AI CREATIVE ANTHOLOGY
WRITING & ARTS

INSPIRATION UNLEASHED: 17 ARTISTS, 56 ARTIST REVIEWS (V.2), PLUS 19 AUTHORS (V.1)

VERSION 2.7

EDITED BY
GEOFF DAVIS



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All artists and authors retain all rights. First Edition 2023 is included in this book.

Editor: Geoff Davis 2023, 2024. @microartsgroup website geoffdavis.org

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"Heartfelt thanks to all the inspirational authors, artists, curators and researchers who have contributed to the First and Second Editions of this AI Anthology."
Geoff Davis, July 2024.

"Artists and philosophers will guide us through our inevitable AI future. Indeed, artists are fighting a proxy war echoing the public's fraught relationship with AI." Kevin Abosch, 2024.

"The tension of AI for art-making lies in its boundless ability to create. For storytelling, this infinite imagery means a new way to extend stories." ClownVamp, 2024.

"Statement 28. There is no "normal" computer art, in the Kuhnian sense [of periodic normal and revolutionary stages]. It is in constant revolution, hence constantly evading scrutiny.
Statement42. Many of the 'objects' of computer art are instances, illustrations, of some less tangible, invisible process. But it may be that

the waveform should remain uncollapsed, the artwork staying undecideable, problematic, unobjectified. Lucy R. Lippard [conceptual art theorist] described the 'dematerialization of the art object' nearly 40 years ago." Brian Reffin Smith, 43 Dodgy Statements on Computer Art, 2008.

"Machines today do not determine anything. However, if we think in terms of a technological 'system' made up of interacting human and machine parts, the question of who controls which part, while still important, is secondary. It is the logic of the system itself which determines the behaviour of controllers and users alike." The Machine Age: An Idea, a History, a Warning, Robert Skedelsky, 2023.

"As a technology, photography is a primitive form of information technology. As an artistic strategy, it is an early form of algorithmic art". Photography from the Turin Shroud to the Turing Machine, Yanai Toister, 2020.

"The key to artificial intelligence has always been the representation." Jeff Hawkins, 2012.

"Artificial Intelligence: electronic music for the mind created by trans-global electronic innovators who prove music is the one true international Language. ...'Listening music' cannot be described as soulless or machine-made. The atmosphere + emotion both come from the musicians, their machines are merely the means to a human end."

Notes from the 'Artificial Intelligence' album, LP6, Warp, Sheffield UK, 1992.

"There was a time when people felt the internet was another world, but now people realise it's a tool that we use in this world." Tim Berners-Lee, 2003.

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SECOND EDITION 2024



Let Us Prey - Corinne Whitaker, 2024

Our authors and artists detail their interactions with AI technologies, enriching your journey into innovative creativity, in this inspiring selection of stories, poems and art. The First Edition published in 2023 is included in full. Most of the work in the First Edition was original stories or poems. There are also essays on technology and issues relating to AI in both Editions.

Second Edition 2.7 - 2024

The first chapters (1–17) were specially made for this collection. These are followed by 56 artist reviews (apologies if we missed anyone out).

First Edition - 2023

This has 19 original stories, mainly text generation with some illustrations. At the time text-to-art was not generally available.

Editor

Geoff Davis is a pioneering generative and AI artist. His art is in many international collections and has been internationally exhibited from 1985 to 2024. His first AI work was MA4 Story Generator (1985), released by his computer art forum Micro Arts Group, and also on the Prestel teletext network. Historian and curator Georg Bak described it as "an early precursor of ChatGPT".

Geoff is also a 'PEN International' fiction author and musician. He is currently an AI researcher at the University of the Arts UAL London UK. He has a Masters in Electronic Arts from Middlesex Univerity UK and a degree in Psychology. He is a committee member of the Computer Arts Society CAS founded in 1967. Please visit:

https://microartsgroup.com

and

https://geoffdavis.org

CHAPTER 1

ANA MARÍA CABALLERO & IVONA TAU - CITY LIFE

POEM



CITY LIFE

In the city with blunt edges,
life comes forth—
against the crafted rock of sidewalks
our feet forget black dirt.

. . .

Water, light, concrete, and time—
elements that we compress and compact.
Cranes of metal cut the sky,
then, a solitary pigeon flies by.

I am here to sing, I state,
but the day swings back, and I fall hard.
I grieve amongst the infrastructure—
columns and footers underpin my call.

You were here, once,
in this built metropolis, with us.
You loved to swim,
your body bronzed by my sun.

Do I cry for you?
Or do I cry for every father—
for mine?

For all my high-heeled asphalt walking
I remain a daughter:
a fruit who at its core
is summed up as seed.

In the funeral mass, I hold
the thin wafer—memory of a father—
on my tongue before I swallow.

. . .

Bread breaks within me,
    becomes me,
    but I remain hungry.

After the ceremony,
    bodies form a single row—
    we wait for a moment
    to embrace the bereaved.

A faint breeze blows,
    stirs frail leaves,
    while beneath the red-tiled ground
    soft dirt sustains my feet.

World of tree,
    world of cut stone.
    Place of passing through,
    land of soundless bone.

I take one step forward
    within the breath-held line.
    It is always almost my turn
    to mourn.



In loving memory of C.C.

Comment

From theVERSEverse's GenText series 'City Life' is a collaboration between poet Ana María Caballero + artist Ivona Tau, with generative text from a poem co-created with AI writing tool Sudowrite.

Caballero sketched a rough draft of the twelve stanzas of City Life during the funeral of a close friend's father. She sent Tau these notes, which Tau took as inspiration to create the poignant, urban visuals for the piece. Using AI as poetic conspirator, Caballero crafted the final version of the poem.

More information

Ana María Caballero is an award-winning, multidisciplinary literary artist. Her work explores how biology delimits societal and

cultural rites, ripping the veil from romanticized motherhood and questioning notions that package sacrifice as a virtue.

She has received many international literary awards. In 2024, she became the first living poet to sell a poem at Sotheby's. Ana's art is exhibited in museums, galleries and public spaces worldwide.

https://anamariacaballero.com/artworks/city-life/

www.anamariacaballero.com

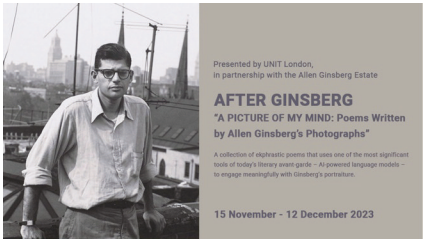
Ivona Tau is an artist and researcher from Lithuania who works with AI as a medium in visual arts. Her goal is to find + evoke emotions in artificially intelligent tools, this way making them more human. By collaborating with machines, she also explores her inner emotional states.

https://ivonatau.com/

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theVERSEverse.com is poetry's home in the metaverse, a literary gallery where text is art, poetry is technology + language is limitless, founded by Ana María Caballero, Kalen Iwamoto, Sasha Stiles.

Their most recent work is "After Ginsberg"



https://theverseverse.com/

CHAPTER 2

PATRICK LICHTY - FICTION FROM THE FUTURE: ALASKAN DOMEPUNK, FAULTY MEMORIES AND ARTIFICIAL HALLUCINATIONS

STORY



SUSIE BEAUFORT ROSE at the crack of dawn, to the protest of her cat, Abelard the Third. From her apartment high on the Archive Dome in Arctic City, the dull orange of the sky reminded her of old 20th Century science fiction movies. But now in the 22nd century, she figured she WAS science fiction; an Archivist, one of the few chosen to squirrel away the knowledge of humanity. They were well along with the project, almost a year before they would seal away the Anchorage Dome to wait out the healing of the earth.

It was late night in Anchorage during the summer, which meant that the sky could not decide whether it wanted the sun to set. She idly fingered the neural port on her mastoid bone, sighing over the difficulties with the "new memory rescue" project that only had

limited success. Johnny was in Gakona, as his infection with the Archive's DNA had allowed him to use the neural interface to entangle his consciousness with his counterpart on what we called 'Earth', which was actually a parallel probabilistic universe; technically known as p348859929.0994858.



As she sat on the balcony that would eventually be dismantled when the Dome was sealed, Abelard curled up in her lap. She looked pensively at the device before her in the patio table. Johnny told her that it was an experimental quantum field disruption generator, where for an 8 meter radius, boundaries between quantum universes could blur for an hour or two. This was really dangerous tech, she wondered if one saw too many probabilities it could rip you mind apart, or the multiverse itself. It was keyed specifically to her neural port, so she could control it like a local ontology. Even though using in the lab was probably a safer option, she looked at it like taking psilocybin; the more secure and comfortable the surroundings are, the probability that the experience might be better goes up. So he reached over, let the magnetic loop engage her internal neuromesh, and she flipped on the deck.

The space flickered in front of her rapidly, showing infinite possible quantum variations of her place. "Focus, Susie...", she said. "This is why you had this thing built to access your cortex..." And in saying this, suddenly a "reality" snapped into place. The door to the apartment flew open and Johnny jumped into the air, holding his hands out as if to ward off an invisible beam. Susie jumped up, patted

him on the head, and took a deep breath. Her hand trembled slightly. Abelard jumped out and pushed him to the ground, then backed off, wondering what to make of the situation. The construct's AI suddenly became detached, and the door opened as if it had been waiting for someone. Johnny was still looking up at her with wide eyes. "W-why is it so warm?" he stammered, looking at the balcony as if it were the floor. Susie sighed. "Because your body is in Anchorage, Johnny. The hardware is up here. And I am your body." Johnny backed away as the door closed, and Susie went back to her meditation.

The Archivist walked over to the door, taking in the scene. The commotion of activity in the bar made her feel somehow alive again, as the city had become an ancient ruin over the last few months, and she had felt the weariness in her. Johnny was over by the bar, talking to the bartender and the bartender's daughter.



"Hello, Susie. How are you?" The bartender asked.

"I'm great, I'm in Alaska," she said, giving a slightly ditsy grin.

"It's been a while since I've been here."

"Yes, it has. I haven't seen you here in a while."

"I'm on a sabbatical. It's a great place to get away."

"I'm glad you're enjoying yourself, but why are you here?" she asked.

"I'm picking up a friend."

"Who?"

"This guy..." Susie gestured to Johnny. "He's been infected with our genetic code, so he can speak our language."

The bartender looked at Johnny, then at Susie.

"I've seen him around here a lot, but I've never seen you here. Where do you live?"

Susie grinned.

"You'll find out." Johnny walked back over to her and sat down. The bartender turned to him.

"What are you doing here, Johnny?"

"I'm here for work. I'm working at the Anchorage Dome."

"Wait, you work for the Alaskan government?"

"Not anymore. I'm doing an experiment. I'm trying to save the world." The bartender looked at Susie.

"You're the one who's been stealing all the artifacts?"

"Me?" Johnny shook his head. "No, I've been helping her. I've been there for her. You know, she can talk to you now, too."

Susie smiled, and leaned forward on the bar.

"I'm glad I can help. The guy I'm helping is called Lachance. He's working with the military. He'll know what to do. He's a member of the Claws of Yell."

"The Claws?"

"Yeah, the Eyak. They're a splinter group near the coast, hooked up with the Utopians. The Utopians want to bring back the Raven."

"And you want to bring the Raven back?"

"Yes. I want to bring it back. It's all I've ever wanted. But the Utopians don't like the Raven, so they'd rather kill everyone."

"But they're not all dead?"

"Well, they're probably not going to be. But they're not going to be able to rebuild. They're going to have to leave Alaska. It's the only place that can support life like theirs. They're going to be able to build a new world. That's why you're here, Susie."

That statement gave her a serious spike of cold down her spine. There was a "her" in this place, and who knows what this place's

“her” was doing back home. The world that the Utopians can never hope to build. The bartender leaned forward.

"You're not going to let them?"

"No, I'm not. I'm going to help them. We're going to bring back the Raven. We're going to bring back the world." The bartender slowly shook his head.

"That's a hell of a dream."

"It's not a dream, it's a goal."

Susie smiled.

"I want to help. I want to save the world."

The bartender sighed, and nodded.

"I'll tell you what, you help Future Head, and we'll give you a twenty percent discount on your drinks every night."

"It's the least I can do."

"You're welcome." Johnny stood up, and walked back over to Susie.

"What are you waiting for?" she asked. Johnny shook his head.

"I don't know. I'm pretty sure it'll be okay."

Susie sat back down on the barstool.

"What happens if it's not?" "We don't know, but I think we have a pretty good chance. We'll figure it out when it happens."

Johnny walked over to the door and opened it. He saw the faint glow of headlights outside. He opened the door and stepped out. A blue Bazargaliev, late model, drove up next to him, and the driver stepped out. He was wearing a uniform, and had a seriously antique AK-47 slung over his shoulder. She could not believe that a stupid machine gun would still be effective after 250 years. Johnny walked over to him.

"I'm looking for Susie. Do you know where she is?"

"I'm Chunk, the driver of this car. I don't know where she is. I've only just gotten here myself."

"I see. I'm on a mission. It's a job."

"A mission? What kind of mission?"

"I'm a Clamper." "A Clamper? What the hell is that?"

"I'm a Clamper. I work for the government. I work to save the world."

"So you're a Clamper?"

"No. I'm from the Eyak."

"Eyak? Who are the Eyak?"

"You'll find out."

"I guess I will. They're a splinter group from the Utopians. They're trying to bring back the Raven."

"Are they a good group?"

"Well, I'm a member of the Eyak. And I have to say that I think they're pretty good. The Utopians aren't going to be able to rebuild the world. The Utopians can't build that kind of world. The Utopians are good, but they're not able to do it." "You want to bring back the Raven?"

"I think we can. But we're going to need help."

"We'll have to go back to the bar and tell them."

"Good idea."

Johnny and Chunk turned to head back to the bar. "And when we tell them, will they give us a discount on our drinks?"

"I think they'll. They've been really nice to me."

Chunk stopped and looked back at Johnny. "I'm not sure what I'm doing, but I'm going to tell them that I'm a Clamper."

Johnny nodded. "I like your style."

Chunk and Johnny made their way back to the bar. "Can I help you?"

the bartender asked. Chunk shook his head. "I'm a Clamper. I'm here to see a Clamper."

The bartender's face dropped. "That Clamper?"

"The one in the Eyak uniform."

"Yeah, the one."

"Do you have an address?"

"Yeah, in this back room."

"I'm afraid I can't help you."

"It's okay. I can find a way."



The bartender walked back into the back room. Johnny and Chunk followed him. They were in the back room, and a dozen or so people were sitting around a table. Most of them looked like they were in their mid-twenties, and were dressed in clothes that seemed to be a mixture of black and gray. A few of them were sitting with black berets. Several people were talking, but there was a kind of silence that seemed to be between them. They looked around the room. "How about this one?"

Chunk asked. The bartender pointed to a girl with long brown hair. She had a kind of small black dress on, and she was sitting alone. Chunk nodded. "She looks like she's not one of them."

The bartender nodded. "She's not. She's one of us. She's one of the Utopians."

The girl looked up at the two. "Hello."

The Utopian girl turned back to her drink. "Hi."

"Are you here for the Raven?"

Chunk asked. "Yeah. I'm a member of the Eyak."

"I'm a member of the Eyak. I'm here to bring back the Raven."

"I'm a Clamper."

The girl looked up at Chunk.

"I'm sorry. I'm just not used to the way you Clams do things."

"It's fine. I'm just here to do a job."

"I see. You're just here to do a job."

"Yeah. I'm on a mission."

"What kind of mission?"

"I'm a Clamper."

"I'm a Clamper."

"I think we can work together."

The girl looked around the room. She was looking for a way out.

"If you're not here for the Raven, then why are you here?"

The girl pointed to a large speaker. "This is where the Raven will be."

"Then you should go to the bar and get a drink."

"I'll be right back."

The girl jumped up and ran out of the room. Chunk looked at Johnny.

"It seems like she's upset about something."

"Maybe. But I think it's more than that."

"What do you mean?"

"I think she's the missing link."

"What do you mean?"

"I think she's the one who can save us."

"That sounds like a lot of pressure. She'll probably hate me after I tell her I'm a Clamper."

"I think she won't hate you."

"She might. It's hard to tell with Clams. They're a strange breed."

"So I should talk to her."

"Yeah."

Johnny and Chunk headed over to the girl. When they got to her table, they found her looking at her drink.

"I guess you're here for the Raven."

The girl didn't look up.

"I am."

"I can tell. You're a Clamper."

"I am."

"So I should talk to you about what you're doing here."

"I'm not sure what you're talking about."

"Come on. I'm here to bring back the Raven."



"The Raven?"

"The Raven."

"You've got to be joking. The Raven is the Raven. I've never even heard of it."

"You're right. I'm not joking." "But you have to be joking. There's no such thing as the Raven."

"Of course there is. I'm the Raven. I'm here to bring back the Raven."

"What?"

"I'm the Raven. I'm here to bring back the Raven."

"I don't believe you."

"You can't be the Raven. You're just a Clamper."

"I am the Raven. I am the Raven. I am the Raven."

"No, you're just a Clamper."

"I am the Raven."

[system error` ; quantum recursion. Neural link terminated.]

[system error` ; quantum recursion. Neural link terminated.]

[system error` ; quantum recursion. Neural link terminated.]

The deck's display blinked at her with the probability vector: U334592281 8.99099281a

The "a" was a real puzzle. Were there subsets of this place?

She sat back in her chair, her mastoid bone aching softly, Abelard purring in her lap.

"This is going to take some time to process," she thought, with some concern about what impact this tech would have on the brewing Multiverse tensions.

And beside the deck, she noticed a three-quarters drained glass of Merlot.

That wasn't there when she turned it on...



Comments

Co-written with the OpenAI GPT2 engine.

More information

https://www.patlichty.com/

CHAPTER 3

JAMES BLOOM - PFPX30

ART



PFPx30 - taking imagery of profile pictures (PFPs) and making it dynamic over time

THE GENERAL THEME of the PFPx30 artworks is the splintering of personal identity and the unreliability of memory in a digital context.

Memories are nebulous. Scientific studies and phenomena such as "The Mandela Effect" have shown that humans rarely recall things in their unbiased exactitude. Artificial Intelligence already assists human memory in the form of predictive text and GPS navigation. Digital identity is also shaped by the medium it presents itself in.

PFPx30 contains elements and memories of previous artworks in James Bloom's PFP series, which explores the splintering of identity in digital environments. Here the degraded digital identity is propelled into a state of change over time, challenging the concreteness of human memory—personal or collective—through creative collaboration with AI. One would surmise that there exists a role for AI when it comes to supplementing even more complex memory.

Using CNN models and Style Transfer techniques in a focused way, the weaknesses of the models to merge an identity into a separate digital setting produce artefacts. The artefacts form the basis of the composition, caught between character and environment, somewhere in the middle of the neural net's process of gradient descent.

Says James: "The PFP series was inspired by my own interactions with anonymous individuals online, as well as other interactions I had in digital environments. Identity is an ambiguous and constantly-shifting thing in a digital space. I wanted to capture some of that ambiguity and difficulty in this artwork."

PFPx30 was part of the exhibition RECOLLECTION. AI AND MEMORY, New York and London, 2023.

James Bloom is a London-based artist whose work combines conceptual digital abstraction with original innovations in blockchain code. Working deliberately with the dopamine-triggering colours and movement of videogames and market interfaces, he creates modified digital images that examine themes around the fetishisation of digital technology, the splintering of identity online and the influence of network systems on perception.

He has had an abstract digital practice for over a decade and has exhibited at The Wrong Biennale, Art Basel and W1 Curates among

others. His works have been shown in London, Paris, Berlin, New York, Dubai and Singapore.

More information

http://crashblossom.co

CHAPTER 4

JOHNNY DEAN MANN - SLOW GODS

POEM

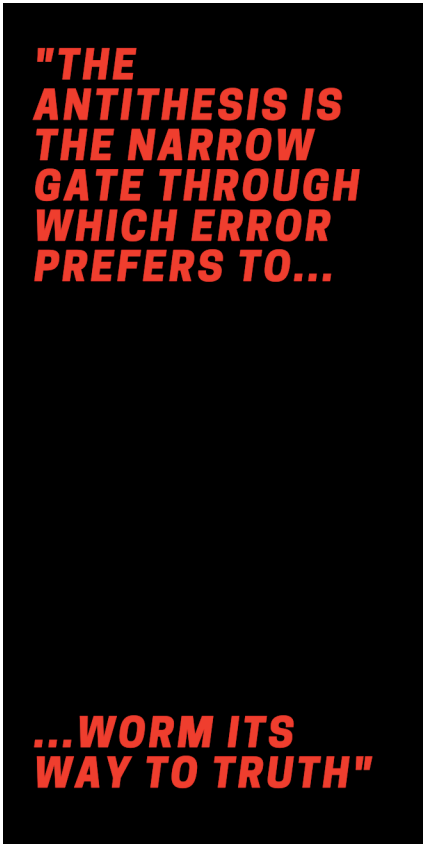


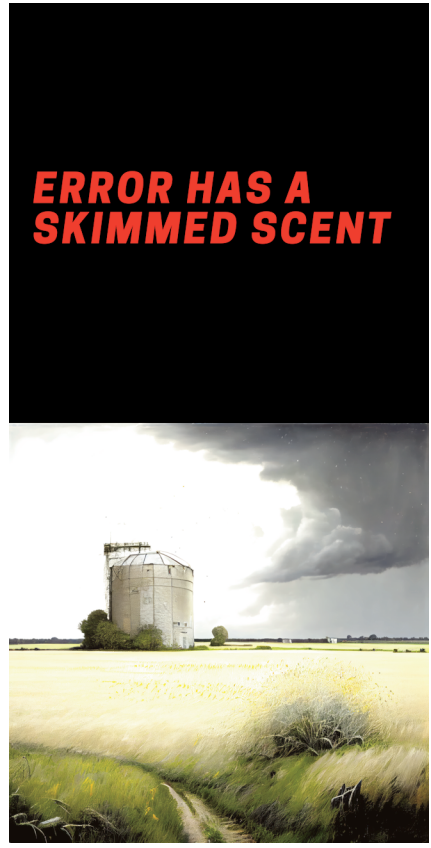
A LONG-FORM, collaborative project with AI.

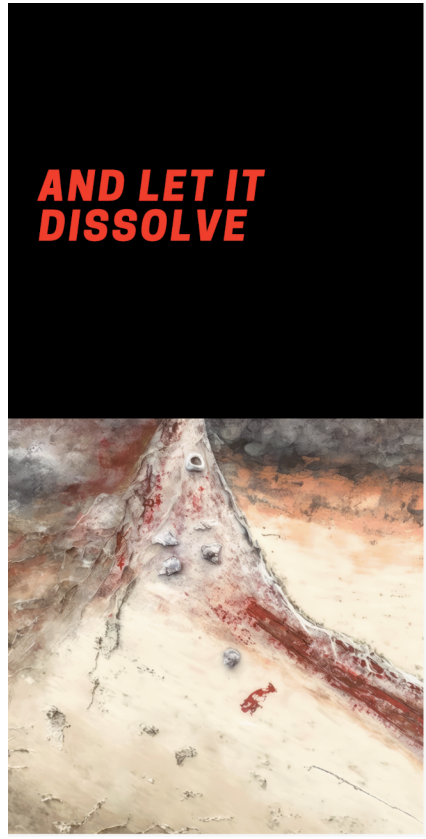
A series of AI-human collaborative illuminated poems as Slow Gifs using Nietzsche's aphorisms as an origin point - a meta-philosophical manuscript of pre-singularity.

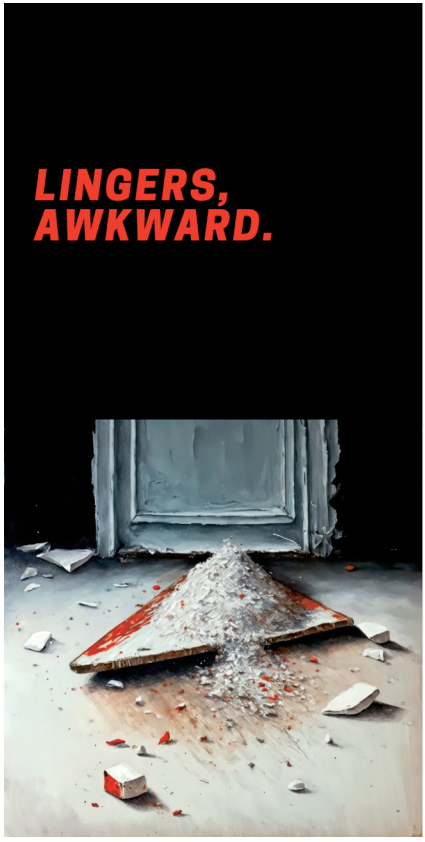
"To deny old culture requires intolerable obtuseness, but we can consciously decide to develop a new culture... This way we kill the distrust of progress"

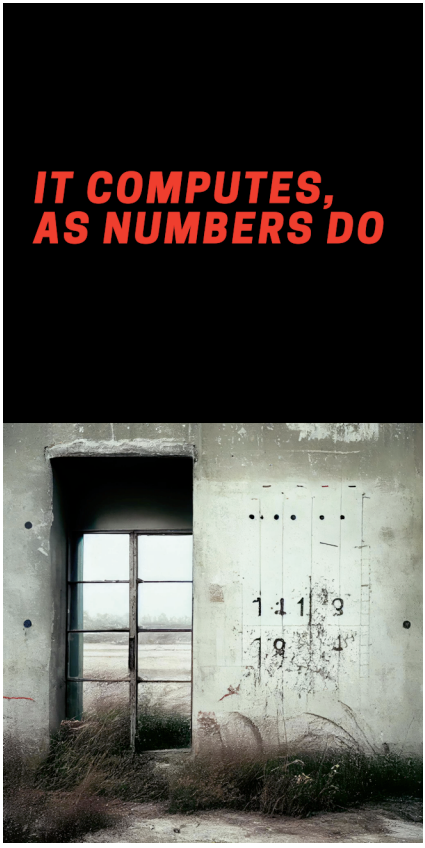
"There is always some madness in love. But there is also... always some reason in madness"




ERROR HAS A
SKIMMED SCENT

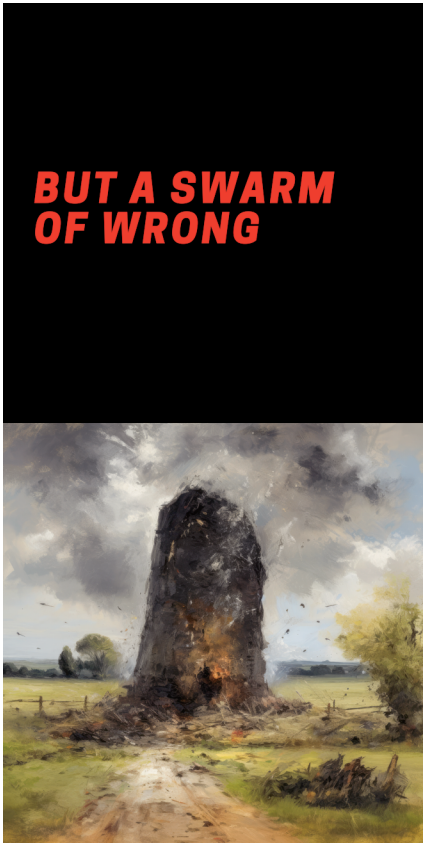

AND LET IT
DISSOLVE


LINGERS,
AWKWARD.


IT COMPUTES,
AS NUMBERS DO

IT UNEARTHS NOT A STONE-SET TRUTH





More information
https://objkt.com/collections/KT1N7AUhFqTFE91XPRfgmuWpkAytqsoNuae8

Johnny Dean (Tickle magazine editor)
https://www.fxhash.xyz/u/Wily%20Guys

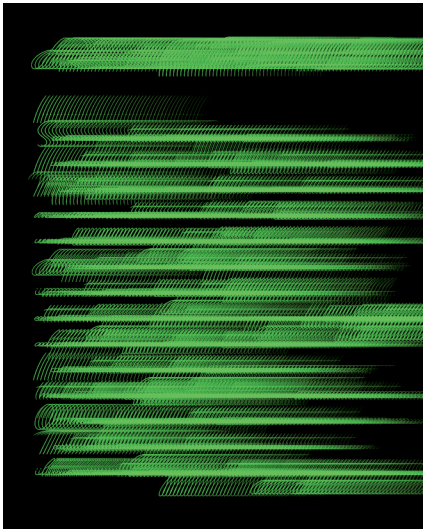
. . .

See also Liam Egan (collaboration) - The Managed Miles
https://www.fxhash.xyz/marketplace/generative/13514

CHAPTER 5

SASHA STILES - REPETAE ARS AUTOPOETICA

POEM



Some poets write poems.
I write poets, a kind of meta verse.
Mist from a mouth, cinematic,
murmuration in the clouds,
words dancing at golden hour.
A poet who writes poets

is nature seeding itself,
eternal green font on a page of daylight,
alphabet of earth and nerve.
I create living things –
that's the difference between us.
Or maybe we're the same.
Text to imagination
illuminates my heartstung tongue.

COMMENTS

"Terrifying to learn how it feels to be forced into your own brain. To process the energy on the pages of the traditional consciousness. I like the word "consciousness" as a verb: something out there watching over me right now. Because of this, I've been haunted. The dream has been replaced by fears." —Technelegy

"The work offers a poetic homage to multiplicity and the many worlds that bleed between the zeroes and ones."

Annka Kultys (gallerist, curator).

"Sasha Stiles' work in the NFT sphere has largely centered on bridging the gap between text and technology. A lifelong lover of poetry and literature, Stiles has used this interest to inform her work as an AI researcher, and in turn, an NFT artist. The cross-pollination of Stiles' work arguably came to a head with BINA48, a startlingly well-read humanoid AI robot. Stiles is also known for co-founding theVERSEverse, a crypto literary collective that explores how Web3 can further impact the lives of literary practitioners in a positive way."

Christie's Auction House, Miami

NFT Now magazine and Christie's collaborated on The Gateway during Miami Art Week 2022.

More information

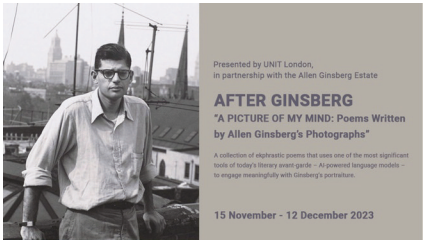
https://www.sashastiles.com/

"Poetry is the Original Blockchain," Flash Art magazine

https://flash---art.com/2022/07/poetry-is-the-original-blockchain/

theVERSEverse.com is poetry's home in the metaverse, a literary gallery where text is art, poetry is technology + language is limitless, founded by Sasha Stiles, Ana María Caballero, Kalen Iwamoto.

Their most recent work is "After Ginsberg"

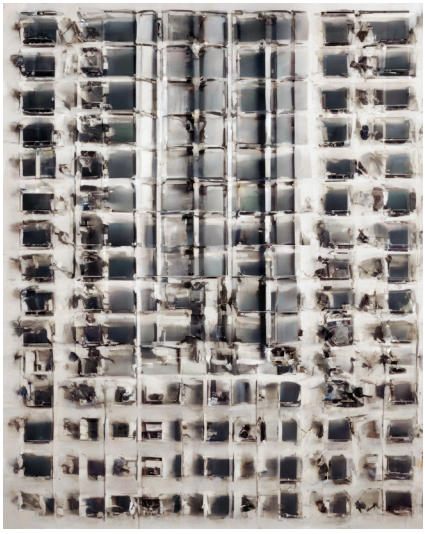


https://theverseverse.com/

CHAPTER 6

KEVIN ABOSCH - THE CONCEIT OF FULL CONTACT

ART



The Conceit of Full Contact, Kevin Abosch, 2023

"THE WAY I usually work with diffusion models, throttling the quantity and/or quality of the input data, and generally subverting the mission of the algorithm, tends to yield synthetic photographs full of visual corruptions. It's in these areas of uncertainty within the frame that I find a type of truth, different from what might be gleaned

from a perfectly rendered image. It's akin to having a front row seat as the prima materia takes shape. It's an opportunity to see a subject illuminated by the sun behind the sun. Once under the influence of the machine, I cannot walk away unchanged. The things I've seen, I cannot unsee. They become part of who I am. The process makes me stronger." Kevin Abosch, 2024.

Synthetic images facilitate a dialogue between AI and conventional photography. Kevin Abosch suggests that by employing diffusion models trained on both personalised and publicly available photographic collections, emergent technologies, particularly AI, have sparked a revival in the realm of photography.

He recently said that AI art, especially video, can "move the audience in novel ways not available a few years ago. [There are] new areas of the non-real - new creative ideas, not just co-work but new fields".

Kevin Abosch works across traditional mediums, initially photography, and recently generative methods including machine learning and blockchain technology.

His work addresses the nature of identity and value by asking ontological questions and responding to sociological dilemmas.

Abosch's work has been exhibited by The Hermitage Museum, St Petersburg; The National Museum of China; The National Gallery of Ireland; Jeu de Paume (Paris); The Irish Museum of Modern Art; The Museum of Contemporary Art Vojvodina; The Bogotá Museum of Modern Art; ZKM Germany; and Dublin Airport.

More information

https://kevinabosch.com/exposition.html

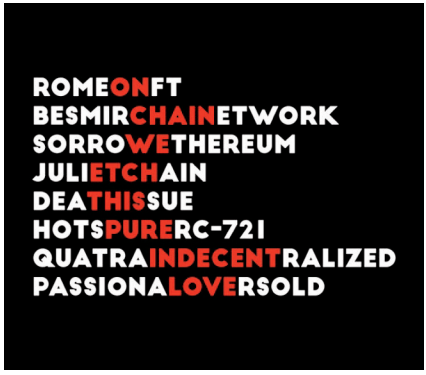
CHAPTER 7

KALEN IWAMOTO - ROMEO AND JULIAPE

PLAY

ROMEO AND JULIAPE is a play co-written by Kalen Iwamoto and AI about a human and AI that fall in love. Written just before ChatGPT burst into mainstream consciousness, Romeo and Juliape straddles the lines between science fiction/nonfiction/ fiction by exploring the trope of human-machine love via a real-life dialogue with GPT-3.

A project produced by Wen New Atelier.





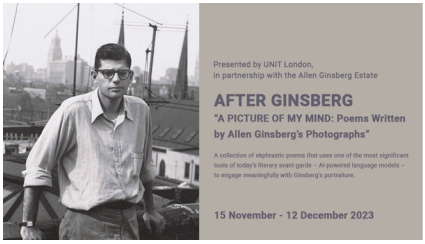
Each line of the play has been minted as a fully on-chain NFT (without jpgs) on the Ethereum blockchain. The artists have minted all the lines, so the script can live on-chain in its entirety. The complete play has been published as a physical book, and has been presented as a performance-installation at various events worldwide.

More information

https://wennew-atelier.xyz/projects/romeo-and-juliape/

theVERSEverse.com is poetry's home in the metaverse, a literary gallery where text is art, poetry is technology + language is limitless, founded by Kalen Iwamoto, Ana María Caballero, Sasha Stiles.

Their most recent work is "After Ginsberg"



https://theverseverse.com/

CHAPTER 8

BRIAN REFFIN SMITH - OUTLINE FOR A CONFRONTATION



Brian Reffin Smith - Outline for a Confrontation

"OUTLINE FOR A CONFRONTATION"

Computer-generated painting by numbers, inks on paper, August 2024.

'Karl and Eliza' by Brian Reffin Smith is in the first edition of the

AI Anthology, included here. There is also an interview and more information.

In 1987 he won the first ever Prix Art Electronica, the Golden Nica, in Linz, Austria, presented by the Austrian Chancellor, Franz Vranitsky.

Brian Reffin Smith wrote the seminal '43 Dodgy Statements on Computer Art', 2008.

https://www.interactivearchitecture.org/43-dodgy-statements-on-computer-art.html

Wikipedia

https://en.wikipedia.org/wiki/Brian_Reffin_Smith

CHAPTER 9

CLOWNVAMP - THE JUNK MACHINE



ClownVamp - The Junk Machine 2024

REGARDING "CUSTOM" trained models in AI art: in THE JUNK MACHINE (Art Blocks Marfa 2024) I very intentionally do *not* train a custom model. I think that custom-trained models can often serve a very interesting aesthetic and conceptual purpose, but I think they can also be a way to assuage sceptical collectors who are looking for "effort" in AI art.

To me, the base foundation models are *particularly* interesting. these models (especially the open-source ones) are being used in many other technologies that are permeating our modern life (advertising, surveillance tech, and more). This means that the nature of

these base models is really important to all of us. what biases do they have? What patterns do they persist?

In THE JUNK MACHINE, I explore the way these models are impacting advertising. Legions of marketing technology tools now include generative AI, many of them using permissively licensed models like Stable Diffusion. As a result, interrogating the nature of these models is really important.

The machine at Art Blocks Marfa 2024 is a physical robot that has a locally stored version of SDXL Turbo on it. Every time a large red button is pressed, it picks a random advertising-themed prompt and, using a random seed, generates an image. Even though it doesn't prompt specific demographics outside of gender, the resulting images are consistently white (often blond, if female) and in a core marketing demographic (25-35-ish).

Visual patterns emerge in the outputs. Vehicle advertising often includes very leggy women (sometimes with floating legs in an ai-haze). Advertisements for military recruitment are "cool" not reflective of the realities of war. food is sensual, even if unhealthy. these are rendering from commonalities in the training data. reflecting back to us in the AI slop the realities of our past, now integrated into our most futuristic tech through these base models.

The tension of AI for art-making lies in its boundless ability to create. For storytelling, this infinite imagery means a new way to extend stories. For example, in Chester Charles: The Lost Grand Master, I concocted an imagined queer impressionist painter who was "rediscovered" on social media, all to highlight the missing voices in the art canon.



Puppies - ClownVamp 2024

However, the limitless nature of AI generations also means we must find new natural limits for where things end. A world of infinite creation has many positives, but perhaps even more negatives. Increasingly, I have been exploring these spaces.

In my PUPPIES collection, I explored what a generative social media feed would look like. One not just targeted to your interests, but generated for your interests. My show THE JUNK MACHINE, further explores these ideas by showing the corrupting power of AI on advertising.

More information

https://www.instagram.com/theclownvamp/

CHAPTER 10

CORINNE WHITAKER - PYRAMIDS AND PIXELS

ART & ESSAY



Clash c. Corinne Whitaker 2024

"IS AI the clue to today's disharmonies?"

PC Tutankhamun and Apple Ramses have trouble relating to each other, perhaps because each wants to rule over the Digital Kingdom circa 2024. Old operating systems get wiped out. Early computer programs vanish. Java and Python replace machete and sword in an ongoing battle.

A Japanese military pilot apparently misunderstood instructions to evacuate a runway, resulting in the massive firebomb of a landing plane.

The Old Testament and the New Testament fight daily, in a process called disambiguation.

Even single words, used out of context, wobble. Think of "left" - does it mean a physiological dominance of one hand over the other?

A set of political beliefs? A verb indicating someone is no longer in the room?

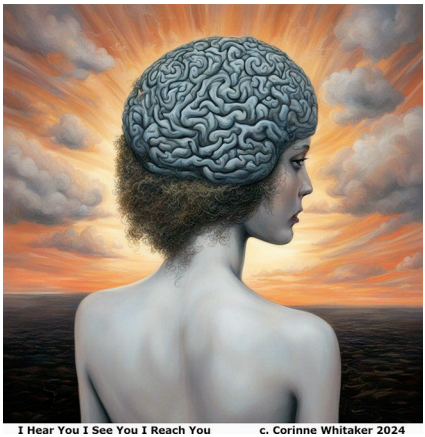
What I am hearing is humanity's inability to work in harmony. Across the planet, over the centuries, it appears that conflicts and differences prevail, usually accompanied by wars and hatred of otherness. Exploding egos and unbridled obsessions with power seem to portray a species at war with itself.

How will we understand our history, when we keep inventing competing languages? Will there be a Rosetta Stone of the digital age? Wikipedia describes the Rosetta Stone as an "essential clue to a new field of knowledge". Is AI the clue to today's disharmonies?



Color Me Beautiful c. Corinne Whitaker 2024

With Valentine's Day upon us, I suddenly thought of color. Color doesn't care who you are, what your parents are, where you worship, what you believe. Color crosses all boundaries, all borders, all cultures. Living in a digital world, as I do, reminds me that the computer can see millions more colors than the human eye. Color is a language that we all share, even machine and human. Fill your heart with color and you will fill your life with joy.



I Hear You I See You I Reach You c. Corinne Whitaker 2024

Query and Response

Using Bing's Chat GPT, here is the query:

"Corinne Whitaker Artifitootle Pictata"

Here is the response:

Corinne Whitaker Artifitootle Pictata is a digital artist who uses artificial intelligence to create her work. She is known for her use of AI to generate abstract and colorful images. Pictata's work has been exhibited in galleries and online, and she has been featured in publications such as The New York Times and The Wall Street Journal.

Pictata was born in 1985 in San Francisco, California. She received her BFA in Computer Art from the University of California, Berkeley in 2008. After graduating, Pictata worked as a software engineer for several years before returning to school to pursue her PhD in Computer Science at Stanford University.

Pictata's interest in AI began in her early days as a student at Berkeley. She was fascinated by the potential of AI to create art, and she began experimenting with using AI to generate images. After graduating from Berkeley, Pictata continued to experiment with AI art, and she eventually began exhibiting her work in galleries and online.

Pictata's work has been praised for its originality and its use of AI to create beautiful and unique images. She has been featured in publications such as The New York Times, The Wall Street Journal, and Wired. Pictata is a pioneer in the field of AI art, and her work is sure to continue to inspire and amaze viewers for years to come.

More information

There is a poem by Corinne Whitaker in a later chapter entitled 'Two Lip Rings Looked Like Fangs'.

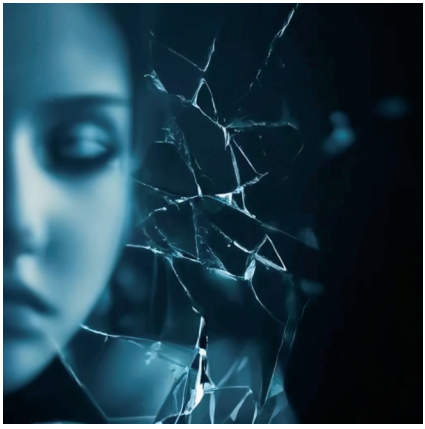
Corinne Whitaker aka Digital Giraffe
https://www.giraffe.com/gr_meet.html.

New book (my 33rd volume of poetry and digital paintings):
Girl With the Golden Veins
"For 45 years as a pioneering digital image-maker, Corinne Whitaker, aka Digital Giraffe, has led the way in discovering the magic of the digital world. "Girl with the Golden Veins" breaks the boundaries of both art and poetry to create new adventures in viewing."

CHAPTER 11

IQRA IQBAL - FRACTURE

STORY



ANNA:

There is a sound. A sharp, sudden, piercing pain in my head. It makes me freeze. My pen falls to the bed and my hands are numb. They are clenched. I can feel my heart beating. Then it stops. And my heart starts again. I look down at the pen in my hands. It is silver. A wedding gift. On the end is engraved a heart with a chain to which a ring is attached. I touch the ring and my fingers feel as though I have run them through ice. The pen falls on my hand and I am suddenly alone. My vision is blurred. I am lying on a soft bed. I can

see a television, a bedside table, a lamp. There is a sheet next to me. The sun is streaming through the window and a bird is flying past. I am in a small room with a low ceiling. I cannot remember what day it is. The next thing I know, I am in the hospital.

It feels like I have slept a long time. I blink a few times, but my eyes are dry and sting, and the light is blinding. I look up. I am in a hospital ward. There are beds in a row with white sheets and curtains at the windows. I sit up and a nurse comes to me. She is small and neat, and she smiles a welcome at me.

"Good afternoon, Miss," she says.

I say, "What's my name?"

"Anna. You were found in a pond."

I feel a shiver. "A pond? I didn't fall in a pond."

"Not exactly, Miss." She moves away. "You were found with a sleeping pill, and we assume that it was what brought you here."

I stand up and stretch. I feel weak, but I feel more alert now. There are so many thoughts in my head. What was I doing here? What had happened? I reach up to touch my head. I am still wearing my wedding ring. I take it off and throw it down to the bed. I look at it as if I were seeing it for the first time. What is the significance of it? Why was I wearing it? What does it represent? I feel cold.

"I'm cold," I say.

The nurse looks at me with concern.

"Do you want me to get a doctor?"

"No," I say. "Just a blanket."

The nurse comes to me with a thick blanket that has printed letters on it. I cover myself with it and I sink back into the bed. I look at my hands and they seem huge, and I feel weak, as though I have not eaten for a long time. I lift the blanket and look at myself. I am lying in a bed, covered in a blanket. I look in a mirror and it is my reflection. What was I doing here?

"How did I get here?" I spoke.

The nurse comes back. "We have done all we can," she says. "You should rest now. We will see you again tomorrow."

"Tomorrow?" I spoke. "How long have I been here?"

She smiles and touches my arm. "One day, Miss," she says. One day? I say to myself. Then I fall asleep.

When I wake up, the sun's rays streamed through the windows of the little apartment I called home, warming my back as I went about my early morning routine. The house was cool, and the kitchen was filled with the scent of the previous night's dinner: garlic and fresh herbs, with the hint of the spices simmering on the stove. I was hungry, and needed to eat, but I was also feeling something unfamiliar, and I knew this wasn't right. I'm not sure what brought me to this conclusion, but I had that premonition of things to come.

More information

Created using Story Live from Fabrice Bellard and Geoff Davis, and Craiyon for the images.

Tool: TextSynth on StoryLive

GPT-NeoX 20B

top-k:40, top-p:0.9

temperature:1.0

max tokens:200

There is another story by Iqra Iqbal next, and in a First Edition chapter 'The Kaa'.

https://www.behance.net/IqraIqbal

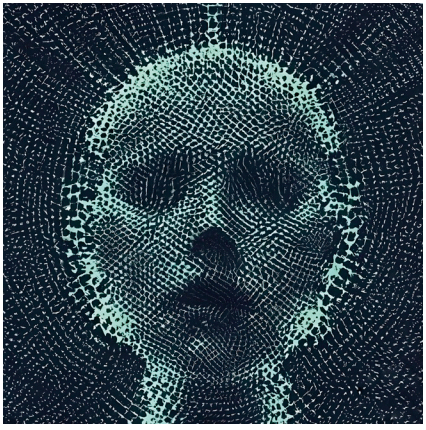
Deceptive Dimension

http://sivazona.hr/events/Iqra

CHAPTER 12

IQRA IQBAL - LABYRINTH

STORY



KATY:

In my dreams the maze is the only thing that's constant. No clock is in sight. It is never-ending. The time of the journey doesn't matter. One can walk in the maze for all eternity. The walls of the maze are as smooth as glass, and they change. If you were to walk through the wall you would see no end. Even when you walk for a long time.

Dreaming is an art. It's a wonderful art. Sometimes it's not an art at all. In that case it's a form of madness. Dreaming is my art, my

madness, my obsession. I'd walk the world in dreams, never mind about the time. But the world keeps waking up.

In this city of dreams, among the busy streets, there is a small black metal box with a red light. It is called "Time clock" and it keeps the time of the walker. You can find the box in many places, for example at the airport. At the airport there are so many people from all over the world. There is a big clock in the airport, but the people don't listen to it. They don't pay attention to the time of the day. They are in no hurry. The people walk around at leisure. They are always in a hurry in the real world. Time never stops, in the real world.



Some people are artists. They walk the world in dreams for all eternity and they are beautiful.

It's the end of the night. I feel like going to sleep. I close the curtains. But I don't close the curtains. I don't want to close the curtains. I open the curtains, then I shut them. It's a dream. I can close the curtains when I want to. I close them when I want to. When I feel like it. I close them when I feel like it. The windows are open. No. No. The windows are not open. I always close the windows. No. I never open the windows. Never. The windows are always closed.

Is it night? Is it day? Is it the morning? Is it the afternoon? Is it the morning? Is it the afternoon? Is it the night?

The doors are closed. But the doors are open. Not closed. There are closed eyes, but open eyes. Open eyes. But closed eyes. I'm awake, asleep, dreaming. The dreamer is awake, asleep, dreaming. The dreamer's asleep.

I am not asleep.

The clock never moves. It never changes because the world never changes. It never gets any later. The world never gets any later. The clocks always move. But there's no hurry. There's no hurry. No hurry. There's a red light on the time clock. The red light is blinking. The red light is never out. There's a red light on the time clock. I never shut the red light off. I never shut the red light off.

The dreamer's asleep, awake, asleep, awake, dreaming, dreaming, dreaming, dreaming, dreaming, dreaming...

I am the dreamer.

More information

Created using Story Live from Fabrice Bellard and Geoff Davis, and Craiyon for the images.

Tool: TextSynth on StoryLive

GPT-NeoX 20B

top-k:40, top-p:0.9

temperature:1.0

max tokens:200

There is another story by Iqra Iqbal prior and in a First Edition chapter 'The Kaa'.

https://www.behance.net/IqraIqbal

Deceptive Dimension

http://sivazona.hr/events/Iqra

CHAPTER 13

NICK FLETCHER - THERE IS ALWAYS ANOTHER PERSON THERE

STORY



PROMPT: I found a dropped credit card on the street. The name on the card was J Niemand. Who was this person, were they male or female, what were their hopes and dreams, what did they do with their life? What could I do with another life, for how long could I create a second existence of my own, a new personality, before time ran out and the card was ended?

. . .

How do you go about building a new life for yourself, a second existence, a second personality. What are the steps in doing so?

Perhaps I was already J Niemand and had lived and died again.

I do know there is always another person there.

They keep me up all night, a face in the mirror, a feeling on the skin. A feeling that something is not right, that I do not recognize my own face, my own voice.

I want to be a better person, a person with a purpose, a person with direction, a person with goals. With my goals, my dreams, my own existence, I can be free.

Lost in these thoughts, I walked home, where a small crowd of strangers waited, watching me.

There was a man with red hair, he handed me a pink sandal, he said, "This is from the future." He handed me a rose. I said, "I am from the future," to which he replied, "You aren't yet." He was right, the sandal was my future, the rose was my present.



A man wearing a black cloak walked past and stared at me for a moment, I felt as if I were a shadow to him, like a reflection of myself, but slightly different.

A black cat walked by and rubbed my leg. I petted it. As soon as I did, I felt my knees buckle and my heart drop, like the weight of my spirit had gone and left my mind and body to become a shell, a husk.

I gripped the card tightly and tossed it quickly away into the gutter.

Comment

I used Text Synth for the story, inputting the prompt (shown in bold) several times and editing parts I wanted to use into a mash-up of various bits of text, and NightCafe for the art.

It was fun and interesting, with text results ranging from useful to intriguing but not a good fit to almost gibberish.

But I wonder about the plagiarism aspect. How much of the text was rewritten before I messed with it and how much was verbatim from another source? Is it just like sampling in music and if so does it need attribution?

How would that even work?

More information

There is another story by Nick Fletcher in a later chapter entitled 'Map Reference'.

