So, I asked curiously: "What do you mean with living in a perfect country grandpa?" . . . You see, everything was good, we had all we needed. But then... "but then what grandpa?" A short break followed by a sigh. Grandpa answered: "But then it took a **one big turn**, in the wrong direction. It felt like a dark, thick cloud putting a lid on everything good."



# "Bruce and his travel to Mars" (2022)

"Bruce couldn't believe it . . . Martin Musk finally finished his father's legacy and found a solution to get the population to Mars. Bruce took his iPhone 23 and started calling his friends to tell them the good news ... Bruce can't wait to get to Mars, because on Mars they still have seasons, and he is very excited for celebrating Christmas again. Christmas hasn't been a thing on Earth since the climate changes kicked in . . . They arrived at Mars, and everything was perfect, Martin had set everything up before the arrival, everyone had a home to live in."



# "AISHA'S JOURNEY" (2023; ChatGPT)

In a remote village nestled among the icy peaks of the Himalayas, there lived a young girl named Aisha. From a young age, Aisha had been captivated by the beauty of her surroundings – the towering mountains, the shimmering glaciers, and the crystal-clear rivers that flowed through the valley. But as she grew older, she began to notice troubling changes in her environment.

The winters grew shorter, and the snowfall became less predictable. Glaciers that had stood for centuries began to recede, their once-mighty rivers dwindling to a mere trickle. [ ...]

Determined to understand what was happening to her homeland, Aisha embarked on a journey of discovery. [...]

They returned to their village inspired by the knowledge that even in the face of seemingly insurmountable odds, ordinary people could make a difference.

And as they worked together to protect their homeland and preserve its natural beauty for future generations, they knew that they were part of something much larger than themselves – a global movement to safeguard the planet and ensure a sustainable future for all.







#### RESEARCH ARTICLE

"In the end, the story of climate change was one of hope and redemption": ChatGPT's narrative on global warming

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Abstract AI chatbots such as ChatGPT help people produce texts. According to media reporting, these texts are also used for educational purposes. Thus, AI influences people's knowledge and perception of current issues. This paper examines the narrative of ChatGPT's stories on climate change. Our explorative analysis reveals that ChatGPT's stories on climate change show a relatively uniform structure and similar content. Generally, the narrative is in line with scientific knowledge on climate change; the stories convey no significant misinformation. However, specific topics in current debates on global warming are conspicuously missing. According to the ChatGPT narrative, humans as a species are responsible for climate change and specific economic activities or actors

particularly popular as it is able of various genres that are har written by humans. ChatGPT of an AI chatbot and is easy to reporting, many people already texts they need for lectures, I similar purposes (Rudolph et developments might have a people discuss socially relevangements climate change.

ChatGPT is a software application in the control of the control of

#### **Initial Situation**

#### Healthy Planet

"the world was a beautiful (...) place" (story 1)
"in a world much like ours" (story 12)

#### Paradisial Place

"there was a beautiful planet called Earth. It was a place full of life, diversity, and wonder." (story 7)

#### **Human Destruction**

#### **Humans Overexploit**

"humans began to take more than they needed, and they started to pollute the planet with their waste" (story 11)

#### First Signs / Impacts

"Hurricanes, droughts, and heatwaves ravaged communities across the globe, leaving destruction and death in their wake" (story 12)

#### Skepticism, Ignorance, Denial

"At first, many people were skeptical of these claims. Some even denied that climate change was happening at all. But as the evidence continued to mount, it became harder to ignore" (story 6)

#### **Positive Ending**

"And so, in the end, the story of climate change had a happy ending" (story 11)

#### Hope & Healing

"slowly but surely, the earth began to heal" (story 2)

#### Lesson Learned / Ongoing Challenge

"they learned from their mistakes and were determined to create a world where humans and nature could coexist in harmony" (story 10)

#### Mitigation

Governmental Action / Working Together /

#### Clean Energies

"Governments and organizations worked together to reduce carbon emissions and protect the environment." (story 2)

#### Individual Action

"People started to make changes in their daily lives as well, using less water, recycling more, and driving less." (story 7)



## THE IMAGINATIVE CRISIS?

- →In CONTRAST with student stories, GPT/LLM stories tend to
  - →NOT to include dialogue
  - → Maintain 'mythic' or 'folkloric' structure
    - → "Far away land"; elder knowledge; flat characters; no interiority
  - → Feature singular, heroic youngsters
    - → 'hero's journey'
  - → Conclude on note of optimism
- →Early observations show LLM cannot distinguish between a story and 'a climate story' – but young people can