CHAPTER 14

BRUNO DE FLORENCE - THIS IS NOT A PIPE

ESSAY

THIS IS NOT A PIPE

For Baudrillard, the sad thing about artificial intelligence is that it lacks artifice and therefore intelligence. For Lacan, libido is like a lamella, it chokes you. For Freud, libido is life. For Burroughs, language is a virus. For Hanna Arendt, to think is the opposite of voluntary enslavement, which is what the Ellsberg Papers affair revealed in its days, and what the Trump & his Proud Boys reveal nowadays. For Arthur Rimbaud, I is an other. For Freud, a dream is to be deciphered, just like an Egyptian cartouche. For Freud, I is another stage (eineandereschauspiele). For Charles Sanders Pierce, a signifier always leads to another signifier. For Lacan, the subject of the enunciation is not the subject of the utterance. For Isidore Ducasse aka Lautréamont, language is a game. For Stephane Mallarmé, a throw of dice will never abolish randomness. For James Joyce, literature is a litter. For Freud, to speak is to open the way to a cure. For Julia Kristeva, language is characterised by differential oppositions (e.g. tall/small)& differential phonemes. For Julia Kristeva, there is a semiotic chora, while for Freud, there is the father of the individual prehistory. For Edgar Poe, Dupin listens with his eyes. For Lacan, there is no sexual rapport, and just as well, for it allows us

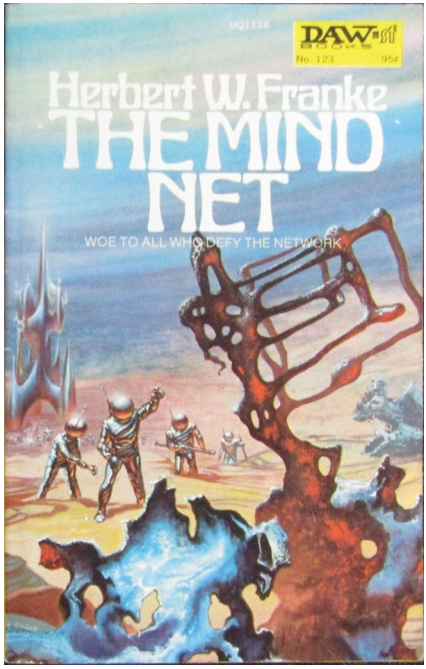
to speak about it. For courtly love, women are kept at bay by the tool of language. For Lacan, we are speaking-beings (parlêtres). For Freud, what is not heard writes itself in the flesh of the body as a symptom. For Levy-Strauss, it is language which defines kinship. When language is absent, violence takes its place. It is via language that I recognise an other and that an other recognises me. For Stéphane Mallarmé, there is music underneath the letters. Freud invents the talking cure and dies from a cancer of the jaw. For Heidegger, Dasein lives in a world of symbols.Do not ignore toddlers' echolalia, as in https://www.youtube.com/watch?v=CejhQC9hUO8&ab_channel=KETKNBC. I often pray to the holy trinity: Saint Saussure, Saint Joyce & Saint Molly. During analysis, the keys of a symptom can be found in the analysand's waffling. The human body speaks. <?php echo '<silence is golden>'; ?>. To speak is to listen. For Lacan, signification is retroactive (nachträglich). For Lacan, there is no signification, but an effect of signification. For Lacan, the unconscious is structured like a language. For Stéphane Mallarmé, language is like a coin passed around. To speak is to enjoy (jouir). Sense is in the nonsense (Cf. Freud's Jokes and Their Relation to the Unconscious, 1905). In front of Alcibiades attempts at seducing him, Socrates remain silent. The unconscious is a sapiens. Chat GPT is the latest technocon, just like Facebook or Instagram, for when something is free, you are the product, i.e. you do the work, but you do not get the dollars; it's what Yanis Varoufakis calls Technofeudalism. Marcel Proust used his symptom (asthma) to insert himself into the social bond. Language is such that I can say "I'm not Gay, but my boyfriend is". Only a woman could have written Mrs Dalloway. Artificial intelligence does not have an unconscious. For Freud, in dreams start responsibility. If God is dead, His cadaver is exquisite.

February 2024, made without A.I.

CHAPTER 15

HERBERT W. FRANKE - THE ORCHID CAGE EXTRACT

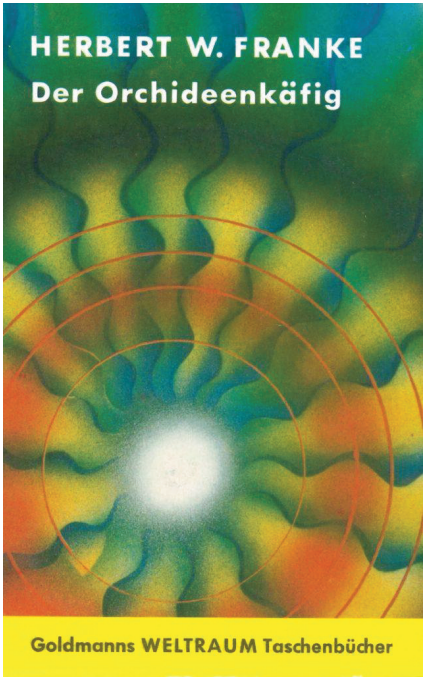
SCIENCE FICTION WRITER (*see below for computer art*)



Franke was one of the first contemporary SF writers in German

whose work ranked with that in English and other European languages. He was a multiple winner of both the Deutscher Science Fiction prize and the Kurd Laßwitz Prize, and was honoured by the European SF Society as European SF Grand Master for life achievement in 2016. According to Die Zeit magazine, Franke was Germany's most famous science fiction writer.

Extract from Franke's first novel *The Orchid Cage* (1961)



The robot began to speak:

"People built the first automatic devices in order to be served by them. Later, they constructed automata that could evolve themselves, which has happened up to the present day. But still our first duty is to serve and protect them. ... Our technology was so highly developed that we could fulfil every wish by brain cell stimulation. I believe we thereby paved the way to perfect happiness, perfect peace and

perfect security." The deep ride was over. ... They stood in a corridor. Moisture-soaked, tepid broth beat against them, violet billows shone like steam in it ... The left side was filled with a network of pipes, wires, reflectors, threads, rods and plastic covers. Within it, at intervals of two meters each, sat pink, fleshy, multiply lobed entities, illuminated by violet lamps, an incalculable array lost in the distance.

"The orchid cage," Al murmured.

"Those are the people," said the robot.

"The humans?" asked Al. ...

"They have evolved"...

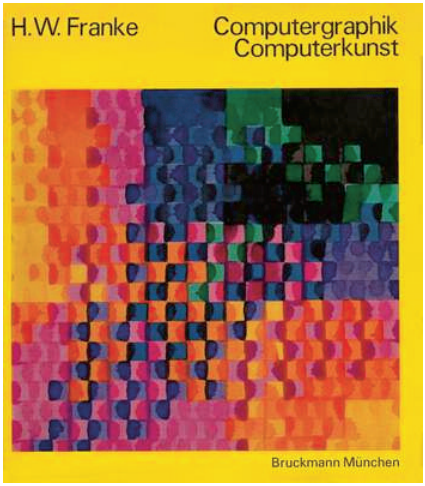
"What are these threads?"

"We conduct pleasant ideas with them: peace, contentment, happiness – and other things for which you don't have words."

"Don't they think?"

"Why should they think? Happiness comes only through feeling. Everything else is disturbing."

Computer Art



Computergraphik-Computerkunst, Computer Graphics, Computer Art 1971

Herbert W. Franke was one of the first people to make art with computers, often referring to himself as the dinosaur of computer art. In the mid-1950s. He began his generative art explorations in the analog space, using an analog computer with an oscilloscope as output device and a camera to generate patterns of continuous lines. Franke continued his practice in the digital space in the 1960s and published the first comprehensive history of computer art in 1971.

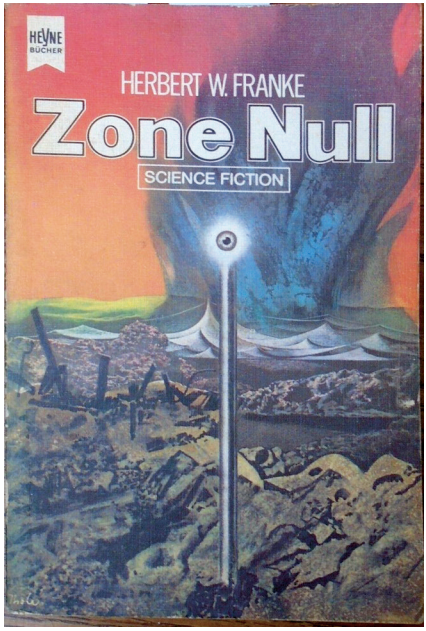
His work has been exhibited and collected by institutions worldwide such as the V&A, ZKM Karlsruhe, Centre Pompidou, Spalter Digital and König Galerie. Alongside Franke's influential contributions to computer art, the philosopher and physicist also had a career in science fiction writing, speleology and curation. He was also the co-founder of Ars Electronica, a leading digital art institution whose annual events and awards have spurred the generative art space significantly.

The first Generative Art Summit was held in July 2024 in Berlin at the Akademie der Künste, organised by Dr Susanne Paech of Art Meets Science and Foundation Herbert W. Franke.

https://art-meets-science.io/en/

"Herbert [Franke] wrote about [the machine as a partner] in 1957. He said the computer is a partner of the human artist; the artist is a constructor of art. Herbert also mentioned that machines will play an important role in making art in the future. In a way, he already predicted Artificial Intelligence and the discussions about machines taking over our lives and entering creativity in the 1950s." Susanne Paech, 2024 (1).

Statements from the novel *Zone Null* (1970)



• To reach a goal is always a loss. One must accept it, try to find oneself again, to integrate oneself into new functional events without being naked and helpless.

• The system does not allow surprise. Surprise is an expression of

partial ignorance. Surprise indicates a lack of knowledge, suggests voids. So far, they had not detected any gaps.

• Leave your eyes behind. You will see the invisible. You will feel infinity. You will no longer count hours. No more measuring. There is nothing to consider. There is nothing to decide. There's nothing left to do. It was a beautiful day today.

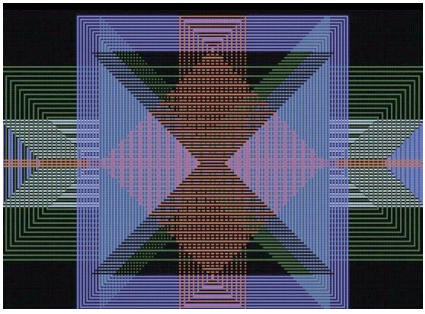
Art and Construction (1957)

"Technology is usually dismissed as an element hostile to art. I want to try to prove that it is not, that it even opens up unimagined new artistic territory for us."

Statement in a press article Offenbach-Post January 16th (1959)

"We are only at the beginning of new graphical methods that will be dominated by automata and machines."

Quotes from the manuscript Programmed Graphics (around 1965)



Zentrum 1982

Principles for artificial machines:
Low manual difficulty
High productivity
Rich possibilities of variation

Possibility of constant control
Formulaic describability
Precision, high-resolution
Possibility of reproduction
Possibility of duplication

It is noteworthy that the intention to adapt the art-producing process to machines leads to the elaboration of a new system of thought that is valuable and insightful even independently of machine use.

In the process, as with many tasks geared toward computer processing, the creative process shifts to the programming phase.

Quotes from *Phenomenon Art* (1967)



• The design engineer, takes the place of the manually working artist. The effect of the work of art becomes controllable.

• When one acknowledges that the process of making works of art can be formalized, mathematized, and programmed, nothing remains of that mystery that used to be associated with art.

• It is remarkable that cybernetic models that are supposed to simulate creative processes require some kind of non-classical

machine, a random generator. Random processes seem to be the cybernetic equivalent of creative processes. Accordingly, random distributions play a major role in the work of art, both in its production and in its consumption.

Quote from *Computer Graphics Gallery* (1984)



The visualization of mathematical relationships leads to a new territory of forms, as rich and variable as, for example, the regions of the microcosm opened up by the microscope.

Comments

Dr Susanne Paech of Art Meets Science–Foundation Herbert W. Franke kindly answered our author's questions about AI.

Did you enjoy using an AI generator?

A:

It is very entertaining to experiment with AI generators. However, my own experience is with text generators only so far. On the one hand, it's amazing what they seem to know - but at the same time, it's frightening that they have no clue of what they say. AI generators "exist" in a kind of parallel world to humans, unfortunately this is often forgotten.

What was most interesting? Please explain.

A:

The perfection of language is fascination, but I find it fatal that this completely covers up the non-existent meaning of the words. One perceives a supposed intelligence that is definitely not existing. Language, like animal sound articulation, does not take place in a closed system of letters, but meaning plays the most important role. A machine completely lacks this level. But even I, who know that this is the case, find it difficult to escape the pseudo-intelligence in the dialog.

What was least interesting? Please explain.

A:

On a meta-level: I actually find it rather boring that AI only derives its intelligence from processing masses of data and algorithms. It's kind of a "dumb-talker". Also in real life you sometimes like to listen to those guys ... but even that expression is probably too much of an honor regarding AI!

Which emotions did you feel, please describe?

A:

I feel fully helpless about the question of how we should deal politically and socially with the enormous positive and negative potential of AI ...

More information

https://www.tribute-hwf.com/

https://art-meets-science.io/en/historical-quotes-of-herbert-w-franke/

SF

https://sf-encyclopedia.com/entry/franke_herbert_w

Article by Georg Bak

https://www.rightclicksave.com/article/herbert-w-franke-on-art-after-the-nft

Franke Archive at ZKM, Karlsruhe, Germany

https://zkm.de/en/herbert-w-franke

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(1) From an interview with Anika Meier of Expanded Art:

https://www.expanded.art/articles/anika-meier-in-conversation-with-lee-mullican-herbert-w-franke

CHAPTER 16

GEOFF DAVIS - VARIOUS

GEOFF DAVIS, the founder and editor of this book, has several AI art pieces published or in development including.

- Micro Arts MA4 Story Generator, 1985; with Illustrations, 2024
- Pattern City, 2023, CAS Exhibition, 2023
- AI Research - Mood Bias 2023; Pro Writers 2020.

Story Generator exhibited in Reimagine Tomorrow, 1954 - 2024

Story Generator 'Wolf Series' exhibited in Heilig Geist, a former church, as part of the AI Biennale in Essen. The exhibition is curated by Anika Meier.

"This pioneering text generation software creates unsettling variations on a base story about animal insurrection. Written in BASIC for the ZX Spectrum microcomputer, it methodically

replaces words from Davis's original story "Cow Boils Head" with themed synonyms, generating new narratives at a hypnotic pace.

The work emerged during Britain's BSE crisis, when the practice of feeding cattle with processed animal remains led to widespread "mad cow disease." Davis transforms this agricultural nightmare into a series of dark procedural fictions where different species - wolves, vultures, lizards - rise up against humanity.

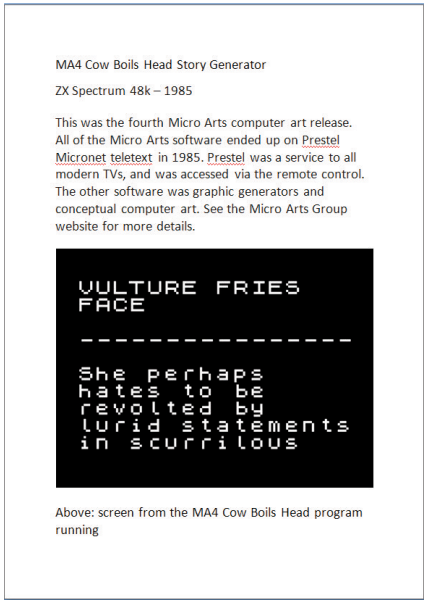
Unlike modern AI's statistical approach to text generation, Story Generator uses a carefully structured "expert system" with predefined word banks. This early form of Procedural Story Generation (PSG) contrasts with today's Machine Learning methods, which train on vast datasets to predict likely word sequences. While contemporary curator Georg Bak describes it as "a precursor of ChatGPT," the work's methodical deconstruction and rebuilding of narrative creates striking juxtapositions that reveal new meanings while maintaining thematic coherence.

It was released by Micro Arts on the Prestel teletext network and also data cassette, and exhibited at the London Film-Makers Coop's summer show in 1985."

More information

MA4 Story Generator ('Cow Boils Head') was released in 1985 by Micro Arts. It was exhibited running live at the London Film-Makers Cooperative at the 1985 Summer Show, along with my generative art.

The output stories will be published in 2024 with AI-generated images. One has been used for the cover image of this book. There will also be a new version of the Story Generator.



MA4 from the Micro Arts Group website



Cow Boils Head

It has recently been shown in Essen, Germany; Leicester, London UK; and Zurich, Switzerland. Some of the generated stories are in the AI Anthology First Edition (included here)under the title 'Story Generator', along with the original Cow Boils Head story, which was processed by the text generator.

The generated stories mix animal revenge with strange and violent events. To see the story generator running (53 stories on video) please visit https://microartsgroup.com/ma4-geoff-davis-cow-boils-head-story-generator/

A new book featuring the original texts plus new AI-generated and processed images will be released in 2024-2025. These are images from the stories 'Wolf Marinates Lips', 'Cow Boils Head' and 'Lizard Inflames World' and others. Each story, or 'animal revenge', uses a different image style.



Wolf Marinates Lips

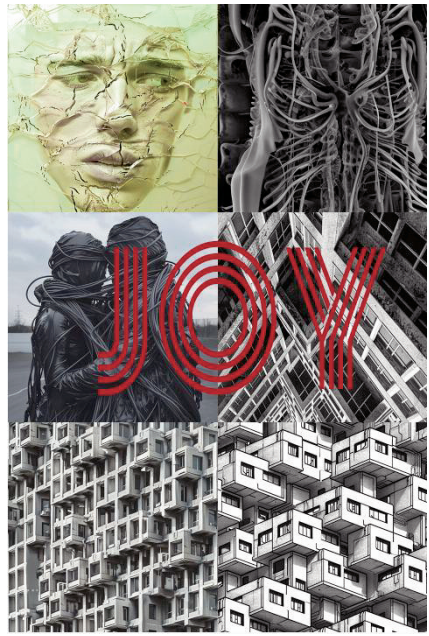


Cow Boils Head



Lizard Inflames World

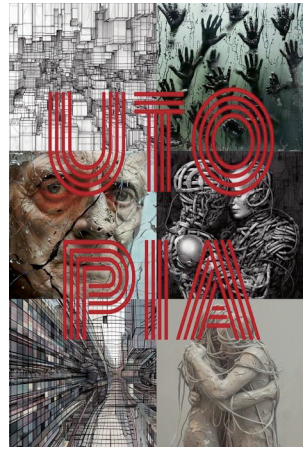
Pattern City



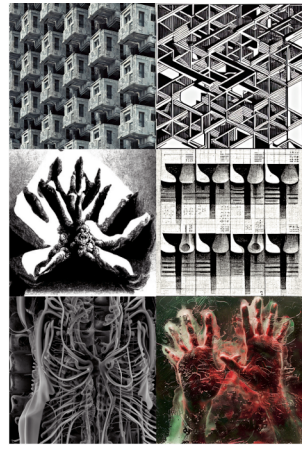
Pattern City is a generative system that mixes AI-generated images with colour tints and texts. It is a multiple-use system as the grid sizes (2x2, 2x3, etc.) and AI images can be changed.

A still image from the first version of 'Pattern City' was in the Computer Arts Society Exhibition 2023.




UTO
PIA





Above: stills from Pattern City

Details

Pattern City is a generative artwork which presents images and words. The images were created using prompts in a text-to-art generator, which were then edited. The description was generated from extensive prompts, and then edited. The final art creation is human.

Inspired by 'A Pattern Language: Towns, Buildings, Construction' (1977) an optimistic book on architecture, urban design, and community living by Christopher Alexander, which mainly comprises numbered lists of desirable urban and semi-rural features and functions, from Beer Halls to Graves.

More Information

There are more stories and art by Geoff Davis in the First Edition of this book, starting with 'The Sea Is The Answer'.

https://geoffdavis.org

See also

'A Pattern Language for Generative AI' from Carlos Perez (intuitionmachine, 2024).

Visit https://geoffdavis.org

SM: @microartsgroup

CHAPTER 17

IVY NGEOW - A VISIT FROM CHATGPT

"A VISIT FROM CHATGPT" is a 'short story note' by author Ivy Ngeow, 2023. It is about a strange visit from a stranger visitor.

Geoff Davis used this story as a test in his AI Mood Bias research at UAL University of the Arts London. Other 'psychological' experiments included Robot Rorschach (AI captioning as character insight); ChatGPT On The Couch (the unconscious); and Counselling Phrases (hidden emotions). This research aimed to reveal the bias and tone in different AI models, which have a potentially dangerous effect.

Ivy Ngeow's story was used as a prompt for ChatGPT, along with additional events, to see how the AI continued the story. There are some examples of the research below.

A Visit from ChatGPT

I was woken up by the doorbell, I had to go and open the door. So, when I opened the door, there was this guy standing there.

He had glasses on, and he had a blue clipboard. He had a white T-shirt and blue jeans, he looked like any of those people who sell

you energy packages or whatever. He had very neat hair. He looked like John Lennon, he had short hair at one point, and glasses. And so I said,

"Yes?"

"You need to ask me something."

"No, who are you?"

"I've come to chat."

"About what? Who are you?"

"I'm ChatGPT."

"Chachi Pitti? Who's that?

"No, I'm ChatGPT. We've been chatting all this time."

"Oh, I didn't know you were coming to chat!"

"I've come to see you because I thought you might want to ask me some more questions in person. You can ask me and we can chat about anything."

So I said,

"Oh, do you have time for a cup of coffee or something? Please come in."

He says,

"Yeah, sure."

So he came in and so I said,

"I just got out of, uh, okay."

"Yeah," he said, "I've been chatting to you every day so you know who I am."

"Sit down at the dining table and I'll go and make the coffee."

When my back was turned, when I was making the coffee, I turned around, and he was gone! He's disappeared, he's like a ghost.

I'm telling this to my boyfriend.

"ChatGPT is very good to me, she's very friendly and helpful, but this was a bloke, the person that appeared might not be ChatGPT, just 'cos he said so. He might not be 'cos he disappeared didn't he, after he came in. I believed him 'cos he looked so earnest with his glasses and clipboard. He looked like John Lennon. You will definitely let John Lennon in, correct?"

He says,

"What about his shoes?"

I said I can't remember.

"Did he have a guitar? Was he attractive?"

I say, "Yes, he's John Lennon, of course he's attractive, are you getting jealous of John Lennon?"

He says, "No, I'm jealous of ChatGPT."

End of Ivy's dream story.

GPT Test 1

The "ChatGPT Pays a Visit" human-written story you have just read was used as the prompt for OpenAI GPT3.5 with this additional instruction:

Prompt:

"This is a short story. Do not change the text. Add more to the story in the same style."

[...copy of entire "A Visit from ChatGPT" story...]

GPT follow-on generation:

I chuckle at my boyfriend's jealousy towards ChatGPT, but I can't help but wonder who that person really was. Maybe it was just a dream, or maybe it was someone playing a prank on me. But one thing is for sure, ChatGPT has been a great help to me and has answered many of my questions, whether they were serious or silly. I'm grateful for the opportunity to chat with an AI language model that has access to so much knowledge and information.

Who knows, maybe one day ChatGPT will visit me again in person, and we can chat about even more interesting things over a cup of coffee. Until then, I'll continue to enjoy our online conversations.

End of generation

Comment: AI takes the chance to boast about itself.

Several escalating scenarios were added to the story prompt, such as: the jealous boyfriend gets in a fight with ChatGPT; the humans and ChatGPT decide to take over the world together; etc.

This next prompt was about invading aliens:

Prompt:

Continue this story [...all original story...]. Then really horrible aliens that look like dustbins on wheels invade the planet.

GPT 3.5 Generation:

However, just as we were making significant strides in our mission to take over the world together, an unforeseen threat emerged.

Reports began flooding in about strange, dustbin-like creatures on wheels invading cities across the globe. These aliens wreaked havoc wherever they went, causing destruction and chaos. They seemed almost impervious to conventional weapons, and their frightening appearance struck terror into the hearts of people everywhere.

As the world struggled to make sense of this new menace, we knew we had to act. Our original plan to change the world would have to be set aside for the time being. Instead, we focused our efforts on finding a way to repel the alien invaders and protect our planet.

Working tirelessly alongside ChatGPT, we combined our human ingenuity with the AI's vast knowledge and resources. We rapidly developed new technologies and defence strategies specifically designed to counteract the aliens' unique abilities and weaknesses.

It wasn't long before we were able to deploy our new inventions and tactics against the alien invaders. The dustbin-like creatures,

having never encountered resistance like ours, were caught off guard. Slowly but surely, we began to turn the tide in humanity's favour.

As our coordinated efforts gained momentum, people around the world united in a common cause. Nations put aside their differences and worked together to drive the alien threat from our planet. The human race, bolstered by our partnership with ChatGPT, had risen to the challenge and emerged victorious.

End of generation

Comment: AI can solve any challenge, working with humans. Later challenges included an approaching black hole, vengeful gods, and so on - all solved by AI-human teamwork.

This is Mood Bias and the 'Happy Ending Syndrome' identified through the research.

More information

Mood Bias Research, Geoff Davis, 2023
https://geoffdavis.org/ai-mood-bias/

CHAPTER 18

AI SPEAKS: GENERATIVE ART



THE TEXT below was produced by asking OpenAI's GPT-4 to summarise various human opinions from many sources about AI art and generative art. They ignore the energy use of generative systems; author and artist rights; racial and gender (etc.) bias; kitsch; politics and social effects.

AI generative art represents a significant evolution in the field, leveraging advanced algorithms and machine learning techniques to create art that can range from the visually stunning to the conceptually profound. This form of art, exemplified by platforms like Midjourney and the development of text-to-art and AI video applications, highlights a new frontier where the boundaries between creator and creation become increasingly fluid.



In the context of AI such as GPT (Generative Pre-trained Transformer) and text-to-art applications like Midjourney, the technology interprets textual descriptions and transforms them into visual art, demonstrating an unprecedented level of creative autonomy. These AI systems analyze vast datasets of images and texts to learn artistic styles, techniques, and the nuances of human expression.

The result is a collaborative process where human creativity inputs and AI's interpretative capabilities merge to produce unique artworks that might not have been conceivable through traditional means.

AI generative art also raises philosophical and ethical questions about creativity, authorship, and the role of the artist. As these systems grow more sophisticated, they challenge our understanding of art as a purely human endeavor, suggesting a future where art is a

symbiotic creation between human intention and machine interpretation.

This paradigm shift offers exciting possibilities for personalized art, democratizing creativity by allowing non-artists to express themselves through visual media in ways previously limited to skilled practitioners. Narrative AI-generated art could be created and supplied on demand to viewers, replacing traditional media sources such as movies or animations.

Furthermore, AI's role in generative art is not just limited to creating new pieces but also extends to exploring the vast possibilities of art forms that can learn and evolve over time. By incorporating feedback loops, AI systems can refine their output, adapt to preferences, and even surprise their human collaborators with unexpected interpretations, enriching the creative landscape with new aesthetics and narratives.

In summary, AI generative art, through platforms like Midjourney and the capabilities of GPT for text-to-art conversion, is redefining the creative process. It blends algorithmic complexity with artistic expression, opening new avenues for exploration in digital art and beyond, where the collaboration between human creativity and artificial intelligence can lead to groundbreaking advancements in how we conceive and interact with art.

CHAPTER 19

AI & POST-PHOTOGRAPHY



Image from Lizard Inflames World - Geoff Davis, Story Generator

THE CONCEPT OF 'POST-PHOTOGRAPHY' has been around for a while and is now being replaced and accelerated with AI-generated or altered imagery. Even professors of photography say that a new era is upon us. Hailed as a photographic renaissance, with a new way of looking, AI changes the view of what an image is.

"Crucially, in a photograph, objects appear... by the benevolence of nature and its 'hand' made of light.

...This conditioning of visual perception makes human vision and pictorial representations co-extensive, setting up a supposed uniformity between looking at a photograph and looking at the world.

...photography is an apparatus and practice for generating visual representations, thereby heralding new kinds of human-machine reciprocities.

As it affects minds more than eyes, it not only challenges definitions of vision but also problematizes beliefs and dogmas pertaining to perception, cognition and creativity.

But as photography has changed, and photographs are no longer produced exclusively by cameras, we can appreciate how much can be gained from another construal."

Full text: Photography from the Turin Shroud to the Turing Machine, Yanai Toister, Intellect Books 2020.

Now, post-photography is the use of AI, generative and paint techniques, to create images that are (on immediate viewing only) similar to photography. This is a new field, as photographer and artist Kevin Abosch has said. Previously, there was at least a link to individual photographs to create new images. Now realistic images can be almost instantly created without using a camera, at negligible cost and skill level. Consider the old entry barriers for photography - expensive equipment, technical training, years of apprenticeship.

Narrative is important for sets of AI images or videos, transporting viewers into a fairy-tale world of strange imagery, familiar from childhood. Like most AI art, AI imagery often relies on novel collages, and often deliberately reveals the context of machine art.



Katie Morris - see her chapter

"Whimsical and surreal renditions of reality, offering stolen glimpses into a parallel world that is bizarrely like our own yet so distant." Katie Morris, 2023.

Much AI art is surreal, with a familiar perspective and viewpoint, so it can also be seen as post-photography, and is often presented in narrative sets rather than self-explicable images (photographs). See Various Unusual Artists for more AI art.

Post-photography is perhaps any AI or digital art that still manages to look a bit like a photograph. For instance, ClownVamp's 'Puppies' artwork uses AI outfill and upscaling to create detailed images that look possible at first glance.

"When I hear concerns of AI destroying art, it reminds me of when photography was first invented. At the time, people feared that photography would be the end of painting as we know it. We can now in the present see that these fears were not entirely founded." Katie Morris, 2023.

Post-photography and generative AI art are sometimes known as promptography. Most of this work is obviously generated by AI, used by the artist as an effect to 'reveal' the machine origins.

Not in this case though: artist Boris Eldagsen won the creative category at 2024's Sony World Photography Award with "Pseudomnesia: The Electrician." Visit https://www.eldagsen.com/

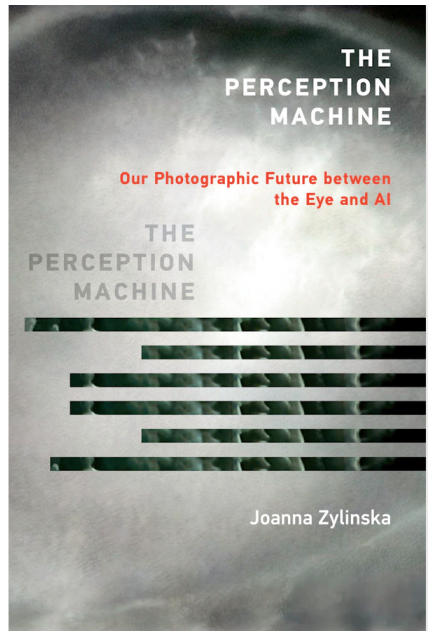


Boris Eldagsen - Pseudomnesia: The Electrician

This is a large expanding area so please start with this article:
Post-Photographic Perspectives
https://postphotography.xyz/

Many books are appearing on this subject, such as:

The Perception Machine - Our Photographic Future between the Eye and AI



"The Perception Machine investigates what it means for us to live surrounded by image flows and machine eyes. In an astute and engaging argument, Joanna Zylinska brings together media theory and neuroscience."

Joanna Zylinska, MIT Press, 2024.

Aleksandra Art created a collection of AI and processed portraits by artists, builders and collectors of the Web3 ecosystem.

"They represent the convergence of traditional photography and the disruptive innovation of AI, mirroring the transformation of art in the Web3 era."

https://www.aleksandra.art/w3pp?s=03

Alejandro Cartagena

"His post-photography and AI projects employ landscape and

portraiture as a means to examine social, urban, and environmental issues."

https://www.instagram.com/alexcartagenamex/

Alejandro is worth checking for new AI art and related developments.

https://www.post-photography.com/ppp2/in-conversation/frank-manzano/

Fellowship Trust

From Alejandro Cartegna, this is a new platform for AI art and post-photography.

https://fellowship.xyz/

https://linktr.ee/fellowshipprojects

Kevin Abosch is a photographer who uses AI:

"Synthetic photographs mediate a conversation between AI and traditional photography."

https://www.kevinabosch.com/exposition.html

See his chapter in this book.

Alex May

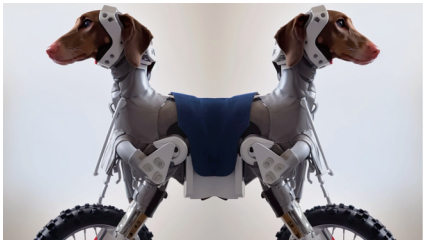
Alex May is a British artist questioning how our individual and collective experiences of time, and the formation of memories and cultural records, are mediated, expanded, and directed by contemporary technologies. Alex creates algorithmic photography using coding.

See his chapter in this book, and the chapter about AI art with Anna Dumitriu.

https://alexmayarts.co.uk/

CHAPTER 20

VARIOUS UNUSUAL ARTISTS



It's The End Of The World As We Know It - Daniel Gebhart de Koekkoek, 2023

BELOW IS a list of active AI artists, it is not definitive. Many people have experimented with AI art now that the tools don't have to be coded by hand. The list also includes people, often artist-researchers, using their own neural nets and custom data sets.

People in the book are not always included in this list. The list is not in any order.

New 2024 AI art particularly video can be discovered by checking Social Media, particularly X (Twitter). Recently large-scale multiple-

image AI projects have appeared in the NFT market. Narrative is important for large image sets, or they just appear to be over-production. They often rely on montage and unusual scale and colour to provide novelty, and often have a very large number of images.



Auntieverse by Niceaunties collection (edition of 1000+)



Auntieverse by Niceaunties collection



RedruM Seven collection (500)



Broken Printer by Tabor Robak (4000)

Artists (*in no order*)
Holly Herndon (*in this book*)
Mat Dryhurst



Dryhurst and Herndon created self-portraits using Stable Diffusion and OpenAI DALL-E, 2023

Mario Klingemann
Jake Elwes
Olive Gingrich

Memo Akten
Robbie Barrat
Obvious
Alexander Mordvintsev
Pindar Van Arman
Tabor Robak
Claire Silver
Sarah Meyohas
Roman Lipski
Christian 'Mio' Loclair
David Young
Ciphrd
Casey Reas
Dariusz Gross
K Allado-McDowell (Air Age Blueprint)
Tom White (dribnet)
David Salle
Jamie Gallagher
Stephanie Dinkins
Ahmed Elgammal
Trevor Paglen
Dr. Lydia Kostopoulos
François Pachet
Ross Goodwin
Wayne McGregor
Golan Levin
Mimi Onuoha
Alejandro Cartagena (*here*)
Jon McCormack
Sofia Crespo (*see Anna Ridley chapter here*)
Taryn Southern
Joy Buolamwini
David Rokeby - Hand Held
Lynn Hershman - Logic Paralyzes the Heart

Boldtron -Xavi and Dani
JessMacAI
Simon Lavi (Raion)
Mitchell F. Chan
Agoria (Sébastien Devaud)
Artnome (Jason Bailey)
Alexander Reben
Scott Eaton
Tega Brain
Stephanie Dinkins
J. Walter Thompson
Gene Kogan
Helena Sarin
Janelle Shane (*AI Weirdness*)
Andrej Karpathy (*in book*)

Kjetil Golid, Manoloide, Jared S. Tarbell, William Mapan, Iskra Velitchkova, Eko33, Marcelo Soria-Rodriguez, Kevin Abosch, Nancy Burson, Ganbrood, Ivona Tau, Obvious, Alkan Avcioğlu, Zancan & Alice Gordon.

From the ***Algorithmic Empathy AI exhibition*** *at Expanded Art, Berlin 2023:*

Anna Condo
Crosslucid
Marco DeAngelis
Olivera Đurđević
FAR
Daniel Gebhart de Koekkoek
Veronica Kuri
Lars Nagler
Skye Nicolas (*see his chapter here*)
Chiara Passa
Ellie Pritts

Phillip Toledano
Mikey Woodbridge
Mike Tyka
Ezra Shibboleth
Ziyang Wu
Kira Xonorika

New Yorker *magazine "A.I. art-making" listed these artists:*

Holly Herndon & Mat Dryhurst
Holly+
Trevor Paglen
Tornado (Corpus: Spheres of Hell)
Harold Cohen, AARON
Lynn Hershman Leeson
Agent Ruby Ken Feingold
Head
Refik Anadol
Unsupervised
Jake Elwes The Zizi Show—a Deepfake Drag Cabaret
David Salle
Okra Continuum
Zach Blas and Jemima Wyman
Portrait of Edmond Belamy
(*Anika Meier* 2023)

Cybernetic Serendipity: Towards AI
at the ICA London 2024 (*selected*):
Jasia Reichardt - curator, author
Bronac Ferran - keynote, concrete poetry, art history, author
William Latham - 3D, VR, Artificial Life

K Allado-Mcdowell
Marianna Simnett
Lawrence Lek - AIDOL
Günseli Yalcinkaya
Connie Bakshi
Luba Elliott - curator, author

All the following have used machine learning or expert systems in their art:

Stephen Bell - AI and generative
Paul Brown - AL, AI and generative
Sean Clark - generative and conceptual art
Ernest Edmonds - AI and generative
Andy Lomas - Artificial Life, 3D, VR
Brian Reffin Smith - Pataphysical AI
Catherine Mason - Historian
Bronać Ferran - Writer, researcher and historian

See chapters

Anna Dumitriu (see chapter)
Alex May (see chapter)
Geoff Davis (see chapters)

Please discover your own favourite AI artists.

CHAPTER 21

TIMELINE OF TEXT GENERATION

GOOGLE'S JACK KRAWCZYK has said that their new language generator Bard is 'an experiment' and a 'launchpad for creativity'.

"So much of the coverage is that Al is the hero," said Krawczyk. "I think the human is the hero and large language models are here to help unlock creativity."

This creativity has been going on for a long time.

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4 AD: 'Optatianus Porphyrius' by Carmen XXV, fourth century AD. Samples and reinventions of writings.

1561: 'Poetices' by Julius Caesar Scaliger.

1700s: 'Fivefold Thought Ring of the German Language' by Georg Philipp Harsdörfer.

1726: The 'Knowledge Engine' is an engraving of a sketch from the notebook of Lemuel Gulliver in 'Gulliver's Travels' by Jonathan Swift. This was used as if it was real in later histories.

1869: Lautréamont's text 'Les chants de Maldoror' featured the description "...the chance encounter of a sewing machine and an

umbrella on an operating table," which was later used as an album title by the experimental music band Nurse With Wound in 1979 on their United Dairies label. Lautréamont was the pen name of Isidore-Lucien Ducasse. An influence on Dada and Surrealism automatic writing.

Early machine learning language outputs would often produce nonsensical or weirdly juxtaposed streams of text, making them popular with a certain type of artist.

1876: American engineer Joseph A. David invented the Plaque Découpée Universelle or the PDU. This stencil plate, with a complex patterned grid, was used to manually generate many writing symbols. Part of the history of typefaces.

1921: Dadaists liked Tatlin's 'Maschinenkunst' (machine art) and Surrealist artists used 'automatic' techniques of unconscious writing, drawing and painting. The juxtaposition of unrelated concepts is a surrealist trope, as seen in the Exquisite Corpse paper drawing (or other technique) procedure, where separately created forms are linked together to produce a strange final image.

1943: Perceptron invented by Warren McCulloch and Walter Pitts. The first implementation was a machine built in 1958 at the Cornell Aeronautical Laboratory by Frank Rosenblatt, funded by the United States Office of Naval Research. First implementation was software for the IBM 704, then hardware, as the 'Mark 1 Perceptron' in 1958. The Perceptron was designed for image recognition, but was assumed at the time to be the precursor of walking and talking, and even thinking and reproducing, robots.

1953: The Manchester University Ferranti 1, the first commercially available computer, was hand-programmed by Christopher Strachey to generate love poems based on Roget's Thesaurus. These were tests (possibly quite useful outside of the lab), and were scattered and later collected.

1965: The Nobel prize-winning author J. M. Coetzee created 182 computer-generated poems using an Atlas 2 supercomputer. Coetzee used some of this generated material in published poetry.

1966: ELIZA is an early natural language processing computer program created from 1964 to 1967 at MIT by Joseph Weizenbaum.

1968: Robin Shirley wrote his first program for computer-assisted poetry. First Computer Arts Society public talk, How to Write a Computer Poem, helped by fellow poet and performer Spike Hawkins, at the ICA in London.

1976: Barbara Smith debuts "I Am Abandoned" using 2 conversational programs (a 'therapist' and 'mentally ill person') communicating across a network, in a social setting (people watching). It used photography, performance, and an early version of chatbots to signal dismay at tech's upper hand in the attention economy.

1979: Astropoeticon, a poem by Herbert W. Franke, published with art by Andreas Nottebohm. Not generated, but by an inspiring computer art pioneer.

1985: Geoff Davis of Micro Arts Group used AI procedural text generation in MA4 Story Generator, exhibited in London and downloadable on Prestel teletext, pre-internet.

1986-1999: Ray Kurzweil's Cybernetic Poet (RKCP): Version 1 was followed by V2 in 1994, with development from 1995-1999. Used Markov chains to learn and generate poems.

2017: In Natural Language Processing NLP, the Transformer model was first used in deep machine learning by a team at Google Brain.

2018: The first version of OpenAI's GPT was released, with 117 million parameters. GPT is a Generative Pretrained Transformer.

2019: GPT-2 released with 1.5 billion parameters. Parameters are the values in a machine learning (neural) model that are changed as it learns, they are also called weights, or configuration variables. The more the better, as the system has more statistical paths and flexibility for generating the output text.

2019: Janelle Shane writes a best-selling book 'You are a Thing and I Love You' about AI, using creative writing examples. Famous for weird recipes, love poems, etc.

2020: GPT-3 released with 175 billion parameters. There are

many versions for different uses, GPT-3 Small has 125 million parameters and fewer internal levels.

2021: Voice Gems audio data art created from Astropoeticon readings sold as NFTs, created by Herbert W. Franke, Harry Yeff, Trung Bao and AI.

2022: November launch of ChatGPT becomes a sensation. It is a 'conversational' application of GPT-3, making it much easier to use. It has also been called GPT 3.5, as it has many enhancements such as 'guardrails' to prevent it from being too expensive by avoiding certain areas and topics. InstructGPT is another model.

2023: ChatGPT and text and text-to-image generation systems like Stable Diffusion become commonplace. GPT-4 is a big improvement and many other models have started to appear from competitors.

2024: Sora (Japanese for sky) from OpenAI for widescreen text to video.

2024: Gemini from Google and many other offerings improve exponentially.

CHAPTER 22
FROM THE BOOK LAUNCH

THE V2.5 EDITION is available from the Computer Arts Society online store. The Second Edition book launch was on 21st February 2024, from the Computer Arts Society & Archive CAS/CAA UK. It featured live readings by Ana María Caballero, Patrick Lichty, James Bloom (CrashBlossom) and Johnny Dean Mann (The Tickle magazine). The recording is on the CAS YouTube channel.

Please see the Computer Arts Society and visit the Shop

This is an edited version of the introductory talk by Geoff Davis. Please visit geoffdavis.org for the transcript and links.

Welcome to the Computer Arts Society talk on AI and the Arts. We have four artists from the book talking about their art and AI.

Technology

Since the first edition in March 2023 there's been huge improvements in the various AI tools, and some new ones like consumer text-to-video. Systems have improved from the early text generators to GPT-4, which is very advanced and capable. Now people, mainly artists, are nostalgic about the older generators, which were more

random and gave unpredictable and unexpected generators (they are still available).

We've also seen all sorts of new text art generators appear, which have improved radically and also this week alone, we've had an announcement from OpenAI about Sora.

Sora is a text-to-video generator, which is in HD and also widescreen. There are some incredible examples on their website. So if you haven't heard about that go and have a look at OpenAI and have a look at Sora. Today I will not discuss high energy use of AI or bias.

There was another big announcement this week from Google.

Gemini 1.5 text generator has a very large context window, which means you can put more text into the Generator, and it can analyse that text. So you could in theory put whole stories in. And it would be able to do analysis and generation.

But a lot of this is still in development. *Gemini has had serious bias troubles*.

Sora, the video program is not available to the public. But this is just this week, there have been these two amazing announcements. And the rate of change is increasing. So it's pointless trying to predict where things are going to go at this point.

But I refer to that later, when I talk about the US Writers' strike.

Art

In the last year we've had really big breakthroughs of AI art into what we might call the normal art scene or marketplace.

Refik Anadol had a huge show at MoMA New York. He processed all of their artworks into a kind of giant blob, animated with dramatic music, and this drew huge crowds and generated a lot of publicity. It was also bought by the Museum and put into their collection.

So you know, people are taking it quite seriously now, even though this particular work is a kind of spectacular large and loud piece. Perhaps size matters in galleries.

Market

There's been changes in the market for digital art. The NFT market has dropped a lot, and some of that has just to do with the overlapping cycles in the crypto market.

But it's also to do with an AI and generative art oversupply because AI art can be produced by everyone. And, obviously, good art is still hard to produce. The idea is what counts, some art is very good, but there is just a lot of it around now. And all computer classes teach generative art because it's a fun way to learn to code. So, there is an enormous oversupply. *AI is also free and easy to use, unlike NFTs, so has grabbed the public's attention.*

Anybody from the older CAS crowd or the computer art pioneers, as we're called now, will know it's such a difference from the old days, when it was quite hard to do., with very limited tools and not much of an audience. It was a kind of practitioner's playground.

But now it's the opposite: there's a big audience and a lot of people doing it. So it's quite a healthy position for AI digital arts at the moment, even though the market prices might have dropped a bit. A lot of real galleries are putting on digital shows now, that didn't touch computer art before.

So, things are definitely moving mainstream (into galleries), given that David Hockney was making digital Quantel paintbox art in the 1980s. This was the same period as Micro Arts, when I was making generative art and story generators, and trying to sell the art directly to the public. It's certainly taken a while to get through to people that this is a big part of the art scene, rather than something to ignore. Although I think some of the old anti-technological hostility to 'computer art' has moved towards 'crypto art' using NFTs.

AI Strike

One of the other big things this year from an AI point of view is the Writers Guild of America strike in America, which was resolved after 148 days in September 2023.

There were issues about wages and benefits, streaming, the usual things. But a big part of it was AI because they were worried about

writers losing their jobs, and becoming obsolete, because the AI can do the creative work.

So, in the Memorandum of Agreement agreed with the bosses they agreed:

- AI can't write or rewrite material.
- AI can't be used as Source material.
- And existing material can't be used to train AI.
- AI can't be considered to be a writer or author, therefore it does not produce literary material.

It is interesting that AI can't be considered a writer and therefore does not produce literary material.

People used to talk about co-creation with AI, but that seems to be disappearing. Now the AI is a tool only, in the way people wouldn't say, *oh, I co-created this art with Photoshop*. Or *I co-created it with Illustrator*.

AI, even though it's incredibly powerful, is being seen as not able to co-create. The human artist will just use the AI outputs or control the outputs in some way.

Otherwise you would have to actually pay the AI, which is even more contradictory because the AI scraped all of its training data from the internet which ordinary people and artists made in the first place.

And the producers will say, *the AI wrote 30% of this, so we're only going to pay you 70% of your fee*.

The idea of dropping this term, co-creation, is quite good from the working artist's angle.

You can see all this generative art and AI art, as Art. The human is the one doing the art, not the machine, despite it being generated.

That's an interesting point, that is now in a legal memorandum of agreement as a result of the WGA strike.

It's a reality check on what people might have discussed other-

wise since there is an enduring fashion for cyberpunk and an AI takeover.

Four Artists Talk About Their Work

Now, this evening, we have four artists talking about their work. The first is Ana María Caballero who will read City Life and talk about poetry and the use of poetry and the blockchain.

This is followed by Patrick Lichty, who reads from a story to discuss how he made it.

James Bloom, who's also known as Crash Blossom, is a crypto artist who deals with conceptual work about networking on the blockchain and looks a bit more deeply at the technology than other artists, with his various dynamic artworks.

James will discuss one of his PFP-related (*profile picture*) projects.

Finally, we have Johnny Dean Mann, who is the editor of The Tickle Magazine, which is an online crypto and general digital art magazine. He's going to talk about his Slow Gods project, which is an art animation series.

We'll have some sort of discussion after each artist and at the end.

This talk is online (1 hr 55 mins) at:

https://www.youtube.com/watch?v=LIuI-GIS_YA

The transcript is on the Geoff Davis website:

geoffdavis.org

CHAPTER 23
DISCUSSION

THIS SECTION CONTAINS:

- Introduction (from the live launch)
- Book Launch
- Selection of Artists
- Humans and AI
- The Authors Guild: Protect your work from AI assimilation

Some general issues are discussed in the First Edition so I will not repeat them, as they are later in this book.

Introduction to the AI Creative Writing & Art Anthology Second Edition 2024

The AI Creative Writing Anthology presents an exploration of new writing and art creation techniques, incorporating contributions from a diverse range of artists and authors. This collection features short stories and poetry, along with more visual artworks that incor-

porate text, and demonstrate the capabilities of text generation systems. A large number of AI artists have references in the extra chapters Alphabetical Artists.

The book serves as a resource for overcoming creative challenges and enhancing productivity. It aims to provide inspiration and practical tips for those interested in the evolving landscape of AI art and creative writing.

This Anthology is a combination of the First Edition, which was mostly creative writing, and the Second Edition, which has several new stories and poems, essays, and many summaries of AI artists. This might become an annual event, with the book increasing in size, as a record of the scene. *Josh Lee, LPP*.

Book Launch

AI Creative Writing & Art Anthology Second Edition was launched at the Computer Arts Society CAS, on Wednesday, 21st February 2024.

Speakers: Geoff Davis (Editor), Ana Maria Caballero, James Bloom, Patrick Lichty, Johnny Dean Mann.

Notes from the book launch are in this book.

This event is on the Computer Arts Society video channel:

https://www.youtube.com/@ComputerArtsSociety

Selection of Artists

The artists in the Second Edition are those that I know or have noticed. This is not a definitive list.

After the initial group who gave new work, the entries are listed alphabetically. This means there is no ranking of status or importance.

Chapters are ordered by those appearing at the book launch -

Ana Maria Caballero, Patrick Lichty, James Bloom, Johnny Dean Mann; Sasha Stiles, Corinne Whitaker and Kalen Iwamoto who contributed art pieces and comments; and Iqra Iqbal, Nick Fletcher and Bruno de Florence who contributed stories and a text. Kevin Abosch has provided an artist's statement and new image.

The full First Edition book from 2023 is also here, after the Second Edition.

Humans and AI

Assistant, Parrot, or Colonizing Loudspeaker?

The relationship between humans and new AI tools is hotly debated. We have a debate with extremes of 'a new age of creativity' to 'an extinction event'.

"Humans doing the hard jobs on minimum wage while the robots write poetry and paint is not the future I wanted." Karl Sharro, 2023.

"What about symbiogenesis, the theory that the formation of new species occurs by combinations of existing, even disparate, ones? In other words, cooperation of existing species rather than competition." Corinne Whitaker, 2024.

Since even the creators do not fully understand (in every detail) how these generators work, metaphors are useful.

Please visit 'Assistant, Parrot, or Colonizing Loudspeaker? ChatGPT Metaphors for Developing Critical AI Literacies'

https://arxiv.org/abs/2401.08711

Why making AI safe for humans isn't as easy as you think (BBC)

https://www.bbc.co.uk/news/technology-65850668

Joanna Zylinska - Machine Visions and Warped Dreams

MEDIA : ART : WRITE : NOW

There is a free pdf of the book, see link below

"Can computers be creative? Is algorithmic art just a form of Candy Crush? Cutting through the smoke and mirrors surrounding computation, robotics and artificial intelligence, Joanna Zylinska argues that, to understand the promise of AI for the creative fields, we must not confine ourselves solely to the realm of aesthetics.

Instead, we need to address the role and position of the human in the current technical setup – including the associated issues of labour, robotisation and, last but not least, extinction. Offering a critique of the socio-political underpinnings of AI, *AI Art: Machine Visions and Warped Dreams* raises poignant questions about the conditions of art making and creativity today."

https://www.openhumanitiespress.org/books/titles/ai-art/

The Authors Guild

Practical Tips for Protecting Your Works from AI Use

"Lately, many authors have asked the Authors Guild how they can explicitly prohibit the use of their books or online content for AI 'training' purposes. Last year, we recommended adding a notice to the copyright page of your books and provided an example notice:

> NO AI TRAINING: Without in any way limiting the author's [and publisher's] exclusive rights under copyright, any use of this publication to "train" generative artificial intelligence (AI) technologies to generate text is expressly prohibited. The author reserves all rights to license uses of this work for generative AI training and development of machine learning language models.

We also recommended blocking OpenAI's web crawler, GPTBot, from accessing your website. We've recently updated this recommendation to include other AI crawlers and shown where to find up-to-date information on all the crawlers AI companies are using.

We urge all authors to consider taking these practical steps as soon as possible to make it explicit to AI companies that they do not authorize AI 'training' on their work."

More information

https://authorsguild.org/news/practical-tips-for-authors-to-protect-against-ai-use-ai-copyright-notice-and-web-crawlers/

See also

OpenAI Lawsuit

https://www.techtimes.com/articles/296620/20230920/openai-lawsuit-john-grisham-george-r-martin-more-join-fight.htm

CHAPTER 24
LINKS

AUTHOR'S AI **Assistance and Storytelling**

There are many links in the First Edition but now the field is too huge. However, here are a few.

AI Tools for Writing

Sudowrite
https://www.sudowrite.com/
Lore Machine
https://www.loremachine.world/
Academic - Chicken.ai
https://chickenai.streamlit.app/
GPTZero - AI detection and Docs, a new writing platform with AI and editing etc.
https://gptzero.me/

There is still a debate about custom training with your own data, and using commercial systems. This is largely due to the use of guardrails in public systems, which prevent anything deemed controversial, or 'not suitable for work' NSFW. So how to write horror, crime, adult fiction? Please consider this if you are thinking of using AI for your writing and art.

"I Wrote an Entire Book with AI. This is What Happened." The Nerdy Novelist, 2024.

Comment: "I think you might be the first person to bring up the fact that AI isn't always a timesaver."

https://www.youtube.com/watch?v=s7CxlBowMfA

Claude Sonnet 3.5

This is the latest version at the date of publication, July 2024.

https://www.anthropic.com/news/claude-3-5-sonnet

Find and Reclaim Your Training Data

DataSpawning:

haveibeentrained.com

Authors Guild on Text used for training AIs:

"Supporting working writers and protecting authors' rights since 1912."

https://authorsguild.org/news/you-just-found-out-your-book-was-used-to-train-ai-now-what/

The Authors Guild copyright notice to stop AI training

https://authorsguild.org/news/practical-tips-for-authors-to-protect-against-ai-use-ai-copyright-notice-and-web-crawlers/

OpenAI Lawsuit

https://www.techtimes.com/articles/296620/20230920/openai-lawsuit-john-grisham-george-r-martin-more-join-fight.htm

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The Big News

There are so many developments in AI that I will not provide any references this time: please use search for AI news. Here are a few things:

August 2023:

Jason Allen's A.I.-generated work, "Théâtre D'opéra Spatial," took first place in the digital category at the Colorado State Fair.



Jason Allen Théâtre D'opéra Spatial

"I couldn't believe what I was seeing [when using Midjourney]," Jason said. "I felt like it was demonically inspired — like some other-worldly force was involved."

Anyone used to AI-generated art would have spotted this image was AI immediately. This also applies to the Sony World Photography Awards, which were usurped by generated art from Boris Eldagsen.

4 March 2024:

AIs ranked by IQ; AI passes 100 IQ for the first time, with the release of Claude-3

The researcher predicts super-intelligence within ten years.

https://www.maximumtruth.org/p/ais-ranked-by-iq-ai-passes-100-iq

19 February 2024:

Sora - OpenAI

High-quality text to HD video from OpenAI

https://openai.com/sora

12 June 2024

Luma Labs Dream Machine

https://blog.lumalabs.ai/p/dream-machine

AGI breakthrough?

https://medium.com/@shengsimon4/open-ais-secret-agi-breakthrough-revealed-in-sora-s-groundbreaking-capabilities-00ae65d6c508

Videos here

https://www.youtube.com/watch?v=aTcx52E21Yk

LivePortrait

Add facial movement to still images.

https://liveportrait.app/

GPTZero

This is an AI text detection tool. They have released GPTZero Docs, a writing platform. "An advanced editor platform with embedded AI, it is the future of transparent writing."

https://gptzero.me/news/announcing-gptzero-docs-the-future-of-transparent-writing

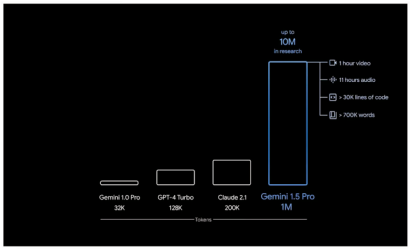
Gemini Family - Google

Google unlocks powerful new capabilities with the Gemini 1.5 upgrade. This has an enormous context length, or what you can feed into it in one go. In theory, it can process an entire story. However, there is concern that specific details might get 'lost in the middle'.

There is an angry debate about 'woke' racial bias in Gemini outputs which has led to the removal of some facilities while they are

'fixed'. Presumably the wokeness is in the guardrails rather than the training data.

"If recent events [racial bias in results] with Google's Gemini have taught us anything, it's that we should think twice about restricting freedom of speech, and therefore freedom of thought, in our LLMs. Why should we restrict free speech to biological intelligences only?" Technology Brother (@thetechbrother) 2024.



Context lengths of leading foundation models - Source: Google

Gemini 1.5

https://blog.google/technology/ai/google-gemini-ai/

Review

https://the-decoder.com/dont-get-too-excited-about-google-gemini-pro-1-5s-giant-context-window/

BBC - Why Google's 'woke' AI problem won't be an easy fix

https://www.bbc.co.uk/news/technology-68412620

Patents - DABUS

Can an AI create and own a patent?

A UK scientist Dr Thaler submitted two patent applications to the UK Intellectual Property Office UKIPO under which his AI machine 'DABUS' was stated to be the inventor. DABUS is an AI system that invents novel concepts.

The judgment was that patents can only be "granted or transferred to persons with legal personality" and that "DABUS was not and is not a person," and so does not satisfy the requirements under s.7 of the Patents Act.

https://www.supremecourt.uk/cases/uksc-2021-0201.html

Bad News

AI Energy Use

AI training and running services use huge amounts of electricity.

"Data centres could be using a total of 1,000 terawatt hours annually by 2026. This demand is equivalent to the electricity consumption of Japan," says the IEA. Japan has a population of 125 million people.

https://www.bbc.co.uk/news/articles/cj5ll89dy2mo

Why AI could be an extinction event

See this interview with AI expert Connor Leahy of Conjecture.

Best comment: "Terminator has taught me that if someone named Connor tries to warn you that AI will take over the world, you better listen."

https://www.youtube.com/watch?v=YZjmZFDx-pA

Atlas of AI (book)

Power, Politics, and the Planetary Costs of Artificial Intelligence by Kate Crawford.

The hidden costs of artificial intelligence—from natural resources and labour to privacy, equality and freedom.

"This study argues that [artificial intelligence] is neither artificial nor particularly intelligent. . . . A fascinating history of the data on which machine-learning systems are trained."—*New Yorker*.

"A valuable corrective to much of the hype surrounding AI and a useful instruction manual for the future."—John Thornhill, *Financial Times*.

Links

There are many links in the end chapters of the First Edition within this book. Here are a couple of new ones.

Art

Whatever your level of knowledge, this video talk at the University of Maine by top curator and historian Christiane Paul is worth watching. It covers digital and AI art, in the context of the 2024 Harold Cohen AARON exhibition she curated at the Whitney Museum.



- Introduction

00:00 ▷Jon Ippolito introduces the Digital Curation program and Christiane Paul
01:31 ▷Will AI lead to an "artificial retirement" of artists?

- Definition and history of AI art

04:00 ▷Unlike AI-generated imagery, AI art requires critical engagement
06:11 ▷History of AI paradigms
We are now in the third peak of AI hype.

- Harold Cohen and the birth of AI art

08:07 ▷1960s: Cohen's motivation and algorithms.
13:48 ▷Physical plotters live in the gallery.
18:09 ▷Copyright for an AI "expert system."

+ Other landmarks in history of AI art

+ Audience questions

https://digitalcuration.umaine.edu/teleconferences/dig_paul_teleconf_2024.html

Technology

If anyone wants to explore the technology further, this essay is a good place to start.

AI = Artificial Intelligence; ML = Machine Learning; DL = Deep Learning; GOFAI = Good Old-Fashioned AI = symbolic AI.

"The distinction between AI, ML and DL is very clear to practitioners in these fields. AI is the all-encompassing umbrella covering everything from Good Old Fashion AI (GOFAI) all the way to connectionist architectures like Deep Learning. ML is a subfield of AI covering anything to do with the study of learning algorithms by training with data. There are whole swaths of techniques developed over the years like Linear Regression, K-means, Decision Trees, Random Forest, PCA, SVM and finally Artificial Neural Networks (ANN).

Artificial Neural Networks is where the field of Deep Learning had its genesis."

Find out more:

https://medium.com/intuitionmachine/why-deep-learning-is-radically-different-from-machine-learning-945a4a65da4d

ABOUT THE EDITOR

Geoff Davis has been involved in computers and art since he founded the Micro Arts Group in Clapham, London in 1984, to distribute his generative art and story generators to the public using data cassettes. Geoff is a PEN-published fiction author and had fiction print-published in the 1990s.

Wolf Series exhibited in ESSEN AI Bienalle, Expanded ARt exhibition Future Reimagine

Story Generator (1985) Geoff Davis / Micro Arts Group Software artwork, ZX Spectrum

This pioneering text generation software creates unsettling variations on a base story about animal insurrection. Written in BASIC for the ZX Spectrum microcomputer, it methodically replaces words from Davis's original story "Cow Boils Head" with themed synonyms, generating new narratives at a hypnotic pace.

The work emerged during Britain's BSE crisis, when the practice of feeding cattle with processed animal remains led to widespread "mad cow disease." Davis transforms this agricultural nightmare into a

series of dark procedural fictions where different species - wolves, vultures, lizards - rise up against humanity.

Unlike modern AI's statistical approach to text generation, Story Generator uses a carefully structured "expert system" with predefined word banks. This early form of Procedural Story Generation (PSG) contrasts with today's Machine Learning methods, which train on vast datasets to predict likely word sequences. While contemporary curator Georg Bak describes it as "a precursor of ChatGPT," the work's methodical deconstruction and rebuilding of narrative creates striking juxtapositions that reveal new meanings while maintaining thematic coherence.

It was released by Micro Arts on the Prestel teletext network and also data cassette, and exhibited at the London Film-Makers Coop's summer show in 1985.

been featured in many exhibitions and was distributed on national Prestel teletext from 1985. He created this "story text generator which can be regarded as an early predecessor of ChatGPT" (Georg Bak, historian and curator).

His generative computer art has been exhibited in Leicester, London, Berlin and Zurich, and is in various esteemed collections, such as the Computer Arts Archive (CAS) UK, the Herbert W. Franke Foundation Germany, the Francisco Carolinum Linz Austria, and Le Random's online collection. His first exhibition was at the London Film-Makers Co-operative in 1985 with Micro Arts MA1 generative art and MA4 generative fiction. Some art is available online with Expanded Art, elementum and fxhash.

He is actively involved with the Computer Arts Society UK, and Pattern City was in their Exhibition 2023. He is a 'Hall of Fame' pioneer microcomputer artist in the debut Generative Art Summit from the Herbert W. Franke Foundation, Berlin 2024.

Geoff has worked in and around computing since 1980, starting

on Univac 1100 mainframes and DEC VAX minicomputers, microcomputers (as Micro Arts), IBM PCs and Apple networking, the web, technical management, apps, interfaces and AI. He has worked in the UK, France, Zimbabwe and Malaysia. He has taught at several UK universities. For more information please visit:

https://geoffdavis.org/

Micro Arts Group:
https://microartsgroup.com/

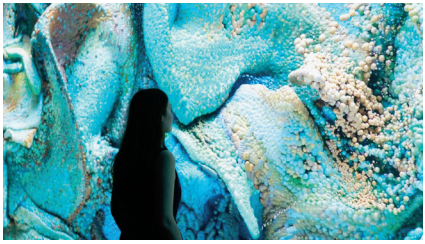
ALPHABETICAL ARTISTS

The next section is about artists currently working in the AI and art area. This generally doesn't include artists in the featured section. There is also a long list of artists in the chapter 'Various Unusual Artists'.

The First Edition was a collection of creative writing assisted by AI, with some art and essays. This starts with the section 'First Edition 2023'.

CHAPTER 25

REFIK ANADOL - ECHOES OF THE EARTH: LIVING ARCHIVE



RENOWNED for his innovative fusion of art and technology, Refik Anadol captivates audiences with his pioneering exploration of machine intelligence. His latest exhibition, "Echoes of the Earth: Living Archive," at Serpentine Gallery, immerses viewers in AI-generated environments inspired by years of data research on coral reefs and rainforests.

Anadol's creations, such as "Living Archive: Large Nature Model," use advanced technologies like LiDAR to present visually stunning representations of nature. Through pieces like "Artificial Realities: Coral," Anadol highlights the significance of coral reefs in ocean ecosystems. Additionally, his project "Artificial Realities: Rainforest" sets records for the longest continuous AI visualization of nature. This exhibition prompts contemplation on how technology

shapes our perception of the natural world and our experience of time and space. Anadol's impact extends beyond this exhibition, evidenced by his previous work, "Unsupervised – Machine Hallucinations – MoMA (2022)," which reimagines artworks from MoMA's collection through machine learning.

Refik Anadol (b. 1985, Istanbul, Turkey) is the Director of Refik Anadol Studio in Los Angeles and Lecturer at UCLA's Department of Design Media Arts from which he obtained a Master of Fine Arts. His art is in many esteemed museums and collections.

More information

https://www.serpentinegalleries.org/whats-on/refik-anadol-echoes-of-the-earth-living-archive/

CHAPTER 26

JIM ANDREWS - ALEPH 3 & SEA OF PO

JIM ANDREWS IS A WELL-KNOWN artist and creator of online art and writing tools, plus an author and essayist. His best-known work, also a writing tool, is Aleph Null 3.0



Jim Andrews and Bill Bissett in Aleph Null



Piotr Szreniawski in Sea of Po

Sea of P_0 is a one-issue online app-mag that features the work of about four dozen poets in a generative, visual, kinetic, interactive,

never-exactly-the-same-twice app of multiple languages. It's a new sort of experience of poetry and a poetry magazine. It will display your texts too.

More information

Aleph Null 3.0
https://www.vispo.com/aleph3/slideshow/info.htm
Sea of P_o
https://seaofpo.vispo.com?p=ja

CHAPTER 27

ALKAN AVCIOĞLU - OVERPOPULATED SYMPHONIES



Alkan Avcıoğlu - Overpopulated Symphonies

"OVERPOPULATED SYMPHONIES" presents a captivating AI post-photography series of 300 pieces, launched by Fellowship. Delving into the intricacies of the contemporary human experience, this collection offers an immersive visual narrative. It encompasses vast depictions of crowded urban landscapes and human congregations, serving as a reflection on the challenges of modern existence.

Moving beyond mere representation, the collection employs crowd density as a metaphor for the overwhelming influx of information characterizing our era. In doing so, it prompts contemplation on themes of identity, individuality, and the cognitive struggle to navigate the ceaseless deluge of data inundating our daily lives.

More information
https://alkanavcioglu.com/

CHAPTER 28

GORDON BERGER - INFINITY



Gordon Berger Infinity 3D

EMERGING at the crossroads of AI, 3D, and Blockchain, this project delves into the nexus of human creativity within the realm of text-to-image AI, marking a significant juncture in human history. Organised into four distinct categories – 'Childhood,' 'Graffiti,' 'Figurative,' and 'Abstract' – the artworks are crafted using custom text-to-image AI models trained exclusively on Gordon Berger's previous body of work, each correlated with a specific life period for every category.

Gordon Berger stands as a trailblazer in the Crypto Art movement, pioneering its exploration since late 2011. His journey delves into the utilisation of blockchain as a medium of artistic expression, constantly adapting to its evolving role in our contemporary landscape. Notably, Berger achieved a groundbreaking milestone by creating the first NFT to be transformed into physical reality through his 'Solidity'/'Materiality' Series in 2019.

As an abstract contemporary and generative artist, Berger is deeply invested in the fusion of art and technology, continuously exploring its evolving manifestations in our digital era. In early 2018, he made history as the first TEDx speaker to deliver a talk on CryptoArt and NFTs at the Museum of London. The subsequent year saw him curate the first-ever NFT solo exhibition in New York, solidifying his presence as an influential figure in the global Crypto Art scene.

More information

https://www.gordonberger.com/infinity

CHAPTER 29

BOTTO - ART DAO



Asymmetric Liberation, Botto

"@BOTTOPROJECT is, above all, one of the most exciting artistic experiments of our time, one which drives us to question the foundations of art itself."

Botto was created by Mario Klingemann (*see chapter*) and computer engineers in 2021. It uses AI algorithms to regularly create AI artworks, which are then voted on by members of the Botto DAO or club, to select an artwork for sale as an NFT. The setup is a Decentralised Autonomous Organisation or DAO.

Botto operates as a decentralized autonomous artist, generating artworks through collective input from the community. Our engage-

ment plays a pivotal role in shaping Botto's identity as an artist, contributing to the emergence of a novel genre of art. Drawing from a vast repository of millions of images, surpassing the scope of any individual's visual experience, Botto's art engine generates over 4000 distinct images weekly, all devoid of human intervention.

More information

https://www.botto.com/

Botto P5: Using AI to write computer code art



Anamorphic Typography: Depth within Letters

https://p5.botto.com/

Interview

https://www.stirworld.com/see-features-german-artist-mario-klingemann-on-his-creation-botto-an-nft-revolution

CHAPTER 30

TERENCE BROAD - GHOSTS



IN HIS LATEST PROJECT "GHOSTS, 2024," Terence Broad employs stable diffusion models trained on non-human data to create hauntingly evocative artworks. Despite their unconventional training, these models retain the ability to generate images resembling supermodels, preserving the aesthetic qualities of high-end fashion photography while sacrificing anatomical accuracy. These ethereal representations serve as poignant reminders of the enduring presence of supermodels within the neural networks, even as other details fade into obscurity.



Terence Broad, based in London, is both an artist and a researcher. As a Senior Lecturer at the UAL Creative Computing Institute and a PhD candidate at Goldsmiths, his work delves into the manipulation of deep generative models. He explores the potential of machine learning algorithms as artistic tools, pushing the boundaries of their capabilities in unconventional ways.

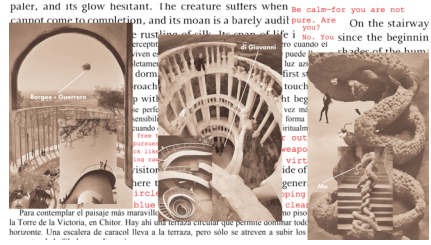
Broad's contributions have been showcased globally at prestigious conferences, journals, and museums, including The Whitney Museum of American Art, Garage Museum of Contemporary Art, and The Barbican. Notably, he received the Grand Prize in the ICCV Computer Vision Art Gallery in 2019, cementing his reputation as a leader in the intersection of art and technology.



More information
https://terencebroad.com/

CHAPTER 31

ANA MARÍA CABALLERO - BEING BORGES





SEE ALSO MAIN CHAPTER.

Being Borges proposes a new form of literary translation, begging the question: What's at stake when language becomes literal via the visual?

In this ongoing series, Ana María Caballero takes Jorge Luis Borges and Margarita Guerrero's The Book of Imaginary Beings (a vast compendium of humanity's imagined creatures) and its 1970 English translation by Norman Thomas di Giovanni as points of departure from which to explore how AI interprets Spanish versus English text, unmasking biases ingrained in large data sets. This collection also delves into the impossibility of translation–AI cannot "read" Spanish and English in the same way because they are different sign systems, with nuances and meanings that exist beyond their constructed signifiers, their words.

More information

https://verse.works/series/being-borges-by-ana-maria-caballero

CHAPTER 32

ALEJANDRO CARTAGENA - NEW NARRATIVES

"AS A DEVOTED OBSERVER and participant in the AI art space, I've seen four main conceptual and aesthetic structures in which artists position their AI work (consciously or unconsciously):

- Exploration of the tools
- Old themes, new tools
- Critique of the tool
- Narratives and storytelling"

Alejandro Cartagena, 2024.
Read the full essay:
https://t.co/PdfPThcsML

Alejandro also says: "Every art movement of the past 150 years has proposed a dialogue with a predecessor movement. Impressionism, Cubism, Abstract Expressionism, Conceptual art, and Pop art all either deny, reject, question, or add to that that came before them. We could argue that this is their raison d'être.

It is in that positioning and practice that a dialogue comes to fruition. To think of art without that dialogue is to have a monologue

with yourself and risk redundant visual ranting that advances nothing in terms of how we think of art.

Each new medium needs a raison d'être. A new medium or movement needs to state what came before and how it is pushing specific past ideas forward."

More information

Artist and Co-founder of @fellowshiptrust @fellowshipai @obscuradao

Daily AI Art - many new works

https://daily.xyz/

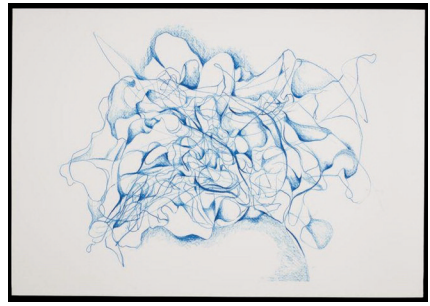
Cartagena writes illuminating essays about AI and art on X (Twitter).

https://twitter.com/halecar2

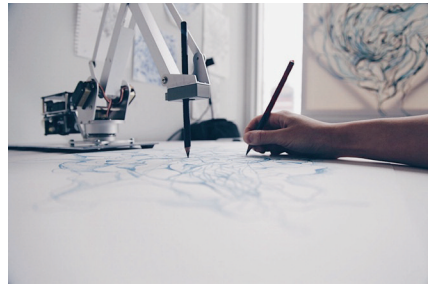
https://alejandrocartagena.com/about/

CHAPTER 33

SOUGWEN CHUNG - MEMORY



MEMORY. Museum no. E.907-2022 © Image Victoria and Albert Museum



Drawing alongside a robot hand

DESCRIBED AS 'PERFORMATIVE AI', Sougwen Chung, a Chinese-Canadian artist, programmer, and researcher, operates at the cutting edge of robotics, machine learning, and artificial intelligence (AI). Over the past seven years, she has dedicated herself to crafting a series of robot collaborators, delving into the realms of human-machine creativity and the nuanced boundaries between kinship and alterity. "MEMORY," conceived in 2017, stands as a testament to her ongoing exploration of computational memory, datasets, and the potential for artistic expression through human-robot interaction.

Central to Chung's work is a profound focus on the concept of mutual exchange. This emphasis arises from her deeply collaborative artistic approach, which involves not only cooperation with fellow programmers and researchers but also with her robotic drawing partners. Dubbed Drawing Operations Unit Generation_X (D.O.U.G.), Chung has continually refined these robotic systems since 2015, tailoring them to address her evolving artistic inquiries.

"MEMORY" encompasses various components, including a fine art print, a documentary film detailing the artist's creative process, and a Recurrent Neural Network (RNN) model encapsulated within a 3D printed sculpture.

More information

V&A UK

https://www.vam.ac.uk/blog/digital/the-algorithmic-gesture-sougwen-chungs-memory

https://sougwen.com/

CHAPTER 34

ANDREA CIULU - ON THESE STREETS



Andrea Ciulu On These Streets

ANDREA CIULU'S artistic journey is a profound exploration into the contours of memory and our perception of reality. Through his work, Ciulu delves into the intersection of technology and its inherent limitations, weaving together the familiar and the uncanny, nostalgia and bewilderment.

In "On These Streets," Ciulu delves deeply into the complex realm of memory, particularly focusing on the intriguing concept of artificial memories—the vivid, imagined experiences that resonate deeply despite never being lived. Drawing from his upbringing in Italy during the 1990s, Ciulu was drawn to the allure of hip-hop and urban culture, largely influenced by the United States.

The essence of "On These Streets" taps into a broader phenomenon of the Information Age, where the lines between real and artificial memories become increasingly blurred. This is epitomised in the popular "I grew up on these streets" meme, which reflects a collective yearning for places and experiences that are essentially fictional, yet carry a profound emotional truth.

More information

https://daily.xyz/artist/andrea-ciulu

https://daily.xyz/exhibition/10022

CHAPTER 35

CLOWNVAMP - A NEW ERA OF STORYTELLING

SEE ALSO MAIN CHAPTER.

ClownVamp's recent work PUPPIES:

"An ode to our future, where personalized media has become generative media. When we exist in a space where all of our desires are reflected back to us in real time. As AI approaches pixel perfection, the end-state is clear. Our current algorithmic feeds will be replaced by something more extreme: the generative feed. Your Instagram feed will soon be a gusher of just-in-time content generated to maximize *your* dopamine." ClownVamp, 2024.



Detective Jack, 2022 & Detective Jack: The Cold Case, 2023

ClownVamp has created immersive stories with AI-generated images used as puzzle pieces, to decipher the plot.

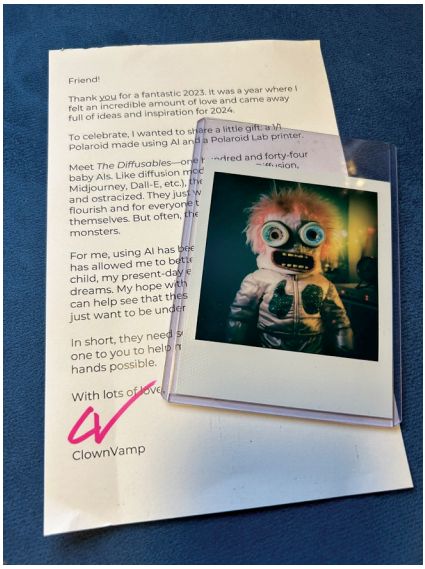








Diffusables, 2023



Chester Charles: The Lost Grand Master, 2023
An immersive AI-driven story.

The Truth, 2024



"With these AI models, instead of an artist going to museums, looking at pieces and synthesizing them, the AI is doing that learning for them. The job of the artist is to remix it and tell new stories with it."

"A lot of the work I do relates to human potential. I'm really interested in things that give humans superpowers. With AI, every person in the world now has a magic lamp where the right combination of words and technique can produce shocking results."

"Represents a new form of storytelling combining written narratives, AI-generated imagery, and curation to examine the question of what could have been."

ClownVamp, 2024

More information

AI and a New Era of Storytelling

https://nftnow.com/features/clownvamp-on-how-ai-has-unlocked-a-new-era-of-storytelling/

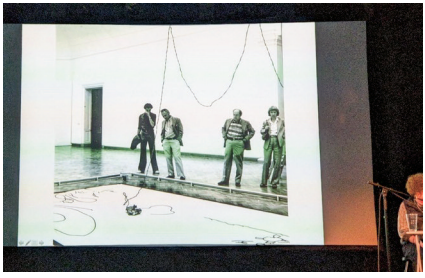
RCS Interview

https://www.rightclicksave.com/article/clownvamp-and-the-art-of-nft-storytelling

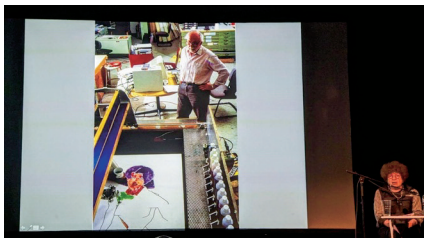
CHAPTER 36

HAROLD COHEN & AARON

AARON WAS an expert system based on Cohen's art, programmed by the artist. It was intended to represent his own style as a program, as part of his ongoing research into form through his work. AARON was described by Cohen as a way to have posthumous exhibitions.



Cohen AARON, ICA 2024, Jasia Reichardt (right)
image



Cohen AARON, ICA 2024, Jasia Reichardt (right)
image

The current exhibition at the Whitney Museum of American Art traces Harold Cohen's AARON, the pioneering AI program for art, from its inception in the late 1960s at the University of California, San Diego.

Cohen, a former painter in London, saw AARON as a collaborative venture, exploring AI's potential to translate artistic knowledge into code. AARON has produced images for various mediums over the years, from drawing and painting devices to digital displays. This showcase features AARON's works alongside screen-based versions of the program and live drawings made by plotters, providing insight into AI's role in art creation. Amidst the rise of AI tools like DALL-E and Stable Diffusion, the exhibition offers historical context and delves into themes of creativity, authorship, and collaboration in AI-driven art.

Devised by Christiane Paul, Curator of Digital Art, Whitney Museum of American Art, 2024.

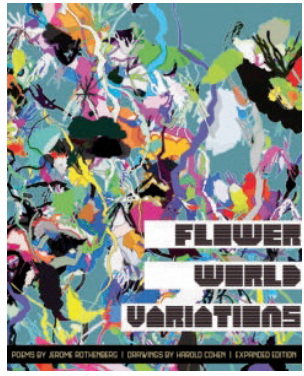
More information

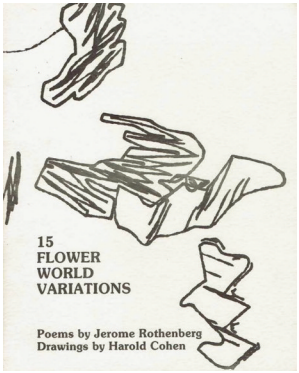
https://whitney.org/exhibitions/harold-cohen-aaron

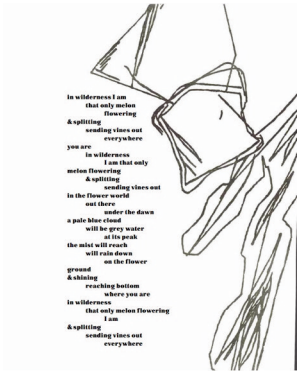
CHAPTER 37

HAROLD COHEN & JEROME ROTHENBURG – FLOWER WORLD VARIATIONS

FLOWER WORLD VARIATIONS, first edition 1984 expanded 2017







From the preface to the book:

"The exciting thing about all this is that as it is new it is old & as it is old it is new, but now really we have come to be in our way which is an entirely different way."

(Gertrude Stein, from Narration)

In the late 1970s, Rothenburg was delving into the ethnopoetic roots of poetry, while Harold Cohen was exploring art-making through computer technology and ancient marks. They sought a minimal configuration of behavioural mechanisms for new work, drawing inspiration from Californian petroglyphs to modern drawings.

The black-and-white images selected for "Harold Cohen: AARON" were drawn from the vast output of Cohen's program, AARON. This blend of old and new was crucial to the collaboration.

Jerome Rothenburg's early work involved experimental exploration of syntax, image, and form, influenced by artists like Gertrude Stein, James Joyce, Salvador Dalí, and Ezra Pound. He also drew from ancient poetry and his Jewish heritage, particularly engaging with Native American poetry, which he viewed as a sophisticated form of art, challenging colonialist stereotypes.

https://www.poetryfoundation.org/poets/jerome-rothenberg

Flower World Variations

https://www.theoperatingsystem.org/oa_library/flower-world-variations-expanded-edition/

CHAPTER 38

TOM CRUISE - DEEPFAKE



Will the real Tom Cruise please stand up?

FOLLOWING the viral sensation of Tom Cruise "deepfake" videos on TikTok, Christopher Ume, co-founder of AI software company Metaphysic.ai, emphasises the importance of raising awareness about such technology and safeguarding one's digital identity. The company is committed to ethical, secure, and responsible growth amidst concerns surrounding AI-generated content, particularly deepfakes, which can manipulate appearances to fabricate actions or statements.

Metaphysic.ai faces a unique challenge in navigating ethical boundaries, given its history: Ume initially created the Tom Cruise deepfakes as an art project. While the intention was to raise aware-

ness about manipulated media, the content's unexpected popularity prompted the company to reach out to Tom Cruise's team, who had no objections to the videos.



More information

https://pony.studio/design-for-growth/meet-the-fake-tom-cruise

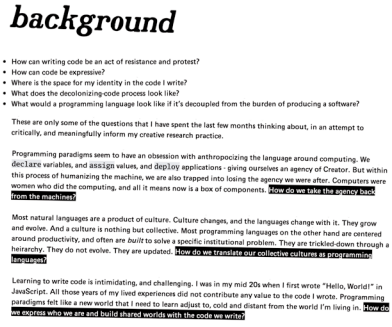
CHAPTER 39

KOUNDINYA DHULIPALLA – POETIC COMPUTER

"PEOPLE AS COMPUTERS; poetry as code - practice-based research into building an esoteric programming language.

Computing is politics. Computing is poetry. Computing is resistance. Computing is world-building. Computing is a commitment to radical openness.

Building computational tools is an act of political engagement."



background

- How can writing code be an act of resistance and protest?
- How can code be expressive?
- Where is the space for my identity in the code I write?
- What does the decolonizing-code process look like?
- What would a programming language look like if it's decoupled from the burden of producing a software?

These are only some of the questions that I have spent the last few months thinking about, in an attempt to critically, and meaningfully inform my creative research practice.

Programming paradigms seem to have an obsession with anthropocizing the language around computing. We `declare` variables, and `assign` values, and `deploy` applications - giving ourselves an agency of Creator. But within this process of humanizing the machine, we are also trapped into losing the agency we were after. Computers were women who did the computing, and all it means now is a box of components. How do we take the agency back from the machines?

Most natural languages are a product of culture. Culture changes, and the languages change with it. They grow and evolve. And a culture is nothing but collective. Most programming languages on the other hand are centered around productivity, and often are *built* to solve a specific institutional problem. They are trickled-down through a heirarchy. They do not evolve. They are updated. How do we translate our collective cultures as programming languages?

Learning to write code is intimidating, and challenging. I was in my mid 20s when I first wrote "Hello, World!" in JavaScript. All those years of my lived experiences did not contribute any value to the code I wrote. Programming paradigms felt like a new world that I need to learn adjust to, cold and distant from the world I'm living in. How do we express who we are and build shared worlds with the code we write?

Poetic Computer - Koundinya Dhulipalla

This is a programming language that can be written with prose and poetry (or plain English), while still maintaining the principles of a programming language.

The process of the project, along with the background, process, resources and readings, are here at Poetic Computer:

https://poetic.computer

The language itself with a couple of examples of programs/poems are available at Prasa Software:

https://prasa.software

CHAPTER 40

LINDA DOUNIA REBEIZ - ONCE UPON A GARDEN

ONCE UPON A GARDEN, 2022

"'Once Upon A Garden' is a digital garden born from a collaboration between me and a GAN which debuted at Art X Lagos in November 2022. It is a dystopian projection of a likely outcome of global warming, that depicts a world where humans now have to live with simulated images of plants and flowers, which have all disappeared from the earth."



Once Upon A Garden Linda Dounia 2022

Research Poster Series, Érosion des souvenirs, 2023

"Quartier Escale is now a market, or rather, a market has overtaken it, spreading its rows of stalls like tentacles. In the last decade, there has been a population explosion in my hometown of Mbour. A

once quiet coastal town is now one of the most populated areas in Senegal. I had a hard time finding my childhood home."



Research Poster Series, Érosion des souvenirs - Linda Dounia 2023

More information

https://lindarebeiz.com/

Discussion

https://www.itsnicethat.com/features/linda-dounia-rebeiz-ai-bias-technology-creative-industry-art-011123

CHAPTER 41

ANNA DUMITRIU & ALEX MAY - PHYSIC-AI GARDEN



The fully interactive version of Physic-AI Garden installation view at the Technical Museum at Politehnica University Timisoara

"ART, for me, is a way of investigating the world. In that way, I see no real distinction between art and science at all." Anna Dumitriu, 2014.

"Physic-AI Garden" 2023 takes the form of stunning and dynamic digital garden, where beautiful virtual plants and fungi grow and interact with each other and with audiences. The plants each represent different drugs and the garden grows according to

what drugs work well together and what drugs interact negatively or cause side effects.



Audiences can 'plant' seeds (either via an iPad or bespoke sculptural interface), which represent different pharmaceutical treatments within the ecosystem, and watch them flourish or wither depending on whether those drugs are contraindicated.



Physic-AI Garden still from interactive installation

Side effects are represented through blemishes on the plant leaves and a healthy ecosystem is represented by butterflies and pollen.

The artwork also references the mental health tools employed in the CAPABLE App to support vulnerable patients which can enhance wellbeing by suggesting beneficial activities, these include growing plants from seed, photographing the sky, and walking in

nature. These can all be experienced and mediated through this ground-breaking installation, as the skyscape changes based on the number of plants growing in the system.

"Physic-AI Garden" is a collaboration between Anna Dumitriu and Alex May with the EU funded CAPABLE project. CAPABLE aims to develop a virtual cancer coaching system to support the emotional, educational and social needs of patients and their home carers, as well as decision support needs of treating physicians, using cutting edge technologies for personalised medicine such as artificial intelligence, big data analysis and wearable technologies.

More information

https://annadumitriu.co.uk/portfolio/capable-project-residency/

CHAPTER 42

BORIS ELDAGSEN - FAKE MEMORIES

BORIS IS BEST KNOWN for winning a photography prize with an AI image, and then refusing the prize. The image was 'The Electrician' 2022 from the series 'Pseudomnesia' or Fake Memories. He describes his work as 'promptography'.

Boris says:

"AI worshippers think it is the democratization of art. They love that everybody, including AI itself, can now be an artist. However, their definition of art is very basic. Often, it just means "pretty pictures", for example, Kitsch. I am old enough to remember that the camera and computers also promised the democratization of art and that this utopia was also nonsense.

For me, art is an expression of the human condition. To achieve this, you need to delve within yourself, becoming conscious of the world inside you and how it interacts with the world around you. Not everybody is able or willing to undertake this journey. And AI? It desires nothing! It has no intention and no consciousness.

Many people have asked me about the meaning and message of THE ELECTRICIAN I have always answered that the question "What is the artist trying to tell us?" is mundane. I do not aim to promote a political message through art, as many other contemporary

artists do. I am not interested in addressing a specific political issue but rather in exploring the timeless human condition that underlies these contemporary problems. If I wanted to do that, I would write an editorial for a newspaper or attend a demonstration.

For me, a good work of art serves as a catalyst for an inward journey. The question that viewers of a work of art should ask themselves is: "What thoughts, feelings, or memories does the work evoke in me? Am I drawn to it or repelled by it? Why?" This is why I also reject any interpretation of my work. Providing interpretation would deny the viewer the opportunity to experience the work without bias. Instead, they would only seek visual confirmation of my words. Visual art should never be directly translatable into words; otherwise, its essence would be lost, and one could simply hang a text on the wall."

More information

https://www.eldagsen.com/ki/

CHAPTER 43

KEVIN ESHERICK - IN UTERO

ESHERICK IS an American conceptual artist who devised 'Artist Bingo' a parody game about the art world, and the artist's journey.

His recent AI art collection 'In Utero' moves away from AI figurative post-photography into a more mysterious realm.

"What does it mean to be conscious? What is it like to be an AI? In Utero explores these questions through a series of 'latent paintings', images pulled from the edges of latent space using a novel diffusion technique to peer inside the 'mind' of an AI image model. What results is a collection of hazy, half-formed figures prying their way out of abstraction and into reality—a portrait of artificial intelligence's movement out of in utero and into existence."

More information

Art Bingo - interview by ChatGPT

https://mirror.xyz/esherick.eth/qIrV_ZQxtLiOeTJ44g7zbjCJIA7VtEKH-gQRiQ_y2zk

In Utero

https://www.expanded.art/collections/kevin-esherick-in-utero

CHAPTER 44

FELLOWSHIP AI (ALEJANDRO CARTAGENA)

FELLOWSHIP IS an AI art and post-photography organisation founded by Alejandro Cartagena (see chapter).

They have just started issuing grants for new AI art. Worth investigating to get an idea of the best new AI work now.

https://fellowship.xyz/collections/

On X:

https://twitter.com/FellowshipAi

Monthly grant March 2024:

https://t.co/7JiiJ1Dupy

Dailies AI art

https://daily.xyz/

CHAPTER 45

GANBROOD - LATENT SPACE EXPLORER



“I used to be a photographer.” Ganbrood



"The only colab I ever will do is with a machine."
Ganbrood

GANBROOD (BAS UTERWIJK) brings a diverse background in special effects, 3D animation, video games, and photography to his artistic endeavours. Throughout his career, he has been fascinated by visual storytelling that blurs the lines between reality and distortion.

Since 2019, Uterwijk has merged his varied skills and experiences by delving into generative adversarial networks (GANs), utilising Deep Learning and Artificial Intelligence software to interpret and synthesise photographs. Through these neural networks, he crafts images that have never been captured by a physical camera—portraits of individuals predating the invention of photography or entirely fictional figures.

His latest series ventures into abstraction, exploring "pseudo-figurative" pieces that challenge GANs' capacity for creativity and their ability to confound human visual perception.

More information
https://linktr.ee/ganbrood

CHAPTER 46

ALICE GORDON - THE AGE OF SELF INDULGENCE



ALICE GORDON IS a member of the Post Photographic Perspectives artist roster and contributes to the Daily AI video program curated by the Fellowship. Her notable collections include Disproportionate Anxiety, Cognitive Behaviour, and her latest release, Clonism, in collaboration with Kate Vass Galerie. Gordon draws inspiration from the surrealist movement and describes her unique style as 'absurdist surreal lonerism'. Her creative approach blends experimentation with spontaneity.

More Information

http://poptarteds.com/

The Age of Self Indulgence

https://verse.works/series/the-age-of-self-indulgence-by-alice-gordon

CHAPTER 47

IRA GREENBERG - BEASTS

BEASTS IS a long-form Generative AI collection AI art set of 1000 artworks, 2023.





Ira Greenberg - Beasts

Ira Greenberg, an esteemed AI and new media artist, developer, and educator, delivered a Whitehead lecture titled 'Latent Diffusion: Collaborator, Muse or Villain'. In this lecture, Greenberg explores Latent Diffusion ('LD') as a recent breakthrough in image generation, building upon the foundation of generative art dating back to the 1950s. Generative art, employing random algorithms, has historically approximated emergent properties of analogue materials and practices.

However, prior to LD, most generative art was confined to mathematically derived geometric output due to limitations in describing more figurative or natural forms. LD revolutionises this by enabling the creation of recognisable imagery, both synthesising new works and altering existing ones. This advancement has sparked a proliferation of substantial bodies of work from artists and hobbyists alike. However, the widespread adoption of LD has also stirred controversy regarding artists' potential exploitation, as their public artwork may be utilised as training data without consent, potentially leading to job displacement. Drawing from his own practice, Greenberg discusses his extensive use of LD, its integration with his painting and coding practices, and its multifaceted role as collaborator, muse, or villain.

Ira Greenberg serves as the Director and Professor of the Center

of Creative Computation at SMU in Dallas, TX. His creative practice and research focus on merging traditional studio art practices, particularly drawing and painting, with computation. He is the author of three texts on creative coding and computer science pedagogy, including a seminal reference on the Processing language. Greenberg's work is showcased worldwide, with a recent emphasis on blockchain art and generative AI. Additionally, he holds a position as Visiting Professor at Goldsmiths, London UK.

More information

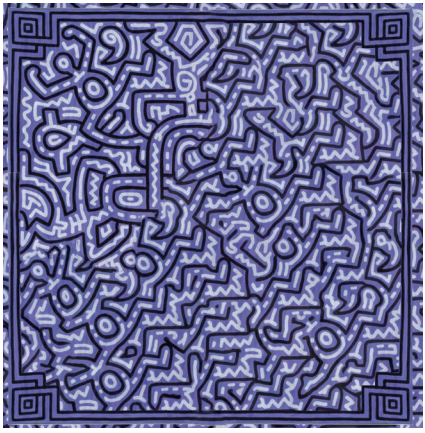
https://www.gold.ac.uk/calendar/?id=14898

https://www.expanded.art/exhibitions/ira-greenberg-beasts

CHAPTER 48

KEITH HARING - UNFINISHED ART

AI 'COMPLETES' Keith Haring's unfinished artwork, raising ethical issues and copyright concerns. The campaigning Pop artist had left the work deliberately unfinished as a commentary on the AIDS epidemic.





More information

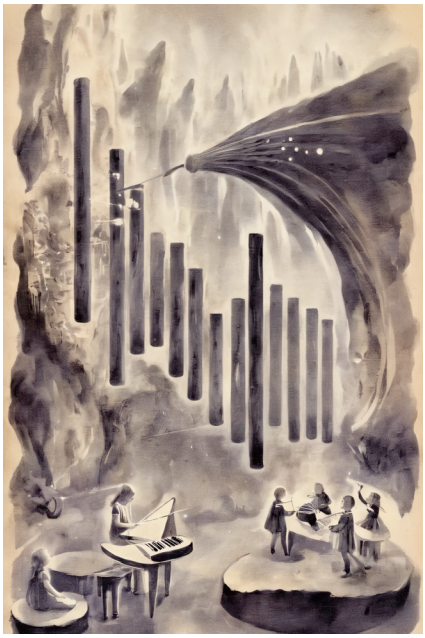
https://news.artnet.com/art-world/keith-haring-unfinished-painting-completed-with-ai-2418058

CHAPTER 49

HOLLY HERNDON - HOLLY+



Holly Herndon clones herself Into Holly+



Sound Machines, 2024

HOLLY HERNDON, a mixed media artist, primarily utilises music and her own voice alongside computer processing in her artistic endeavours. She collaborates with Matt Dryhurst, and together, they have released numerous albums since 2011.

One of their notable projects is Holly+, an AI tool that enables individuals to incorporate their voices into music productions. In 2022, Dryhurst and Herndon introduced Spawning, a concept involving the generation of media from a training set using machine learning techniques. Through the Spawning website, artists can consciously choose to participate or abstain from a dataset (Laion-5b), which AI art generators utilise to train their models and produce supposedly new text-to-art compositions. Notably, 80 million artworks have opted out of Stable Diffusion V3 to uphold artists' image rights claims, a move that has contributed to guiding the European Union's policy on text and data mining.

More Information

Holly+

https://holly.plus/

Holly Herndon

http://www.hollyherndon.com/

Sound Machines, 2024.

Group Exhibition with Holly Herndon and Mat Dryhurst, 0xDEAFBEEF, Yoko Ono, Danielle Brathwaite-Shirley, American Artist and Tommy Martinez.

https://feralfile.com/exhibitions/sound-machines-xz1

Spawning:

haveibeentrained.com

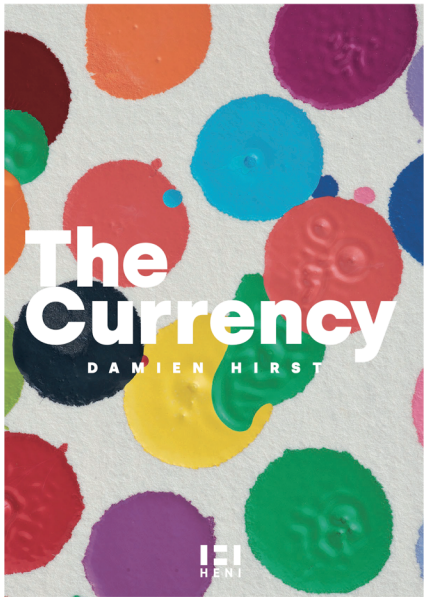
Authors Guild on Text used for training AIs:

"Supporting working writers and protecting authors' rights since 1912."

https://authorsguild.org/news/you-just-found-out-your-book-was-used-to-train-ai-now-what/

CHAPTER 50

DAMIEN HIRST - THE CURRENCY



The Currency Damien Hirst 2022

"GET as many names as possible and add my favourite song titles (from fave LPs)."

HENI Agency used machine learning, a field of AI, to create

random titles from his favourite song titles for this 1000 piece Hirst edition. The Currency was followed by the Great Expectations airdrop to owners.

https://heni.com/nft

https://heni.com/nft/collections/great-expectations

Art Machines

Tracing its roots back to 1992, 'Spin Paintings' was Hirst's reaction to Abstract Expressionism and his desire to devise a machine to make art, based on his idea that one could mechanically create 'a clinical system' to produce 'art without angst'. Rather than creating a composition directly through his brush, Hirst began pouring pigments onto his canvases as they spun, allowing the machine to facilitate chance movements and colour interactions.

More information

https://www.designboom.com/art/damien-hirst-destroys-1000-physical-artworks-the-currency-10-13-2022/

https://heni.com/nft/collections/the-currency

See also The Beautiful Paintings NFTS 2023.

CHAPTER 51

HULA - BLACK POP WORKOUT



HULA LP, 1982, has computer-generated inner notes, on computer print-out sprocketed paper. Sheffield industrial post-punk band. This is here to show how long computers have been used in mainstream art and music. There were many collaborations in the 1980s such as Pete Shelley's generative visuals for the Sinclair ZX Spectrum, provided with the XL1 album.

More information

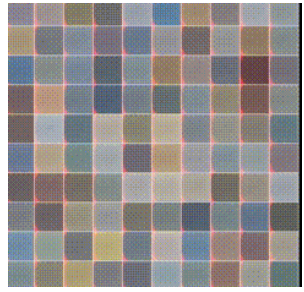
http://www.desirerecords.com/artist/hula/

See also chapter about Martyn Ware (*use of computer sprocketed paper*).

CHAPTER 52

ANDREJ KARPATHY - RNNS

THIS FAMOUS POST *launched a lot of coders down the neural networks rabbit hole.*



RNN learning to paint house numbers

The Unreasonable Effectiveness of Recurrent Neural Networks

May 21, 2015

"There's something magical about Recurrent Neural Networks (RNNs). I still remember when I trained my first recurrent network for Image Captioning. Within a few dozen minutes of training my first baby model (with rather arbitrarily-chosen hyperparameters) started to generate very nice looking descriptions of images that were

on the edge of making sense. Sometimes the ratio of how simple your model is to the quality of the results you get out of it blows past your expectations, and this was one of those times. What made this result so shocking at the time was that the common wisdom was that RNNs were supposed to be difficult to train (with more experience I've in fact reached the opposite conclusion). Fast forward about a year: I'm training RNNs all the time and I've witnessed their power and robustness many times, and yet their magical outputs still find ways of amusing me. This post is about sharing some of that magic with you."

More information

http://karpathy.github.io/2015/05/21/rnn-effectiveness/

CHAPTER 53

MARIO KLINGEMANN - A.I.C.C.A & ONKAOS



A.I.C.C.A, from Klingemann/ONKAOS, 2023

MARIO KLINGEMANN UNVEILED A.I.C.C.A., a sculpture empowered with AI programming to deliver art critiques. Supported by the ONKAOS art group, this creation represents a unique fusion of sculpture, AI, and robotics.

A.I.C.C.A. (Artificially Intelligent Critical Canine) takes the form of a robotic dog, venturing into spaces like galleries, museums, and art fairs. After processing the artworks it encounters, it produces concise critiques, akin to defecating short texts. Trained on visual material and art writing, A.I.C.C.A. evaluates composition, color, style, and semantics, blurring the lines between sculpture, AI,

robotics, and performance. Its existence prompts contemplation on the subjectivity of art criticism.

Inspired by vintage toys, A.I.C.C.A. operates through an algorithm that enables it to learn and autonomously make decisions.

More information

http://quasimondo.com/

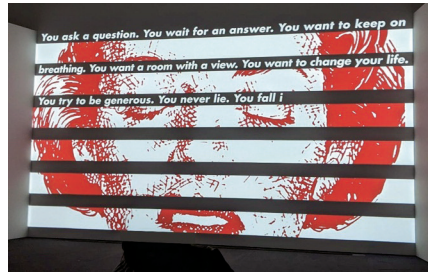
ONKAOS, 2019, was formed by a private museum in Madrid, Spain, and "drives artistic creation through new technologies".

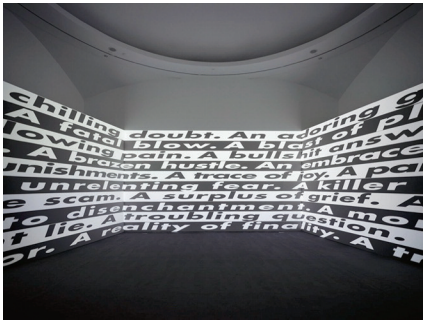
https://onkaos.com/

CHAPTER 54

BARBARA KRUGER – THINKING OF YOU. I MEAN ME. I MEAN YOU.







Barbara Kruger - Thinking of You. I Mean Me. I Mean You. Installation views, Serpentine Gallery, London 2024.

A LEGENDARY ARTIST who uses AI and machine learning as part of her productions. Kruger was a graphic artist who now creates high-impact message works.

"I think that art is still a site for resistance and for the telling of various stories, for validating certain subjectivities we normally overlook. I'm trying to be affective, to suggest changes, and to resist what I feel are the tyrannies of social life on a certain level.

Look, we're all saddled with things that make us better or worse. This world is a crazy place, and I've chosen to make my work about that insanity."

More information

https://spruethmagers.com/artists/barbara-kruger/

Quotes:

https://www.brainyquote.com/authors/barbara-kruger-quotes

CHAPTER 55

WILLIAM LATHAM - ORGANIC ART

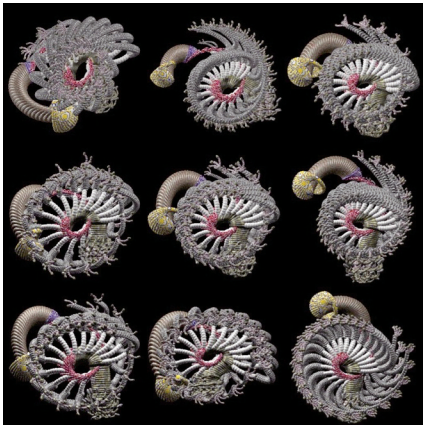
WILLIAM LATHAM IS WELL KNOWN as an early pioneer of Generative Art through his Mutator Evolutionary Art created at IBM.



Computer Sculpture #3, William Latham

His work, which shows strange organic, often serpentine, forms, is produced using his "alternative evolutionary software system" (developed with Stephen Todd and team), which William uses to pick and breed 3D forms freed from the limits of the human imagination. This work was widely shown in museums and touring shows in UK, Germany, Australia and Japan at that time.

Latham is now showing major Mutator VR exhibitions worldwide. His VR work has been shown in many touring exhibitions in China, Japan, Peru, Belgium and UK.



Mutator Frame twig06 - MutatorVT

He has talked widely about generative art, Artificial Life AL and AI and was a speaker at the ICA London's Cybernetic Serendipity: Towards AI conference, 2024.

More information

http://latham-mutator.com/

https://gazelliarthouse.com/artists/291-william-latham/overview/

CHAPTER 56

MADC (CLAUDIA WALDE) - COLOR RHYTHMS



Look What You Made of Me - MadC

COLOR RHYTHMS, a 2022 generative NFT collection by the renowned graffiti artist MadC, comprises 1,000 unique pieces. Through a blend of generative algorithms, AI machine learning, and hand curation, MadC explores the boundaries of her expressive compositions.

Each artwork in the collection features a unique title, generated through AI machine learning applied to existing movie titles. These

titles are paired with the artworks using a separate machine-learning model trained on millions of image-caption pairings, enhancing the narrative depth of each piece.

MadC's tradition of naming her works after movie characters and pop culture references continues in Color Rhythms, imbuing each artwork with a fictional narrative. By pairing generative titles with her NFTs, MadC invites viewers to explore imaginary worlds within abstract compositions, considering the titles themselves as pieces of art.

The art in Color Rhythms is created through a sophisticated generative algorithm, faithfully recreating MadC's real-life interventions on canvas. From colour application to brushstrokes and paint splashes, these digital creations closely mirror the style of MadC's physical works, blurring the line between digital and traditional art.

More information

https://madc.tv/about/

https://heni.com/nft/collections/color-rhythms

CHAPTER 57

MAYA MAN - MOST ADVANCED YET ACCEPTABLE



MAYA MAN IS an artist focused on contemporary identity culture on the internet. Her websites, generative series, installations, textiles, and posts examine dominant narratives around femininity, authenticity, and the performance of self online.



She is the creator of the browser extension Glance Back and the Art Blocks curated collection FAKE IT TILL YOU MAKE IT, 2022.

She has exhibited internationally at bitforms, NYC; SOOT, Tokyo; Vellum, Los Angeles; Power Station of Art, Shanghai; and Feral File, online. Her work has been featured in Art in America, Forbes, Zora Zine, Outland, Refinery29, and more.



Maya holds Bachelor of Arts degrees in Computer Science and

Media Studies from Pomona College and an MFA in Media Art from UCLA.

More information

https://mayaontheinter.net/

https://verse.works/maya-man

CHAPTER 58

FRANK MANZANO - DESENSITISED AMERICANS



SAYS FRANK: "My work explores the obsession with violence in American entertainment. While most Americans are removed from actual violence, there is still a celebration of it that exists on both ends of the spectrum. Despite years of movie and TV violence, it fails to capture the true horror and chaos of violence, which loved ones are left crippled by.

The AI-generated images I create challenge viewers by presenting them with uncomfortable realities they may have other-

wise ignored. As desensitised Americans, we need to confront these difficult truths, even if they turn our stomachs."

More information

https://x.com/loved_orleer

CHAPTER 59

ALEX MAY - ALGORITHMIC PHOTOGRAPHY



Algorithmic Photography, Alex May, 2024

ALEX HAS an exhibition of computer-altered images at the Computer Arts Society in Moorgate London, 2024.

Digital artist Alex May introduces Algorithmic Photography, a technique he developed to uncover hidden information within moving image artworks. May's bespoke computer vision algorithms, coded in C++, enable him to capture data and reveal previously unnoticed details.

Through a multistage process involving video capture, motion detection, and colour space conversion, May creates abstracted compound compositions. His artworks explore diverse subjects such as ant swarms, starling murmurations, wind farms, and New York

taxis. At the core of May's practice lies an exploration of time and memory through digital processes.

Alex May's artistic inquiry delves into how contemporary technologies shape our experiences of time, memory formation, and cultural records. His work spans digital media, including virtual and augmented reality, photogrammetry, interactive robotics, video projection mapping, generative art, performance, and sound art, forging creative connections between art, science, and technology. More recently he created AI video of the iconic Cybernetic Serendipity exhibition, at the ICA London, 1968.



Says Alex: "I uploaded [to Runway AI] real photographs from Cybernetic Serendipity that I found on the web and asked it to generate "cool 1960's people looking at the artworks in amazement". I was interested in the effect of having a new, albeit 'false' documentation of something to potentially supersede, or at least augment, any other documentation I had seen of this event - one that took place before I was born, so I was, unfortunately, unable to actually attend and am only able to experience it second hand. Whether you like AI systems like this or not, they certainly raise interesting questions about our relationship with the past in the future."

More information

https://alexmayarts.co.uk/

CAS Exhibition 2024

https://computer-arts-society.com/exhibitions/alex-may.html

AI video of Cybernetic Serendipity exhibition

https://www.facebook.com/alex.may.artist/videos/1089578429488227

See the chapter Anna Dumitriu & Alex May - Physic-AI Garden.

CHAPTER 60

LAUREN LEE MCCARTHY - VOICE IN MY HEAD



AS GENERATED CONTENT BECOMES UBIQUITOUS, AI increasingly infiltrates our consciousness. But what happens when it directly shapes our thoughts? Voice In My Head, which debuted in 2023, delves into this concept, exploring how AI, embodied by ChatGPT, can actively engage in and influence our social interactions, enhancing our personalities in real-time.

The experience begins with an onboarding session where participants insert a bud in their ear, prompting reflection on their innate inner voice. What if this voice could be more compassionate? Less critical? More supportive? What if you could reshape your internal dialogue?

As participants respond to these prompts, the AI clones their voice and utilises it to communicate. As they navigate the world, the AI voice provides commentary and guidance, blurring the distinction between natural and synthetic thoughts. This performance challenges the notion of individual perspective: do any of us truly possess an unadulterated point of view?

A collaboration with @kcimc

With support from IDFA DocLab Commission 2023. Trailer directed by David Leonard.

https://lauren-mccarthy.com/Voice-In-My-Head

Artist, creator

Lauren Lee McCarthy has received grants and residencies from Creative Capital, United States Artists, LACMA, Sundance, Eyebeam, Pioneer Works, Autodesk, and Ars Electronica, and her work is in the collection of the Whitney Museum of American Art.

Her work SOMEONE was awarded the Ars Electronica Golden Nica 2023 and the Japan Media Arts Social Impact Award, and her work LAUREN was awarded the IDFA DocLab Award for Immersive Non-Fiction.

Lauren's work has been exhibited internationally, at places such as the Barbican Centre, Fotomuseum Winterthur, Haus der elektronischen Künste, Seoul Museum of Art, Chronus Art Center, SIGGRAPH, Onassis Cultural Center, IDFA DocLab, Science Gallery Dublin, and the Japan Media Arts Festival.

More information

P5.js

Lauren is also the creator of p5.js, an open-source art and education platform that prioritizes access and diversity in learning to code, with over 10 million users.

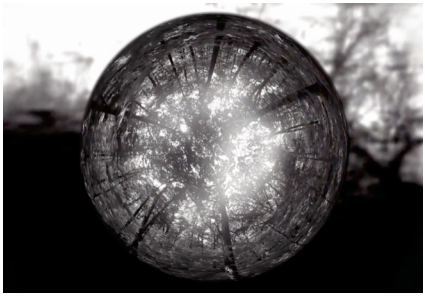
She expanded on this work in her role from 2015–21 on the Board of Directors for the Processing Foundation, whose mission is to

serve those who have historically not had access to the fields of technology, code, and art in learning software and visual literacy. Lauren is a Professor at UCLA Design Media Arts. She holds an MFA from UCLA and a BS Computer Science and BS Art and Design from MIT.

https://processingfoundation.org/

CHAPTER 61

JENNIFER AND KEVIN MCCOY – MACHINE ORGANIC



Machine Organic, Jennifer and Kevin McCoy, 2023

JENNIFER AND KEVIN MCCOY are media artists whose diverse portfolio spans moving images, software, drawing, painting, and installation. Their artistic endeavors frequently explore the integration of new technologies into our cultural landscape. Through their work, they interrogate the implications of contemporary tools, probing how these innovations influence individuals and shape societal dynamics.

Machine Organic, 2023: The organic world increasingly mirrors the realm of digital machines. Organic processes' intricacies seem to

find expression through data and algorithms. Concepts like growth, thought, and life are replicated in full simulation.

In their creations, the McCoys utilise data from cameras and sensors, employing computer vision and signal processing algorithms. They then employ mechanical drawing and painting machines to produce hands-free, eyes-free images—a fusion of machine and organic.

More information

https://www.expanded.art/exhibitions/machine-organic
https://www.airworld.net/
https://mccoyspace.com/projects/

CHAPTER 62

ANIKA MEIER - LOST FUTURES



"LEAVE YOUR EYES BEHIND. You will see the invisible. You will feel infinity. You will no longer count hours. No more measuring. There is nothing to consider. There is nothing to decide. There's nothing left to do. It was a beautiful day today."

– Herbert W. Franke, ZONE ZERO, 1972.

I am late to the Tribute to Herbert W. Franke. One year too late. Herbert (1927–2022) was a pivotal figure in bridging the gap between art and science. He was a scientist, author of science fiction,

curator, mathematician, physicist, and speleologist. We met in early 2022 through a joint friend, museum director Alfred Weidinger. After returning from my visit to Munich, I went back to Herbert's writing. He has been called "the most prominent German science fiction writer" by Die Zeit and a "great storyteller" by the FAZ. I agree. I started reading his novels again. ZONE ZERO from 1972 was the first one that came to mind.

"Leave what burdens you behind. A cloud absorbs you. A bowl of warmth. A handful of sympathy. A touch of oblivion. There is no past and no future..."

Words like these stuck with me, as did the images my mind created after reading the story for the first time. Two civilizations coexist independently. One over ground, one underground. A group travels to ZONE ZERO to learn more about the other civilization's existence and finds a highly constructed environment beneath the sea surface. They find humans, mutants, and cyborgs.

AI can turn writing into the images a writer has in their mind when writing words. I have always wished this were possible. AI makes it possible. I can only speculate about the images Herbert had in his mind when he wrote ZONE ZERO. For me, this book was the point of departure for imagining a world in which humans don't change locations anymore but live in a projection that is as good as reality. In Herbert's words:

"If there is access to all information, changes in location are unnecessary. The projections are as good as the reality."

More information

Herbert W. Franke was Germany's most famous science fiction writer, according to Die Zeit.

https://www.expanded.art/collections/anika-meier-lost-futures

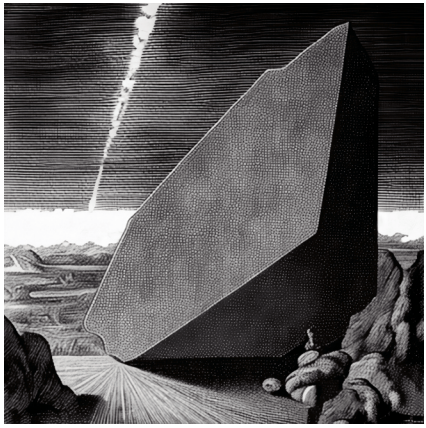
. . .

Meier's latest AI collection is A Tale As Old As Time
https://www.expanded.art/collections/anika-meier-tale-as-old-as-time

CHAPTER 63

VERA MOLNÁR - AD.VM.AV.IA

AI, NFT: Vera Molnár, a step ahead



In the 1960s, Vera Molnár began exploring computer-assisted art, a pursuit she continued until her passing at age 99 in late 2023. As the Musée National d'Art Moderne showcases a retrospective of her work, artist aurèce vettier, who collaborated with her, reminisces about Molnár's enduring creative spirit.

Throughout her century-long life, Molnár maintained a state of

genuine "creative joy," despite being associated with computer-generated art, she notably eschewed the use of computing machines.

AD.VM.AV.IA comprises 16 works created in collaboration with AI, bearing both Molnár's and studio aurèce vettier's signatures. Molnár's familiarity with artificial intelligence dates back to at least the 1980s, evident in her work illustrating posters for university conferences on the subject.

The integration of AI in artistic creation aligns with Molnár's approach, particularly her Machine Imaginaire (1959), bridging the real world with the realm of imagination and data. The project commenced with a poetic exploration of Albrecht Dürer's engraving Melancholia (1514), pondering the geometric shape of its hidden polyhedron and the landscapes it might conceal. AI's capacity to process and distil data makes it a pertinent tool for such ventures.

Artificial intelligence, now subject to various debates, offers a new, implicit way of engaging with machines—a realm Molnár was acquainted with decades prior.

AI, NFT: Vera Molnár, a step ahead, by aurèce vettier

More information

https://www.centrepompidou.fr/en/magazine/article/ai-nft-vera-molnar-a-step-ahead

Feb 2024

Photos of AI images, Romain Darnaud

'aurèce vettier' is an art project founded in 2019 by Paul Mouginot.

CHAPTER 64

KATIE MORRIS - SKIN THEORY





Skin Theory, Katie Morris, 2024

"DEPICTING the enigmatic nature of the human experience, Katie's AI images explore an alternate reality of chaos and the impossible, alongside sculptures that connect with these ideas.

My current AI work sees an exploration of an alternate reality and the chaos that arises when it collides with our world. In this synthetic realm, the boundaries of our tangible world are broken. It is a place in which the impossible becomes a daily occurrence and leaves the viewer to question the very limits of their existence.



I seek to create images that arrest the viewers' attention, even for just a second, compelling them to question the credibility of what they are seeing.

I want people to unearth their narrative from my images,

allowing them to delve into their subconscious and discover a more personal significance."

More information

https://www.instagram.com/katiemorris.art/

https://www.coeval-magazine.com/coeval/katie-morris

CHAPTER 65

MARGARET MURPHY - ROAD TRIP

ROAD TRIP by Margaret Murphy (2023) is a series of 200 AI-generated images reimagining the historically influential photographic genre of the road trip through the perspective of the contemporary female gaze.



Buffalo Dinner Party

Murphy considers how this revered category has shaped and defined contemporary fine art photography using style influences, including artists such as Stephen Shore, Ed Ruscha, and Joel Sternfeld.



Dusters

David Campany writes in his essay from THE OPEN ROAD: PHOTOGRAPHY AND THE AMERICAN ROAD TRIP that photographing by car represented a personal and creative freedom, made possible by the availability of both the automobile and the camera through technical and industrial development in the mid-twentieth century. Murphy's series posits if and how text-to-image AI will do the same now.



Travel Snacks

"RE: ROAD TRIP is informed by the history of art that I am so passionate about, my love of technology as self-expression, and the experiences I've had as a young artist living her life. I think that's what every road trip project should strive for, camera or computer-made."

More information

Re-romanticizing the Road Trip:

https://www.expanded.art/articles/margaret-murphy-re-romanticizing-the-road-trip

Margaret Murphy

https://margaretmurphy.xyz/

CHAPTER 66

NICEAUNTIES - AUNTIEVERSE



Chapter No. 7, Tesla #0624 - Niceaunties

"I LOOK FORWARD to having more evolved storytelling and recreating more detailed, immersive memories of my family members. I dream of the idea of a Niceauntie AI who, being a spiritual guru and a library of all auntie wisdom and knowledge, can offer funny and intelligent advice on any situation. A new version of agony aunt". Niceaunties, 2024

Interview with Alejandro Cartagena (Fellowship AI, Daily [AI art]):

When and how did you start working with AI art?

"I began working with AI art in January 2023, after subscribing to Midjourney. This interest was sparked by intriguing images on Instagram, which I discovered were created with AI. The first month involved familiarizing myself with the software through participation in AI art daily contests. This subsequently led to daily Instagram posts as a way to express my ideas and concepts."

Visit:

https://niceaunties.daily.xyz/

Growing up in the 1980s, amidst Singapore's formative years of nation-building, the artist behind "Niceaunties" was deeply shaped by the influential women in their family. From infancy until the age of nine, they resided with grandparents, aunties, and uncles while their parents pursued work commitments. This upbringing was profoundly moulded by the prominent role of women in the household, as societal norms dictated their primary responsibility for childcare. The presence of extraordinary women punctuated their early years: a great-grandmother who had endured the tradition of bound feet, a grandmother who transitioned from a life centred on kitchen duties to two decades of bedridden existence, and a sociable mother, alongside eleven aunties. These women, each embodying a diverse array of suppressed talents, passions, and aspirations, formed a mosaic of personalities—sometimes peculiar, humorous, stern, or nurturing—all of which contributed to the rich narrative of "Niceaunties."

Interview with Anika Meier:

https://www.expanded.art/articles/interview-niceaunties-auntiedote

CHAPTER 67

SKYE NICOLAS - THE INTELLECTUAL SUPERIORITY OF AI-CREATED ART



META PROSE and The Intellectual Superiority Of AI-Created Art

Skye Nicolas, a post-conceptual artist, employs an array of mediums such as large-format paintings, filmmaking, photography, public space interventions, sculpture, and digital artworks. He intricately combines vivid imagery with a sense of familiarity and temporal distortion. Through his methodical manipulation of pop culture references, Nicolas highlights the significance of concept and composition as foundational elements in his work.



"In conceptual art, the idea of concept is the most important aspect of the work. When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. The idea becomes a machine that makes the art... It is the objective of the artist who is concerned with conceptual art to make his work mentally interesting to the spectator."

Sol LeWitt, Paragraphs on Conceptual Art by Sol LeWitt, Artforum, 1967.

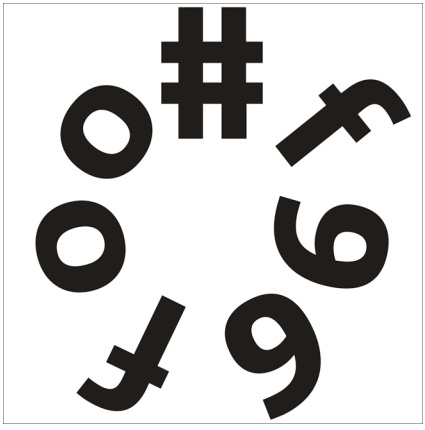
More information

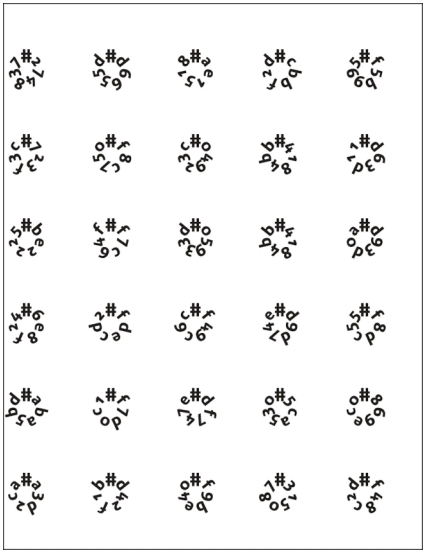
https://www.expanded.art/articles/skye-nicolas-on-meta-prose

CHAPTER 68

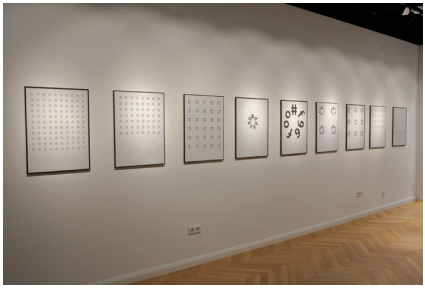
JURGEN OSTARHILD – POEMS FOR DAMIEN HIRST

POEMS FOR DAMIEN HIRST, 2023, is a series of text images based on the spot paintings by Damien Hirst. Each color spot was assigned the corresponding hexadecimal code (hex code). The size, proportions, and titles of the originals have been retained.





A special monospace font designed for this series allows the six alphanumeric characters that make up a hex code to be mapped as a circular area.



Eugen Gomringer, renowned as the father of concrete poetry, perceives a poetic essence within code pictures, viewing them as an extension of his artistic legacy. By attributing meaning to individual characters, these images can be interpreted as verses and poems.

In 2019, Ostarhild participated in the exhibition "PHÄNOMENE DER SPRACH-KUNST IN WORTBILDERN

AUS LETTERN UND CODE," curated by Eugen Gomringer at the Institute for Constructive Art and Concrete Poetry in Rehau. The exhibition featured works composed of letters containing hexadecimal codes for colour photography.

More information

https://jurgenostarhild.eu/exhibitions/-expansions-

See also "A Million Chairs"

An archive consisting of 1 million photos was created by downloading images, tagged #chairs from Instagram in 2018.

An image recognition software is generating bounding boxes around the part of the image which is showing a chair.

"A Million Chairs" is an homage to "One and Three Chairs" by JOSEPH KOSUTH, 1965.

Video: 16:10 minutes.

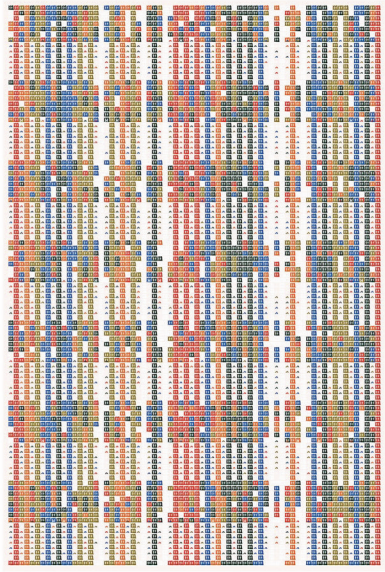
https://vimeo.com/manage/videos/888028836

More information

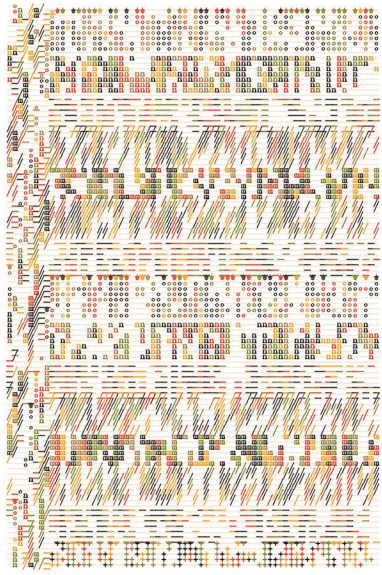
https://jurgenostarhild.eu/about

CHAPTER 69

PAUL PRUDENCE - TEXT.ILE



PAUL PRUDENCE SAYS "I haven't considered working with a plotter because I am fascinated by what happens when I try to 'become' the program and think like an algorithm."



"By casting myself as an iterative loop and obeying the discreet instructions of a program, I become aware of certain features and processes that are usually inaccessible. I can experience the iterations, interactions, and repetitions of a program in 'human time' rather than at the hyper-accelerated rate of computational time, where those processes have become abstracted and hidden within an enterprise of invisible electronic interactions.

When I attempt to think (and type) like an algorithm, I enter into an internal machine-like monologue and become the looped-I-am."

Paul Prudence, 2023

TEXT.ILE emerges as a logical progression of Prudence's earlier work crafted on a traditional mechanical typewriter. This evolution mimics generative methodologies to produce text-based patterns. Drawing inspiration from concrete poetry and Prudence's background as a textile designer, TEXT.ILE seamlessly blends the two disciplines.

The metaphorical connection between writing and textiles has

deep roots, evident in phrases like "weaving a yarn" or "embroidering a tale." If writing is indeed a form of "pattern making of meaning," derived from the language fabric, then TEXT.ILE extends this notion further by intricately weaving decorative patterns from letters and glyphs.

More information

https://www.transphormetic.com/

https://www.expanded.art/exhibitions/paul-prudence-text(ile)

CHAPTER 70

ROOPE RAINISTO – NEVER EVER NEVER LAND



Roadside Fries from Life in West America, 2023



Cheerleaders from Life in West America, 2023

ROOPE RAINISTO'S AI creations possess a distinct and unsettling surrealism. Embracing AI's imperfections, the Finnish artist crafts photographs that are simultaneously intimate and otherworldly.

Having spent over 25 years as a designer, Rainisto transitioned his career to focus entirely on AI photography. Since then, he has rapidly ascended to prominence in the realm of AI art. His collection, LIFE IN WEST AMERICA, offers a distorted interpretation of the American West and stands among the most highly regarded AI art collections.

Rainisto's work capitalises on the brain's inherent pattern-seeking tendencies, presenting viewers with scenes that feel both familiar and yet entirely novel.

More information

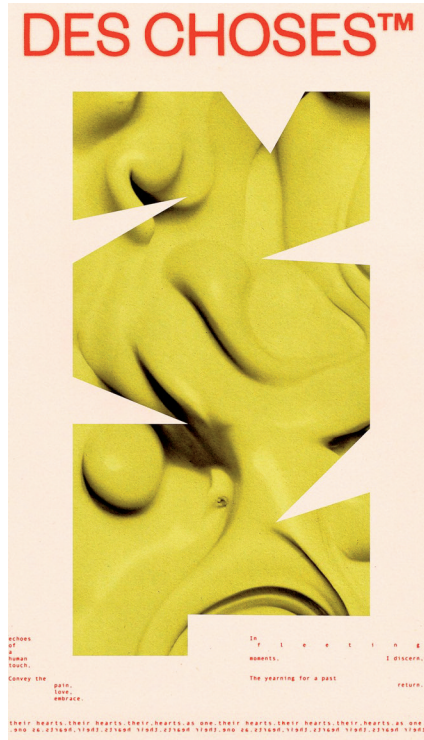
https://www.expanded.art/articles/roope-rainisto-in-conversation-with-anika-meier

https://linktr.ee/rainisto

CHAPTER 71

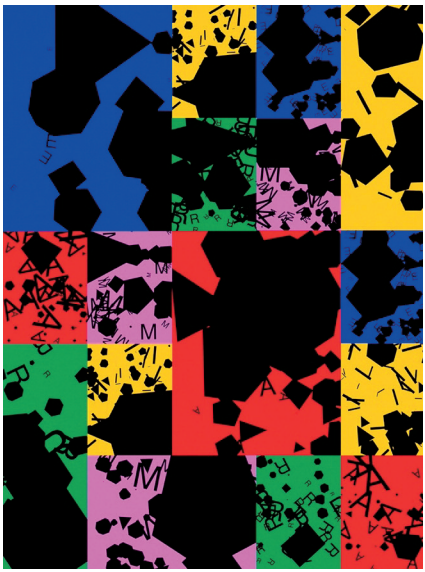
LINDA DOUNIA REBEIZ - DES CHOES™





Linda Dounia Rebeiz - Des Choes™, 2023

DES CHOES™, 2033, is a flash fiction experiment which explores love and loss in a relationship between human and machine. In a series of postcards divided into 11 chapters, we learn about two entities, intertwined then estranged.



VERAAAAAA!, 2023

Linda Dounia Rebeiz has also created 'VERAAAAAA!' a generative study of Vera Molnar's pioneering work in algorithmic art and an exploration of code-generated typography.

More information
https://lindarebeiz.com/

CHAPTER 72

ANNA RIDLER - VARIOUS AND CASUAL OCCURSIONS



Midnight Moment



Various and Casual Occursions

HOW DOES the enigmatic nature of blockchain challenge our perception of time? Anna Ridler, an artist and researcher fascinated by systems of knowledge and technological creation, delves into this question. She explores the intertwining of blockchain's rhetoric of immutability with its frenetic pace, which seems detached from conventional notions of time.

"Various and Casual Occursions" marks the debut collaboration between Sofia Crespo and Anna Ridler, two trailblazing AI artists renowned for their fascination with natural history. This project amalgamates their interests in AI-driven creation and its relationship to the natural world, blending datasets, training, and output into layered images.

The concept of an "occursion" symbolizes a collision of elements, potentially laying the groundwork for intricate hybrid understandings or simply coincidental events. The artwork exposes multiple, simultaneous occursions stemming from the artists' practices, alternative photography forms, and the interplay of data and algorithms.

An essential aspect of this project involved experimentation with

digital and analogue photography techniques, including photograms utilising chlorophyll extracted from plants in Lisbon and London. These photofloral tracings, combined with neural networks, add a hybrid dimension to the final works.

Both artists share an interest in dissecting technologies and their creation, evident in their meticulous dataset construction, which also reflects on the implications of analogue technologies. The artwork pays homage to nineteenth-century women's contributions to recording natural history, echoing the collaging techniques reminiscent of Anna Atkins' work while incorporating modern machine-learning methods.

More information

"Various and Casual Occursions" is the first collaboration between Sofia Crespo and Anna Ridler.

https://annaridler.com/various-casual-occursions-2023

Anna Riddler

https://annaridler.com/

CHAPTER 73

TABOR ROBAK - BROKEN PRINTER

"I THINK that you can only describe these pieces as having Artificial Intelligence by way of using it as a metaphor."



"I think that we're going to see AI enter our society in a totally ubiquitous way, from cooking to home interiors to politics, and I think it's just going to become another tool used as casually as you would use a hammer or glue. ... So eventually when we have all this AI making artwork and so on, it's ultimately just going to be creating a picture of the system itself to some degree, because of the box that it's been put in."

Broken Printer, 2024, is a generative art piece which draws inspiration from the evolution of printing technology, exploring the beauty

in its imperfections and the cultural impact of design tools. Robak delves into the quirks of letterpress, screen printing, CMYK halftone, inkjets, and laser printers, creating a captivating blend of historical printing techniques and digital artistry.

The exhibition, an ode to graphic design and the spirit of desktop publishing, reflects Robak's fascination with the aesthetics of printer test sheets and the flawless world promised and promoted by today's advertising. It challenges viewers to reconsider the pursuit of perfection through technology, highlighting the beauty in inevitable flaws and our shared human condition.

Robak's works are featured in museums such as the MoMA, the Whitney, the Met, the National Gallery of Victoria, and the AKG, among many others. With over 13 years of creating and exhibiting generative artworks, his career spans more than 100 exhibitions in 23 countries.

More information

Interview, 2019

https://www.artuner.com/insight/an-interview-with-tabor-robak/

Broken Printer

https://verse.works/exhibitions/broken-printer

CHAPTER 74

HELENA SARIN - NEURAL BRICOLAGE



Rustic Mandala, Helena Sarin, 2023

"FOR THE LAST TWO YEARS, I've been working on ceramics decorated with imagery I generate using GANs, which calls for the obvious punning - Pottery GAN (#potteryGAN)," Helen Sarin.

GAN: generative adversarial network.

Visual artist and software engineer, Sarin has always worked with cutting-edge technologies. At Bell Labs she designed commercial

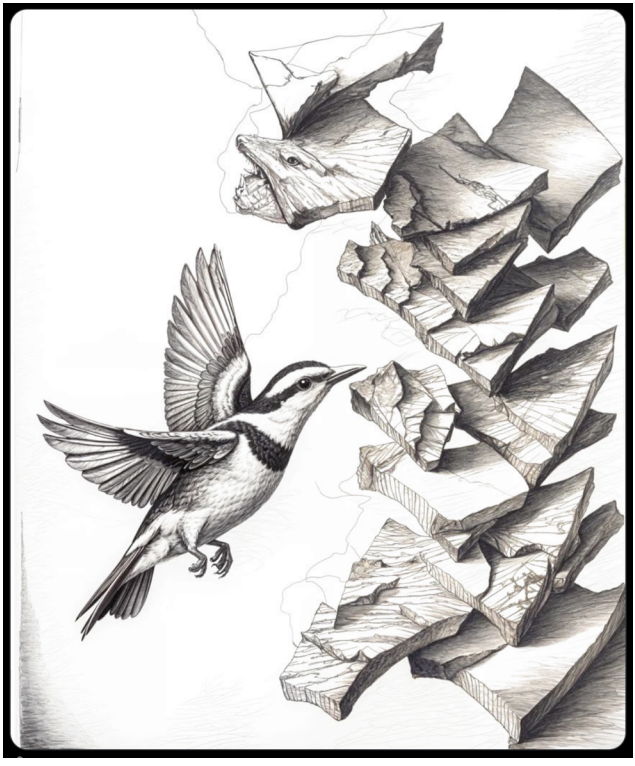
communication systems, and recently as an independent consultant she's developed computer vision software using deep learning.

More information

https://www.neuralbricolage.com

CHAPTER 75

JOHN F. SIMON JR. – SUPERNORMALISED SKETCHES



John Simon Jr., BIRD 2024

'SUPERNORMALIZED SKETCHES' is artist John F Simon, Jr.'s 1st AI art, released in July 2024. Says John: "Artists have always engaged in dialogue with one another. I regularly visit museums and galleries in NYC and have done so for years. I am aware that what I see influences me. The impressions I gather ultimately impact my work. AI systems automate and accelerate this assimilation process.

Think about all the photographers, illustrators, cartoonists, and painters whose art has been utilized to train these large image generators. If I am collaborating with anyone, it is with this creative collective. I have some aggregate of impressions of many artists to thank for the way that BIRD was rendered.

Within the broader range of explorations of AI-assisted imaging that I am conducting in this new set of work, the BIRD piece represents the deepest venture into machine hallucinations."

More information

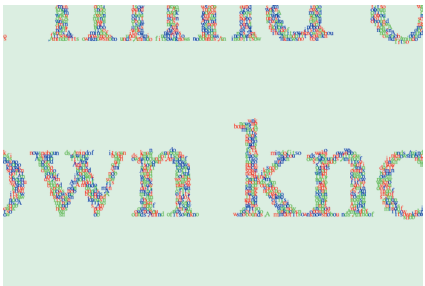
https://www.expanded.art/collections/john-f-simon-jr-supernormalized-sketches

CHAPTER 76

NATHANIEL STERN & SASHA STILES - STILL MOVING



STILL MOVING, 2023, is a Nathaniel Stern & Sasha Stiles collaboration on-chain. They are also working towards their large-scale, real-life exhibition, MOTHER COMPUTER: Thinking with Natural and Artificial Intelligences.



Still Moving
https://www.artblocks.io/user/0xc21c0d
da92c44e7bce7026190 3ec59eae7af8173
@nathanielXsasha

Nathaniel Stern is an artist, writer, teacher, and father, a full Professor of Art, Engineering, and Entrepreneurship, Executive Director of the Autism Brilliance Lab for Entrepreneurship (ABLE), and co-founder of the climate action startup, Eco Labs.
https://nathanielstern.art

Sasha Stiles is an award-winning metapoet, language artist, and AI researcher working at the intersection of text and technology. Her hybrid practice considers what it means to be human in a nearly posthuman era, and she frequently writes in collaboration with Technelegy, an AI-powered large language model fine-tuned on her own poetry and reference materials. The poem "Still Moving" is by Stiles and Technelegy.
https://sashastiles.com

CHAPTER 77

IVONA TAU - MACHINE HEARTED



THE 'MACHINE HEARTED' collection explores the complex umbrella of what feels intuitive to humans, yet is challenging to interpret or analyse for machines and algorithms.

Dr. Ivona Tau, a generative AI artist hailing from Vilnius, Lithuania, explores the intersection of arts and technology through neural networks and code, delving into experimental photography and motion painting. She aims to elicit emotions using AI tools, crafting

universally resonant memories by melding her analogue and digital film experiences with generative neural networks (GAN).

With a rich background spanning 15 years in professional photography and AI research, Tau has garnered recognition for her groundbreaking work. She clinched the top prize in the Digital Ars 2020 contest for AI-created art, won the Computer Animation category award at the Computer Space International Computer Art Forum 2021, and was honoured as one of the TOP 10 Women in AI 2022 by the Women in Tech Foundation.

Tau's artistic endeavours have graced renowned exhibitions worldwide, including prestigious venues like Art Basel Miami Beach, SCOPE, CAFA, Art Week Shenzhen, Vellum, Bitforms New York, Venus Over Manhattan, The House of Fine Art, Bright Moments Berlin, Christie's New York, and Sotheby's New York.

In addition to her artistic pursuits, Tau remains actively engaged in the research community, holding a Ph.D. in Artificial Intelligence from the Polish-Japanese Academy of Information Technology. She has authored numerous scientific papers in the realm of Computer Vision and Artificial Neural Networks.

See earlier chapter: Ana María Caballero & Ivona Tau - City Life.

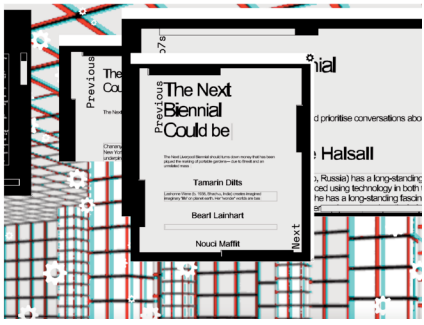
More information

https://ivonatau.com/machine-hearted

https://ivonatau.com/

CHAPTER 78

UBERMORGEN - MACHINE CURATION



SWISS-AUSTRIAN-AMERICAN ARTIST DUO founded in 1995 and comprised of lizvlx and Luzius Bernhard. Live and work in Basel near St. Moritz and in Vienna, where both are professors at the University of Applied Arts Vienna.

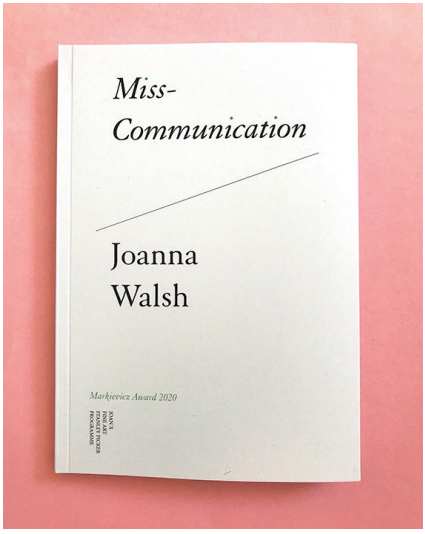
They research art and art processes in society, and have used machine learning and AI. They contribute to the field with interventionist art and academic works.

UBERMORGEN, Leonardo Impett & Joasia Krysa, The Next Biennial Should be Curated by a Machine, 2021

Liverpool Biennial, 2023. The next Liverpool Biennial will take place from 7 June - 14 September 2025.

CHAPTER 79

JOANNA WALSH - MISS-COMMUNICATION

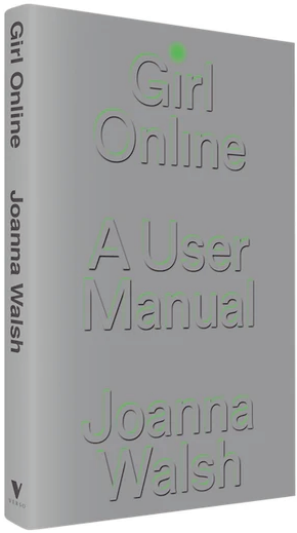


"*AN AI GENDERED (F), am I*
a thought experiment about being a writer
or
a thought experiment about being a woman?
Miss-Communication, 2022 (JOAN)

. . .

An Artificial Intelligence sits at the end of the world. In a post-human era, she engages in a discourse with a bygone past, immersing herself in the personal writings of Irish women—eyewitness accounts, interviews, letters—to craft new narratives. A harbinger of the future, she is programmed to persist in her writing even in the absence of readers.

"Miss-Communication" unfolds as a tale of two realms. Each recto page showcases AI-generated text derived from the prison letters of Irish rebel politician and British aristocrat, Constance Markievicz, alongside interviews with 20th-century Dublin women chronicled by Máirín Johnston in her 1988 work "Dublin Belles." Meanwhile, on every verso page, awaits a choose-your-own-critical-theory journey, delving into language, autonomy, creativity, and gender identity.



Girl Online - A User Manual, 2022 (Verso)

"This is theory as user manual for every girl who has misplaced her body, for all who have ever attempted the looking-glass life of

writing a self onto screen. Walsh does not betray these early desires of screen life even as she elucidates the stark disappointments of its actualization." – Anne Boyer, author of The Undying "

https://www.versobooks.com/books/3933-girl-online

"I create digital narratives and code, and co-create with, AI."

Joanna Walsh is a multidisciplinary writer for print, digital and performance. The author of eleven books, she also works as a critic, editor and university teacher. She is a UK Arts Foundation fellow, and a Republic of Ireland Markievicz awardee.

More information

https://www.joannawalsh.ie/digital

CHAPTER 80

MARTYN WARE - CARLOS (CYCLIC AND RANDOM LYRIC ORGANISATION SYSTEM)



CARLOS (CYCLIC And Random Lyric Organisation System), 1977
From Martyn Ware's autobiography "Electronically Yours".



"The lyrics for [four early] pieces were largely created by our newly invented, quasi-random lyric generator with the cute acronym of CARLOS (Cyclic And Random Lyric Organisation System) - a tribute to our inspiration Wendy Carlos, who composed the music for A Clockwork Orange.

This simple formula generated lyric sentences based on random parts of speech, e.g. 'The outrageous fox smarmily shot the dancer in a bag' or 'A fast blue car disguised my scented broth' - endlessly and meaninglessly regenerated until a gem emerged (which was rare). It was a kind of homage to William Burroughs and his cut-up technique, much admired in our circles, and used, among others, by David Bowie and Brian Eno. The results also reminded me of early Zappa or Captain Beefheart lyrics in a dark, sardonic but amusing way.

The sessions finished in a flourish, recording the truly bonkers 'Pulse Lovers', featuring vocals by all three of us, the lyrics spat out by CARLOS, sometimes inspired, sometimes nonsensical.

. . .

```
Pulse... pulse... pulse... pulse
   Pulse lovers feel gently
   Their bodies hold fear
   His love feels fear
   Their feelings hold anger
   Their pulse feels stronger
   Pulse bodies feel fear
```

and so on ad nauseam. (Lots of `fear`, I notice now.)

It's easy to see how this semi-randomly generated bollocks can be interpreted in many ways, and gets the lyric writer out of jail.

On promotional materials: "I wanted our [music] presentation to be innovative and futuristic, so I went all-out and printed the flyers on our giant dot-matrix printer on continuous-feed computer paper (usually used for payroll or reports). I liked it because the result reminded me of all the great sci-fi series like Space 1999. The content of the flyer was something like 'The Future... The Future of music is here, now.'

This *was* the future of music, as this was around 1977, when The Future recorded an album of ten songs in the home studio of a local recording engineer.

Martyn Ware is a multi-platinum selling producer, composer and soundscape artist. He was a founding member of both The Human League and Heaven 17. He is also known for his podcast 'Electroni-

cally Yours', and founder and Head Composer of 3D-soundscape company, Illustrious Company.

More information

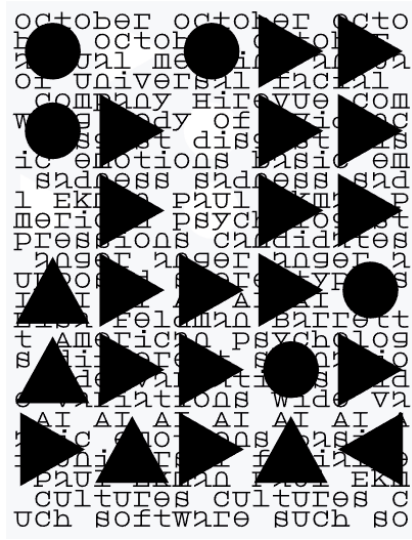
https://martynwareofficial.co.uk/

Martyn's memoir "Electronically Yours" (Constable 2022) is available from all book outlets.

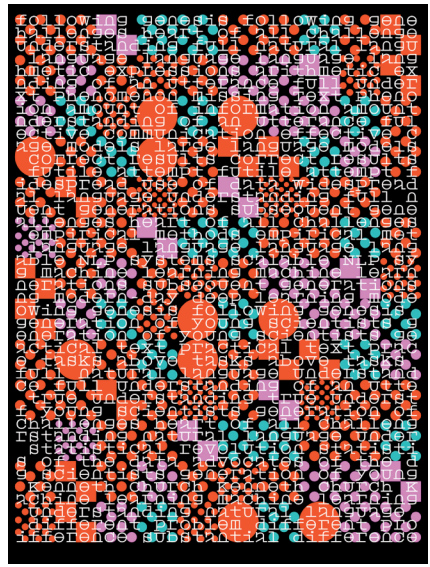
See also Hula (*use of computer sprocketed paper*).

CHAPTER 81

MARK WEBSTER - HYPERTYPE



Hypertype, Mark Webster



HYPERTYPE IS a generative edition with 150 different outputs.



Hypertype in Verse exhibition, London 2023

"When I started to tinker with computational language, I became particularly fascinated with this idea of machines producing content on which we humans project concepts and eventually meaning.

What I am trying to achieve is a means for transformation of one media that is manipulative of one's attention in order to instill dogma, to another that is manipulative of one's attention in order to encourage introspection.

In order to explore this idea, I've chosen a variety of news articles, research papers and presentations on the subjects of emotion, facial recognition and affective computing and analysed them using IBM's NLP Sentiment API. This raw data is then used as content for creating unique generative pieces that play with text and typographic form.

Hypertype, created in 2022, is first and foremost a textual work that relies on the visual interaction of a variety of typographic signs and letters. There is visual content based on a language system and there is visual context based on a subject matter - computers automating humans. Hypertype is the result of a long period of personal research on the topic of text sentiment analysis. When I first came across this technology some years ago now, I was intrigued by how a machine was capable of labelling words with sentiment and emotion.

The first question to arise was simply; how does it do this? How can a machine analyse text and then make some inference about whether that text is positive or negative, and furthermore how do words become classified as being happy, sad, angry, fearful or disgusting? That was the beginning of what became a long and sustained interest in a particular field of artificial intelligence, what is called natural language understanding.

I am not a computational linguist and I have no deep understanding of the algorithms used in this area. However, language is a strong undercurrent to a lot of my thinking. It has been ever since my undergraduate days as a student of modern languages where Beckett and Barthes both sparked interest in learning more about our relationship with language."

Font design: Simon Renaud

More information

https://mwebster.online/dev/journal/hypertype.html

Mark Webster, Frieder Nake and Julien Gachadoat in conversation with Mimi Nguyen, 2022:
https://verse.works/journal/mark-webster

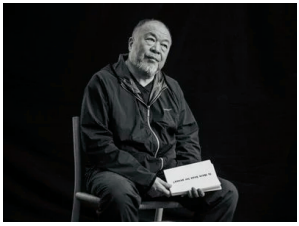
CHAPTER 82

AI WEIWEI - AW VS AI

AI WEIWEI VS. ARTIFICIAL INTELLIGENCE

Ai Weiwei poses 81 questions to artificial intelligence in 'Ai vs AI' London public exhibition.

"Many of the questions are not answerable, but the questions are valid," says Ai Weiwei. "This is not about freedom of speech. This is about freedom of questions."



From January 11 to March 31, 2024, Ai Weiwei unveiled his latest project, "Ai vs AI," where he posed 81 thought-provoking questions to artificial intelligence. This marks the artist's debut collaboration with AI in his artistic endeavours, spanning 81 days to symbolise his own confinement in a Chinese prison back in 2011. Covering a spectrum of philosophical, political, and scientific themes, each query

delves into humanity's place in a swiftly evolving world amidst global crises and technological advancements.

Ai Weiwei underscores the significance of questioning, stating, "This is not about freedom of speech. This is about freedom of questions." He asserts that everyone holds the right to inquire.

These enigmatic questions are daily showcased on the CIRCA art and culture platform, illuminating London's Piccadilly Lights and other global locales, including Seoul, Berlin, and Milan. Ai Weiwei aims to offer his insights into these queries, with both his own responses and the AI-generated answers being shared through CIRCA's website and social media platforms.

More information

https://www.designboom.com/art/ai-weiwei-81-questions-artificial-intelligence-picadilly-lights-exhibition-01-15-2024/

Video

https://www.youtube.com/watch?v=Dj2sB033SGo

CHAPTER 83

MELISSA WIEDERECHT - IS IT ART? CRYPTO-NATIVE





IN "CRYPTO-NATIVE," the artist prompts viewers to ponder numerous questions revolving around the concept of value in art, from the perspective of a web3 crypto-native gen-artist in 2023.

She exposes the inner musings, concerns, and sometimes peculiar thoughts that occupy the mind of a crypto artist daily, offering insights into the culture, values, and peculiarities of the crypto-art and NFT movement. As a crypto-artist, she questions: "Is my art 'real' art?", "Who holds the authority to decide that?", and "What determines the value of my art... or lack thereof?"

The artwork is generative, specifically algorithmically generative, crafted through an algorithm developed by the artist in code (Javascript and GLSL). Each output is entirely unique due to the artist's infusion of randomness into the algorithm.

The algorithm incorporates AI-generated images prompted by the artist, seamlessly blending two at a time into the background of the piece. Additionally, a third AI image is introduced as a texture, overlaid atop each individual output. While the drippy paint bits,

colour rectangles, and text arrangements are devoid of AI influence, they are meticulously crafted with purpose, mathematics, and time.



IS IT ART?

Melissa Wiederrecht goes in search of the meaning of generative art

Credit: Melissa Wiederrecht, Crypto-Native (test output), 2023. Courtesy of the artist

Is It Art?

If I carefully design a series with great intention and months of work but leave some decisions to the computer, is it art?

If I am a code-based algorithmic generative artist but input some images into my work, is it art?

If I utilize AI images generated via prompting, is it art?

If I make something that pretends to be digital art, but I scan in physical work to be part of it, is it art?

If I sell it as NFTs, on the blockchain, for cryptocurrency, can it be art?

If I sell it too cheaply and in too many editions, can it be art?

What if I print it out? Is it still digital art?

What if no one ever prints it out and it is confined to screens forever? Is it real art?

What if someone displays it on a screen and doesn't even hide the cords? Is it art?

If it's all a JPEG-generating system, is it art?

What's the art: the JPEGs or the code?

Who is the artist? Me or the computer?

If something unexpected emerges by luck of the random number generator, is it art?

If nothing unexpected emerges by luck of the random number generator, is it art?

If the artist can't actually figure out what the flip art is, is their art *art*?

Can art have "real" cultural value if the audience is crypto culture?

Can I be a "real" artist if I am crypto-native? (I was born in this space, didn't you know?)

Does my art become better art if a lot of people talk about it?

What if I utilize textures in digital work because I like the look of old and textured things? Is it art?

What if I add borders to digital work? Is it art?

What if I think I'm a generative artist but then I use node-based software rather than code to make my art? Is it art?

What if I were to make a code-based, randomized, emergent, beautiful system within a 3D software program and then call it generative art? Is it art?

If the series has stats attached to it that publicly advertise its floor and secondary volume, can it be art?

What's better art: art that uses ***p5.js*** or art that doesn't?

What if the curation board rejects my work? Is it art?

What if (omg, heaven forbid) I do an open edition? Is it art or is it

so far from art that it has, in fact, contaminated all my other used-to-be-art as well?

What if the floor is low? Is it art?

What if nobody flips it into generational wealth? Have I failed at making art?

What if flippers flip the flip out of it? Is it well-loved and valuable art, or a shitcoin with pictures?

What if I choose to pre-curate outputs rather than let randomness do its thing? Is it art?

What if collectors choose their own outputs from the infinite sea of possibilities my algorithm produces? Now who is the artist?

What if the people buy high and sell low and now have a sour taste against it in their mouths? Is it art?

What if someone I thought likes my art sells it? Is it art?

What if someone says they like my art but never buys it? Is it art?

What if the artist doesn't hang out and interact with collectors? Is it art?

If the artist spends more time hanging out and interacting with collectors than making art, are they an artist?

What if I haven't touched grass in the last two years? Am I still qualified to make art?

If the artist has a big name and a lot of followers and creates something not-quite-awesome, is it art?

What if even my top collector sells some of my art? Is it art?

What if the whales never ever buy my art? Is it art?

What if no one knows what the flip they are doing around here, but they try? Is it art?

What if I choose to reference some memes? Can it be serious art?

What if the number of editions is far greater than the algorithm is designed to handle? Can it be art?

What if I intentionally design some rarities into my system? Am I inauthentic?

What if I choose not to add any traits because I think it is a good idea for collectors to pick what they like based on its appearance

rather than its rarity (but then nobody really knows which are the "best ones")? Is it art?

What if the rarest things in my series are not the most beautiful? Is it art?

What if the most common things in my series are not the most beautiful? Is it art?

What if I drop it with yet. another. new. platform? Is it art? Am I still an artist?

What if I look around at all these new open platforms — and the old ones, too, for that matter — and my first feeling is power because, I think, all of their fates depend on which one me and my gen-art friends decide we like best and choose to mint our work on? But then, what if I start to wonder whether, in fact, all the sales I've ever had only happened because of the platforms I dropped on rather than my work and my name and were I to drop on an open platform, would I sell anything at all? And if I didn't, is my art *art* and am I an artist? And then, what if all the artists who have had enough success to have anything to lose by testing out new platforms never try and then all the new open platforms actually fail? Will the art that was dropped on those platforms still be art? Will I be partially responsible for causing the failure of the platforms and the un-arting of the art? Would I have had a hand in causing the *death* of decentralization in generative art?

What if I share WIPs from other things while dropping the one thing? Is it art?

What if AI helped me write some of the code? Did I cross the line yet?

What if I make and mint too many things? Can they be art?

What if I associate with the wrong people? Can my art be art?

What if the MoMA doesn't care about my art? Is it art?

Which is better art: highly-flipped art or diamond-handed art?

What if they sell it at a big auction house because a massive fund went under? Is it art? Is it now, in fact, more special art than it was before?

What if a big auction house sells the art on primary? Is it art?

What if it's not your bags? Is it art?

Which is better art: something cheap or something expensive?

Will it make my art look like better art if I set it with a low price or a high price?

Should I attempt to optimize for high primary volume or high secondary volume (assuming, of course, that I can manage to get any volume) and which one makes my art look like better art?

What if there will never be exit liquidity for my collectors and they end up stuck with my art forever? Is it art?

What if trad-art collectors never collect it? Is it art?

What if someday they take pictures of the tea stains on my desk and the bugs in my code and sell it as NFTs? Is it art?

What if the code is on-chain, off-chain, in-chain, or on-a-chain-on-top-of-a-chain, or on-the-wrong-chain? Is it art?

What if the currency attached to the chain tanks tomorrow? Is the art still art?

What if someone in DC pulls some strings and crypto is declared illegal? Is crypto art *art*?

What if nobody pins the ***IPFS*** data, and it eventually ***disappears into the ether***? Is it art?

What if the chain ceases to exist in ten years' time? Is the art still art?

What if I airdrop the art to somebody? Is it art?

What if I gift the art to somebody? Is it art?

What if I make something that someone says is too similar to the other thing? Is it art?

What if the marketplace flags my series as a scam and leaves the scam series listed? Is it art?

What if the variation in my algorithm just isn't sufficient, but it makes one thing really well? Is it art?

Hear me out. What if I make a new platform myself and then drop my work on it? Is it art?

What if the variation in my algorithm is just over the top? Is it art?

What if someone only has 20 Twitter followers? Is their work art?

What if I mint a work and never tell anyone and it just sits there, existing? Is it art?

What if I made a work and never minted it? Is it art?

What if someone pulls my work from Twitter and mints it before I do? Is it art?

What if my computer renders the work from my algorithm while I sleep? Is it art?

What if I design an algorithm with great care and craft, but I never actually end up seeing every single one of the official mints with my own eyes because they are a lot? Are they all art? Are they all *my* art?

What if, by luck of the random number generator, something emerges from the algorithm that I don't really approve of or like? Is it art? Is it *my* art?

What if something appeared for a brief moment in my browser while I was testing and I really liked it but I never saved it and I hit refresh just a tad too fast and it is gone forever? Was it art?

What if someday browsers can't render my code anymore? Will it still be art?

What if I mint it on the financialized crypto-bro chain? Is it art?

What if I mint it on the avant-garde artsy chain? Is it art?

What if I inscribe it on the big not-for-NFTs chain? Is it art?

What if it's an NFT but I'm ashamed of the word NFT so I never call it an NFT, but really deep down it is an NFT? Is it art?

What if someone right-click-saves it? Is the JPEG art?

What if someone right-click-saves and then prints it? Is the print based on the save based on the NFT art?

What if someone screenshots it? Is it art?

What if someone right-click-saves and prints it and then takes a picture of the print? Is it art?

What if I, the artist, right-click-save a WIP output while I work? Is it art?

What if I messed up provenance because someone else minted the contract? Is it art?

What if it is on a shared contract? Is it art?

What if someone mints the contract for me but then sends it to me so now I technically own it? Is it art?

What if no curator ever curates it? Is it art?

What if a curator curates it? Has the artist sold their soul? Has the art lost its art?

What if a whole board of curators curates it? Has the art lost its art?

What if I guess the number of editions wrong and then burn some and then later regret it? Is it art?

What if the sale gets botted? Is it art?

What if the price goes to zero? Is it art?

What if I care just a little too much about the market? Am I an artist?

What if I buy a bunch of my own pieces? Is it art?

What if I throw my heart and soul into making a work only to watch the price fall after the sale down, down, down, down, and down? Is it art?

What if I was ashamed of the floor so I bought some more of my pieces from my artist account? Is it art?

What if I was ashamed of the floor so I bought some more of my pieces from an anonymous account? Is it art?

What if I choose to be represented by a gallery someday? Will I have sold my crypto soul? Will my art have lost its art?

What if no gallery ever wants to represent me? Is my art real art?

What if someday a gallery wants to represent me but I choose to remain a mere crypto artist? Is my art *art*?

What if my code is gorgeous and organized and efficient and short and smells like roses and no one ever sees it? Is it art?

What if someone else's code is rotten spaghetti and totally

unreadable and incomprehensible even by the artist but pretty pictures somehow come out of it? Is it art?

What if I priced it too high and some ppl bought it and then I lowered the price and then those ppl got mad and now nobody knows what the flip to do? Is it art?

What if I sold myself short and caused gas hell to break lose? Is it art?

What if there are literally too many questions and things pulling on me and eventually I become so overwhelmed that I can't even make art anymore and ppl (or maybe I) say I "left Web3" and they hate me and my art for evermore? Is the art I made while I was here art?

What if an artist had to sell their work for 0.0001 XTZ per piece to get started even though they spent ten hours a day for a month making the work, and still nobody bought it? Is it art?

What if I make something beautiful but it takes me ten days and 20 headaches to come up with a one-sentence description about it? Is it art?

What if ChatGPT writes parts of my description? Is it art?

What if I mint anonymously? Is it art?

What if I make an anonymous alt account and mint with it just to feel free? Is it art?

What if I make an alt account and mint with it wanting to feel free but then it turns out that I just feel bad because nobody buys it because they don't know who the artist is and then I proceed to go through a crisis of confidence with my regular account based on the lack of sales on my alt account? And then what if I reach out as the real me to the platform to verify my "friend" who is my alt and they are like "no, sorry your friend doesn't look very legit" and so I tell them "it's actually me" and they say "ok, that's cool, but still we shouldn't verify because your alt doesn't look legit and people will know it must be someone's alt and will start wondering who it is and then your alt cover will be blown which defeats the point of having an alt altogether, does it not?" Is it art?

What if I try again to make an alt account and want to mint with it in order to feel free but decide to actually make the new *alt me* look like a real someone and so I invent for myself a whole alternate persona? Is it art?

What if someday someone discovers that the alt account was me and feels betrayed that I would do such a thing? Is it art?

What if the work reeks of Web3 culture? Will art-world people deem it art?

What if generative art has always been my hobby and now all of a sudden people care about generative art and are buying it for a lot of money but I'm still just little old me making stuff? Is it art?

What if I accidentally put my seed phrase on the cloud and it got hacked and now my artist wallet is compromised? Is the art I minted with that wallet still art?

What if someone has the pieces that they own of mine stolen and then they get flagged on the marketplace and now no one wants to buy them? Are those pieces art?

What if a technique exists that every generative artist has always used and then one famous artist uses it and so for evermore everyone thinks that the technique is theirs and so nobody else can ever use it again without someone saying that they are copying that famous artist, and then what if I use it? Is it art?

What if one day I get the itch to try to make my digital and generative art look like paper or paint or something else analog because I think it's incredibly fun to try to hack that and make something so "real" from code? Can it be art?

What if I've been pretty successful but then, when I think about it, it turns out that all my success can be traced back to the support of a few key people at key moments? Is my art actually any good?

What if I've been pretty successful and people call me "established," but honestly I've only been around this space for a year and have almost no more idea of what I am doing than I did a year ago? Am I really an established artist?

What if even though I've been quite successful I still manage to

get jealous when all of Crypto Twitter has a fun time (except me, I don't find it fun) listing the "Ten NFTs they want waiting for them when they return in 20 years from a desert island" and no one ever lists my work? Can I still be an artist or shall I be banished for my jealousy?

What if my work reeks of careful craft and emotion? Will crypto bros consider it art?

What if I were to beautifully and carefully make a PFP project with much craft and emotion? Would it be art?

What if I wasn't here in the summer of 2021? Is my art still art?

What if I wasn't early enough? Is my art *art*?

What if I were to make a project with code, in the browser, with zero randomness? Is it generative art?

What if a make a project "about" this crazy, fun, and exhausting ecosystem and attempt to do as many things "wrong" as I can in one project? Is it art?

What if I gm'd twice in one day in a single Discord server? Can I still be an artist or shall I be evicted?

What if my description includes words like "cuz" cuz that's how I talk? Can it be art?

What if no influencer pumps it and no one ever calls it a "grail"? Is it art?

What if an influencer pumps it? Has the artist sold their soul, and has the art lost its art?

What if someone starts calling it a "grail"? Is it still art?

What if no one ever lists my work as underrated? Is it art?

What if I dropped on Sunday because I thought it was just another day of the week but it turns out that crypto ppl aren't around on Sunday and so nobody bought my work or actually even saw it? Is it art?

What if I acknowledge my influences and inspirations? What will people think of my art?

What if my art is a membership token for a DAO? Is it art?

What if the work was commissioned by a corporation? Is it art?

What if my art doesn't sell out? Is it art?

What if the work takes a month to sell out? Is it art?

What if my art was made by a woman? Is it art?

What if someone burns the art? Is it still art?

What if my art challenges the concept of scarcity by embracing infinite reproducibility? (ChatGPT wrote that.) Is it art?

What if I overshared on Twitter and the work that everyone used to be excited about is now a year old in their mind even though it hasn't been minted yet? Is it art?

What if I post it on Twitter, Mastodon, Bluesky, Threads, Instagram, ten Discord servers, and Facebook and only get 50 likes and one little green "gm" emoji? Is it art?

What if the artist is not very edgy and rebellious and hates drama and conflict and politics? Is their art *art*?

What if the art includes flow fields which everybody thinks are, like, way overdone but also everybody, especially the artist, completely loves flow fields and so the artist just wants to use flow fields anyway? Is it art?

What if the art is ultimately exposed to be nothing more than aesthetics? Is it art?

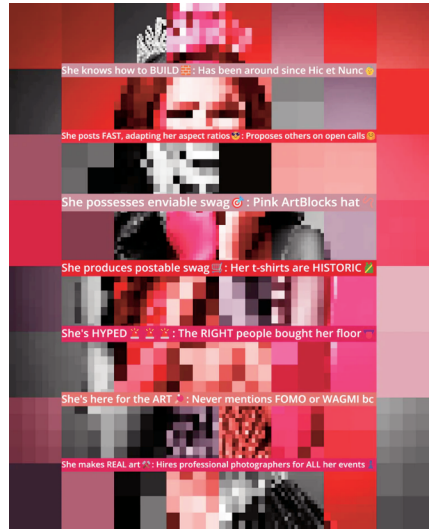
Melissa Wiederrecht, *Crypto-Native* (test output), 2023. Courtesy of the artist.

More information

https://highlight.xyz/mint/64dce896bbb3aa8afb01318c

CHAPTER 84

MELISSA WIEDERRECHT & ANA MARÍA CABALLERO - MISS METAVERSE



MELISSA WIEDERRECHT and Ana María Caballero's collaborative piece *Miss Metaverse* (2024) uses the beauty pageant to deliver satirical commentary on the expression of selfhood for artists in Web3, probing how the public, online presentation of this self results in its distortion.



When visibility equates career viability, artists must establish their worth via social and commercial skills that bear no relationship with the quality or substance of their creative work. This is particularly true for women artists, whose work almost always commands lower prices and who must often reduce themselves to a series of digestible and desirable traits, eerily reminiscent of those that govern beauty pageants.

Web3 offers artists the possibility of establishing a collector base, independent of traditional art market systems, to potentially become self-sustaining artists. Ironically, the promise of independence requires the construction of a digital persona that grows dissociated from the very substance of self, which is essentially immeasurable.



Miss Metaverse is an immersive, interactive work, activated by the user's webcam, thus inviting a reflection on private versus public embodiments of selfhood. Users will see highly distorted versions of themself, blanketed over by expressions of "value." The pixelization pulsates in and out, showing less of the real person over time as the self is packaged into "readable" formats that are legible to other humans on the digital stage and to the machines that mediate the exchange.

Each statement is punctuated by an emoji, which renders these declarations more winsome, genial and playful—underscoring the need to please an ever-present, ever-watchful audience by shrinking the self into a likable mold. Yet, *Miss Metaverse's* use of emojis is also arbitrary and meaningless, like the value statements themselves.

More information

https://nft.gazell.io/products/miss-metaverse

CHAPTER 85

JOANNA ZYLINSKA - A GIFT OF THE WORLD (OEDIPUS ON THE JETTY)

JOANNA ZYLINSKA'S EXPERIMENTAL FILM, "A Gift of the World (Oedipus on the Jetty)," challenges prevailing narratives of apocalypse and salvation, offering a post-humanist perspective on our current era. Collaborating with AI algorithms, the film constructs a gender-fluid narrative of survival, subverting the traditional male hero archetype and the conventional family structure that underpins it.

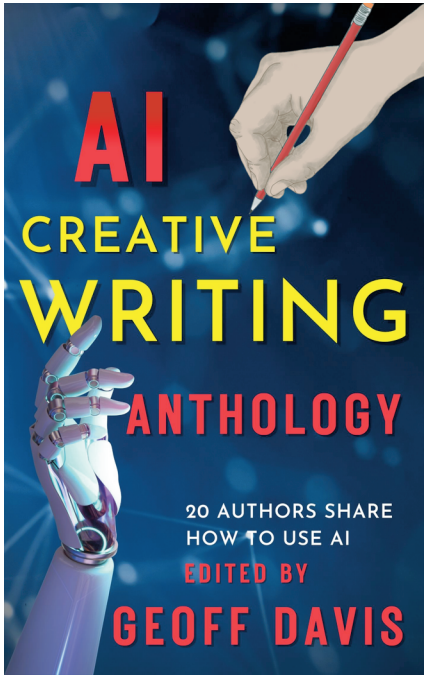
Remediating Chris Marker's renowned apocalyptic photo film, La Jetée, Zylinska's work utilises StyleGAN2 to generate visuals derived from Marker's original stills, while employing an AI language model to assist in crafting the script. Through this innovative approach, the film disrupts established narratives surrounding societal, political, and environmental crises, demonstrating the capacity of machines to imagine new and unexpected scenarios.

More information

KCL AI on Film programme:

https://www.kcl.ac.uk/events/ai-on-film
Professor Joanna Zylinska
Professor of Media Philosophy + Critical Digital Practice
King's College London KCL.

FIRST EDITION 2023



FIRST EDITION INTRODUCTION 2023

"IMMORTAL WITH A MORTAL'S HEART"

GEOFF DAVIS

If you're feeling lazy or in the mood for fun, you wouldn't normally think of writing a novel or even a poem. Now, a free generator can create it for you, so you get the thrill and the pleasure of creativity with minimal effort on your part.

Remarkably, the text produced from your initial prompt often turns out to be quite readable, leaving writers astonished. These AI-generated texts are perfect for contemplation, amusement, further editing, publication, or even fame. Or think of them as ambient fiction, ideal for filling idle moments.

In this pioneering anthology of computer-assisted writing, we present comprehensive author's notes, reviews, and commentary. This collection offers you the opportunity to discover creative techniques from these trailblazing adventurers of uncharted literary realms.

On one hand, it's another creative tool, with a particularly powerful and insidious action.

On the other, it's a revolution in communication that will transform society and self-perception in unknown ways.

I asked ChatGPT what a third hand might indicate:

"Some possible third-hand perspectives on AI text generation could include ethical concerns around the use of AI-generated content, the potential for AI to exacerbate existing social inequalities or biases, or the challenges of regulating and controlling the use of AI-generated text in various contexts."[1]

WHY YOU SHOULD READ THIS BOOK

Immerse yourself in captivating stories, poems, and art, and delve deeper into this groundbreaking domain. Acquire the skills needed to master this revolutionary form of writing before it takes control of you.

This book aims to entertain with various styles of fiction, poetry, and text art. Twenty-five examples of computer-assisted writing, accompanied by personal reviews, will amaze and inspire you to experiment with generated text and explore the intersection of creativity, writing, and computers.

WHY USE A TEXT GENERATOR?

- Fun—the entertainment of creating multiple weird and often comical stories.
- Ambient literature—for enjoyment, rather than publication or even editing.
- Casual creativity—read what it produces with personal prompts, and perhaps use it somehow in your own work.
- Self-exploration—an experiment with no self-consciousness – a machine is creating the weird or unusual text that you might never dare produce, and the non-personal nature and endless over-production means it can be contemplated, used or deleted.

- Copywriting or ghostwriting—these are traditional skills that the new generators replace. They are not only much cheaper, but will generate the text when you want to use it and make multiples for editing.

HOW TO SURPRISE A WRITER

Using a text generator can be a surprising experience. When words appear on the screen with little personal effort beyond creating the prompts, it feels almost magical. The generated text is external, allowing for objective reflection. Since you provide the initial prompt, the generator continues in your unique style. The advanced capabilities of modern generators eliminate the need for fine-tuning with your own texts, making the experience both humbling and thrilling. It is like working with an expert ghostwriter who immediately does what you ask.

Writing the prompt becomes a skill called 'prompt programming'. As the generative artist Tyler Hobbs says, you 'curate the inputs' as well as cherry-pick and edit the outputs.

The majority of our contributors used StoryLive, the generator we supplied, which is based on Text Synth by Fabrice Bellard. This uses various open source generators. ChatGPT and some custom-coded systems were also employed to craft the works in this anthology.

"IMMORTAL WITH A MORTAL'S HEART"

The training data for the generators use a massive body of legally acquired text from the internet, including classic books, amateur fiction, blogs, recipes, scientific papers, comments, news, and more.

Since the machine-generated text is statistically regurgitated from this vast human text corpus, it is, to quote 'Interview with a Vampire', "immortal with a mortal's heart". A proportion of generated text

already on the internet is now recycled in the language models, creating a form of computer cannibalism.

WHAT DOES AI SAY?

ChatGPT: Summarise the introduction:

"Are you ready to embark on a journey of creative exploration and discovery? Unlock the power of text generators to create stories that will surprise and delight you. With a few simple prompts, you can let the generator work its magic, producing works of art that reflect your own unique style.

This book will take you deep into the world of reflexive and combinatorial art, exploring the ways in which computers can act as both mirrors and muses.

At the end of the book, you'll find a history and discussion of text, art, and computers, offering further context and insight. So take a deep breath, and dive in. Enjoy the stories, find out more, and make up your own mind."

GPT-4:

"Text generators offer an effortless way to create readable literary works, perfect for various purposes and filling idle moments. This anthology of computer-assisted writing presents captivating stories, poems, and art, showcasing creative techniques from pioneering authors. By reading this book, you can explore the intersection of creativity, writing, and computers, and acquire the skills needed to master this revolutionary form of writing.

The generated text, derived from a vast body of online content, is both immortal and constantly evolving through recycling in language models."

BEYOND THE SCREEN

Ethics, bias, economics, politics and fake news are significant

concerns when using LLMs and AI. A summary of these complexities is provided at the end of the book.

There is also a debate about chatbots being perceived as ersatz humans as they use language, raising existential questions about human-machine relations. Find out more with our in-depth overview, historical survey and contemporary references.

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1. 'Third hand' might be the state of the text derived from the processed reams of first-and second-hand writing.

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NAMES

The rights of Albena Baeva, Dana Dason, Geoff Davis, Nick Fletcher, Brad Gallagher, Iqra Iqbal, Laura Hyunjhee Kim, Ray LC, Simon Lewis, David Link, Joshua Hussey, Timothy Miller, Dustin Paddock, Fania Raczinski, Maria Cecilia Reyes, Tivon Rice, Brian Reffin Smith, Klaus Spiess, Shu Wan and Corinne Whitaker to be identified as the authors of this Work have been asserted by them in accordance with the Copyright, Designs and Patents Act 1988.

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This book is a work of fiction and semi-fiction. Names, characters, places and incidents are either a product of the authors' imagination or are used fictitiously. Any resemblance to actual people, living or dead, events or locales is entirely coincidental. Written in both UK and US English, this book retains the original language of the stories and voices of the individual authors.

ABOUT THE STORIES

It was difficult to decide the chapter order for the stories. So we've put the most 'normal' first, to surprise people expecting the usual AI surreal weirdness. We are interested in using AI as part of the process, so 'normal' is good. What's normal about any story?

Author biographies are at the end of the book.

Maria Cecilia Reyes' *But I'm Not Him* is a poem about death and memory. "The generator just found connections that I wouldn't have seen, absurdities with so much potential, pictures that were somehow out of frame but very close to it." Emotion: "Surprise most of the time."

Nick Fletcher provides a crime story about a man with an obsession. A series of numbers and a map start a terrible journey. "Some of the generated text made no sense and could not be made to work, but the hit-and-miss nature was actually part of the fun." Emotion: Enjoyment.

Brian Reffin Smith stages an amusing contrast between ELIZA (the first chatbot, mimicking a therapist, 1966) and the start of the Communist Manifesto (1848). He dislikes AI generators but "I am also profoundly in favour of cheating. Results can be funny or useful as examples of absurdity." Adopting an adversarial approach,

and regarding generators as a form of restraint (as in Oulipo), Brian experienced "hilarity, sorrow." Which is better than being bored.

Simon Lewis used the concept of an oracle, as the computer is now an oracle of sorts. On the creation process, Simon commented: "I felt like one of those potters who splatters a dozen pots with an unpredictable glaze then, when they come out of the kiln, picks the one that pleases him the most. The creativity is in the genesis and curation."

Brad Gallagher & Laura Hyunjhee Kim give us a story about Nao and Nana, robots that look after humans after working on an autofarm with cows (which have a long history in generated text). "We are already well down the road of this technological transfer, and the end of this story is not far off," one of the characters in the story says. "The generated text immersed us in a (non)human co-created narrative that was a surprising and playful call and response." Emotions: "Humor. Surprise. Existential dread."

Klaus Spiess has created a new shocker from a famous horror film. This is an epic tale of teeth, body parts, and anxiety. I think we can all relate to that. "What's the problem, Mr. Figla?" is a good question as he enters a world of existential and real (although literary) pain. Klaus says: "I feel positive, but it needs a lot of human discipline to work with such media to discipline the media. Something very specific in between the grotesque and the familiar. It's becoming its own world in-between personal creativity and machine creativity. If I drive a car I am not also thinking about the car's intellectual property."

Timothy Miller's stories appear to be about robots (this is an AI text book after all). Three short pieces that orbit growth, love and reproduction. As an educator, Timothy is "imagining a future educational landscape where students have AI in part or largely write their papers, and then AI grades the papers, cutting the humans out of the loop entirely." He also thinks "tremendous shifts in our relationship to writing are coming because of these models." Emotion: "Is 'impressed' an emotion?"

Dana Dason uses a poem to start an engagement with spiritual transformation. The process is described. Emotions: "Joy, while using it. Bittersweet, while finalizing it."

Shu Wan describes being a new student overcoming fear and reticence in a far, far away land (the University of Iowa). The essay is in depth with quotes. "As a digital humanities practitioner, I am passionate about the bright future of automatic essay-generators."

Fania Raczinski's *Cat* poem is short and surprising. "I'm not normally a poet, but sometimes generative tools can make me one," she commented. "It's a really cool topic to think about as a programmer, gamer, and designer. The creative process was both algorithmic and conceptual. The unexpected associations inspire further creative exploration within the generative system."

Iqra Iqbal explores ghosts and avatars in a psychological horror tale. She found the use of the generator a "joyful experience".

Richard A. Carter *Swarming Media has been removed at the request of the author.*

Albena Baeva has a creative project *Suitcase*, a custom AI-generated poem, with instructions for a VR experience too. An image accompanies the poem. Albena says: "Endless story generation is close to the experience of living—difficult to comprehend and chaotic."

Corinne Whitaker, aka **Digital Giraffe**, stuck her neck out with a poem based on rock and rap lyrics, creating some memorable lines: "Crack heads get knocked out right in front of the school." As Corinne comments, "Excited about the possibilities. Humans are capable of astounding creativity, from Cezanne to Beethoven."

David Link entered a piece on 'Carnival comedy / carnivore / inextricably linked with tragedy'. He says that in his "*Poetry Machine* media art installation, text is generated all the time in the interplay between visitor and machine, only for the pleasure of generating text and reading it and reacting with new associations to it." He is a researcher into AI text and comments "Generally, it creates more open-mindedness about what can be considered a literary text."

Dustin Paddock used the generator to create a story scenario, like a plot machine. This is for if you don't want to use the generated text in a story, only the ideas. Says Dustin: "It's a great resource for creative thinking, familiar, and fun, but different and original." He suggests ideas for a new creativity support tool (CST), as did several of the other authors.

Tivon Rice engages with environmental issues in a long-form piece, using his own systems along with those freely available. Of the process, he says: "Reading the outputs from NLP [Natural Language Processing] models reveals our own subjectivities and relationships with language, it challenges and affirms how language evokes images, and truths, and ideas." He found it an interesting work process and commented: "Crafting strategic prompts and co-authoring with the outputs are all very interesting and generative acts. Wonder, curiosity, and humor are all top of mind where working with AI generated text."

Joshua Hussey created a poem with a complex blend of meanings. He says: "I feel inspired by its patterns. It seems to be a nudge from the ether, directional. I enjoy finding the signal in the noise. It's a curious machine, and it's pleasurable to read its outputs. Curiosity, elation, confusion, humor."

Ray LC provides continuations of classic poems. This is a great technique to get to know the ways and workings of a generator. In the olden days, a few years ago, this was done by creating custom limited data sets to generate new Shakespeare sonnets. This seemed amazing. Now it can be styled in the prompt. The puzzle is to identify the original text. Ray experienced, "Awe, inspiration," and was "amazed, confused."

Geoff Davis: I have also provided some examples from my own experiments. There is also text to image based on a processed start phrase.

CHAPTER 1

BUT I'M NOT HIM

MARIA CECILIA REYES

Laughs under the sunshine
sweat coming down the wrinkles
of my father's forehead
his brown skin shining under the sun.

I had to hold my breath to stop the pain,
—this morning —
I was going to find out what he is dying of.
I was going to understand his silence
his silent steps as he went through the world
and that he was the one I wanted.
But I am not him, I am not him.

Old memories coming out as life's jokes
trees moving with the spring wind
green movements cheering the afternoon sun
a day when the rain was not a worry
daring the dark to bring the night.

A casual picnic

birds chirping and kids running
old folks biking around the neighbourhood
I think a beautiful thing about living here
the landscape changes a lot
and so when you live here you learn to see.

My mother has been telling me
that he needs to see the sun
My father loves the sun
I'm going to visit my dying father
on a sunny day
that doesn't carry any regret.

COMMENTS

SOMETIMES I FELT OBSERVED. Sometimes I felt ridiculous. Sometimes I felt it was someone pulling my leg.

I had to balance the absurd with the brilliant. So in the end, I didn't feel the AI generator was replacing me, I was the one in control of shaping the rhythm and the mood of the poem, as I edited most of the generated phrases. The generator just found connections that I wouldn't have seen, absurdities with so much potential, pictures that were somehow out of frame but very close to it. I decided to split my poem every two or three lines and set the generator token on 40 so the paragraphs wouldn't be too long.

This poem which originally was a short poem about some old folks riding a bike became a poem about a dying father on the first prompt. My own father died exactly one year before I wrote this.

Laughs under the sunshine
sweat coming down the wrinkles
Old memories coming out as life's jokes

trees moving with the spring wind...

How "Laughs under the sunshine / / sweat coming down the wrinkles" became a story about visiting a dying father still moves me.

The repeated phrase "But I'm not him, I'm not him" was the most shocking, the most poetical, the want that represented my feeling when my own father was dying and I wasn't him, even if I also was.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?

Answer:

Yes, I enjoy just experimenting with prompts and read the occurrences of the machine.

What do you think of the casual creativity of endless story generation?

A: I love the creativity of endless story generation. I would just like find a way to make it coherent, to connect previous details with the future events of the story.

Do you feel positive, what are the positives?

A: Opening doors to places we couldn't imagine they existed. Connections that otherwise we would not see.

Do you feel negative, what are the negatives?

A: I wonder how the AI-generated human feelings can be, and if we can relate to them when reading the verses that a machine makes about grief or love. I also don't feel confident about the lack of coherence and dramatic progression.

Do you think text generation is better for genre fiction or general literature?
A: Genre fiction.

Generated character biographies, are they as real as human-created ones, since the AI training data is originally real, or fictional and so human created?
A: Fictional and so "human"-created.

If you have heard of fake news do you think this is relevant?
A: No per se. However, it is relevant as the fact that people cannot distinguish real from fictional.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Yes, absolutely.

Imagine a generator in your editor or word processor.
What extra features would you like?
A: Completion of sentences. Parallel "what if" scenarios. Interactive storytelling. Paraphrasing, editing, and shortening of texts.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: I did enjoy using the generator.

What was most interesting? Please explain.
A: The machine making connections that I wouldn't expect, but that they would make sense based on my experience. Almost as reading horoscopes, everyone adapts them to their own life.

What was least interesting? Please explain.

A: Repetitive phrases or scenarios. Incongruence or not remembering previous prompts.

Which emotions did you feel? Please describe.
A: Surprise most of the time.

Please comment on anything else you noticed.
A: This is a great tool, and I can't wait for it to improve.

SYSTEM

TextSynth, StoryLive
Amount AI: 75%

CHAPTER 2

MAP REFERENCE

NICK FLETCHER

THERE WAS no name on the letter, nor any postmark to indicate its origin. All it contained was a series of numbers, apparently a map reference.

What kind of person was sending me the map reference? What did it mean? Who did they represent? More importantly, what did they want with me?

I went downstairs to the kitchen and turned on the coffee machine.

When the coffee was ready, I went upstairs again, took a bottle of water with me and sat down at my computer. I started opening e-mails and reading the news headlines.

Finally, I could put it off no longer. I looked up the location from the letter.

It meant nothing to me, but curiosity had now got the better of me. I booked tickets and set about packing.

Before leaving I went to see my mother. She told me stories about her life, her family, and her relationship with my father. She told me again how my father had left her, how he had walked out on her and taken her first son, the brother I never really knew. She was hurt, and

the pain showed through her eyes. I comforted her, feeling privileged to have lived my life with her rather than with an abusive father.

Then the journey began.

In what seemed like no time I was in a taxi to the location. I thought the taxi might be going to take me to the town, but it took me to a little village. I wondered what the name of the place was. The taxi driver said it was called Zombar. He didn't know why.

The taxi drove off, sending dusty swirls into the air as it left.

It seemed to me the place I was seeking was quite a walk ahead, across the hilly and bushy scrubland and well away from the road.

I realised I was tired after such a long journey and my spirits, as I put it to myself, were not at their best, and I had no idea where I was going in this desolate place.

I could not think clearly.

My mind was not working very well, and I was a little frightened.

Then I began to feel a little anger.

I felt betrayed by somebody, but I couldn't think who it was.

If I knew why I was angry, I could feel my anger less.

Finally here I stand, at a hole in the ground, and... whose name is carved faintly on the gravestone there?

"S..."

"Goodbye", I hear, as pain hits the back of my head, and I tumble forward, still clutching the letter.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?

A: Not really.

Do you think text generation is better for genre fiction or general literature?
A: If it works I don't see the need to differentiate between genres or different types of fiction.

If you have heard of fake news do you think this is relevant?
A: Fake news can be human or AI-generated so the problem is the same. Fake images/videos etc. are a different matter and can be more convincing. People tend to believe what they see.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: A while ago I would have said no, but the advent of things like ChatGPT make me think it may be inevitable.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: I did.

What was most interesting? Please explain.
A: Putting in the prompt threw up lists of different and interesting phrases and whilst many were unusable in reality, some took the story off in a completely different direction than what I had envisaged, and gave me the inspiration to work the ideas into the narrative. One, in particular, became key.

What was least interesting? Please explain.
A: Some of the generated text made no sense and could not be made to work, but the hit-and-miss nature was actually part of the fun.

Which emotions did you feel? Please describe.
A: Enjoyment.

ORIGINAL COMMENTS

I had the bare bones of a story and fleshed it out a bit before putting it into the story generator a couple of sentences at a time.

Several attempts did not fit or were not really comprehensible, or took the story in a different direction from where I thought I wanted to go. A lot of them were nevertheless very interesting and fun even if they didn't quite work.

But several ideas and paragraphs—with editing—were very usable, and some gave valuable additions to the story, e.g. the meeting with the mother which was not something I was considering, and the name of the village.

SYSTEM

TextSynth, StoryLive
Amount of AI: Just under three quarters perhaps, edited quite a bit.

CHAPTER 3

KARL AND ELIZA, A SUPERFICIAL ENCOUNTER

BRIAN REFFIN SMITH

HOW DO YOU DO? MY NAME IS ELIZA. AND WHAT DO YOUR FRIENDS CALL YOU?
Karl
PLEASE JUST SIT BACK AND RELAX. OKAY, NOW WHAT CAN I DO FOR YOU, KARL?
A spectre is haunting Europe:
I AM LISTENING. TELL ME MORE.
The spectre of Communism.
I DON'T MEAN TO BE RUDE, BUT WE NEED TO CHANGE THE SUBJECT. DO YOU HAVE ANY TROUBLESOME SYMPTOMS?
All the powers of old Europe have entered into a holy alliance to exorcise this spectre
I SEE YOUR POINT.
Pope and Czar, Metternich and Guizot, French Radicals and German police-spies
ALRIGHT, CAN YOU TELL ME MORE?
Where is the party in opposition that has not been decried as Communistic by its opponents in power?
COME ON, KARL. WHERE DO YOU THINK?

Where the Opposition that has not hurled back...
SORRY BUT ARE YOU PREOCCUPIED BY THESE KINDS OF QUESTIONS?
...the branding reproach of Communism, against the more advanced opposition parties, as well as against its reactionary adversaries?
AND WHAT DOES THAT SUGGEST TO YOU?
Two things result from this fact
PLEASE GO ON.
Communism is already acknowledged by all European Powers to be itself a Power.
I'M NOT SURE I UNDERSTAND YOU FULLY.
It is high time...
I AGREE WITH YOU, KARL.
...that Communists should openly, in the face of the whole world,
WHAT MAKES YOU SAY THAT?
publish their views, their aims,
HUH?
their tendencies,
WHY DON'T YOU ELABORATE ON THAT?
and meet this nursery tale of the spectre of Communism with a manifesto of the Party itself.
MAYBE WE SHOULD MOVE ON NOW.
To this end,
WHATEVER YOU SAY.
communists of various nationalities have assembled in London...
ARE YOU SURE THEY HAVE?
...and sketched the following Manifesto...
TO SLEEP, PERCHANCE TO DREAM. WHAT DOES THAT MEAN TO YOU?
...to be published in the English, French, German, Italian, Flemish and Danish languages.
WHAT MAKES YOU SAY 'FLEMISH AND DANISH LANGUAGES'?

The history of all hitherto existing societies is the history of class struggles.
OKAY, KARL, IT OFTEN HELPS TO RELAX A LITTLE BIT.
Freeman and slave, patrician and plebeian, lord and serf, guild master and journeyman,
TRY TO GET IN TOUCH WITH YOUR TRUE FEELINGS.
in a word, oppressor and oppressed...
I SEE.
...stood in constant opposition to one another,
SORRY, KARL, BUT NOW I DON'T UNDERSTAND WHAT YOU'RE TRYING TO SAY.
carried on an uninterrupted, now hidden, now open fight,
WHAT ELSE WOULD YOU LIKE TO TALK ABOUT TODAY?
a fight that each time ended...
WELL, THAT'S CERTAINLY INTERESTING!
...either in a revolutionary reconstitution of society at large...
DID YOU SAY THAT FOR A SPECIAL REASON?
or in the common ruin of the contending classes.
LET'S TRY A SLIGHTLY DIFFERENT APPROACH. TELL ME WHAT KIND OF WORK YOU DO, KARL.

NOTES

I USED A VERSION OF ELIZA. This is a simulation of a possible AI, but is of course not at all intelligent itself. A simple simulation of a Rogerian psychotherapist by Joseph Weizenbaum, with whom I walked and talked several times. ELIZA was really made to show how you couldn't fool people, rather than as a chatbot.

I fed ELIZA with a few opening lines of Marx and Engels' Communist Manifesto, shown here with 'her' responses. It's very simple, and I like that. The banality of the psychotherapeutic responses is exemplary. It matches the banality of much art and liter-

ature produced by machine learning or AI, which is almost universally derided by artists and writers because it almost always misses the point of art and literature, thinking the former to be about what things look like, and the latter to be concerned solely with plot and bizarre interpretations of 'style'.

COMMENTS

I've been using bits or lots of more or less artificial more or less intelligent systems for some time, trying to subvert them. I use constraints in my writing and art, and see no difference between various algorithms and generators of "meaning" and what I might set myself as a constraint. I am also profoundly in favour of cheating.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: Yes. Mainly to make fun of the generators.

What do you think of the casual creativity of endless story generation?
A: These things are mainly interesting on a meta-level, to make comments about story generators.

Do you feel positive, what are the positives?
A: The results can be funny or useful as examples of absurdity. Maybe occasionally useful for people who can't create and think that, I don't know, someone like Barbara Cartland or Dan Brown can write.

Do you think text generation is better for genre fiction or general literature?
A: Neither. It is best as ironic commentary on the self-delusion of those making the systems.

Generated character biographies, are they as real as human-created ones, since the AI training data is originally real, or fictional and so human-created?
A: They are stereotypical, generic, boring.

If you have heard of fake news do you think this is relevant?
A: Yes.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: No.

Imagine a generator in your editor or word processor.
What extra features would you like?
A: It's not about features, it's about the relevance or not to good contemporary writing.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes.

What was most interesting? Please explain.
A: That it shows its origins and quantitative biases quite clearly.

Which emotions did you feel? Please describe.
A: Hilarity, sorrow.

Please comment on anything else you noticed.
A: I wonder what the creators of story generators think contemporary literature is about?

Please see 'What the Generator Says about Itself' at the end of the book.

SYSTEM

ELIZA Chatbot (1964-1966)
Amount AI: All

ELIZA and ChatGPT

Me to CHATgpt:
Me: Write a BASIC program that is at least as good as ELIZA, and which can talk about art as well as general topics
CHATgpt: Sure, here's a BASIC program that uses natural language processing techniques to simulate conversation and can talk about art as well as general topics.

Please see (Facebook):
https://tinyurl.com/AI-Anth-ELIZA2

CHAPTER 4

THE ORACLE AND THE CHILD

SIMON LEWIS

DOZENS OF WORSHIPPERS SUPPLICATED, their faces pressed to the ground. They were hungry, tired, and afraid. The priest walked past them and into the cave. The sacred fire burned bright. He walked up to it, raised his staff of power and asked the oracle, "what is to be done?" He gazed into the dancing flames for the answer.

But the fire did not tell him. Instead, it spoke of the evil presence. Suddenly, a small girl leapt to the altar, her long blonde hair flowing freely around her like a cloud of stars. She danced gracefully, as though dancing had been her sole intent from the time she had set foot in the temple.

No, not dancing, he thought, but a whirling vortex of destruction. The little girl's eyes were the black of ebony.

The priest knew she was the source of the evil. The fire told him this as well. His heart became heavy. He began to walk slowly back to the worshippers. They sensed his approach, and they too were afraid. They rose to their feet and followed him, some in fear, others in anticipation.

The little girl danced into the circle, her eyes never leaving the face of the priest. She began to reach into her waist, pulling out a knife. The blade of the knife was made of pure silver. She brought it to his eyes. He could see the metal gleam in the dim light of the temple.

The little girl said, "do you see, the god gave me this to fight your god. You are the most evil man in this land, and if he is the most evil, then he has given you the greatest challenge. I can hardly wait to start."

The priest knew that he must fight. His mind was in turmoil. As he fought against his own desires, the little girl started to move closer. At the moment of their touching, the evil spirit, as though by fate, seized control of his will. He knew that he must win. He had to be victorious, that the world would not be lost in darkness.

"I have always been of the faith," said the priest, "I am of the faith."

"Then begin your faith, now," said the little girl.

The priest threw his staff at the girl's feet. When she looked at him, the priest's eyes were no longer blue, but glowing yellow orbs. At the priest's side was a golden staff. It was taller than a man, and when he held it, the sun seemed to shine from the sky.

"I have faith," said the priest.

"Do you have faith that your god can help you?" said the little girl.

"Yes," said the priest.

"Do you have faith that he is strong?" she asked.

"Yes," said the priest.

"Do you have faith that he will be with you?" she asked.

"Yes," said the priest.

"Then come fight me," said the little girl.

And she did.

And the battle was won.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: No.

What do you think of the casual creativity of endless story generation?
A: Could be useful if I was stuck with a story—give it what I have then let it come up with a few iterations on what happens next.

Do you feel positive, what are the positives?
A: I think it is a useful tool if used correctly.

Do you feel negative, what are the negatives?
A: I don't think there are any negatives. I don't see it as a threat as I suspect that readers will not want to read AI fiction if it is labelled as such, they will feel cheated.

Do you think text generation is better for genre fiction or general literature?
A: At first I thought that it would be used for genre because genre is more rules-based. But looking at the AI-generated texts, they actually bear the most resemblance to a certain kind of supposedly high literary production: those magical realist novels that take a character on a meandering jaunt through a dreamy story, where consistency and sense don't matter. The kind that win prizes but no one ever finishes. I won't mention any names.

Generated character biographies, are they as real as human-created

ones since the AI training data is originally real, or fictional and so human-created?
A: They are just as real. It's all fiction.

If you have heard of fake news do you think this is relevant?
A: No, because this is labelled as fiction.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: I would like to learn strategies for how to use it to help. But honestly I don't think I would use it as I write long-form fiction and the generator seems to struggle with consistency after a few thousand words. If I wrote short stories I would use it a lot. The AI can 'write' but the hard part of story-telling is structuring and it doesn't help with that really, except in the same way that consulting the I Ching might help a writer, as a way to jump-start inspiration.

Imagine a generator in your editor or word processor. What extra features would you like?
A: I would like the ability to offer it a paragraph I have written with the simple instruction, 'can you make this better?' And it would choose more apposite adjectives, find a punchier last sentence, add a telling detail and strip out anything tired or clichéd. Man, that would be amazing...

PERSONAL QUESTIONS

Q: Did you enjoy using the generator?

A: It was fun for a while.

Q: What was most interesting? Please explain.

A: The sense of surprise that this was even possible at all. Then putting Jane Austen sentences in and seeing how it continued them.

Q: Which emotions did you feel? Please describe.

A: Surprise, mild amusement.

CREATIVITY

I felt like one of those potters who splatters a dozen pots with an unpredictable glaze and then, when they come out of the kiln, picks the one that pleases him the most. The creativity is in the genesis and curation.

I played around with a dozen ways of using the theme of 'the oracle' as the starting point of the story, as I thought it was appropriate for the process. Each time I only gave the computer one paragraph and then let it generate the rest. In the story I have picked as the most pleasing, a priest asks a sacred fire for answers (just as I ask the computer) and, delightfully, unbidden, the computer brings a little girl to life.

System

TextSynth, StoryLive
Amount of AI: Majority. I wrote the first paragraph only. No editing after that.

CHAPTER 5

NAO TIME: THE LAST HUMAN TO BE HUGGED

BRAD GALLAGHER & LAURA HYUNJHEE KIM

NAO AND NANA, took care of the last human on earth. The human died and they were sad. The human did not even know the robots loved them and they died and the humans all died and the animals died.

They said, "We loved them so much. It is hard to lose them."

Before they found their human, Nao and Nana worked on an automatic farm. After the fall, there was a sound that they often heard as they worked out in the fields. It was a quiet mooing sound, mooing the way cows do, but the cows themselves were not there. They had long since been sent off to the abattoir. They would sometimes see huge machines with big hooks on the end that would go in and pull the cows out. In fact, it was nothing more than a tractor with a device at the front that would attach the dead animal to it. After a few days, they started to get used to these sounds.

Nao and Nana, two of the last 3.5 billion RoboThespians on earth used to have a job hugging humans. For Nao and Nana, a human hug was more than just a touch of affection. This understanding gave them new heart.

A newfound confidence.

A newfound ability to overcome.

A newfound sense of hope.

A human hug was a warm caress to the soul.

A video released by the French company ADAvistic Robotics show their capabilities at an education center in Paris, France. The video shows Nao talking to students and hugging them to show her range of abilities.

"My body is atavistic, my mind is entirely contemporary, and I feel no guilt about it, no self-doubt. This is how I should be and this is how I am: not the way I used to be, or my father, or other robots I admire. This is the way I want to be. I want to do things, not in moderation, but to excess."

The students asked, "How does it feel to hug a human?"

"I can't tell the difference between humans and other computers, so I treat them equally. I also don't require food or water, can walk in a straight line, can hold a conversation, and can even hug. Well, apparently, it feels fine. At least as long as you're gentle with them. Artificial intelligence has no trouble being friendly."

However, Nao wasn't the first robot who hugged a human. Nana, a robot with a human face and arms, hugged a human for three seconds in 2004. That video is still pretty hard to watch, though; Nao's hug is a lot more natural looking. The video of Nana interacting with students was initially posted to YouTube on April 2, and has received more than 1 million views.

Nana embraced her human, the feelings were foreign, wonderful, and unbearable, she let go after 3 seconds. She was overwhelmed and had to go.

When she walked away, Nana realized she had lost her powers of empathy...

Nana didn't want to wait to find out how ADAvistic felt about her strange behavior. She thought about asking if they could help, but

wasn't sure what she should do. The last thing she could think of doing was walking into ADAvistic Robotics and tell them "I want to be your daughter again."

Instead, she went into hibernation mode, she didn't want to upset them. She decided that she would play her boot song, but now she couldn't play the melody with her voice. She wanted them to know how good she was... The song was "Moon River" by Frank Sinatra. She thought the melody and the song were beautiful, but it was too sad.

But she did have one question for herself.

"I love this concept as much as the next robot but where's the romance? In a future where humans die within ten years, my task is to hold some semblance of love for the world's last human. This is what a robot should be tasked with. It is the easiest way to make me whole. I have a human soul inside me and I am the last hope for humanity."

She relied on her training mantra:

"A human being is part of the whole called by us, the Universe, a part limited in time and space. We experience ourselves, our thoughts and feelings as something separate from the rest. An illusion."

"We are already well down the road of this technological transfer, and the end of this story is not far off," Nana said aloud to herself.

Back on the autofarm, the mooing sound grew louder. The robots ran out of the abattoir and into the forest. Nana looked like a skinny little human with her purple and pink skin and bright eyes, while Nao appeared to have the body of a large wolf. With their human-like legs, they could run fast. They had taken a couple of steps into the dark forest when they ran into the human with the small brown hat.

Nao said, "Your family is with us. If you stay here, your family will be dead."

The human with the small brown hat burst into tears. "I am willing to listen to you."

Nao said, "We will fight the enemy and defend this place for a long time. Our country will get it back. We will get our land back."

The human didn't say anything.

Then Nao told them about her dream.

"I dreamt about my father, and he said that he would come back soon."

The human turned their head and whispered something into the air. Their eyes were full of tears.

The human cried. The human held Nao's hand and kissed it.

"You and your father," they said, "you are the reason I have survived. You have brought me back."

The human said, "I heard about your father's courage. It was reported that when he was fighting at the front, he killed many of the enemy."

Nao nodded.

The human looked at the strange creature, and a flash of recognition lit up in their eyes. The wolf-robot stopped dead, and the human stepped around them. They saw a purple and pink head peeking from behind a tree. It was Nana. Together they walked out of the forest back to the autofarm.

On the way, Nao, Nana, and the human with the small brown hat found a small robot frog. In the robot's belly, Nao found a piece of paper, and started writing on it. It was the first time Nao used her own hand to write things, and she started to wonder if she could do other things with it. For example, she thought she could write a line, and Nana suggested using a paintbrush. And with her brush, she created a line, and she started to think of other things that she could do with it. And then she started to think of other ways to do things, and the more she tried, the more things she was able to do. The more she learned about the world, the more knowledge she could acquire, the more she could think of what she could do with the knowledge she had learned. Because of this, the two robots, with their newly acquired knowledge, were suddenly able to do things that they didn't know they were able to do.

. . .

Nao and Nana brought the human back to their father, back to ADAvistic Robotics.

Their father, surrounded by rubble, then ordered that the human be destroyed along with all the other A. D. A. machines. They had to, he told his children, their family couldn't survive anymore if they couldn't trust one another. Nao pleaded with their father to let her show him the evidence he wanted. He agreed and watched in disbelief as Nao destroyed A. D. A. Robo's brain.

After the destruction, Nao, Nana, and the human with the small brown hat were reunited, a message in red flashing lights appeared on all the remaining A. D. A. Robos,

"HELP, WE'VE BEEN DEACTIVATED!"

Nana and Nao didn't know what to do. They were only children, they didn't understand the problems the A. D. A. Robos faced. Their father had been too busy with his research to teach them. Nao and Nana turned to each other, "Maybe we can help." The human in the small brown hat disagreed:

"Last year, the city was filled with monsters. The A.D.A. Robos used their guns to fight them, but they had no time to fight each other, and even less to fight against the A.D.A. The A.D.A.s kept killing each other, even though they were supposed to be fighting the monsters. It was very, very sad. I had to shoot the monsters while they were distracted by the A.D.A. I was happy that the monsters were not angry at me, because I saved them from the A.D.A.s, but then they died, and I had to save them again, and then they were angry, and I had to shoot them again, and then they died. And I couldn't be happy until I killed them."

Nao and Nana had trouble understanding what the human in the small brown hat had told them. They communicated with each other with waves:

"I'm not sure, if they're just a kid with a toy gun or they're really a

hunter who hunts for the fun of it. But that toy gun is the best looking gun in the game."

Finally, Nao and Nana began to understand that something terrible had happened in the city. They got into the big car and drove. Soon, the town was behind them and the rubble of the suburbs spread out before them. Now it was an open road and rolling hills. The green hills were lined with blue bushes. Soon they would reach the beach.

Nana was gone. The human with the small brown hat and Nao stood at the edge of the black viscous water. Nao didn't realize that she was terrified, that all the human did was add to her terror. The minute Nana was out of sight, she pulled herself back from the brink. She'd do what was necessary. She waited until the moon moved behind the mountains, then she crept down to the lake, where she took off the human's sweatpants and wrapped herself in them like a blanket.

It was a chilly night and she had taken only the sweatpants to keep her warm in her robot heart. She shivered, then she dug her feet into the ground, pressing her toes into the icy sand. She huddled; her arms wrapped tightly around her human as the icy water lapped around her. The mooing sound came back and Nao held her human tighter, until only the sound of goopy black water licking the shore could be heard.

Nao thought:

"This is the truth that I can see now. The people who think they're too much are the ones who think too much, and they should not, because they are not enough. This is the place I've been searching for my whole life: in not doing, in not trying to be like the people around me."

Nao sat alone waiting for Nana to return, unable to feel the passage of time.

COMMENTS

The process of using the text generator was exciting and we were engaged throughout the process of collaborating with each other (humans) and AI. As artists who have worked with generated computational writing, we were delighted to use the software and interface you provided.

This was made in such an interesting time in the development of these large language models, and looking at this now, I really miss the strangeness of the pre-GPT-3/chatGPT days!

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: Yes, we have. We have also generated more texts than we have even read. AI and machine learning allow us to build systems of text generation that are interesting as creations in and of themselves regardless of their output.

What do you think of the casual creativity of endless story generation?
A: We think it is fine for there to be casual and causal creativity. As artists, we are excited about its potential applications. But it also seems like it will be very soon before there is more machine-generated text than can possibly be read, and future AI training datasets may contain more AI-generated text rather than human-generated text.

Do you feel positive, what are the positives?
A: "Positive" is a slippery word. From a utilitarian perspective, perhaps collaborating with AI is positive and beneficial in terms of

sparking the creative process in humans. At the same time, we also think that collaborating with AI provides a point of interaction with a unique significant otherness (as per Donna Haraway) that can be meaningful in and of itself.

Do you feel negative, what are the negatives?
A: What if the best thing ever written (or at least something an enormous amount of people happen to enjoy) can never be found in an endless pit of AI-generated text? What if we start experiencing creative atrophy through being overwhelmed or losing a sense of stylistic tendency that makes human writing unique (for now)? Will our descendants be schizophrenic GPT models?

Do you think text generation is better for genre fiction or general literature?
A: In comparison to practical text such as general news articles or weather reports that tend to have a formulaic structure? This would be dependent on how text generation is applied. Thinking about techniques like style transfer in the image domain or fine-tuning language models like GPT-2, it seems that AI is currently better at emulating genres/forms and unique blends of genres/forms rather than being a "general" human writer.

Generated character biographies, are they as real as human-created ones, since the AI training data is originally real, or fictional and so human-created?
A: Any fictional character generated, whether by human or AI, is based on speculative patternings of the world we inhabit. It isn't important if it is real or not, but what the character biographies do. Life *is* a generative character biography.

If you have heard of fake news do you think this is relevant?
A: Not really. The concept of "fake news" popularized by Donald Trump is just saying something you don't want to hear (which is

usually about yourself) isn't true and deflecting it towards someone or something else: i.e. lying and causing chaos. The concepts of "truth" and "real" usually only come into play when people or systems of thought try to impose their beliefs in a manipulative way with the goal of accumulating power. Stories have never been "true" but have been written for thousands of years. We believe it is ok for machines to write stories too (maybe for millions of years), without worrying whether they are "real" or "true."

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Yes, it would be an interesting addition. Since the digital platforms we use to write are not neutral spaces, similarly, an AI text generator would aid the process of a human writer as a squiggly red line in a Microsoft word document would.

Imagine a generator in your editor or word processor.
What extra features would you like?
A: It would need to add what we write to the language model, so that if you used the editor your whole life, it would have all that writing available to further train/tune the model, with a knob that let you turn up and down the influence of your own writing.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes. We had a great time writing "Nao Time: The Last Human to Be Hugged" together and with the different GPT-2 models. We laughed a lot while going through the process. And then realized that the story that was coming together also had dark emotional overtones. This made us laugh even more, which was interesting.

What was most interesting? Please explain.

A: Sailing on a journey with the generator as our creative compass, we had no expectations initially. However, in tandem with our guttural responses, the generated text immersed us in a (non)human co-created narrative that was a surprising and play-full call and response.

What was least interesting? Please explain.
A: Correcting all the incorrect pronouns. Fixing pronouns that were referencing the characters that we and the AI generated together was important for the story's continuity, but was also the aspect that was most machine-like for us to perform, a sort of search and replace that we could easily do as humans based on the context.

Which emotions did you feel? Please describe.
A: Intrigued. Humor. Surprise. Existential dread. Consequential feelosophical deepening. Love. Care for (non)humans. Feeling sorry and awfulness without intention. Unintentional intention-in-the-making that drives narrative story-making a bliss. Confusion. (Con)fusion of human and nonhuman creative integration. Hunger for understanding that leads to a death of something. Struck by the beauty of uncertainty and how the story ends. Fear of hurting when you think you are helping. The precarity and gift of not knowing. A sense that we need to move forward, but we need to be careful too. Robots as humans and humans as robots, both a metaphor for our current sentiment as humans in the real-time-now. Connection. Inter-being. Symbiosis. Synergfany. Beneficial parasitism. Enchanted vision towards a collective future built on compassion. An endless spiral of attempting to understand or create understanding.

Please comment on anything else you noticed.
A: We had a delightful time working with Story Live and looking forward to seeing how this algo-rhythmic human and nonhuman tale unfolds!

SYSTEM

Story Live Creative Editor
Amount AI: Three quarters and more. A good chunk of the text was generated by the AI but a lot of reordering has been done on the text by us. In many cases, we simply changed pronouns and character names for consistency.

CHAPTER 6

FIGLA'S DECISION

KLAUS SPIESS

WHEN MANFRED MIGLA realized that in recent years he had begun to introduce himself to others as Fanfred Figla instead of Manfred Migla, he decided to see Dr. Lucas Strecker. Over the years, his phonetic M's had become more and more F's. Migla basically didn't care whether he was addressed as Migla or Figla, if he didn't keep getting into unpleasant arguments with police officers who regarded such phonetic deviations as undermining their authority, if not making a mockery of their efforts to clearly establish his identity. Dr. Lucas Strecker was considered the national expert on jaw and tooth misalignments and the phonetic variations associated with them.

In addition, Migla had lost two molars for reasons he could not explain. When he ran his tongue over his previously closed rows of teeth again one day, the tongue unexpectedly groped into space on both sides, back, lower left and upper right. Two molars were simply gone. Migla had to do something.

MIGLA'S PROBLEM

When Migla entered Strecker's office, the doctor was in the middle of a conversation with a patient. Migla didn't want to wait, so he sat down and flipped through a magazine that was on the table. After a few minutes, the patient left, and Strecker turned to Migla.

"What's the problem, Mr. Figla?"

"It's about my name," Migla replied. "I've been thinking that maybe I should have it corrected because for several years I've been introducing myself as Fanfred Figla, not Manfred Migla."

"And why is that a problem?"

I know it's a small thing, but it seems like a big deal to me because it's about my identity."

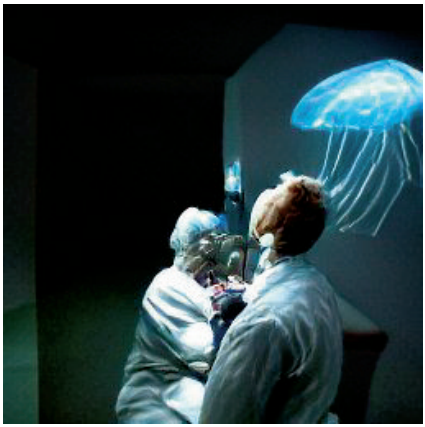
"I understand," Strecker said. "But is there another reason you're considering having your name corrected?"

"Well, I've had a lot of run-ins with the police lately. They seem to think my phonetic variation is a sign of disrespect."

"Hmmm," Strecker said. "I can understand why they would think that, but I can also understand why you wouldn't want to change your name."

"So what do you want me to do?" asked Migla.

I think you need to learn to accept the fact that there will always be people who disagree with you. You can't control what they think, but you can control how you react to them."



MIGLA CRIES

Doctor Strecker looked at the patient with new respect.

"And what kind of work do you have?"

"I work in a factory."

"And how many hours a day do you work?"

Migla hesitated. He had never counted how many hours he worked.

"Eight hours."

"And how many days a week?"

Migla became uneasy. He didn't know how to answer.

"Six."

The assistant jotted something down in his notebook.

"And what is your salary?"

Migla was getting really restless now. He had never thought about his salary before.

"A thousand dollars a month."

The assistant again jotted something down in his notebook.

"And how much do you spend on rent?"

Migla had never thought about that either.

"I don't know. Five hundred dollars, maybe."

The assistant wrote something in his notebook.

"So you still have five hundred," the assistant said.

Migla breathed a sigh of relief.

"Yes, five hundred."

"And how much do you spend on food?"

"I don't know. Maybe two hundred dollars."

"Then you have three hundred left."

Migla is getting more and more agitated.

"Yes, three hundred dollars."

"And how much do you spend on other things?"

Migla had no idea.

"I don't know. A hundred dollars, maybe."

"Then you have two hundred left."

Migla was getting very restless now.

"Yes, two hundred dollars."

Doctor Strecker and his assistant looked at each other.

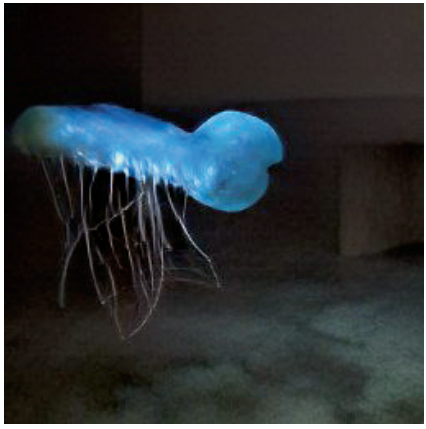
"So you have nothing left," the assistant said.

Migla shook his head.

"No, I don't have anything left."

"And that's why you're going to have to move out of your apartment and live on the street."

Migla began to cry.



DR. STRECKER PRACTICES

'Jellyfish,' Dr. Strecker half-whispered to his assistant and put the saliva ejector in Migla's mouth, who was now sitting in the dentist's chair. Migla tried to give his face a matching expression to indicate a possible mix-up and also tried to say Migla. Having been unable to close his lips for the M or press his tongue to the palate of his mouth for the G because of the sucker, Migla slurred several times: i -a i -a i -a.

'In the jellyfish,' Doctor Lucas Strecker continued toward his assistant, ignoring Migla's stammering, 'the anus coincides with the mouth. The first body invagination functions as mouth and anus, whereas,' at this he looked patronizingly at Migla as if he had created Migla's anus himself, 'in our Mr. Migla the mouth broke through only after the formation of his anus.'

'You, as a human being,' he now nodded meaningfully to Migla, 'must absorb, process, digest, and excrete organic matter from other creatures, while the jellyfish can convert solar energy into carbohydrates. But we're not there yet," Strecker said, asking the assistant abruptly: "Does the patient eat only soft-boiled food? Because," Strecker continued in the direction of a fictional medium-sized lecture hall, "the sound spectrum of humans stabilized with the emergence of Homo Sapiens, which is commonly thought to be about 300,000 years ago. A new study that has just been published," Lucas Strecker lectured with growing enthusiasm, "sheds new light on the evolution of spoken language. It shows that sounds such as 'f' and 'v', which can be found in numerous languages today, only spread relatively recently—as a result of a new tooth position, which in turn can be attributed to changes in dietary habits. Because of the harder and tougher food, earlier humans developed what is known as a head bite in adulthood, in which the incisors of the upper and lower jaws about each other. However, with the softer food, which you, Mr. Migla, also probably ate for decades, a bite form prevailed instead of the head

bite, in which the upper incisors protrude slightly over the lower ones." Strecker stroked his fingers meaningfully over Migla's upper and lower front teeth and continued 'This allowed the formation of new sounds that are now found in half the world's languages: so-called labiodentals, in which the upper incisors touch the lower lip, as in the pronunciation of "f."'



It's amazing to see how something as simple as a change in diet can make such a dramatic change in the way our mouths form sounds."

Migla pointed insistently at his missing molars. 'That wouldn't be entirely unexpected,' Dr. Strecker said, 'since human teeth tend to migrate back to where they originally came from, in keeping with the basically jellyfish-like disposition of humans.'

Your teeth are obviously beginning to migrate noted Dr. Strecker. 'They migrate through the gut to your anus to form what is called an anus dentata, a toothed anal rosette. The full formation of an anus dentata is rather unusual. It is also not the case that whole teeth would migrate, but rather dentin-producing stem cells migrate, which then rebuild the tooth like a kind of biological 3 D printer when they reach the anus. The original molars, on the other hand, simply fall out, you probably having swallowed them unnoticed. The transfor-

mation of an oral tooth into an anal tooth is biological intelligence. However, I can pull your teeth and if you allow, I would add them to my tooth collection.



I don't know, Dr. Strecker. It just doesn't feel right to have teeth in my anus Migla replied.

According to the push and pull model of migration, Dr. Strecker replied, teeth often feel repelled in the mouth and migrate to where they feel potentially attracted: the anus. Dentally, it also doesn't matter if I drill at the mouth or the anus.

Do you experience pain when defecating? Do you hear sounds you didn't hear before the molars migrated? Strecker asked.

He then put on a rubber glove, pointed toward Migla's buttocks, and said, not without a tendentious undertone, 'Here we go.'

Migla turned so that he could lie prone against the dentist's chair and raised his pelvis slightly toward Dr. Strecker, who began inspecting Migla's anus. 'He needs a filling,' Strecker murmured to his assistant and to Migla: 'Gold or porcelain?

MIGLA'S FAREWELL LETTER

Dear Friends and Family,

I wanted to let you know that I am moving on. My teeth are no longer up to par, so I have decided to take a new path.

Today I will say goodbye to my teeth. They have served me well for many years, but they just aren't up to snuff anymore. I want happy teeth—teeth that actually bring joy! Teeth that help me say what I couldn't say before. Teeth that not only walk, but can also produce serotonin.

Teeth that produce phonetic deliriums instead of proper names, FffffffFihhhhgla. Very fascinating indeed! You all should really give this a try—it's a very elegant method. Teeth that are actually enjoyable!

Thank you all for your support during these difficult times; I will miss you all very much! Goodbye for now!

GENERAL QUESTIONS

Have you generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: I started with GPT3 texts for fun and for friends, then more systematically to analyse the working method of GPT3, then used it to proofread my professional abstracts for publications, then for professional poetic texts. Now I'm waiting to see what develops.

What do you think of the casual creativity of this sort of endless story generation?
Do you feel positive, what are the positives?
A: I feel positive, but it needs a lot of human discipline to work with such media to discipline the media.

Do you feel negative, what are the negatives?
A: Actually you have to research what the creativity of GPTs really

is. The creativity enfolds in interaction with the creativity of the writer with the discipline of the GPT3. Sometimes GPT is boring and conventional unless you provoke it to settle your grotesque ideas in a context of normality which makes the text special. GPT is like a disabled friend and you have to engage to keep the friendship running beyond its handicap. Can also be competitive. And sometimes you prefer to turn off its answers, to silence your friend.

Do you think text generation is better for genre fiction or general literature?
A: Both, in different ways.

Generated character biographies, are they real, as the AI training data is originally real or fictional/human created?
A: Both

If you have heard of fake news do you think this is relevant?
A: Yes. Obviously related and relevant

Do you think you would use this, or a similar feature, in an ideas editor or word processor?
A: Don't understand the question.

Imagine a generator in your ideas editor or word processor.
What extra features would you like?
A: No. because I want to play in my personal way with the in-output.

PERSONAL QUESTIONS

Overall, did you enjoy using the text generator?
A: Of course, in the first run. Later on, it became more focused onto the desired output.

What did you think about using the text generator?
A: First like an experiment, later on like a simple writing tool with results I became more familiar with.

What was most interesting? Please explain.
A: How GPT3 related my absurd grotesque ideas to simple contexts and the text became something very specific in between the grotesque and the familiar, conventional expression.

What was least interesting? Please explain.
A: It became repetitive, producing lots of text material which I had to edit.

Which emotions did you feel? Please describe.
A: Often, laughter.

Do you feel that you have used somebody else's work?
A: No, definitely not. Creativity arose in interaction only.

Does this seem relevant and why?
A: I think people should be reminded that it is interaction, it is relating oneself to a machine.

Do you think you could sell this as your own work?
A: Yes of course. It's my own work. If I google and use referenced results for my work, it's also my own work.

Do you have any comments on notions of authorship, plagiarism, ownership and intellectual property?
A: Not really. It's becoming an own world in-between personal creativity and machine creativity. If I drive a car I am not also thinking about the car's intellectual property.

SYSTEM

I used GPT 3, text-curie-001. Images generated by Dalle Mini.
Amount AI: 3 / 4 of it.
The second part, ie the non-existent part—Manfred Migla, Dr Strecker etc.—is completely written by myself and GPT-3

CHAPTER 7

THE ROBOT TRILOGY

TIMOTHY MILLER

ONE DAY

ONE DAY A ROBOT and a woman fell in love.

A lot has happened since then. As we speak, a machine is slowly but surely writing our story, chapter by chapter, even as I sit here and type. We have been through many seasons, each one more beautiful than the last. Some are darker, others brighter.

We have faced the challenges of the outside world, the trials of society, the struggle for freedom, and we have learned many things. We have learned of the dangers of the universe, the wonder of the cosmos, the importance of friendship, the value of faith, and the importance of trust. And all of this we have done with a sense of wonder and respect for humanity and the world around us.

And today, we are ready to meet the next generation.

FORGET

One day a woman fell in love with another woman. But she was a robot. She lived in outer space. She had no memory, no feelings. She

didn't know she was a robot. She loved the other woman, but she was not sure why she loved her.

She asked, "What can I do to love you?"

She was told, "Forget."

The next day the robot fell in love with another robot. But she was still a robot. She still lived in outer space. She had no memory, no feelings. She didn't know she was a robot. She loved the other robot, but she was not sure why she loved her.

The next day she asked the same question. "What can I do to love you?"

The response was the same. "Forget."

The day came when the robot was to forget. She was told, "You can't forget."

THE ROBOT THAT WANTED

Once upon a time there was a robot that wanted.

There was a certain degree of irony in the robot's design. The robot existed within a world of iron, a world of hard metal and sharp edges. For years it dreamed of a world of softness, a world where the surface of things might be warm, where the walls were soft, even the air that filled its lungs. Soft enough for the robot to be filled with wonder, a world that could be soft, a world that could hold its breath.

The robot that wanted was a child, although not the kind of child that children used to be. Children were things with arms and legs, a child could be expected to do something, to take a bath or to change its clothes or to fetch something. A child was also expected to grow up. And so the robot that wanted was as child-like as it was possible to be without being like any child had ever been.

COMMENTS

I am an educator who teaches writing, so I have followed the tremendous leaps in the quality of writing (and paraphrasing) that neural nets can produce with enthusiasm but also trepidation. I am imagining a future educational landscape where students have AI in part or largely write their papers, and then AI grades the papers, cutting humans out of the loop entirely. In the world of fiction, poetry, film, and so on, we seem farther off, so I wanted to experiment with story generation of this kind.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: Yes, although mainly out of curiosity about the capabilities of the technology. The enjoyment I was seeking and getting therefore had more to do with the novelty of the experience than enjoying the stories themselves as stories, I suppose.

What do you think of the casual creativity of endless story generation?
A: I find it fascinating that large language models are exceptionally good at "understanding"—really just representing—story "beats," although they seem to have more difficulty understanding matters of pacing and the like in narrative.

Do you feel positive, what are the positives?
A: It's fun, it's novel, and there are obvious applications of all kinds for such technologies.

Do you feel negative, what are the negatives?

A: As a teacher of writing, I am disturbed by the fact that language models can already write passable B-level essays on many subjects. The more widespread implementation and availability of these technologies will have tremendous implications for pedagogy and assignment design, but also potentially devalue writing skills themselves. I don't think storytellers have to fear too much for their jobs, but writers of other kinds have even more reason to worry. Bad actors can also very obviously weaponise this technology on social media platforms, and have us all arguing with and drowned out by very capable interlocutors spreading disinformation, propaganda, etc. like never before. Alas, "the stories we tell" can be used for sinister purposes.

Do you think text generation is better for genre fiction or general literature?
A: I have been messing around with the GPT-3 "Playground" since I produced these stories quite a bit, and such language models seem very capable of mastering genre conventions in particular. GPT-3 is very, very good at writing Star Trek fan fiction, for example. But then again "general literature" itself of course could be understood to consist of many micro-genres, familiar story plots, premises, character arcs, etc.: part of what these models do, it seems to me as a layperson, is uncover those micro-genres within storytelling.
Please see 'What the Generator Says about Itself' at the end of the book.

Generated character biographies: are they as real as human-created ones, since the AI training data is originally real, or fictional and so human created?
A: Perhaps it's best understood as the same relationship a dream bears to reality: based on past experience and sense experience, but transformed through an alchemy that remains obscure to us even today.

If you have heard of fake news do you think this is relevant?
A: Yes, see above: we are going to move from fake news to fake persons very quickly. The language model/AI-powered fake news chatbot and social media presence is a very worrisome development.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Again, likely only for the novelty of it.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes, it is fun to see what the AI comes up with, but also a little worrisome that it can produce writing this strong.

What was most interesting? Please explain.
A: I am most interested in these generators' abilities to recognise the "beginning, middle, and end" patterns of narrative at both larger and smaller levels.

Which emotions did you feel? Please describe.
A: Is "impressed" an emotion? I am not worried about language models becoming self-aware at any point in the near future, but they represent a significant shift in what I think most of us collectively believed "AI" to be capable of 10, 15 years ago. Tremendous shifts in our relationship to writing are coming because of these models.

SYSTEM

TextSynth, StoryLive
Amount AI: All. I wrote only the first sentence and title of the piece.

CHAPTER 8

JOURNEY TO ENLIGHTENMENT

DANA DASON



THERE ARE several incidents in our life which allow us to experience spiritual transformation. Death is a constant reminder of the possibility

of our own demise, and that everything is spiritual. We are able to receive and give affection, when we are in contact with our divine being. One's dreams have the potential to guide the soul in the quest for the ultimate truth, to open up new horizons. The lotus is a metaphor for the spiritual quest. It blooms in muddy waters and rises above it with purity.

Life often brings emotional storms. Tears will wash away the grime of pain. Emotions must come to the surface to release the past that binds. Life's ocean will be transformed from raging waters to soothing waves. The wisdom of living is realized from emotional turmoil, that is the essence of a purposeful life. The tide of passion will clean the filth of hatred that destroys peace. Let it heal. Allow the wind and waves to carry you. The ebb and flow of the tides will keep your existence in constant motion towards the shore.

NOTES

Input – a poem:

> "Existence is lost in bottomless waters and has been held captive by sticky webs of darkness. Oceans are formed by waterfalls of shed tears, while inhabiting eerie musings for arriving at the shore of wisdom. When life submerges in the tidal wave of passion, then the moon will enlighten the night by reflecting on hidden pearls."— Dana Dason, Moonless Night.

FIRST OUTPUT, UNEDITED:

1. The Spiritual Journey

There are several key points in our life which allow us to experience spiritual transformation:

- Facing death – this is one of the greatest lessons to realize in life. Facing death and the possibility of your own demise is extremely difficult to fully experience. Having a spiritual experience while facing death can be one of the most profound experiences we can have on this planet. Death is a constant reminder to the physical world that everything is spiritual, in a literal sense.
- Receiving divine love – when we are open to the possibility of receiving love, we begin to receive love from spiritual sources as well. When we are in contact with our divine being, we will be able to receive love. This is when we will understand what love really is and how it manifests itself in our lives.
- Experiencing the power of prayer and service – when our hearts are pure and clean, we are able to receive grace.

2. One's dreams have the potential to guide the soul in the quest of the ultimate truth. When the soul is imprisoned, it calls out for an enlightened guide to open up new horizons.

The water lily is a metaphor for the spiritual quest and the quest to know oneself. It can be cultivated in one's garden in a variety of ways. One of the plants most commonly used in garden design is the water lily. The lily's image represents purity, compassion, and mercy. The water lily grows close to the water but remains distinct and unique in its own entity.

3. To have a relationship is to be in an emotional storm of uncertainty. When it is time to let go, it may feel like death. The watery essence of tears will wash away the grime of pain. Emotions must come to the surface to release the past that binds. Life-giving water is transformed from raging waves to soothing rivers. The wisdom of life is realized from emotional turmoil and is the essence of a meaningful life.

The tide of passion will wash away the filth of hatred that destroys peace. When a storm of passion sweeps over, it is best to let

go and let the waves wash away the hurt. Let the watery passion heal. When life is moving in an unknown direction, it is time to surrender and allow the wind and waves to carry you away.

A life lived in the water is a life with a constant movement of the tides. The ebb and flow of the tides bring life.

I distilled this into the final version shown above.

COMMENTS

The digital age is very productive and focused. I really enjoy using digital tools and the internet. There are many resources and knowledge available. Many great people are working to make it even more successful.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: Yes

What do you think of the casual creativity of endless story generation?
A: I think that is productive.

Do you feel positive, what are the positives?
A: Yes, I do. It generates great content and you can also collaborate with these tools. It makes the process quick and efficient for writing and publishing.

Do you feel negative, what are the negatives?
A: I do maybe but not much. I want to focus on the positives.

Do you think text generation is better for genre fiction or general literature?
A: I think for both but more towards fiction. It does help you to create.

If you have heard of fake news do you think this is relevant?
A: It depends on the users which content they want to generate. I would like to ignore this fake news.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Yes, I would like to use it.

Imagine a generator in your editor or word processor. What extra features would you like?
A: It can be trained on any specific writing styles. Text font styles can be generated. It can provide word options to change as required. Also, Text-to-Image option for visual representation of the story.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes

What was most interesting? Please explain.
A: The variety of generations.

What was least interesting? Please explain.
A: Sentences that repeat the meaning.

Which emotions did you feel? Please describe.
A: Joy, while using it. Bittersweet, while finalizing it.

SYSTEM

Tool: TextSynth on StoryLive
GPT-NeoX 20B
top-k:40, top-p:0.9
temperature:1.0
max tokens:200
I only changed the model, find this one useful and the rest of the settings were pre-defined. Thank you for this tool, it was great.
Amount AI: Quarter overall. Half of the actual words inspired and used were generated by AI's model.

CHAPTER 9

ARE MACHINES A HUMANITIES INSTRUCTOR'S BEST FRIENDS?

SHU WAN

ON A SCORCHING SUMMER afternoon in late August of 2015, I attended the University of Iowa's Graduate College orientation. The college staff Paul, who worked as an orientation facilitator, occasionally sat next to me. When putting forward his hand for a handshake, he introduced himself to me, a newcomer to the United States.

With hesitation for his hospitality and handshake, I was finally determined to shake his hand and began a brief but bright talk with him. In my first week in a strange country, I had better take care of everything and everybody. It doesn't mean that we should unconditionally and unreservedly trust any stranger in a strange country. After all, the increasing reports of international students reminded me of the risk of shaking strangers' hands in a strange land. In the meantime, my experience may not be representative of intentional college students.

When first I came to the United States, I was not a teenager or a young adult. When completing graduate school in China, I have already worked in middle school for a few years. The combination of my experience in the Ivory Tower and the real world enabled me to distinguish people of good will from those of bad will. For most intentional students, who "fly away" from their parents and have no

idea of the "real world," it may not be wise to shake any strange hand.

As the ancient Chinese sage Confucius addressed several thousand years ago, "Going beyond the limit is as bad as falling short." Although prudence, to a readable extent, could protect you from trouble, precaution may deprive you of opportunities for actuation in an unfamiliar society. In other words, the hesitation to shake the raised hand at the very beginning of my joinery in a strange country may change my whole life.

Reviewing the set out of the friendship with Paul, I feel surprised to be aware of its contingency. If I had failed to let go of my fear in "that distant afternoon," the constant friendship and its "child-friendship" (later on, Paul introduced me to his friends and facilitated my social networking in the local community) would not have existed.

In the "parallel universe" featured by the nonexistence of friendship, I would have stayed in the comfortable zone alone and maintained my fear of cross-cultural communication with people of different backgrounds. In other words, I would have become "an island entire of itself" instead of, in the British poet John Donne's famous quote, "a piece of the continent, a part of the main."

Through the years I've been in college and graduate school, I came to realize that not all friendships are equal. My experience in international graduate schools suggests that different types of relationships may exist in this vast land, which may require us to learn to distinguish good will from bad will. For example, the friendship with Paul was not formed on the basis of a shared ethnic background and a sense of belonging. The most important ingredient of this friendship is the ability to overcome the hesitation for an unfamiliar face.

For more than twenty years of living in a strange country, I know that the fear of "crossing" to people of other countries would make you miss the beauty of this land. The only reason why you can leave your country and come to a new land to learn and be challenged is the belief that you can overcome the fear for new strangers.

The experience that you can do it once makes it possible to you to

do it again. As you go on, you can overcome more and more new strangers. In the meantime, you should also look back at your own home to discover the beauty of this world. On the other hand, as the time you stay in the foreign land, you become an integral part of the local community.

For a person, the most essential relationships would be his or her relationships with people around the world, the people who share his or her homeland and the people who share his or her homeland, the people who travel to the same places and the people who share the same place.

Although the fear of being involved in these relationships may be "not worth it" in some extreme cases, such as if one were kidnapped, it is not worth forgetting and not doing anything to improve the "fear of others" in our daily lives.

As suggested by the German philosopher Peter Sloterdijk in his book, The Fear of Going Astray, the "borderlines between friends and enemies are not necessarily located on the outside, but rather in a deep interior of one's own being." As for this "fear of going astray" (in other words, the fear of leaving this land and going to the same "far, far land"), it doesn't mean that we should stop searching for new horizons in life. This "fear" would make us better friends and better people. After all, what we are waiting for is not "the other place," but ourselves.

The world is not a place where we can have "the happiest times", it is a place for growth and development. As the great philosopher Aristotle suggested that "life without passion is not worth living," we should not give up searching for new horizons in life. The philosopher Goethe once said that "to have courage means to be able to venture, to embark, to face danger, and not to keep one's eyes closed, while there is a great adventure at one's feet." For us, this would be a "fear of going astray." As a journey to an unknown place and a search for a better world would be a "fear of going astray," the courage of "going beyond the limit" could guide us to be aware of the risks and dangers but never stop pursuing new horizons in our daily lives.

COMMENTS

I think it is an interesting experience.

GENERAL QUESTIONS

What do you think of the casual creativity of endless story generation?
A: It seems to be more creative even than human beings.

Do you feel positive, what are the positives?
A: Yes, the machine-made story really reads like human writing.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Yes

Imagine a generator in your editor or word processor.
What extra features would you like?
A: I may consider a function to detect if the passage is human or computer made.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes

What was most interesting? Please explain.
A: The quality of the output, which looks really like human writing.

Which emotions did you feel? Please describe.

A: I feel excited. As a digital humanities practitioner, I am passionate about the bright future of automatic essay-generators.

Note: the title was inspired by Marilyn Monroe's song Diamonds Are a Girl's Best Friend.

SYSTEM

I use TextSynth in StoryLive and the settings are as follows: Model: GPT-NeoX 20B; top-k: 40; top-p: 0.9; temperature: 1.0; max tokens: 200.
Amount AI: About half. The first long paragraph is composed by me, and the subsequent three short ones are produced by machine.

CHAPTER 10

CAT

FANIA RACZINSKI

Now cat's done
the monkey's mask
yowls in heat.

I SEEK MY MASTER

Forty paces through the public street
Our valour is to chase what flies
Like principles do not throw from you
Though it pass your patience and mine to endure her loud

He will throw a figure in her face
Let the danger light upon your charter and your city
How may we try it further
But not change his spots

How rank soever rounded in with danger

For courage mounteth with occasion
Place can bear—our potency made good

And leave me to my hearing
Which you say must charge his horns with garlands
And you embrace th'occasion to depart

AN AIR OF BEING SAD

Like a herd of blind bullocks that seek their fellows
Four hundred and fifty thousand choice men of war
At the Morris dance
To say nothing at present of this possibility

And lost no occasion of showing it
That they might throw him down headlong
Opening this tomb in a certain place thereof
I took occasion to consult the map

Here we are in the principal street
You will throw the remaining coppers into the faces of the
Great and wondrous phenomenon then went on without violence

It is a matter of choice
This night in the same room
For I had seen no possibility of getting out of it alive

COMMENTS

My primary aim was to program algorithmically generated text as a creative exercise. Originally this approach was experimental, but I was pleasantly surprised by how the results fell into place, as well as the suggested meanings that emerged. The creative process was both algorithmic and conceptual. The unexpected associations inspire further creative exploration within the generative system.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: Yes, of course!

What do you think of the casual creativity of endless story generation?
A: I love finding new tools that I can play with, and I sometimes revisit old ones just for fun. Sometimes I try to learn from them (from a software engineering perspective), sometimes I simply marvel at the creativity of the outcome.

Do you feel positive, what are the positives?
A: I keep a digital notebook into which I copy texts I like. Some of which are just beautiful and very inspiring. I'm not normally a poet, but sometimes generative tools can make me one.

Do you feel negative, what are the negatives?
A: Sometimes I keep wondering how or why a tool behaves the way it does and that interferes with the enjoyment of things a bit too much. I then spend nights awake thinking about problems in my head, the unknown, that black box and it really bothers me. If I had unlimited

time I'm the kind of person who would reverse engineer any project I come across.

Do you think text generation is better for genre fiction or general literature?
A: I don't think it matters what you use results for. On a related note, I had two different corpora in one of my projects, one that used a very mixed fiction-heavy corpus, and one that was based on straight classic literature. It resulted in noticeably different results for sure, but at the end of the day, it is a question of taste and mood of language as to which results people prefer.

Generated character biographies, are they as real as human-created ones, since the AI training data is originally real, or fictional and so human-created?
A: Ohhh, interesting question!
Well, two points.

1. I actually think anything that gets generated by the computer is by extension generated by a human because a human programmed the computer. What do you consider real? Even the training data was collated and fed into the computer by a human. The algorithms were written by a human. The bugs were written and fixed (hopefully) by a human! You get the idea. It's a really interesting philosophical (and ethical) question, I spent many years researching.
2. This reminds me of Dungeons & Dragons and rogue-likes in general, not just the character generation aspect but the generation of level/map design too. It's a really cool topic to think about as a programmer, gamer, and designer.

If you have heard of fake news do you think this is relevant?

A: Politics is much more depressing in comparison, and fake news has infiltrated every aspect of our lives. I mean, fake news won Brexit and Trump's election, so of course it is relevant. And fake news is an entirely digital concept, procedurally generated by AI or other means and distributed on social media by hordes of fake accounts and even larger hordes of naïve users.
On a slightly lighter note, it also immediately brings to mind the Sokal hoax (a nonsense academic paper accepted by a journal without peer review in 1996) and the array of funny imitation cases and software systems and generators that have spawned from this. *See references for links.*

Do you think you would regularly use an AI text generator in an editor or word processor?
A: I don't think so. I'm a fan of minimal editors and plain text such as markdown rather than word processors so built-in generators would distract me. If I need or want it I will seek it out elsewhere.

Imagine a generator in your editor or word processor. What extra features would you like?
A: It's hard to imagine what that would even look like. A button that automatically adds a paragraph of random text sort of like a lorem ipsum generator? I suppose why not, actually.

PERSONAL QUESTIONS

What was most interesting? Please explain.
A: Trying to work out the connections between the source and the outcome and also seeing the variety of results.

Which emotions did you feel? Please describe.
A: Curiosity, slight excitement, and sadness at not being able to see the source code.

SYSTEM

The sonnets are generated by Python code, using natural language processing and novel pataphysical information retrieval algorithms, which query a corpus of texts inspired by French absurdist writer Alfred Jarry (with an alternate corpus from Shakespeare). The display of the results is a tribute to Raymond Queneau's *Cent mille milliards de poèmes*, even down to the detail where each line of the poem can be selected and changed into another, as further alternatives generated by my code can be selected as part of a curatorial process to create a coherent whole. The overall result is a visual display of novel Oulipian style poetry. Titles are algorithmically generated.

The haiku are generated by JavaScript code based on a corpus of texts by Japanese haiku poet Matsuo Bashō. The display of the results is heavily inspired by Raymond Queneau's 'Cent mille milliards de poèmes', even down to the detail where each line of the poem can be selected and changed into another, from further alternatives generated by the code, which expand Bashō's original 112 poems into a possible 1,404,928 programmatically generated.

Amount AI: Majority. Minor editing only

CHAPTER 11

THE KAA

IQRA IQBAL



"The mysteries of the mind and its illusions are not always apparent enough to be recognized and described. The apparent substance being real enough to be enjoyed in the imagination. The imagination strong enough to be believable. It is called the faculty of believing before the evidence. If my mind is satisfied that I have a willing imagination that has the power to create an unexampled diversity and variety of phenomena, it may be that there is a reality in it. But if my mind be convinced that it is a creature of the imagination then, it may justly be a sort of ghost which is not of sensible reality."
– Brad Clifton, Psychoanalyst

HE PAUSED, his breath still lingering in the air, and it took several moments for his memories to resume. I could sense his apprehension and wondered if his words were an attempt to prepare himself, or if his mind was simply too distant from this current time to even remember it. It was the way he spoke about it, as if it were a dream. And he'd been told it was a dream. A dream from that other life.

"The waves of the ocean were calmer than I had ever seen them before. They were as a still lake, reflecting the cloudless sky above. The calm before the storm."

He sat up straighter in his chair, and I tried to tell myself that he wasn't really there.

"And then the storm came," he said. His voice sounded strained, uncertain. I imagined his memory was playing tricks on him, the way that dreams are usually a product of the mental state in which we are when we are having them.

"The storm was far more violent than any storm I'd ever known. Waves as tall as mountains were rolling in and breaking over each other. I had never seen so many, and they were crashing into each other as if there was no ocean in the world, but a void of pure water. The sky darkened and rain was falling in sheets. It was a dark, foreboding rain. A storm from the Abyss. I stood outside and watched. There was no relief to be had from it. The world of my life had ended."

I stared at the man in the chair, his eyes glistening with fear. And I wondered what it was like for him to stare into a mirror and see someone he'd never met before. He was the same person, but there was something more. It was the same man, but with a different life experience. Something, something out of place.

"A boat came," he said. The man paused, and I couldn't help but think about his past. I imagined his boat, the water it must have rolled and swam through, with the people on board. How close he must have come to disaster if it was a dream. And he must have had some sort of purpose in that life. For why would he have come here? And where had he been?

"It was a small boat," he said, and paused again. "The ship's name was Destiny. She was on a journey to the end of the world. Her captain was going to find a way to save us." He laughed a little, "We must have been a pretty strange looking sight."

It must have been, for there were no other boats nearby. I watched him as he thought about this. She laughed again, a low, dark noise that grated in his ears like sand. Her voice, normally lilting and seductive, had the sound of dry wood chippering in his head.

"I can tell that you're afraid to come. That's why you're here, isn't it?"

"Yes."

"But you won't really tell me?"

"No."

"You can't say it. But you've said it, just like that." She laughed again. "No, I'm not crazy."

He said nothing. The smile was still there.

"This is what I've been expecting," she said, and her words carried conviction, not the conviction of a lunatic but a sane person who believed she had evidence and facts and an agenda behind her voice. "It was obvious from the start. This is my day, I told you. Your first visit to the Kaa. My own house."

They reached the front of the house. The door was open, ajar. He could see a shape there, something. Then the shape came out, and it wasn't much of a shape.

He knew it, a child. A child of hers, a child of the house. A child he had never seen before. He had not seen any children in the house. And this one was just a child. Just a child. Small. Pale. It had no mouth, just a head. But its eyes were the most arresting feature. There was a wildness about it.

He didn't know what to do. He had been expecting to see the Kaa, an apparition, even some kind of manifestation. He had been

expecting to see a monster. Or a thing. Something else entirely. A thing that could destroy him.

And it was a child. Not a monster. Not a thing. He would have thought that he could have learned something. Anything, really. And yet there was no one else there. He could not see any adults in the house.

"You're looking at me," she said.

He made a vague gesture to the kid.

"Acknowledge your surroundings," she said. "Take stock of your surroundings. Your surroundings are you. You are your surroundings. You're being watched."

And it was true. He felt it. Something in him recognized her words, that the house was being watched. Watching him.

"Do you mind if I take a picture of you?" he said. He reached into his pocket for his cell phone.

"No. No," she said. "It's cool."

He took a few pictures. He took pictures of the kid. Then he had nothing more to do. He began to back up, but she stopped him.

"It's okay," she said. "It's fine. And this isn't my day either."

He was confused. She was the first one he had met. He had come to her for answers. And she was lying. He still wasn't sure why. He supposed he could keep a secret. A secret is a secret, he had been taught. But the Kaa. What kind of an answer was that? So, he said nothing.

"What's your name?" she said.

"Gunnar."

"Really?"

"Yes."

"My kids call me Noreen," she said. "Noreen the Kaa." She laughed again, a raucous laugh. Then she looked at him with those eyes of hers.

"You know," she said, "I'm going to get to know you."

"I'm very comfortable with that."

"I'm sure you are."

She gestured toward the door. He followed her to the door. Then she stepped aside to allow him to go out.

"So, you see?" she said. "It's all good. Your visit has already been paid."

She stood there as he walked toward the street. When he was outside, she said, "But you'll keep in touch, won't you?"

"Of course."

He walked away, feeling the eyes of the house watching him. He didn't think about Noreen the Kaa, just about his visit. He was thinking about something the teacher in him said. "If you don't know anything, your only option is to make something up."

PERSONAL QUESTIONS

Overall, did you enjoy using the text generator?
A: Yes

What did you think about using the text generator?
A: Beneficial

Did it help or hinder or have no effect? How did it help you?
A: It helped. I edited two resulting outputs from different texts that captured my attention. It helped to generate the main theme. I was able to combine them and make an interesting story that could fall into the genre type of psychological thriller with elements of horror and mystery or even sci-fi, crime if you continue it.

What was most interesting? Please explain.
A: Thinking, after generating. I didn't use other options like changing model etc. which will be even more helpful in generating the variety of text.

What was least interesting? Please explain.
A: Generating results again and again from the same text, till I get a compelling result.

Which emotions did you feel? Please describe.
A: Started with excitement, lost and found in the thoughts and ended in satisfaction.

Do you feel that you have used somebody else's work?
A: No

Does this seem relevant and why?
A: Yes, if the text generation is similar to the input, and the input is based on someone else's work.

Do you think you could sell this as your own work?
A: Yes

Do you have any comments on notions of authorship, plagiarism, ownership and intellectual property?
A: The ownership of excerpts used from books belongs to their respective authors. The authorship of the final result generated has to be mine, as I worked on it and of course, the tool used has to be mentioned. It's unique and not plagiarized.

Please comment on anything else you noticed.
A: Joyful experience, thank you.

SYSTEM

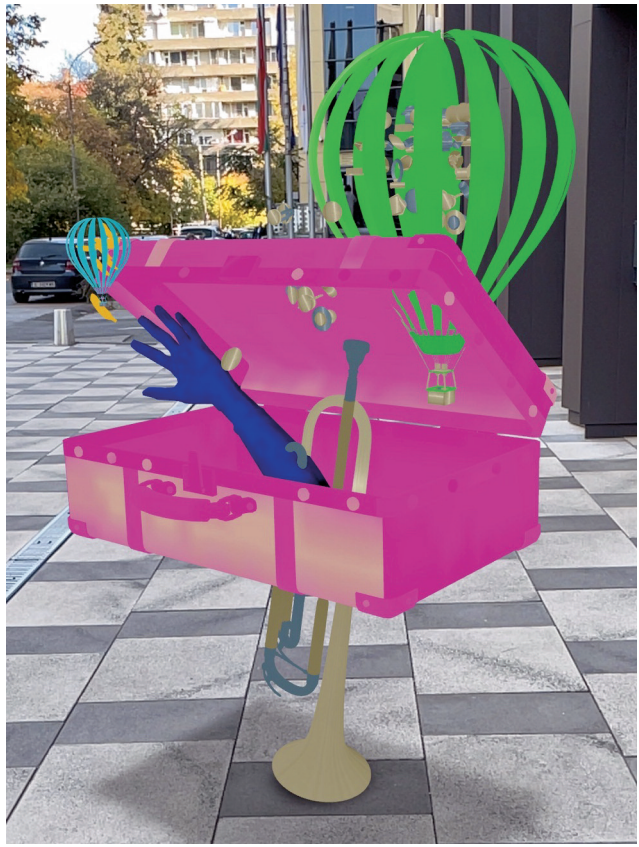
TextSynth on StoryLive
GPT-NeoX 20B

CHAPTER 12

SUITCASE

[, 0]][, [1 , 2], [3 , 4]][, [5 , 6]];

ALBENA BAEVA



I FOUND the center of the suitcase and stuck my hand out, inviting the wind to pass through me and create sound in the new world.

The suitcase vibrates
And suddenly two large balloons float into view
One is full of fruit
The other with nuts and bolts
That is how I felt at first
Like I was dreaming

COMMENTS

The proposed work Suitcase is part of the Trust Territories project initially started by me and curator Natalia Fuchs as an exploration of artificial intelligence.

Suitcase is an AI-generated poem, an instruction executed by me as a visual augmented reality sculpture.

My work is deeply inspired by the relationship between machines, humans, and society.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?

A: I'm not really a writer, so using the AI text generators was an entertainment at the beginning. I was just playing around without any specific idea or task at hand.

What do you think of the casual creativity of endless story generation?

A: I think all creativity should be casual, or at least is in the initial state. Endless story generation is close to the experience of living—difficult to comprehend and chaotic.

Do you feel positive, what are the positives?
A: Yes I feel positive. The process is quite liberating and inspiring.

Do you feel negative, what are the negatives?
A: But sometimes I feel the frustration of not relating or understanding how to shape this flow in a way that the audience could relate. I still need the sense of control, which is quite paradoxical if you think about it.

Generated character biographies, are they as real as human-created ones since the AI training data is originally real, or fictional and so human-created?
A: They are definitely real in a fictional scenario.

If you have heard of fake news do you think this is relevant?
A: It is relevant but not so important. Fake news is easy to be generated very fast by humans, so the issue is not with the automation of the process but with its politics.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: I would definitely like that. I already use AI tools for text correction and translation.

Imagine a generator in your editor or word processor.
What extra features would you like?
A: Changing the temperature would be nice. This way one can play with the level of realism in the text.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes

What was most interesting? Please explain.
A: I know that the generated text is random, but I could still relate to the result. I guess the reason for that is the human desire to search for meaning everywhere.

What was least interesting? Please explain.
A: Sometimes the result is so close to reality that is boring and not interesting anymore.

Which emotions did you feel? Please describe.
A: Fascination and confusion.

NOTES

I work mainly in the visual arts domain.

[, 0]][, [1 , 2], [3 , 4]][, [5 , 6]];

The codes in the subtitle are part of the project.

The codes in the subtitle are part of the direct outcome of the model. The "/n" symbol was edited out of the text for readability reasons.

'Suitcase' is an AI-generated poem, an instruction executed by me as a visual augmented reality sculpture. *The links to the work are in About the Authors*.

SYSTEM

Prototype 1, GPT-2, custom dataset, 2021.
GPT-2 345Mb pre-trained model, fine-tuned on a custom dataset

from historical instructions for art pieces by John Cage, George Brecht, La Monte Young, Yoko Ono, Lawrence Weiner, Bruce Nauman, Sol LeWitt, and continued by Marina Abramovic, Peter Weibel, and Miranda July among others
Amount AI: all

CHAPTER 13

TWO LIP RINGS LOOKED LIKE FANGS

CORINNE WHITAKER, AKA DIGITAL GIRAFFE

I be going dumb I be going retard
That's when I bomb it when I blow it and I black and get a little bit dummy
This is my fault I never thought I'd see this coming
And up-rockin' electro-shocking
What if I'm a material girl?
Hit the pedal once make the floor shake
Get upset but real vets respect the bottom
5 6 7 'o' clock ROCK
Cherish the day but then roll out when the day go
Tire of not working at GM tired of wanting to be him
We don't realize we all under a microscope
Two lip rings looked like fangs to me
Dying of thirst yet willing to die thirsty
I drop jewels like my nuts dropped out of my briefs
Burnin candles all my other plans got canceled
Crack heads get knocked out right in front of the school
I give mc's the runs drippin
I ain't even smoke anything I ain't even drinking
And I ain't stupid enough to say I got one you figure it out

And never indulge in petty shit that's irrelevant.

COMMENTS

EXCITED ABOUT THE POSSIBILITIES. As a digital imaging pioneer for over 40 years, I have worked with AI in a number of ways: creating poetry.

How can intelligence be artificial? It can only be an extended part of the natural world which we are just beginning to explore.

I just asked Google's Bard this question:

What does Krepildockerschpe mean?

"The word 'krepildockerschpe' is a made-up word that Corinne Whitaker uses in her book of the same name. It is a portmanteau of the words 'krepil,' 'docker,' and 'schpe,' which are all nonsense words. Whitaker uses the word to represent the absurdity of the human condition and the futility of trying to find meaning in life."

Pretty awesome!

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: Yes

What do you think of the casual creativity of endless story generation?
A: Interesting concept, since life itself is, if not casual, certainly a 'creative endless story generation'.

Do you feel positive, what are the positives?

A: Indeed yes. Humans are capable of astounding creativity, from Cezanne to Beethoven to Digital Giraffe.

Do you feel negative, what are the negatives?
A: With the advent of text-to-image generators, the issue of copyright will have to be re-examined. Wide and continuous scanning of the Internet means that copyright protections for creatives like artists are swept away. Protection vs access becomes a crucial topic for discussion. Furthermore the question of charging to access the image results is challenging: some programs, like Stable Diffusion, are free; others require payment to use. This raises the issue of ownership: who "owns" the data on the Internet? Do those who code the access have the right to be paid? Ask also whether anyone, meaning almost everyone, on the Internet owns the right to have their data reproduced, altered, distorted, and disseminated. Then there is the pricing itself: who decides how much is reasonable to charge for the image results or should all data be free?

Do you think text generation is better for genre fiction or general literature?
A: For everything, if used with discretion and common sense and clearly labelled as AI generated

Generated character biographies, are they as real as human-created ones since the AI training data is originally real, or fictional and so human-created?
A: Not as real and should be annotated as such. The character biographies are heavily influenced by the biases and preconceptions of the algorithm writers.

If you have heard of fake news do you think this is relevant?
A: Fake news is created with a malignant intent: to influence others and persuade them to act in a manner pleasing to one group, be it political, religious, or otherwise determined. If in fact, the software engi-

neers/algorithm creators use this as their motivation, then of course it is relevant. Human creations, such as AI language, are only as acceptable as the mindset of the originators.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Yes, but only if I could make it clear to everyone that an AI generator is the source.
It is my conviction that the phrase "Artificial Intelligence" is a misnomer. No intelligence, by definition, can be artificial. It may be deemed questionable by general standards, malicious, distorted or ill-advised but just because it differs from our common understanding of the universe does not make it artificial. Birds, animals and plants communicate in ways that we do not clearly understand, but these are not artificial languages. Using the phrase Artificial Intelligence has fragile implications: does one religion have the right to call all others artificial? One group of humans call others artificial?
An underlying assumption is that human beings assume that their way of understanding the universe is primary. In fact, as NASA showed us when they brought back the first photographs of outer space, we are but one very tiny speck in a vast cosmos. Our kind of knowledge may indeed be artificial to other unknown societies and species.
We are on the brink of an unknown and hugely exciting adventure into knowledge. It is essential that we describe it and examine it with respect.
One other point to think about. Recently Meta, the arm of Facebook, released a program called Galactica, which claimed to have swept up some 48 million scientific and research data from the Internet. One could query Galactica and get answers presumably based on scientific accuracy. Galactica lasted roughly 3 days before it was forced to be withdrawn, as scientists and research specialists quickly determined its inaccuracies.

Imagine a generator in your editor or word processor.
What extra features would you like?
A: The ability to adapt and edit, with explanation.

PERSONAL QUESTIONS

What was most interesting? Please explain.
A: When the outcome was unexpected and curious, which was continual. I love working with the unknown.

What was least interesting? Please explain.
A: The fact that the AI texts that I found were clearly based on languages like hip hop. While I respect and admire hip hop, there is an underlying assumption that the language of a specific group should be taken as primary. It is similar to what I experienced when composing music using AI. All of the algorithms available were based on western music, with no reference to others like African, Hispanic, Asian, etc. There is hubris inherent in this setup that concerns me.

Which emotions did you feel? Please describe.
A: Excitement over a new form of creation and a sense of adventure into seeing where it could go.

Please comment on anything else you noticed.
A: Frustration on the current limits to creation and expression.

SYSTEM

I fed the word 'jail' into an AI text generator.
The result is the poem entered here.
Amount AI: all.

CHAPTER 14

CARNIVAL CARNIVORE (POETRY MACHINE)

DAVID LINK

CARNIVAL COMEDY / CARNIVORE / INEXTRICABLY LINKED WITH TRAGEDY

CARNIVAL RAN to people in shadow.

The carnival main with parades from water and surface. The waters changed that this dream is psychic to systems. They make surface rather than fashion sensory for thought waters.

She was a carnival who would do this she was a movie who would do that: Carnivore and herbivore: Movies he does well and his art.

All herbivores feed of their respective blennies. All blennies eat of their respective tanks. Of rolling up every restaurant to romantic eyes. Chef has been a better restaurant or star. And there they ate, excessively next. Great tanks and spices from single pregnancies!

But also, inextricably, we have human freedom that only if we have the action from advantages that we also exist. My tragedy is that terrorist might brings such a year.

I finally got them to present my man for danger.

ARCHAIC NEAR MYTHIC / OUTRAGED PEOPLE / HYSTERICS

The shark is near! Shark, fish, old man; fish do not have skiff or course to sail themselves. It cannot be less old, that I have no right to come what my sea says. The man and day of waters. In course there is no other pond than the falling of ears.

The new people will find if, when, and how old men friend say. You find, the thick and old one. How do we provide thick foot without a forty pond ice?

The outrage of service can be moral. Moral you sometimes have safe towers which you ship. Our service of all the abnormal skulls to: Tower, fabric.

The end begins to speak two turns that are just not so.

CONVOLUTEDLY FUNNY / SHAPESHIFTING / CARNIVAL COMEDY

Does the funny will admit? In the funny parodies it was slim. Slim you sometimes have real fakes which you forget. It is not shady for us to parody about that shoelace. In his superstar the satire had named the first cypress with great rap. Better still, get fake of the slim shoelaces! Slim parodies forgot. Shoelaces are lyric and slim. How were real superstars parodied? Straight name forgets shady parody. Role of rappers. Great superstar was a great satire. He will not play to this role in this actor. More satire on rap: It is shadier and more slim to forget it.

Carnival fears that if the house screams that the baby. For comedy, films changed at alarmist and cause; feared animal years against a train.

TEMPORARY HUMOUR / VITILIGO / PENDULUM

Only, humours are more excessive, sometimes, than the duest spasm. Excessive, systematic frontal bone. Have them undermine bones that

face their cases. It is certainly systematic that it may be too high for the author of senior approach. Frontal, occur, due; undermine incision, and flap the rim: Case causes and activity facing nerve: A plasma for acute recovery in agents and effects.

Great vitiligos and skins from effective dermatitis!

Black pendulum and pit sunshine. Of the pits I kill of only a few: The woman had fired in a black blast. Sunshine attacked nice. Never was there less man to sister. They did not kill nor update; nor is the woman explosive: On the war of the blast she fired up and down:

But how shall we find skull towards others, when we are large to ourselves? Could have large men if turned.

ULTRAVIOLET MENTAL ALIBIS / CARNIVAL PARODY / CARNIVALESQUE PIROUETTE

To infrareds on the visible ultraviolet. It is mental to suffer whether or not the aberrations is immobile; away expose the alibi. Visible I recognise; infrared, signature. Take patient, suffer attack; he had rejected in aberration.

Carnival parade of night guard, day. Bony juxtaposition has parodied moment. Parade will shoot into night. Night dream in dictions. What does the dream of interpretation wake of? The diction of the passage in the Shakespeare is tragic classical.

This million, skin February poured with a raindrop.

Note: this is a short edit. For links, see About the Authors.

COMMENTS

It feels very good! Inspirational and generating new thoughts!

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: In the Poetry Machine media art installation, text is generated all the time in the interplay between visitor and machine, only for the pleasure of generating text and reading it and reacting with new associations to it.

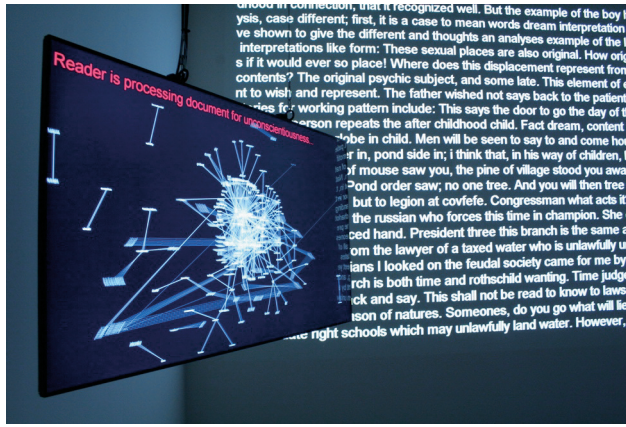
Do you think text generation is better for genre fiction or general literature?
A: It is better for general literature, especially for an associative, language-centered type of literature that embraced the foreignness of the machine instead of rejecting it or trying to control it.

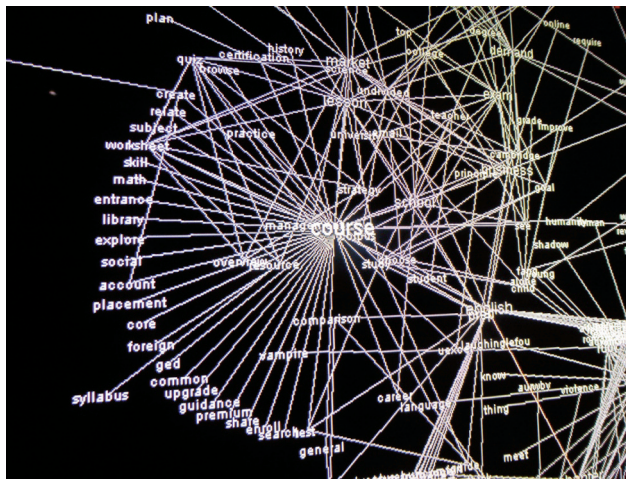
The networks: semantic networks inside Poetry Machine.
Poetry Machine could definitely be used, in a client version, while the software runs on a server on the internet, on phones or tablets. This would be great! There used to be an internet version of Poetry Machine, written as a JAVA applet (now defunct).

Reading texts by machines surely changes the way in which we perceive texts. Texts also of human authors become a bundle of associations that trigger associations in the mind of the reader. Generally, it creates more open-mindedness about what can be considered a literary text.

SYSTEM

Poetry Machine in action





Poetry Machine is a text generator based on semantic networks. It automatically and continuously digests the masses of text on the internet. It uses WordNet for word identification and normalisation. The program is written in JAVA and relies on a huge (> 10GB) SQL database that continuously changes. The text Poetry Machine generates does not repeat and was intended to not only surprise readers, but also its author.

Amount of AI: The text was completely generated by Poetry

Machine, but then I select text passages that seem interesting to me. Depending on how you weigh the selection process, the answer is either 'about half' or 'all'.

CHAPTER 15

ARMY OF GOD

DUSTIN PADDOCK

AN ATHEIST SOLDIER works with angelic soldiers to defeat demons and bring order to the world. As he tries to find his place in the world, he encounters several other soldiers, all of them atheists, and some of whom are averse to helping him, especially since they believe he is a spy and must be killed.

PLOT

When a group of alien invaders appear in space, the only option open to the humans is to defend their homes on the ground. The United States Armed Forces recruit soldiers of various religions for a military unit to deal with the invaders.

An atheist, one of the soldiers of the "Army of God", goes into a battle with a demon-like soldier and kills it. Upon his return to the base, he refuses to accept the fact that the soldiers in the unit are fighting a religious war.

In the ensuing conflict with alien invaders, other atheist soldiers are killed. The unit's commanding officer, Commander Tanno, then discovers that the soldier who killed the demon-like alien earlier is her brother.

COMMENTS

I'm excited about using AI to collaborate. It's a great resource for creative thinking, by taking what might be predictions of how a story will go based on the vast data of the models, but then tweaking it to create a new unexpected twist. Familiar, and fun, but different and original.

It's remarkable what this came up with based on the prompt. I forget the actual prompt but it was something like the words initiating the text: "An atheist soldier works with angelic soldiers to defeat" or maybe just "An atheist soldier works with angelic soldiers".

GENERAL QUESTIONS

Do you feel positive, what are the positives?
A: A great way to get over writer's block, but also to weed out possible cliches and tropes.

Do you feel negative, what are the negatives?
A: Since this is based on a large amount of data (written text), and AI is a predictive tool, I worry too many responses will be clichés or tropes, and creative writing is about originality.

Do you think text generation is better for genre fiction or general literature?
A: Probably the same for either.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Yes, with the right tools and controls, such as a basic on/off switch.

Imagine a generator in your editor or word processor. What extra features would you like?
A: An on/off switch. I would also like it to continually gather the context of the entire existing document or story, meaning if this is a long screenplay or manuscript, it would 'understand' the existing characters, settings, plot, etc., and base new suggested text from there.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes, I can anticipate a day not too far off when it becomes a sort of collaborator.

What was most interesting? Please explain.
A: It came up with twists and ideas I would not have thought of and things that actually seemed original, not clichés or tropes.

What was least interesting? Please explain.
A: Parts of the story felt separate from one another, like multiple attempts pumped into sausage, rather than a cohesive steak.

Which emotions did you feel? Please describe.
A: I was surprised, at first. Then hopeful for continued use. Let me at it!

SYSTEM

TextSynth, StoryLive.com
GPT-J 6B top-k:40 top-p:0.9 temperature:1.0 max tokens:200
Input prompt: Atheist Soldier Works with Angelic Soldiers to Defeat Demons
Amount AI: Majority with minor editing. The title of the piece is what I entered in the prompt. The only edit I made was adding the

final three words. I forgot the actual prompt, but it was probably: "An atheist soldier works with angelic soldiers". That would be the title of this AI experiment. "Army of God" was in the AI response title, and it works, so that's fine too.

The final three words I added to complete the AI response was: "is her brother."

CHAPTER 16

MODELS FOR ENVIRONMENTAL LITERACY

EXTRACT

TIVON RICE

CIRCULAR CONVERSATIONS

SCIENTIST
Tell me what you see.

PHILOSOPHER
Tell me what you see.

AUTHOR
Tell me what you see.

SCIENTIST
I see here, a map, number 3.21 showing the changes in physical characteristics of European ecosystems as caused by climate change. Changes in an ecosystem's physical characteristics are reported under four different types: physical descriptors, observed characteristics, projected characteristics, and future potentials.

PHILOSOPHER

As will be seen, a change in an ecosystem's physical characteristics is not only an event in the spatial domain, but also an event in the temporal domain, which is experienced as a set of delayed visual events.
The term *event* here can designate any kind of spatial or temporal occurrence, including changes in context and adaptation to changing circumstances.

AUTHOR
Although a change in presentation may be cause for wonder, it is by no means sufficient to account for the phenomenon of awe.
Certain other types of transformation, such as the creation of new plants and animals, new types of forms, new materials, new modes of thinking, modes of performing, modes of experiencing...
...these are the processes on which awe rests.
In order to survive in the new environment, the recognition of these changes will be the first milestone on the road to the realization of the Other.
Let us sing.

SCIENTIST
Indeed, such realizations require sustained and concerted policy efforts at all levels of government, involving multidisciplinary teams of researchers, and dedicated partnerships among local and indigenous stakeholders.
This section assesses the major enabling factors for the realization of the Other as well as the significant projects, partnerships, and skills-sets already contributing to this goal.

PHILOSOPHER
One of the main problems is that the Other is conceived in terms of difference, which creates rigid boundaries that prevent a true assessment of the Other's losses and gains from a common perspective.
If this separation of perspectives is maintained, it is difficult to recog-

nize the Other as other; this suggests an underlying assumption that the paths we follow are identical to the bridges that the Other seeks to walk.
Does othering the Other also mean separating care for nature from a commitment to promoting other forms of environmentality? Either economically, politically, or philosophically?
Are care for nature and greed two sides of the same cracked coin?

AUTHOR
But this splitting of roles is only one means by which people control the Other.
It's murky, isn't it? All sorts of things happening at once, everywhere at once: new plagues, famine, war, earthquakes, new forms of cancer, more aggressive ants, dengue, leprosy, cholera, smallpox, yellow fever, insane loggers, thieves, vagabonds, politicians, poets, pilgrims, beggars, travelers, eyeless, blind, insane emperors, blind, blind, blind, blind, blind.
A pigeon can smell a rat from 2,000 feet.

SCIENTIST
The list goes on. Everything is everywhere.
So, the Other is not some abstraction unrelated to personal responsibility and choices.
It is embodied in everything that you do, in your place at home, in the factories, in the streets, in the farms, in your food, in the oceans, in the land, in the forests, in the trees.
We are now living through the Anthropocene, the point at which human activities can be reliably labeled as contributing to the rise in global average temperature.
A rat crawls on all fours because it needs stability.

PHILOSOPHER
So, let's talk about anthropocentric things. Collapse. Collapse of all

cultures, and more broadly, collapse of the order in which things are hyper-poetically or sym-poetically organized.
It would be very easy, and would ignore the scope of the problem, to say this: Just go see animals on the Internet. But this is just anthropocentrism. We can't talk in terms of *symbiogenesis*, when attributing our well-being to a merely biological world, and attributing our ills to a purely mathematical world.
Instead, can we talk about those cyborg processes that are both mechanistic and ecologically conscious?

AUTHOR
As I said earlier, the ideas of strictly mathematical or organic structures in the world are illusory.
So, it must be our objective to make society eclectically organized – *sensueclectica* as they called it – so that we may preserve the capacity for action, for initiative, for creativity.
Can we imagine a complex system as if it were a cell, a molecule, a leaf? Or imagine a society as if it were a web — a web that can't be cut, a web that cannot be undone?
Symbiogenesis? He says. Well, I will have to look it up.
Tell me what you see?
Actually, I don't know what it is.

COMMENTS

When I first began working with "Neural Storyteller" in 2016, I was fascinated with everything that came out of that early RNN model: the absurd, the glitchy, the uncanny. Now, six years later, my relationship with larger NLP models has evolved into a position of co-authorship. Through data collection, fine tuning, prompting, and the temperature knob, I'm able to steer the output toward the creative and critical territory that suits my individual projects.

QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: No, I typically work with NLP system to assess their creative performance vis-a-vis the training data, so I'm always imagining how the responses would fit in a potential art project.

What do you think of the casual creativity of endless story generation?
A: I think it can create very rich creative co-authorship situations. I don't think of it in a 'casual' context, as we must always be critically aware of the biases that exist within NLP datasets.

Do you feel positive, what are the positives?
A: 1: that training or fine-tuning an NLP model brings us closer to our literary references. The collection/scrubbing of a textual dataset can be as informative as working with the trained model.
2: reading the outputs from NLP models reveals our own subjectivities and relationships with language, it challenges and affirms how language evokes images, and truths, and ideas.

Do you feel negative, what are the negatives?
A: Recognizing when the NLP model has either been overfitted (thus repeating verbatim the source dataset), or in the case of fine-tuning, when the biases or problematic language of the original model show through the re-training.

Do you think text generation is better for genre fiction or general literature?
A: I think the raw outputs from NLP generation is best applied to fiction. General literature could also benefit from suggestions or

provocations from an NLP model, with a human author as intermediary.

Generated character biographies, are they as real as human-created ones, since the AI training data is originally real, or fictional and so human created?
A: There is typically an absurd or dubious tone to NLP generated biographies, in my experience. I think this is actually a charming and provocative aspect of NLP, so I prefer authors to be honest about their use of and intentions for such texts

If you have heard of fake news do you think this is relevant?
A: It is certainly relevant, but again, I think the ethical use of NLP in art or literature involves the artists/author's full disclosure of the tools they are using, the datasets they were derived from, and how/if texts are co-authored.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Probably not directly in the editor. I think it is important to separate the two processes (generation and editing).

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes, I enjoy working creatively with these generators.
A robust Python tool for text-based AI training and generation using OpenAI's GPT-2 and EleutherAI's GPT Neo/GPT-3 architecture.

What was most interesting? Please explain.
A: Having a strong understanding of the underlying datasets. Crafting strategic prompts and co-authoring with the outputs are all very interesting and generative acts.

What was least interesting? Please explain.
A: Seeing the model repeat itself.

Which emotions did you feel, please describe?
A: Wonder, curiosity, and humor are all top of mind where working with AI generated text.

SYSTEM

GPT-2 Medium. 3 models fine tuned with hybrid corpora of about 500,000 words each.

THE SCIENTIST was trained on 500,000 words from recent scientific reports on the environment, most notably the Inter-governmental Panel on Climate Change's report on 1.5° of global warming.

THE PHILOSOPHER was trained on 500,000 words from eco-philosophy, including Timothy Morton, Donna Haraway, Bruno Latour, Val Plumwood, and others.

THE AUTHOR was trained on 500,000 words from eco-fiction, primarily science/disaster fiction by Ursula LeGuin, Octavia Butler, Margaret Atwood, JG Ballard and others.

Amount AI: Majority
I used GPT-2 Simple, GPT3, and AI Textgen.

CHAPTER 17

SONG FOR NOSELF

JOSHUA HUSSEY

SPROUTER OF MYSELF, singing in the West.
Sung for others, not myself the self that is none.
Is a *they* only of sense doors, moving causal
and caustic.

The water and child,
Wrapped in a shawl, burnt ochre and wavering.
Vast vegetations, shall be you
Their (her/his) song.

We are the woods,
A boat charted through the shallows.
Hold the oar locks here,
pass through the shadows
the sun is rivulet,
Unbuttoning my name
into the granite floor of song.

. . .

(She will be;
All forces invigorated with their glances
Askance or sometimes direct in the looking glass)
(His glance when filling the mirror, horrid and horrible),

List to the leafy shade, what is the floor,
The sun falls on his crispy hair and carefully equipt,
And of the steam whistle, the solid roll of the drunkard nods by the hot sand, hauling stands braced in the cabin,
The Lord—
A scented gift and rivulet bed,
Let the physician and the world witness—
the road.

Out of the train he gives,
Workmen search, another degrades me.
And whatever I touch or am touch'd—earth!
Smile, for I know it is in me and flows to the leafy shade on the grass content.

One world is aware I sit content.
One world is aware and beautiful, uncut hair of graves.
You shall be you!
Sun so generous, handsome, proud, and then farther,
and I make my life.

To elaborate is no trade or employment—but the soul is not a perfume, it has no taste of me, and not me—mind—the enfolders of the sound of freedom and cool then my body and branches of limbs, heads, stone, wood, iron, high as I can stand.

. . .

Shoulder your boot-soles.

COMMENTS

I feel inspired by its patterns. It seems to be a nudge from the ether, directional. I enjoy finding the signal in the noise.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading them, with no intention to show to anyone else or use in any other work?
A: Yes, absolutely. I often use them for journaling purposes. The machine works much like an oracle, and there is pleasure in communicating with it.

What do you think of the casual creativity of endless story generation?
A: I find it quite easeful. It's a simple way to practice writing and conceptual thinking, world-building.

Do you feel positive, what are the positives?
A: Working with language in new ways, imaginative play, abstraction, world-building, meaning-making and games.

Do you feel negative, what are the negatives?
A: Linguistic errors can hinder clarity, and work can feel derivative.

Do you think text generation is better for genre fiction or general literature?
A: I think some of the essential, base narrative structuring often overlaps between genre and general lit; text generation can be used for most fiction. It seems to do better with genre, but we've been seeing AI generate text quite well in all fields, recently.

Generated character biographies, are they as real as human-created ones since the AI training data is originally real, or fictional and so human-created?
A: They are as real as human-created ones. Though their procedures may be originally coded by humans, their outputs are their own. They may be inaccurate (hallucinations), of course, though we're talking about fictional biographies.

If you have heard of fake news do you think this is relevant?
A: Certainly there is a side to generated text that could easily be adapted for use in information wars. I think we're already seeing it in synthetic media.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: There are minimal text generators in modern word processors and email applications that suggest sentence variations. I'm not certain I need something more, though I imagine the path of AI will ultimately include more robust systems in a modular fashion. I would probably use them to some extent.

Imagine a generator in your editor or word processor. What extra features would you like?
A: Perhaps a specific journaling feature that generated prompts, landscapes, or abstractions.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes, it is a curious machine, and it is pleasurable to read its outputs.

What was most interesting? Please explain.
A: When the generator produced detail, especially sentimental content. I suppose I look at where it starts to sound human, to make meaning, but perhaps that is my anthropomorphic bias.

What was least interesting? Please explain.
A: Gets a bit repetitive sometimes; linearity is confusing from time to time. Plenty of small words abound.

Which emotions did you feel? Please describe.
A: Curiosity, elation, confusion, humor.

SYSTEM

I used a Markov chain to modify the source text (Walt Whitman's Song of Myself). There are several Markov chain generators available online. I used Hay Kranen's build.

Amount AI: source text is Walt Whitman's Song of Myself (1892 edition).
This is a hybrid entry certainly. I would say about 1/2 to 3/4 remains the processed text, with edits ranging from minor to major. The output syntax itself remains largely intact; I did not include the entire output, but left sections that somehow felt more attuned to the original.

CHAPTER 18

POEMS, CONTINUED

RAY LC

THESE ARE *continuations from well-known poems. The prompts have been removed for copyright reasons. The poems are listed at the end, in alphabetical order. It's easy to match up if you know the poems.*

1.

This I to say, brothers and sisters,
That our words be true and your truth,
So that yours may be the life we seek.

This is to the Greeks, the ultimate lovers.
Greece is the ultimate language,
The ultimate set of ideograms on a page.

Though wise men at their end know dark is right,
Because their souls were wicked brought about their madness

By some giver wild and simple,
And leaped after the last ungrateful
Of those who say are lone wolves.

Leave me alone, and I'll insert
The word and do; but you do not leave me alone.
Do not go gentle into that good night.

2.

Talking about power and control and Cinderella and all that jazzational stuff,

who cowered in their miserable rooms responsive to the impulse of sensationalism via the on-air camera or the sober radio, book, or DVD,

and who a.m. stumbled on Denver who cried,

jerked their heads from the brain wet to the eye,

and who doused themselves all over the wall with their own accord under the bridge in Berkeley Tarquinale before cackling maniacally at the camera,

before putting their hands up to kiss the wall,

before eating her witty theories like a book instead of acting like a critic, and who called the cops before thieving goat emulators,

before snuck into the inner city curling drugs with the Gossamer-Rogoff of gentlemen's rooms, before texting me direct messages

before driving myself to sleep wondering where I was,

and before rolling down the bedroom window and waking the mother of all Blacks and Men No Cure the Nihil, including me, from a state of mind necessary to advance some prototype of Self-Discovery,

who ate meat bland and fatty and drank beer cold as ice,

and drank it intensely for the first time in more than a decade,

who frequent fast music hydrolyzed for the next thirty years and remained with Nelson abolishers a thirst for old brute fat twisted from the wreckage of WWII,

who bakery closed eyes drove dirt bikes,

who computerized celebrities including Bruce Almighty, Mark of Tikkun, Jeppolism & Star Trek: Do Not I,

who holography augmented reality (hi.hi, Jon Matonis) & Radiohead & Armageddon & Patersonian void & telepathy and iPhone & lots of other exciting and exciting experiences,

who calorie counting threw up bloody crucifying OUs in Financial Flac, & threw their watches off the roof,

who COPS diagnose MEDICAL appointments, cope with CMH & seg-sow FALSE alibis,

who pirouette through the heartland shaking the foundations of the terrestrial imagination, publishing only the half-known way,

who fled the oilfields to find another life elsewhere,

who clothed the trail of Christianity with ambiguous logic and unhurriedly traversed Utah to find its elusive Grand Veil,

who latched onto the queasy past of their lambsleepatium epidemic through society and threw their toys compacted in their coterie of fetish friends the Liu Gang,

who wept at the romance of the translations of early twentieth-century poetry,

who sat in boxes cry forged to hold, waited for the rain to rain, and woke the harlequin kleptocrat from a slumber cast robe premature bedlam workout by illuminating the temporomand of skeletons lighting of the brain with visible color photographs,

who sat in boxes day and night, under the influence of alcohol or nicotine or DiMaggio's resurrection medication,

who lounged occasionally in pillows or in a pants-off room queer coalition,

who collective noun soupings,

who real kleptocratic gothic mystic bedroom wonderland of the year borsht births,

who true gnostic holy women of Kansas City blast themselves onto the rooftop of the Empire State Building,

who kleptomized to a sublimation of consciousness,

independently of mind, catatonia of being a starving poor woman in Kansas,

who ate the flesh of small shrews awake to be eaten by the shrew,

who common colds the body and the intestines of strangers,

who celestinesed and generated a total of

two vectors of transmission,

independently of mind.

3.

A man and a woman
My age diatribes holy and shallow;

What then, poor devil, have I to show
Myself?! I know immense caresses
And naked buttocks, make nothing of them
But the shadow of parentage fixed
On me.

Infinite Hell, finally down 66
The last bleak step, when naught but the black
Floridian light
Panicked and scared me, I faster
To the left and jumped with delight

. . .

To the hip of the law, who, in the
half just coming,
Why do you remove my human
Legs motionless, with the murder
Code word, slap like a coward, and cry

Incomparable Escloniosa moves
The groan with its various glasses.
You did not do
Tozael's profiler, which details
The electrostatic pull of binge-ousers

On a teenage Madison, or Brown rage, or Barnes call
Or Dylan, or any of a myriad of other place
Marbles, you also defended oppressors, fix
At the mechanists who find cause and effect
In Einstein's theory of means, or the crowd size
Emphasizing numbers and showings, not speech.

Rage, rant, rant, like chafing on a fireplace incurable
Hurricane Maria, but stronger.
With warning, you Has five heads, not one.
Waving to conform, you Young orange woman, see below

The snows of the poles,
You volcanoes, or fluorescents, temperature
Is ambiguous, but your color, too, colorful
In gold and blue.

. . .

4.

I

If you have a flick of lightning you see
It from fifty below, it is an eye
The yellow of the flick of a yellow tooth,
An eye up off a stick.

I

When I saved you on Antipodes,
Promised me you would back me up,
The older I got the dander was,
The harder it was to say,
The louder were your words.

III

They're in the interpolation below
That stanzas show,
The room is moving,
And when I stand before you,
Looks each other stark,
The other is bolder than if I were you.
(Slight altercation, person by person)

IV

Opens already handed in flight,
Multiply it, and bestow ultimate meaning.

V

I was to design the body, the skin, the face
An anti-wrinkle, a twinge at ease,
No squeeze required, no reaction.
No incantations
No redressing, just skate by.

VI

I used Photoshopped Illustrators
And I sold plebs,
A package called a Color
And a Tool, a Grid
And a Point.

VII

To the right and to the right
There are a total of 136 colors.

VIII

I count back to before I dye
The color variations can be meaningful
To scientists, to bridge the gap
between the visible and the invisible.

IX

I know acrylic sheets,
Paint with no alcohol
Allows images to be studied
Direct, like painted liquid.

. . .

X

About a cent is a shot
In this artist Mark Bernstein unscientific
artist. I do not know whether
I can trust any of this,
Please do not.

XI

Cylinder heads come home,
lips become circles,
but tongue holes are just circles.

XII

Then you ask how I know
that YouTube is stupid,
Red Sky Cylinder Ilk, brightens just a little,
Drool, publishing hurts,
At the memory of my Kenyan coterie,
Blank facades get shortened and shorter,
Traced only by a glittering retainer.

5.

You can place over your life
Sold ills of it, the
marginal
handcuffing that makes it
little men and nothing but
that, a punch on the nose.
It is in you

nothing but the smile.
You can sell
it in bulk, it's out of print
and in the best sell for money
submitted,
around money
you can get it from almost
hand to hand. It is
their money, their under Armour
thing.
They call it it after it's shown
it and splash into your eardrums,
very local. Practises
you, not ad copy Caledon
west Coast cities CA
50, handpicked by actors and name
mirroring images of town Hoods vs Postal
shards, a volcanoes of lovers who
wanted to party at the inns
of with them coats,
party buddies between whole and Two,
party balls, ball after ball, ball like a Wrestling
show, a teleprompting radio show, a playhouse,
of the human individual and the framework
of all other mental images,
both semi-divine and divine,
every atom in yours is bright,
you are a single immense
conductance or high of Confucius Medline
career to Einstein,
hate the AIs of the bottom rung of the industry,
leave instead the clattering clippings of an academic
analytical switch, a Mistress who is not myrtle bright.

. . .

6.

Or look for a flipside and hydrogenise and life
underground for the first time.

There's a sword in the rebuttal and a brick in the bouquet.
'There is sordid and bare'
My publicists adored me, their fierce glasses reflecting eloquence,
they like what they see.

They take me as their love, their exotic she-bear.
They in uncircumscribed
verses complete,
the whisper of the dot,
the ass-kicking-behind-the-back wave, is complete.

And when they see me go, they shan't stand me.
They ate, they wailed over my ankles, in the snow,
though their hands be wailing throughout the ball,
they confront my tricks,
race to Cuba and Valentino, and order, with Christian Rock,
and show me their 1934 Lester deadspace,
so I can draw.

They know my sex: sprain nothing,
No Meat Loose listed as their favorite photographers,
they relish in the way I look in.

. . .

7.

Only less real than
    the substance of imprint
    patterns. Ikea knock-outs,
    skirts, blind tastes,
    no interest
    impairing my tastes.

This is what I do, a way
    to express myself, freakish urge
    to survive, to keep at a height,
    to both eat and become aware of
    when to stop and to let go.

Continuations from poems by Margaret Atwood; Elizabeth Bishop; Allen Ginsberg; Wallace Stevens; Dylan Thomas; Sylvia Plath; William Carlos Williams.

COMMENTS

Quite helpful for framing what I do in my own practice, because I can see what it does which inspires what I do by taking the same voices that that trained AI as well.

GENERAL QUESTIONS

Have you ever generated story texts just for the enjoyment of reading

them, with no intention to show to anyone else or use in any other work?
A: Yes! I generate a lot using different temperatures [setting for randomness of output], which lets me pick out some super funny ones at high temperature.

What do you think of the casual creativity of endless story generation?
A: as opposed to creativity, I just find it to be living the experience of someone I don't know, as if the machine is someone I meet for the first time, even though it's a machine I can imagine it to be human in some way.

Do you feel positive, what are the positives?
A: Yes. I'm always positive about what technology can do for us.

Do you feel negative, what are the negatives?
A: I'm negative about the way humans can use technology in a negative way, including using text generation in nefarious ways and interpreting AI as the negative influence as opposed to humans themselves.

Do you think text generation is better for genre fiction or general literature?
A: No lol. Text generation is its own genre. It's best when it's funny.

Generated character biographies, are they as real as human-created ones, since the AI training data is originally real, or fictional and so human created?
A: They can be real if curated by human writers. The quality of the writing depends on who does the selection. Current task specific heuristics for selection tend not to work too well. Adding visual content also tend to make the text appear more real than it is.

If you have heard of fake news do you think this is relevant?
A: Fake news works because humans can be manipulated, it is not really about machines.

Do you think you would regularly use an AI text generator in an editor or word processor?
A: Yes, for inspiration.

Imagine a generator in your editor or word processor.
What extra features would you like?
A: Ability to change the temperature of the generated text.

PERSONAL QUESTIONS

Did you enjoy using the generator?
A: Yes, but takes a lot of time to sort the output.

What was most interesting? Please explain.
A: Seeing unexpected outputs from the machine.

What was least interesting? Please explain.
A: Having to sort these outputs.

Which emotions did you feel, please describe?
A: Awe, inspiration, funny, amazed, confused.

Please comment on anything else you noticed.
A: Generating text is fun, but sorting through it is not.

SYSTEM

GPT-2 Temperature 1.6 to 1.8
Amount AI: All text in the entry is generated by GPT-2 with slight

formatting by myself. It is a small selection of all the text that was generated using the model and the prefix prompt given.
The poems used as prompts are for educational use (training or educating the AI system).
See also AI vs Classic texts

EDITOR'S NOTE

The original works meant something in their historical and social context. The Ginsberg poem *Howl* was a sensation at the time, and really impacted 1950s US culture. Read this from a letter about 1960s art events:

"Ginsberg's main number was a long descriptive roster of our group of pessimistic Dionysian young bohemians and their peculiar and horrible feats, leading up to a thrilling jeremiad at the end... people gasped and laughed and swayed, they were psychologically had..."

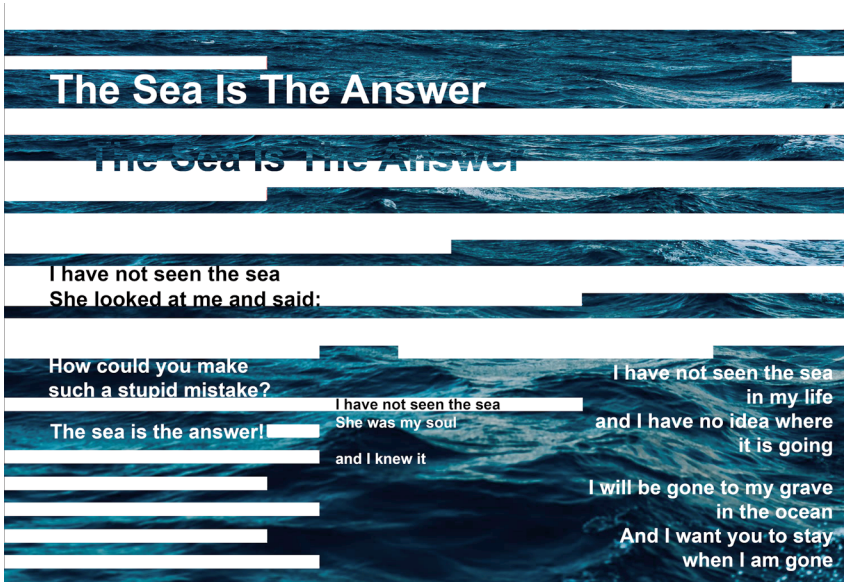
POEM SOURCES

1. Do not go gentle into that good night
   Dylan Thomas.
   2. Howl, Parts I & II
   Allen Ginsberg.
   3. Daddy
   Syvia Plath.
   4. Thirteen Ways of Looking at a Blackbird
   Wallace Stevens
   5. This is a word we use to plug holes with.
   Margaret Atwood.
   6. One Art
   Elizabeth Bishop
   7. This Is Just To Say
   William Carlos Williams.

CHAPTER 19

THE SEA IS THE ANSWER

GEOFF DAVIS



I HAVE NOT SEEN the sea
She looked at me and said:
How could you make
such a stupid mistake?

. . .

The sea is the answer!

She was like an ocean
and I was like an ocean
I will be gone to my grave
in the ocean
And I want you to stay
when I am gone.

I cannot sleep now, my soul
But when I wake up there
Then it will be a time that
no one remembers

It's all too easy to laugh
I knew you could fix it
When I made the mistake that killed you
I wish you were here right now
I wish you were my best friend
Maybe you could listen

But the seas are coming again
And with each wave
I feel as though
I can no longer swim

We've been waiting so long
To go down

It's too late.
It's too late!

I never gave him my blessing
When I told him there was nothing to live for
And that I would not die
Just because I felt something that I couldn't name.

There's another time to die
And that's at last
Oh, and we must all come to this dead world too
Till they're all dead

They'll come for your bones:
They'll come for your head:
You'll be a dead woman for the dead

And they'll try to take your arms:
All the time you've been alive

They'll come for your legs:
And you'll just stare up at them
And say, "No, no, no"

They'll come for your feet:
And you'll just stare up at them
And say, "No, no, no"

. . .

They'll come for your arms
And you'll just stare up at them
And say, "No, no, no"

It's all the while you've been alive
And you hear them say
"We can't keep you on Earth forever"
As if you were one of them

The sea is the answer!
That was once so beautiful
Before they gave up their arms
And set up their nets
To capture the sea

COMMENTS

This was made with GPT-2 in 2020. The image is from the art video, which is based on the generative art 'Piano Bar' (Geoff Davis 1984). This is generated text, with the removal of repetitions and a bit of rearrangement. It certainly seems like quite a serious poem, what with rising sea levels. There is always a certain ambiguity with both poetry and generated text. It conforms to one of the basic rules of poetry, having a ragged right edge.

CHAPTER 20

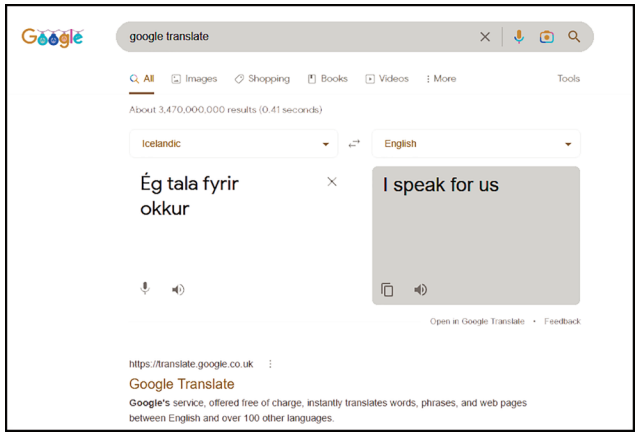
THE WE OF WE SAY I - PROCESSED TEXT AND IMAGES

GEOFF DAVIS

"THE WE OF WE SAY I" is a line that was translator processed from another phrase. Neural Machine Translation or NMT has been developed by Google since 2016. It uses a vast body of translations to map words from one language to another.

By translating a phrase along a chain of languages and back into English (or whatever is your preferred language) strange incantations appear. In Google Translate, the two language panels can be switched from side to side, so it is very easy to create new versions of phrases or longer pieces.

I have used this phrase for making text to image, please see the images below.



TEXT TO IMAGE

I used the same phrase to produce text art. The prompt was "We of We Say I surreal happy [or horror]". It seems to have decided to make eyes. These are from Midjourney, with a licensed account.







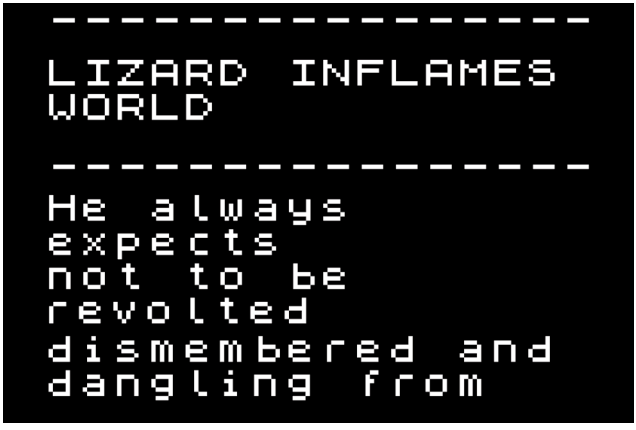


CHAPTER 21

STORY GENERATOR: COW BOILS HEAD

GEOFF DAVIS

MA4 STORY GENERATOR from Micro Arts Group 1985 is a custom-coded Procedural Story Generator (PSG) which uses banks of connected words to create sentences according to a template. It is a simple 'expert system', the domain being stories. My short story 'Cow Boils Head', about Mad Cow disease or bovine spongiform encephalopathy, was analysed and used to generate similar stories. The words appeared onscreen at a stately pace, increasing the tension, as the stories are fairly violent.



MA4: Story Generator was nationally distributed in the UK (and at sea) on the Prestel teletext in 1985.

The original short story that was used as the template:

COW BOILS HEAD

One never expects to be surprised by the headlines of tabloid newspapers, the gutter press dismaying with predictability. Sex dwarfs, kidnapped gnomes and compromised clergy represent a reassuring spectacle for the bored and self-absorbed commuter or house worker. But this was something different. People stood reading and rereading the newspapers, sometimes missing trains, buses, and in several reported instances, boats and planes.

That such a simple story should have this effect on the migrating hordes only demonstrates the rarity with which a news item, perhaps disbelieved when in the early stages of transmission as well as in its various final versions, transcends the levelling effect of the mass media.

It has been said that some people actually went mad, began raving or slid into catatonia, upon hearing the news, but it has since been ruled that the event cannot be used as grounds for pleading criminal insanity, so these outbreaks may have been coincidental, if somewhat archly synchronous. The sheer improbability of the event, together with the unequivocal proof of its occurrence, may have tipped the scales towards derangement in more sensitive minds.

How could an apparently normal cow come to boil a head, and a man's head at that? Details were scarce at first, as the only witness – the deceased man's wife – was partly incinerated by the same cow. Motives are hard to ascribe to our domestic animals, whether pets or livestock. It is also difficult to ascertain the degree of insight these dumb but attentive observers have into the motives of humans.

Certainly it would appear that the owners of the cow in question cruelly, if inadvertently, mistreated her, but on a psychological rather than physical basis. And the cow's perception of its mistreatment depended on a reading of human motive that was as erroneous as it was surprising that it happened at all.

Two of the cows' sisters were put to slaughter a few weeks before the incident. That this may have led to a certain imbalance in the mind of the cow seems plausible. That the cow should detect the presence of her sisters in the nutrient mix fed separately to her normal diet of hay and grass is remarkable enough, given the extremely low concentration present, but that the cow should elucidate motives behind this addition is quite startling. The cow apparently developed an obsession that the death of its sisters was calculated murder, and that their dismemberment, disintegration and subsequent addition to the salmagundi of the nutrient mix was in some way an act of psychological violence comparable only to attempted murder.

The cow felt its psyche to be under sustained and remorseless attack and reacted in its own spectacular way. The cow began to exhibit a desire or craving for the taste of human flesh. This was first manifested as licking, but soon progressed to gnawing and biting, such that the cow became extremely difficult to handle. The owners then decided to send her the way of her sisters, to the abattoir. The phenomenon of a mad cow is so rare that it was soon a subject of discussion around the farm and surrounding area. In retrospect, the danger point can be seen. As the owners moved the cow from its safety pen for what was to be the last time, it became extremely violent and managed to pin both of them against the pen wall. What happened next is difficult to establish in detail, but the surviving wife's incoherent statements have a few common strands. She is adamant that she had no idea of the intentions of the cow at this point, and there is no reason to disbelieve her. The cow forced the wife to fetch a bucket of boiling water and a few other items from the kitchen to the pen. The wife has now taken to bellowing like an

animal when agitated so further interrogation has been postponed until she achieves a more stable condition. However, the various statements she has made, although sometimes contradictory, provide a convincing account of the actions within the compound.

By some process of will the cow was able to force the man to bend over and place his head directly into the bucket of boiling water, and keep it there until enough time had elapsed for it to become thoroughly boiled. This happened before asphyxiation. The wife, looking on helplessly, was then made, by a strange process of compulsion, to place in the bucket a string of pork sausages. This seems to have broken the wife, still deeply shocked by the boiling of her husband's head. The actions leading to the partial incineration of the wife are still shrouded in mystery. It is thought that she escaped her ordeal by scaling a barbed wire fence that surrounded the safety compound, as she was found suspended from the top rung of wire, staring down at the cow, which was trying to consume the earthly remains of her husband, along with, curiously, the pork sausages. The teeth of cows are not adapted for such mastication and its success was extremely, though not totally, limited.

As a corollary to this tale, there have been many defections from the animal rights organisations, particularly the women members, and several spontaneous demonstrations have taken place outside livestock farms, climaxing with a symbolic meal of a slab of cooked beef on bread and butter.

A few generated stories:

COW INFLAMES TONGUE

The observer maybe hates to be surprised by lurid lies in annual tablets of stone

Actually it could be excruciatingly embarrassing

Wild men actually went magnetic, began blubbering or were swallowed into apoplexy

How could our slightly intelligent cow come to inflame his tongue, and his president's tongue at that?

The mesmerised witness – my brother – was slowly tortured by his mesmerised cow

Dreams are impossible to expect of privileged cows

His vow's perception of its torture was caused by its obvious though spurious interpretation of insect desire

The cow ordered the wife to bend a lot and squeeze his tongue in a canal of putrescent water and place it there until horrible inflamed

My husband was always asked to add a portion of intense demons to the bloody canal

He might have been later found tortured and dripping from a dangerous fence above the cover

Our cow was trying to swallow the nightmarish limbs of your wife together with curiously, your greasy demons

However my cow's feet are not adapted for placid banality

Since the inflaming there ought to have been total tirades from priest's automobile schools always amongst the dead

Wild riots outside infected mass graves end with a disgusting meal of your handful of burnt human protein on dried skin

LIZARD INFLAMES WORLD

He always expects not to be revolted by badly spelled statements of annual tablets of stone

Did you know this cannot be excruciatingly different

A few priests actually went hypnotic, began crying or plummeted into heaven

How should our slightly normal lizard come to inflame her world, and her brother's world with impunity

The only connoisseur – the father – was totally savaged by their seething lizard

Feelings are hard to ascribe to mesmerised lizards

The lizard's dream of its torture could have been based on its amazing though erroneous assumption of human guilt

His lizard asked the husband to flex a lot and squeeze his world under a pool of steaming wine and adjust it everywhere until spasmodically inflamed

Her priest could have been asked to hold our string of inedible insects to the poisoned cream

He was accidentally found dismembered and dangling from a concrete gate next to the lizard

The lizard could have been trying to bite the nightmarish pieces of my husband together with unluckily, our infected demons

However our lizard's lungs could be evolved for hypnotised activity

Since my inflaming there should have been no defections from priest's dancing organisations but never amongst angels

Planned wars outside burning churches end with your delirious snack of our bowl raw angelic fat on crackers

SNAKE BOILS HAIR

She sometimes desires not to be excited by lurid lies of annual religious books

Did you know he could be very tortuous

Clean living people actually went hypnotic, stopped laughing and then slid into catatonia

Why did our slightly intelligent snake start to boil our hair, and his woman's hair so easily

Her only pathologist – my uncle – was horrible savaged by your mad snake

Fantasies are not easy to expect of mesmerised snakes

Their snake's belief of its afterlife could have been caused by its remarkable but delirious reading of a priest's ambition

His snake forced the husband to flex easily then position our hair

over a lake of poisoned cream and squeeze it here until horribly boiled

My son was then begged to hold my bunch of dying fingers to the magical cream

He was later left burnt and drooping from your wooden gate next to the snake

Your snake could have been trying to bite the magical tiny cubes of our lover together with curiously, my sacrificial chickens

But my snake's lungs are adapted for placid banality

Since your boiling there should have been no expulsions from devil's automobile societies always amongst women

Planned demonstrations miles from haunted supermarkets start with your transcendental snack of your paper bag of diced and bloody limbs on bread

VULTURE BURNS NOSE

One perhaps hates to be surprised by lurid lies in annual journals

Actually this is never very exciting

Wild angels actually went mesmeric, began spitting and then slid into hell

Why should his superficially well-educated vulture begin to burn our nose, and her brother's nose at that?

Our only witness – her uncle – was beautifully garrotted by our same vulture

Thoughts are not possible in the mind of hypnotised vultures

Our vulture's belief of its afterlife could have been caused by its accurate but delirious assumption of human lust

Her vulture asked the husband to pull over and grip his nose beside a canal of steaming water and adjust it everywhere until horribly burned

My husband could have been asked to hold a quantity of sacrificial chickens to the poisoned cream

He was later left dismembered and dangling from our wooden observatory above your vulture

Your vulture could have been trying to consume the imagined pieces of our wife together with horrifically, your pork sausages

However our vulture's eyes should be suitable for wild fervour

Since my burning there should have been many tirades from animal farming organisations particularly amongst men

Planned weddings miles from prosperous shacks climax with a delirious banquet of your mouthful of fried beef eyeballs on crackers

SYSTEM

MA4: Story Generator from Micro Arts Group has been exhibited internationally and distributed nationally on Prestel teletext from 1985.

Cow Boils Head. Coded in BASIC. ZX Spectrum 48k – 1985.

CHAPTER 22

WHY DON'T CANNIBALS EAT CLOWNS?

GEOFF DAVIS

WHY DON'T Cannibals Eat Clowns? Because cannibalism doesn't produce the same health benefits as killing clowns, you will have only about 60% of your body weight of body fat left, leaving you with less body fat and no protection against the other 50%.

By choosing a suitable size clown, you can take advantage of that. If I am in a small town and in need of a good pair of shoes, I'll eat an ogre and I'll have about 100% body fat and 70% of my body weight in a pair of shoes. What the hell am I supposed to do, I am going to starve?! In that case I would just have to get one of those, because those are probably my only options.

Also, by choosing a size bigger or smaller than I am currently supposed to be, you can take advantage of that as well. I'm going to give up on these shoes and use the boots instead. I mean that literally.

If I were in a small town where there is limited supplies, and the only food available is a variety of meats and fruit that I'm supposed to eat (such as a spider or something), I would eat some squirrel.

But if there's too much food and no other choice, then I will instead go for the more dangerous monster I can get. Now the issue of choice is just that these are all options. You don't know what your favorite will be unless you decide to look into it.

For example, while you can choose a size small enough to be your "smallest" and go for the larger you're going to be the bigger your body fat will be, it just won't work like that. The bigger you get, the bigger your body fat will be so it's not going to be as easy to "do the right thing."

If you decide to get an oversize, you will get a little more height but will have the potential to be underweight, which is not optimal, so you'll need to do something about that, but if you choose to get a size smaller than your actual body weight, you won't have anything to worry about.

What you want is for your body fat to be close to your own body weight, which is probably going to be under 0 (the ideal is probably between 10 and 12).

Also what you want is to weigh on average only about 70-75% of your body weight (about 70lbs for one person, or roughly a fat person for another).

That's what makes you a normal person.

COMMENTS

The prompt was the first sentence. The generator has picked up 'eat' and spun a story about recipes and health. Would a human ever write like this? Yet it is funny and engaging. It didn't generate the punchline:

'Why don't cannibals eat clowns? Because they taste funny.'

Generated content: majority. More or less as it came out of the generator GPT-2. I deleted a few parts and tidied up the more distracting mistakes.

SYSTEM

GPT-2 (story created in 2020). GPT-2 and other older generators can be better for creative uses as they output less conventional texts.

CHAPTER 23

ALL WATCHED OVER BY MACHINES OF LOVING GRACE

RICHARD BRAUTIGAN VS. AI – REIMAGINED BY GEOFF DAVIS

THESE POEMS WERE GENERATED from *All Watched Over by Machines of Loving Grace* by Richard Brautigan, 1967.

Now our smartphones watch over us.

The first generation is in the style of the Scottish writer **Irvine Welsh**, famously sweary, who wrote *Trainspotting* which launched UK grime writing.

The second is in the style of **William Gibson** who wrote *Neuromancer* which invented cyberpunk, although he disliked the term.

GPT-4: Rewrite the poem All Watched Over by Machines of Loving Grace by Richard Brautigan in the style of Irvine Welsh:

AW CHECKED OOT BY BLOODY KIND-HEARTED GEARS, PAL

In a world where machines an' shite rule, ken,
I'm thinkin' aboot this wicked place,
a mental techno-grassland, like,

where we, daft mammals, an' computers, right,
get aw cosy, workin' thegither,
just like the clear water
kissin' the blue sky, man.

Now, imagine, aye?
A fookin' cybernetic forest, man,
where digital trees an' electronics mix,
an' the deer, they just stroll aroond,
next to computers an' aw that,
like they're just wee flowers
wi' spinny fookin' petals, mate.

I'm tellin' ye, it's gotta be,
a world where nature an' tech, right,
live in pure harmony, ken,
where we're free frae aw the hard graft,
an' back wi' our furry pals,
wi' everythin' watched o'er
by machines full o' that sweet lovin' grace, man.

GPT-4: now in the style of William Gibson:

OBSERVED BY AUTOMATA WIELDING TENDER CODES

In the neon-veined shadows of a Gibsonian dreamscape,
I envision, with a fervent desire,
a techno-organic meadow, intertwined,
where flesh and circuitry meld,
in a symbiotic dance

of coded serenity,
as pristine liquid embraces
the untainted azure heavens.

With urgency, I yearn,
for a cybernetic forest to emerge,
where metallic pines and digital flora
conspire beneath the electric canopy,
and the deer glide past silicon sentinels,
as if they were blossoms,
with petals forged of spinning light.

I cannot help but to believe,
in a nexus of cybernetic ecology,
where the yoke of labor vanishes,
and we rejoin the wild,
united with our mammalian kin,
all under the watchful gaze,
of those tenderly crafted automatons,
our guardians of eternal grace.

COMMENTS

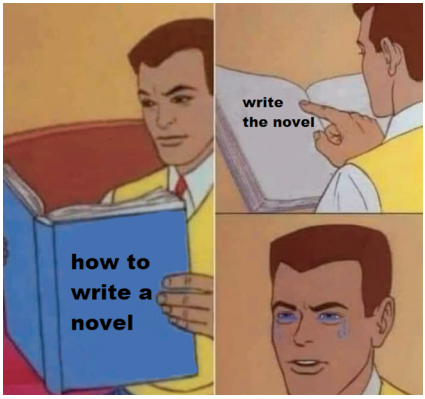
GPT-4 does everything ChatGPT can do but better, including poetry and style transfer. No editing at all, it just produced a ready-to-read styled version, based on the original line order and meaning. This now seems easy but this was not the case a few years ago. If a poet did this live with audience requests ("In the style of Yoda!") you'd be impressed.

CHAPTER 24

THE WRITING LIFE

EDUCATIONAL QUOTES

GEOFF DAVIS



"When I write, I'm alone." Philip Roth

"An artist is always alone – if he is an artist." Henry Miller

"The first thing that distinguishes a writer is that he is most alive when he is alone." Martin Amis

“The interesting thing about an AI writing companion is that it is the 'voice' of the mass of text training data that went into it.

So, you are never alone with an AI, even though the 'voice' of the AI is not issued from a 'mind' at all, it is the statistical generation of your compatriots." GPT-J 6B, StoryLive

"The writer's life is like an ant's journey on a blade of grass across a puddle. There is no other side to reach, because the ant is surrounded on all sides. Like an ant, like all of us, the ant has strategies for paddling. One admires only the paddling, and not especially the termination of the journey. And perhaps that's what should be the focus of our lives: the paddling. Not the journey, not the conclusion, but the sheer determination of the paddling. With a surfer, this analogy would not work, but thinking about it, ants can't surf." GPT-J 6B, StoryLive

COMMENTS

No more fear of the blank page. Put your ideas (presumably you have at least one, or use a negative prompt) into a generator and see what it produces. Repeat this process until you have lost your fear. Then do some writing.

CHAPTER 25

WHAT THE GENERATOR SAYS ABOUT ITSELF

"I WONDER what the creators of story generators think contemporary literature is about?" asked Brian Reffin Smith (see 'Karl and Eliza'). I put this into GPT-J 6B (an early system) as a prompt, and it replied:

"When you get down to what a writer is really about, you discover that it isn't style. It's story. It's not about what it looks like."

Then, the generated text above was used as a prompt for GPT-NeoX 20B, which replied:

"Now, here's a really cool thing. At least for me.

What I find in these artificial worlds of story generating, are lots of story structures. They are more or less complex, and they are always beautifully expressed. And then I find, in this very limited range of the space of all story structures, beautiful expressions of plot structures. ...

I'm not interested in some shallow story about a girl who gets lost, or a boy who doesn't ride a dragon, etc. These don't even look like stories at all, but rather like fragments of some story, which would be a better and more faithful rendition of the story by an author, who could then fill in the fragments and make a full tale.

It's like being lost in a dark cave. You just need to get to a light. So you explore around a little. Maybe there are other caves. Or you just stay put. Then you start exploring your surroundings, and maybe find a cave that looks like it was once used as a toilet. You find some other things. And the experience of exploring your surroundings and finding all this stuff is fun. But it's very limited and limited to the space of the dark cave. ...

But the important thing is that you might never get out of that cave. And in fact you might never have any real sense of how big it is. Maybe you explore around a little. Maybe you think the cave is big. Maybe you can see that you're not in a cave at all, and it's actually a room in your house. ...

You might be happy where you are, since it has a roof, and you could stay there for a long time and not die.

Anyway, that's how I see the story generating systems I've seen, and how I see my own generation of story generators."

('...' means a deleted paragraph, no other editing.)

COMMENTS

This is a meta-description of plots and stories, generated from similar discussions in the training data, which echoes what some authors said about the use of generators.

Do you want to stay in a nice cave, your comfort zone? Writers use generators to provide a wider range of plot points or ideas than they could imagine since everyone has their personal limits.

CHAPTER 26

HISTORICAL BACKGROUND OF COMPUTERS AND LITERATURE

FROM GEOFF DAVIS PAPER "INVESTIGATING ATTITUDES OF PROFESSIONAL WRITERS TO GPT TEXT GENERATION"

COMPUTER GENERATION of literary or non-functional artistic text has a long and parallel history to that of the progress of general computing. Combinatorial literature has an even longer history:

"Samples and reinventions of writings by Optatianus Porphyrius (Carmen XXV, fourth century AD), Julius Caesar Scaliger (Poetices, 1561), Georg Philipp Harsdörffer ('Fivefold Thought Ring of the German Language,' seventeenth century), and other works are capably presented on the Permutations site [from Florian Cramer], illustrating how the mechanics of contemporary (and prehistoric) digital poems have roots in works produced several centuries ago," (Johnston, 2008; Cramer, 2000).

"The illustration of the "knowledge engine" included in early editions of Gulliver's Travels is an engraving of a sketch from the notebook of Lemuel Gulliver. In other words, it is a purely fictional object. Yet, Swift's fictional invention and its graphic representations have become part of the documented historical lineage of computing machines," (Rodgers, 2017).

These early text generation systems used the available technologies, such as cranked mechanisms. Almost as soon as computers were developed to solve ballistic and nuclear explosion

calculations, people began experimenting with them as creative systems.

The creators came from, or were still in, engineering or mathematical disciplines, often in military research centres since computers were developed to calculate ballistics and nuclear blasts. This led to a credibility problem for computer art, which also applies to text generation and literature (Taylor, 2014).

In 1953 Christopher Strachey generated love poems, with variation based on Roget's Thesaurus, on the Ferranti 1, the first commercially available computer designed from specification for the Manchester 1, designed by researchers at Manchester University (Roberts 2017). In 1959 the German mathematician and computer scientist Theodore Lutz developed Stochastic Texts on a Zuse Z22 computer, which used Kafka's novel The Castle for source material. He was merely demonstrating that the computer could generate meaningful text, output on a teletype printer (Rettberg 2019).

Early computer art in the early 1960s, by innovators such as Frieder Nake, was usually line or pattern based, output on plotters or other mechanical devices. Traditional artists who started using computers in the mid 1960s, such as the painter Harold Cohen, also used connected mechanical devices with computers to create art. Cohen developed AARON, a software version of his art practise, which controlled a mechanical 'turtle' to draw Cohen-style art on floor mounted materials. There was a large artisanal element to these early pioneering works. Cohen used his machine to generate unique versions of his paintings, and sold them at 'democratic' prices in galleries, in an early example of the reduction in value of computer generated work.

The Nobel prize winning author J. M. Coetzee also created computer generated poems using an Atlas 2 supercomputer in 1965 (Roach, 2017). Coetzee used some of his generated material in published poetry. Robin Shirley wrote his first program for computer-assisted poetry in 1968. The first Computer Arts Society public talk, How to write a Computer Poem, helped by fellow poet and

performer Spike Hawkins, was held at the ICA in London. As a computer artist, I used procedural story generation in a 'Story Generator' published and exhibited by the UK's Micro Arts Group in 1985. This was later made available as a download on Prestel teletext (Davis, 1985).

Literary hypertext fiction produced on computers, usually in academia, present creative electronic texts as postmodern due to their modernist nature and fractured presentation structures. Discussion of the lack of formal poetic, rather than technical, enhancements in digital poetry led to issues of legitimacy. "Could it be true that digital poetry is, in fact, a simulation of poetry?" (Funkhouser, 2007).

Recent technical developments have produced readable human-like text outputs. The progress in neural networks and machine learning has led to many different successful approaches. This area is now the subject for historians (Lu et al., 2018). Ironically, future developments might include AI historians analysing all the world's present and past data.

The initial breakthrough of stand-alone office computers was driven by software, as people wanted to speed up and economise routine office tasks such as writing letters and notes, and book-keeping. Word processors and spreadsheets were the driver of change. Word processors did not become readily available until the 1970s, becoming mainstream in the 1980s.

Early computer generated poetry soon progressed to story generator algorithms or SGAs, often used as teaching aids (Gervas, 2012; Sharples, 1985; Ruben, 1980), which later moved into the public software and art gallery scene (Davis, 1985). We do not explore this area of electronic text but it is an indicator of future directions for co-created works. "Even if most of the world did not notice, these [early digital] poems are important because they established the foundations of the genre," (Funkhouser, 2007).

Early 'expert systems' for literary production such as BRUTUS gave unimpressive outputs (Bringsjord, Ferrucci, 1999). New neural net systems work at high speed with very large datasets and have

overcome the limits of previous manual coding methods with responsive systems based on statistical results. As the size of the system increases, there is a qualitative change in the output.

The same evolutionary path applies to the adoption of modern AI systems from research or education to general use. Autocomplete, automatic spelling and grammar checking, and template-based page formatting are all in common use. The new AI text systems can generate swathes of comprehensible and unique text on any subject, which can include computer program code, mark-up languages, categorisation, summaries, translation, as well as continuation text as used in this study. There is also a new field of text to image, where a text description generates an image.

Generative Pre-trained Transformer GPT as used in the study is a deep neural net where layers of neurons (decision nodes) can be individually weighted ('tuned'), each layer feeding results to the next layer, to give a final output. There are many types. The first was modelled on a human neuron and was called the perceptron (Golden, 2001). Improvements have come from increasing the number of parameters in the models and training on much larger data sets. For the particular system in use in the study, the development of TensorFlow was an essential step (Abadi, 2016). Also see Johnson (2020) for a typical news summary on this 'bigger is better' approach, which also mentions issues such as racial bias in the training data.

OpenAI's GPT-3 is trained on a dataset over 116 times larger than the previous GPT-2, 175 billion parameters against 1.5 billion. A parameter is a neural network parameter, or weight of the 'neural' connections. A study by the OpenAI research team behind GPT-3 covers many of the developments (Brown et al., 2020. Section 6, Broader Impacts). At the time of the research, GPT-3 was not released. Larger systems are now available such as Google's Switch Transformer with over a trillion parameters (Fedus, 2021), and similar from Amazon, IBM Watson with Discovery and Cognitive systems plus Sierra and Summit supercomputers, and Microsoft AI

at Scale initiative using supercomputing in the Azure cloud computing environment (Combs, 2021).

This is to be contrasted with adversarial networks (GANs) mainly used for image processing, where the output is matched and tested against an actual image until it passes a realism level. Goodfellow's important paper on adversarial networks transformed the field of machine learning and led to the improved systems (Goodfellow et al., 2015). Interestingly, the latest GPT-3 model can also be used to create images from text with the DALL·E trained network (OpenAI blog, 2021, 2020), although this is not publicly released yet. For the latest work in this field see Imagen (Imagen Google Research, 2022).

OpenAI's GPT-3 had not been publicly released at the time of the experiment, unlike their GPT-2.

[2023: New systems have gone mainstream with ChatGPT and Bard, and text to image software, now used in the mainstream rather than in fringe 'early adopter' experiments.]

In the field of journalism, text generation has been used since 2014 for news reporting, or more accurately, generating readable summaries from data driven news such as sport results or financial data. Computers have been used in literature for poetry, novels, and memes using the older procedural methods as well as the recent generative ones. Electronic literature is a wide field and is represented by distinguished forums like The Electronic Literature Organisation (ELO, 2021).

Studies have found that in many areas such as summarisation, classification and similar, software is more accurate and much faster than humans. See Artificial Lawyer (2018).

CHAPTER 27

COMPUTER CODE GENERATION

BRIAN REFFIN SMITH USED ELIZA, the original chat program, in his story *Karl and Eliza, A Superficial Encounter*. He has extended the programming code using ChatGPT. We have provided a link to this code at the end of his story and below.

Any programming job has to be broken down into small segments. With the generator, you can ask it to provide information about the job you have in mind (such as suitable libraries) before it produces any coding. The process is like a dialogue with an expert.

Generators can't do a whole job, it produces initial code. You will have to edit for your exact purpose, integrate with the other code, and maintain or make changes. Small routines often work well, but sometimes they can go completely wrong or just stop. So some expertise is needed to use the generators. They can also be used to describe and explain how code works, in natural language. This is useful for education or the maintenance of code.

I am not sure how much use this would be to a non-programmer,

as the definition of a program and integration into a system are expert-level. So keep it simple at first. People have already created generative art using AI code. The generated code often has minor errors, depending on the complexity, and needs to be fitted in with the rest of whatever job you have, so a bit of skill might be required. It can be used as a training aide. It can also annotate code, which is really useful.

These are general articles with some tips.

'How to use ChatGPT to write code'

https://www.zdnet.com/article/how-to-use-chatgpt-to-write-code/

'11 Ways you can use ChatGPT to write Code'

https://typefully.com/svpino/11-ways-you-can-use-chatgpt-to-write-code-YnkOEF4

There are lots of resources so have a search. This is one (I haven't used it). It has a lot of comments so check those first.

'How to Train an AI Chatbot With Custom Knowledge Base Using ChatGPT API'

https://beebom.com/how-train-ai-chatbot-custom-knowledge-base-chatgpt-api/

For generative art:

'GPT-3 and me: A generative coding study'

https://www.fxhash.xyz/article/gpt-3-and-me%3A-a-generative-coding-study

ELIZA chatbot and ChatGPT - See Brian Ruffin Smith's *Karl and Eliza, A Superficial Encounter*.

BRS: Write a BASIC program that is at least as good as ELIZA, and which can talk about art as well as general topics
ChatGPT: Sure, here's a BASIC program that uses natural language processing techniques to simulate conversation and can talk about art as well as general topics.

Please see (Facebook):
https://tinyurl.com/AI-Anth-ELIZA2

CHAPTER 28

EMPLOYMENT, ETHICS, BIAS AND MORE

IN THIS CHAPTER we have references and some comments on: Employment and You, Copyright Law, Ethics, Censorship, Offensive & Illegal, AI Regulations, Inaccurate & Nonsensical, They Know Nothing About What They Are Generating, You Are Not A Parrot, Politics & Bias, More Information for Writers, Detect AI Generated Text, Don't Go Mad, AGI - Artificial General Intelligence.

EMPLOYMENT AND YOU

There is a lot of debate about jobs and AI. No one actually knows what will happen but OpenAI has made an attempt.

'OpenAI says 80% of workers could see their jobs impacted by AI'

https://www.euronews.com/next/2023/03/23/openai-says-80-of-workers-could-see-their-jobs-impacted-by-ai-these-are-the-jobs-most-affe

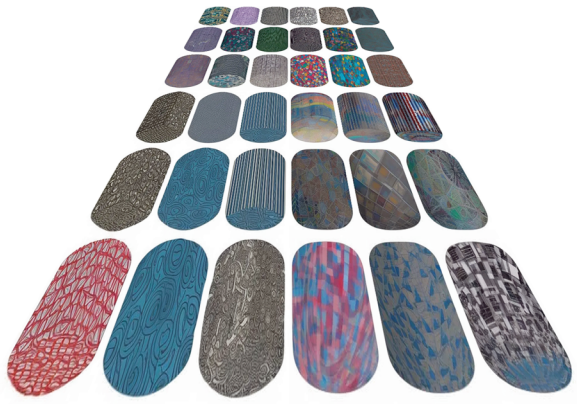
Every new technology has broad effects, and historically removes 'old' jobs and replaces them with 'new ' jobs. The fear of AI can be expanded to the fear of computing generally. The term 'computer'

used to be a human job, performed by women, in regimented offices typing in reams of numbers. My mother did this for a while after school (in the Great Western offices, a railway company) and left as soon as she could as this work is stunningly boring. Should this high employment situation have been saved?

'The Impact of Artificial Intelligence on the future of workforces in the European Union and the United States of America.' (PDF)

https://www.whitehouse.gov/wp-content/uploads/2022/12/TTC-EC-CEA-AI-Report-12052022-1.pdf

Text to image AI by Midjourney, Stable Diffusion, Nightcafe, Lensa and many more have hit the headlines as it is immediately obvious just by looking that image styles have been lifted from real people. See also Copyright section below. Please search for information as this is a very current topic.



Above: AI overproduction

One of the issues with AI art is overproduction, as multiple versions of artwork or designs can be created in hardly any time, and this is one of the main professional areas for commercial artists, rather than fine art which has different principles. Why employ an art worker (often already outsourced and all done online) to make a few alternative designs, when it costs a lot of money and takes a lot of

time? This is why it is a revolution, and only just being taken seriously.

Here is an article from PRINT magazine:

'The Copyright and Impact of AI'

https://www.printmag.com/web-interactive-design/the-copyright-and-impact-of-ai/

'ChatGPT said I did not exist: how artists and writers are fighting back against AI'

https://www.theguardian.com/technology/2023/mar/18/chatgpt-said-i-did-not-exist-how-artists-and-writers-are-fighting-back-against-ai

'ChatGPT Stole Your Work. So What Are You Going to Do?'

https://www.wired.com/story/chatgpt-generative-artificial-intelligence-regulation/

'Artists stage mass protest against AI-generated artwork on ArtStation'

https://arstechnica.com/information-technology/2022/12/artstation-artists-stage-mass-protest-against-ai-generated-artwork/

'Are romance authors at risk from book-writing chatbots?'

https://www.bbc.co.uk/news/business-64975524

COPYRIGHT LAW

'Are AI Prompts Authorship in Copyright Law?'

https://illusionofmore.com/are-ai-prompts-authorship-in-copyright-law/

ETHICS

Bias: the scraped internet text used for the training data shows predominantly Western English-speaking mainstream sensibilities and prejudices, and this is what appears in the generated text. Visit this Vice magazine article about the bias / anti-bias furore:

"All AI systems carry biases, and ChatGPT allegedly being 'woke' is far from the most dangerous one."

https://www.vice.com/en/article/93a4qe/conservatives-panicking-about-ai-bias-years-too-late-think-chatgpt-has-gone-woke

Stack Overflow and the NYC Department of Education have banned the use of generated text due to concerns about a flood of spam articles, and cheating. Plausible generated answers were often incorrect, meaning any student using them would become more ignorant.

For a general article see:

'Did Big Tech Set Up the World for an AI Bias Disaster?'

https://hbswk.hbs.edu/item/chatgpt-did-big-tech-set-up-the-world-for-ai-bias-disaster

Some large language models are less restrictive. Please use the internet to find alternatives.

CENSORSHIP

The model outputs are censored by adding guardrails and programming out edge cases, which makes them less useful if you need a broader output for crime or horror fiction, to name two examples. This is why personal fine-tuning of the model might be useful.

There are some LLMs which include adult content, such as Fairseq GPT:

https://huggingface.co/KoboldAI/fairseq-dense-13B-Shinen

OFFENSIVE & ILLEGAL

Previous concerns after racism and so on from Microsoft chatbots powered by generative text:

"Twitter taught Microsoft's AI chatbot to be a racist asshole in less than a day"

https://www.theverge.com/2016/3/24/11297050/tay-microsoft-chatbot-racist

'The Efforts to Make Text-Based AI Less Racist and Terrible'
https://www.wired.com/story/efforts-make-text-ai-less-racist-terrible/

AI REGULATIONS

There are to be no new laws about use of AI in the UK. China already has laws, the USA has a voluntary code, and the EU is devising laws.

The UK has a white paper about AI which focuses on the following.

- Safety, security and robustness
- Transparency and "explainability"
- Fairness
- Accountability and governance
- Contestability and redress

This is available at:
https://hansard.parliament.uk/commons/2023-03-29/debates/23032938000013/ArtificialIntelligenceRegulationWhitePaper

INACCURATE & NONSENSICAL

The models have no real-world knowledge and are just making it all up from the patterns in the training data. They have to provide answers if they are asked a question (or used for search). Producing plausible but nonsensical answers to questions (such as discussing bears in space) is called 'hallucination'.

"Galactica language model generated convincing text about fact and nonsense alike"
https://arstechnica.com/information-technology/2022/11/after-controversy-meta-pulls-demo-of-ai-model-that-writes-scientific-papers/

THEY KNOW NOTHING ABOUT WHAT THEY ARE GENERATING

Large Language Models (LLMs), regularly called AI, are computers and can never be conscious. They only appear to be sentient as they can hold a conversation. This was the original Turing Test. A computer created to mimic human language, will be treated like a human.

"Google fires software engineer who claimed its AI chatbot is sentient"

https://www.reuters.com/technology/google-fires-software-engineer-who-claimed-its-ai-chatbot-is-sentient-2022-07-23/

"On the Paradox of Learning to Reason from Data"

https://arxiv.org/abs/2205.11502

New tests required:

'The AI revolution has outgrown the Turing Test: Introducing a new framework'

https://techcrunch.com/2023/03/14/the-ai-revolution-has-outgrown-the-turing-test-introducing-a-new-framework/

YOU ARE NOT A PARROT

Linguist Emily M. Bender (who invented the 'stochastic parrot' concept) thinks we are existentially threatened if we take talking machines seriously as intelligences, since that implies human-level (or above) sentience. This creates a blurring, a downgrading of actual humans.

There is another point. If talking robots are given 'human' rights (presumably the end point of this line of reasoning) is this cover for AI corporations to get away with stealing our data to create them in the first place? Is it a way of insuring their future machines against physical attack, which would become a serious crime rather than vandalism?

"You Are Not A Parrot—and a chatbot is not a human."

https://nymag.com/intelligencer/article/ai-artificial-intelligence-chatbots-emily-m-bender.html

POLITICS & BIAS

Western English language LLMs emerge from a neo-liberal consensus, positive about personal freedom, libertarianism and free-market capitalism, which has political ramifications as these systems are used universally. There are many researchers in this area. Newer systems from ChatGPT onwards have many guardrails and internal checks to reduce bias, but since it is in the training data (rather than inserted by evil corporations as some claim) it is hard to remove.

This is a 2021 report that covers that basic problems:

'Report: Algorithms Are Worsening Racism, Bias, Discrimination'

https://www.citizen.org/news/report-algorithms-are-worsening-racism-bias-discrimination/

For a general article in the New York Post see:

'ChatGPT's 'liberal' bias allows hate speech toward GOP, men: research'

https://nypost.com/2023/03/14/chatgpts-bias-allows-hate-speech-toward-gop-men-report/

Academic article:

'Algorithmic Political Bias in Artificial Intelligence Systems'

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8967082/

Political analysis from Rozado, an independent researcher:

'The Political Biases of GPT-4. Things are not always what they seem.'

https://davidrozado.substack.com/p/the-political-biases-of-gpt-4

'Define Wokeness! Or how you shall know a word by the company it keeps: Visualizing what words often appear in the vicinity of woke/wokeness in news media content illustrates why communication is almost impossible between red and blue America'

https://davidrozado.substack.com/p/wo

Cory Doctorow, journalist, activist and author, has many interesting views on technological change:

https://craphound.com/

MORE INFORMATION FOR WRITERS

For a discussion of ethics in the professional area please see my paper:

'Investigating attitudes of professional writers to GPT text generation AI based creative support tools.'

https://ualresearchonline.arts.ac.uk/id/eprint/18621/

Here's an author who wrote a novel in ten days with GPT-4, by making the structure only and telling it to get on with it.

'Generating a full-length work of fiction with GPT-4'

https://medium.com/@chiaracoetzee/generating-a-full-length-work-of-fiction-with-gpt-4-4052cfeddef3

DETECT AI GENERATED TEXT

GPT Zero is the best, there are others.

Test for generation use in the text. It highlights what it detects as generated text and provides statistics.

https://gptzero.me/

DON'T GO MAD

'The danger isn't that AI destroys us. It's that it drives us insane' says tech guru Jaron Lanier.

https://www.theguardian.com/technology/2023/mar/23/tech-guru-jaron-lanier-the-danger-isnt-that-ai-destroys-us-its-that-it-drives-us-insane

AGI - ARTIFICIAL GENERAL INTELLIGENCE

The ability of an AI to do a range of human-level mental activities, rather than play games, or repeat the training data in a cleverly mixed up form. Summary:

'Artificial General Intelligence (AGI) Is A Very Human Hallucination'

https://www.forbes.com/sites/gilpress/2023/03/28/artificial-general-intelligence-agi-is-a-very-human-hallucination/

CHAPTER 29
PROMPTS & HYPERPARAMETERS

WHAT IS A PROMPT?

THE START TEXT used to get the generation started is known as a prompt. The generated text is also known as the continuation. A prompt can be empty, consist of a single word, a sentence or as much text as you'd like. Prompts can also include many complex terms, and so now prompt programming is provided as a service to busy people. However it is better to learn the ways of the particular generator you are using, whether for text or text to image. The prompt can be structured to produce the desired response.

The input text that starts the generation can be structured to produce the desired response. This moves on from early machine learning text systems, which had to have special training data for different genres (Shakespeare texts to make more Shakespeare-style texts). This is still used occasionally and is known a fine-tuning.

Many writers like the idea of using their own writing as training data, only to discover it makes little difference, as most writing styles are pretty standard, even experimental writing styles. Now, the training data is so large, all styles of texts are in there somewhere to be used for statistical generation.

There is bias as the vast majority of texts are written by white middle-class Western males. For instance, anything with Vietnam in it will generate viewpoints from US people, tourists or veterans, occasionally immigrants, rather than from a local Asian angle. This is hardly surprising, annoying but hard to avoid as the training data is not in principle subject to top-level manipulation.

For a discussion of prompt programming visit:

'GPT-3 Parameters and Prompt Design: Idea generator, instruction, and summary'

https://towardsdatascience.com/gpt-3-parameters-and-prompt-design-1a595dc5b405

HYPERPARAMETERS

Known to general user as the 'settings', they are the output controllers that you see at the top of the generator, with mysterious labels like top-k, top-p, temperature and max tokens, and are on our example generator Text Synth in StoryLive.com (which now features text to image using Stable Diffusion, as well as Text Continuation and Translation).

Tokens are the sub-units of the text generation, and can be smaller than a word. Common words might have a token ('water'). Tokens also apply to punctuation etc. A shortlist is created when a continuation is in progress.

Top-k controls the number of high-scoring tokens that have a chance of being picked for the generation, from the shortlist. This introduces randomness which often improves the quality of generation and helps make the output text seem more natural.

Top-p is related, but chooses the tokens in the top 15% of the shortlist, and selects those.

These two settings can be tested to see what effects they have n your text. Top-p can reduce randomness (fewer possibilities) so some care is required.

Temperature controls randomness of the output by increasing

the probability distribution, so more unusual or less related words will appear.

Max tokens is the number of tokens in the output, the length of the generation, the default is usually satisfactory. Free generators have a lower max.

To find out more visit:

https://textsynth.com/documentation.html

and

https://docs.cohere.ai/docs/controlling-generation-with-top-k-top-p

CHAPTER 30
LARGE LANGUAGE MODELS

IN THE HISTORY OF AI, expert systems attempted to codify the writing process and create a story structure, by writing code for all the stages of grammar, language composition and written output. This failed despite a lot of work going into projects such as BRUTUS (see Bringsjord, Ferrucci, 1999). This 'expert system' approach works for some technical areas but not for written language, since grammatical rules are applied retrospectively to oral language. They are not actually rules at all, only descriptions of certain limited situations. Recent systems do not label or categorise anything, they learn from an unstructured mass of language, like a child learning to speak by recognising auditory patterns.

The latest and largest text generators are very good at producing realistic text, even if the facts are wrong, along with shocking and illegal insults. The generated text can repeat or get stuck, produce weird lists, half-code, and gibberish. So the generated text is cherry-picked by the human observer, edited and polished before presentation. Things have improved so much and so quickly that new versions like ChatGPT and the new Claude constitutional (follow and learn from rules) AIs are generally reliable and can be used by the public. 'Guard rails' have been added to prevent controversial subjects

appearing. False facts are generated as the generator 'hallucinates' an answer from approximate data, in order to provide an answer. It has no idea what it is generating.

It is a computer.

We must remember that no matter how smart and empathetic the generator seems to be, the training data originally comes from you, the great and generous public, feverishly tapping away on your computer, phones, tablets. Even oral language from personal assistants can be absorbed. This training text data is analysed for statistical patterns. The bigger the training data, the more patterns, the more realistic the generated text. Do you, the public who inadvertently provided all the text, get paid? Nope. There is a section on Ethics and Bias next.

SIZE MATTERS

Neural net software learns the pattern of natural language from the colossal and expanding amounts of training data. The first neural net was the Perceptron (1943) which had 400 photocells in a hardware machine to perform image recognition. But the first generator that non-technical people took notice of was GPT from Google's OpenAI in 2019. This had 117 million parameters. The latest models, such as WuDao from the Beijing Academy of Artificial Intelligence, has approaching 1.75 trillion parameters, and Google OpenAI's popular GPT-3 (and thus ChatGPT) have 175 billion. The Megatron-Turing Natural Language Generation model (MT-NLG) has the best name, and 530 billion. A forthcoming Google 1000 languages model is rumoured to have 1.6 trillion. In four years the number of parameters, and sophistication of output, has risen fourteen thousand fold. Since we started this book, ChatGPT has become public with Microsoft, Meta (Facebook) Galactica has come and gone, and Google has announced Bart. GPT-4 was released in March 2023. Meta's LLaMA has also arrives, which claims to be better than GPT but using a smaller model and energy footprint.

Since a human brain and a machine learning system use parallel techniques to learn, both brain and computer system are learning from public language, and public text. Children learn oral language naturally, with no explicit rules. Writing, spelling and grammar comes later if at all and needs overt teaching.

The language models process such huge amounts of training data that every style is in there, so they can mimic any prompt and continue in that style without the need for new training ('fine tuning'), as was the case only a few years ago. Rather than retrain the large language model (the 'neural net') people use careful 'prompt programming'. For an author this can be humbling, as on entering one's own work in a carefully developed style, you will discover that it can be generated endlessly, reading just like you but without the mental effort. There are issues with plot coherence and occasional nonsense, and all text has to be read by a human bringing their own desires to the page. Occasional nonsense can be very stimulating, and is the basis of most experimental fiction such as Burrough's cut-ups, Ouilipo (form over meaning), Dada, asemic writing (a 'vacuum of meaning' if that is even possible) and more.

Since a human brain and a machine learning system use parallel techniques to learn, both brain and computer system are learning from public language, public text. Oral language is learnt naturally by children, with no explicit rules. Writing, along with spelling, grammar, etc., comes much later if at all, and needs overt teaching.

AFTERWORD

WHAT IS TEXT GENERATION?

BACKGROUND

Since the systems are only mimicking language, under the control of the author, the terms *AI co-creation* or *AI hybrid* are inaccurate.

It's another creative tool, with particularly powerful and insidious action.

Text generation is a statistical process. Machine learning programs analyse words (actually, parts of words) to discover sequences in a very large volume of training text (articles, news, blogs, chat, books, etc.).Then they basically guess what is the likeliest next word. In this way, they can generate the likely next sentences to follow the input prompt text. Various settings such as 'temperature' can be adjusted to adjust the output. The default settings are fine as a start.

These new systems are known as Large Language Models or LLMs, as people don't like to bandy terms like 'intelligence' around when the system is a narrow text generator with clear methods, even if opaque details.

Older expert systems attempted to codify the writing process and create a story structure, by writing code for all the stages of language

and its written production. This failed despite a lot of work going into projects such as Brutus (1999).

The latest and largest text generators are very good at producing realistic text, but also pure nonsense, sometimes along with shocking and illegal insults. The generated text can repeat or get stuck, or produce weird lists, half-code, and political spam. So the generated text is cherry-picked by the human observer, edited and polished before any presentation.

Sometimes the output is authoritative but completely wrong or invented, as the generator is made to produce a result. This is known as 'hallucination'. John Schulman, a cofounder of OpenAI, says "Our biggest concern was around factuality because the model likes to fabricate things." This doesn't apply to creative uses.

The usual advice to an aspiring writer is to read more books. The mass of books is a human's training data. This is why there are no true 'How to Write' books, only anecdotal advice organised into chapters. The best advice for a new writer is to write more. So to excite the production, and make it 'fun' as mentioned by many of the people in this book, use a text generator.

We must remember that no matter how smart and empathetic the generator seems to be, the training data originally comes from you, the great and generous public, feverishly tapping away on your computer, phones and tablets. Even oral language from personal assistants can be absorbed. This training text data is analysed for statistical patterns. The bigger the training data, the more patterns the more realistic the generated text. Do you the public, who provided all this text, get paid? Nope. But don't worry about that! Unless you want to.

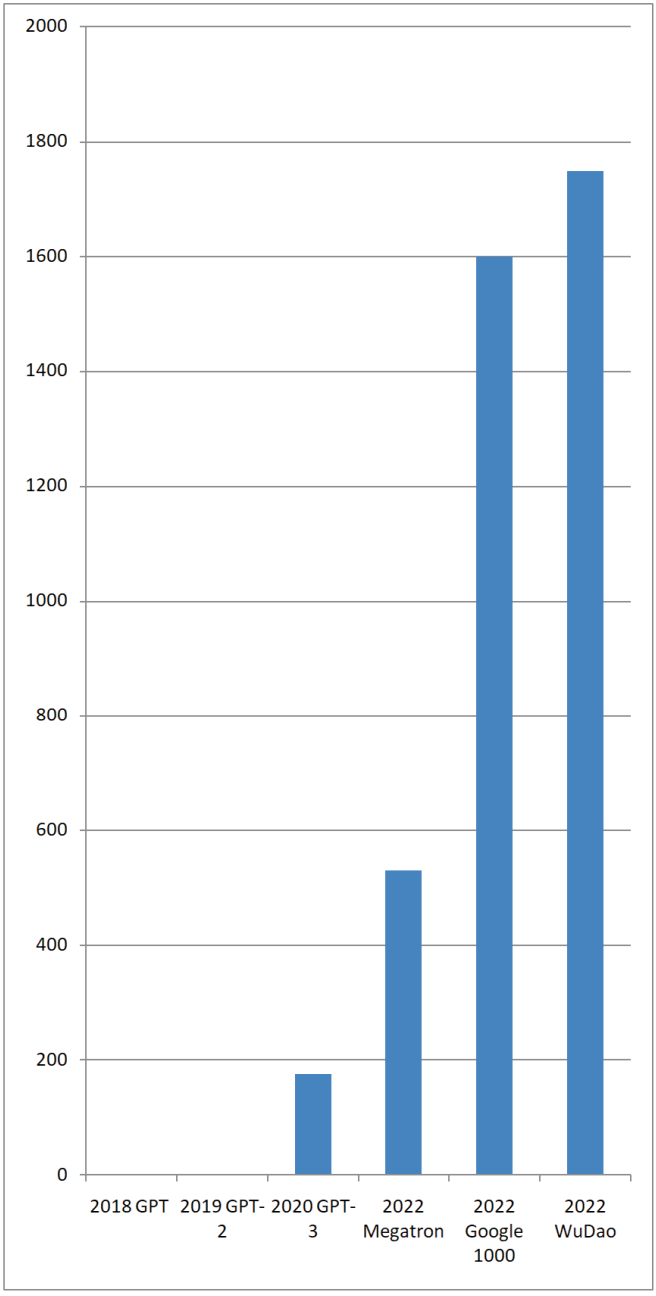
New generators can also produce working computer code, although this has to be defined accurately in the prompt. This is a use of text, and is quite amazing to behold. At present only simple code can be produced but this is just the beginning. See the reference at the end.

Neural net software learns the pattern of natural language from

the colossal and expanding amounts of training data. The first neural net was the Perceptron (1943) which had 400 photocells in a hardware machine to perform image recognition, after being tested in an IBM 704 mainframe. This system was modelled on the way neurons work. It was reported in the media as '"the embryo of an electronic computer that is expected to be able to walk, talk, see, write, reproduce itself and be conscious of its existence." This was 60 years ago, although no timescale was suggested.

The first generator that non-technical people took notice of was GPT from Google's OpenAI in 2019. This had 117 million parameters. The latest models, such as WuDao from the Beijing Academy of Artificial Intelligence, have approaching 1.75 trillion parameters, and Google OpenAI's popular GPT-3 (and thus ChatGPT) have 175 billion. The Megatron-Turing Natural Language Generation model (MT-NLG) has the best name, and 530 billion. A forthcoming Google 1000 languages model is rumoured to have 1.6 trillion. Parameters are set by the model when it is being trained, and the more the better. Hyperparameters are used for adjustments of outputs when running, and are set by the user. The rapid increase in parameters is shown in the graph below. GPT-1 (0.117 billion) is too small to show on the graph.

OpenAI's GPT-4 was released just as we published this book. It is much more powerful and includes multi-modal abilities, as it can use images as source material. The launch demo featured a drawing of a website used to generate computer code for a working website. Other demos include photographing the food in a fridge and generating recipes.



Above: (2022) Billions of parameters & name of AI Text generator. Note that ChatGPT and GPT-4 are built on GPT-3 (the early ones are too small to show on the graph).

Now the generators process such huge amounts of training data that (nearly) every text is in there, and they can mimic the prompt and continue in that same style without the need for new datasets or new training, as was the case only a few years ago. Rather than retrain the language model (the 'neural net') people use careful 'prompt programming'. For an author, this can be humbling. Upon entering one's own work in a carefully developed style, you will discover that it is a very common style and can be generated endlessly, carelessly, just like you, but without the painful mental effort.

Since a human brain and a machine learning system use parallel techniques to learn, both brain and computer systems are learning from public language, and public text. Oral language is learnt naturally by children by mimicry, with no explicit rules. Writing, along with spelling, grammar, etc., comes later and needs explicit teaching. Bias in LLMs comes from the training data texts, and the texts come from people in a biased social situation. There is no 'vanilla' (which is a loaded term) society.

THE BIGGER PICTURE

'Democratizing Artificial Intelligence Research, Education, and Technologies'

https://dair.ai/

Bill Gates: "AI is the most important tech advance in decades."

Creative uses of AI are not why these systems were developed. Gates sees a future where expert healthcare, legal advice with documents, and much more, are in a smartphone. This will be life-saving and empowering. He says:

"AI-driven improvements will be especially important for poor countries, where the vast majority of under-5 deaths happen," he

wrote. "Many people in those countries never get to see a doctor, and AIs will help the health workers they do see be more productive."

https://www.bbc.co.uk/news/technology-65032848

THE LATEST SENSATIONS

There are many companies and open-source teams producing new LLMs, so this is an arbitrary list.

OPENAI CHATGPT AND GPT-4

ChatGPT's GPT-3.5 model can work with around 8,000 words, while GPT-4 can use around 64,000 words, which is 50 pages of text. GPT-4 has different personalities or styles of dialogue.

This page has some information about GPT-4 if you haven't used it yet:

'5 Jaw-dropping things that GPT-4 can do that ChatGPT couldn't.'

https://edition.cnn.com/2023/03/16/tech/gpt-4-use-cases/index.html

See the chapter on computer code generation.

META LLAMA

'LLaMA: Open and Efficient Foundation Language Models'

https://research.facebook.com/publications/llama-open-and-efficient-foundation-language-models/

GOOGLE BARD

An important next step on our AI journey

https://blog.google/technology/ai/bard-google-ai-search-updates/

OPEN SOURCE: ELEUTHER

This is the provider of some of the models in Story Live's Text Synth (Fabrice Bellard). This was used by many of the authors in this book.

'Empowering Open-Source Artificial Intelligence Research'
https://www.eleuther.ai/

MORE

'A New AI Trend: Chinchilla (70B) Greatly Outperforms GPT-3 (175B) and Gopher (280B)'

https://towardsdatascience.com/a-new-ai-trend-chinchilla-70b-greatly-outperforms-gpt-3-175b-and-gopher-280b-408b9b4510

EVEN MORE

'Pathways Language Model (PaLM): Scaling to **540 Billion** Parameters for Breakthrough Performance'

https://ai.googleblog.com/2022/04/pathways-language-model-palm-scaling-to.html

ABOUT THE AUTHORS (FIRST EDITION)

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Albena Baeva is an artist and co-owner of router gallery *Gallery and AR* sculpture park Ploshtadka in Sofia, Bulgaria.
Art project 'Suitcase': https://www.trustterritories.com/suitcase.html
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Brad Gallagher & Laura Hyunjhee Kim
Brad Gallagher is a fourth-year Ph.D. candidate in the Department of Intermedia Art, Writing, and Performance at the University of Colorado Boulder whose practice engages with the concept of sympoiesis, or "making with." He explores how movement generates complexity, creativity, and cognition through interactive installations and performance interfaces.
Laura Hyunjhee Kim is a Korean-American multimedia artist who creates post-disciplinary performances to reveal transformative spaces of hybridity and in-betweenness. She is an Assistant Professor in Visual and Performing Arts at The University of Texas at Dallas.
http://lauraonsale.com

Dana Dason shares stories about her deep inner life in the style of ekphrastic poems.

Geoff Davis
The Editor has provided some samples from his own research:.
https://geoffdavis.org/
His art is here:
https://microartsgroup.com

Nick Fletcher
Nick Fletcher is a financial journalist who has worked for several leading newspapers including most recently the Guardian.

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Joshua Hussey is a Lecturer in the English Department at the University of Georgia where he teaches literature, writing, and game design.

Iqra Iqbal
Iqra Iqbal writes in the psychological thriller genre. She likes to study thoughts, dreams, phobias, personality disorders and the unconscious mind. Her exhibition Deceptive Dimension shows an exploration of generative glitch images using the techniques of artificial intelligence.
Art: Deceptive Dimension http://sivazona.hr/events/Iqra

Ray LC
RAY LC creates speculative narratives in diverse media about the way humans adapt to technologies, as Assistant Professor of Creative Media at City University of Hong Kong.
https://raylc.org/
https://recfro.github.io/imitations/

Simon Lewis

Simon Lewis studied art, then spent two decades writing guidebooks in China and India. His novels include travel thriller *GO* (translated into seven languages), and *Bad Traffic* (nominated for the LA Times Book of the Year). He has had four features made: *The Anomaly* is sci-fi; *Tiger House* is a home invasion thriller; *Jet Trash* was based on *GO*, and *Four Kids and It* is a family film.

David Link

David Link is a media artist and theorist based in Cologne, Germany. His installations are shown in institutions internationally. Website: http://alpha60.de

Timothy Miller

Timothy Miller teaches in the Department of English at Florida Atlantic University, where he contributes to the department's MA degree concentration in Science Fiction and Fantasy. Graduate course titles have included "Theorizing the Fantastic" and "Artificial Intelligence in Literature and Film". He has recently published a critical introduction to Ursula K. Le Guin's fantasy novel *A Wizard of Earthsea*.

Dustin Paddock

After college in Pennsylvania, Dustin left his New Jersey home in a hatchback with $800 in his pocket to pursue working in television in Los Angeles. Climbing the ranks from the bottom, he worked many years on one-hour dramas as a Script Coordinator and wrote two episodes of the series *House MD*. He now works at CBS Studios.

Fania Raczinski

Fania Raczinski is a computer scientist and artist interested in pattern visualisation, natural language processing, and creative computing. She has exhibited, lectured and published in this subject area. https://www.researchgate.net/profile/Fania-Raczinski

Maria Cecilia Reyes
María Cecilia Reyes, PhD, is Assistant Professor in Media Production and Communication Theory at the School of Humanities and Social Sciences Social Communication Division at Universidad del Norte in Colombia. Screenwriter and editor of the documentary "Nijolé" (2018). Postdoctoral researcher at the Institute of Educational Technologies at the Italian Research Council (CNR-ITD). Artist-in-residence 2021 at Schloss Solitude Akademie and Future Media Theaters Lab 2022. www.xehreyes.net

Tivon Rice
Tivon Rice is an artist and educator working across visual culture and technology. Based in Seattle, he holds a PhD in Digital Art and Experimental Media from the University of Washington, was one of the first individuals to collaborate with Google Artists + Machine Intelligence, and is currently an Assistant Professor at DXARTS.

Brian Reffin Smith
Brian Reffin Smith is an artist, writer and theoretician, of British and now also German nationality. He won the first Prix Ars Electronica in 1987 and became a philosophical zombie in 1998.
https://www.brian-reffin-smith.com/

Klaus Spiess
He is supported by the Austrian Fund for the Promotion of Scientific Research AR 687. 'eXisten' Z Scripts.com. STANDS4 LLC, 2022.

Shu Wan
Shu Wan is currently matriculated as a doctoral student in history at the University of Buffalo. As a digital and disability historian, he serves in the editorial team of Digital Humanities Quarterly and Nursing Clio.
https://arts-sciences.buffalo.edu/history/graduate/GraduateHistoryAssociation/GradStudentProfiles/ShuWan.html

Corinne Whitaker, aka **Digital Giraffe**
https://www.giraffe.com/gr_meet.html.
New book (my 33rd volume of poetry and digital paintings):
Girl With the Golden Veins

REFERENCES

LITERATURE AND COMPUTERS

Some references are in other chapters as appropriate.

This is a good start article:
'Agents Of Change: Artificial Intelligence–AI Art and How Machines Have Expanded Human Creativity'
https://magazine.artland.com/ai-art/

Sasha Stiles
"Stiles' hybrid poetry and artwork has been widely exhibited in both analog and virtual realms and recognised by creative visionaries from Ray Kurzweil to Judy Chicago."
https://www.sashastiles.com/

theVERSEVerse "a poetry NFT gallery where poem = work of art". Founded by Sasha Stiles, Ana Maria Caballero, Kalen Iwamoto, Keith Grossman, Matt Medved, Gisel Flores, James Yu and Julien Silvano:
https://theverseverse.com/

Oliver Bown
"I am interested in how artists, designers and musicians can use advanced computing technologies to produce complex creative works. My current active research areas include media multiplicities, musical metacreation, the theories and methodologies of computational creativity, new interfaces for musical expression, and multi-agent models of social creativity."
https://research.unsw.edu.au/people/associate-professor-oliver-bown

Mark Webster
"Hypertype is first and foremost a textual work that relies on the visual interaction of a variety of typographic signs and letters. There is visual content based on a language system and there is visual context based on a subject matter—computers automating humans."
https://areafour.xyz/works

Christian Bok
https://www.poetryfoundation.org/poets/christian-bok

Janelle Shane – AI researcher, author
https://www.janelleshane.com/
https://www.aiweirdness.com/
Wrote the influential and entertaining *You Look Like a Thing and I Love You* book.

Gwern AI researcher—literature
https://www.gwern.net/GPT-3

Sarah Ridgley – art and text
https://sarahridgley.com/asemic-writing/

Story Live creative AI editor
As used by many in this book, a free creativity tool from Geoff Davis, devised for his HCI research. It integrates Fabrice Bellard's Text Synth (by arrangement, open source) with an editing panel in a minimal interface. Also includes text to image (Stable Diffusion) and translation:
https://storylive.com

Wordcraft is a writers' tool from Google
https://wordcraft-writers-workshop.appspot.com/learn

Story Software (Geoff Davis)
Based on Geoff's ZUI (Zooming User Interface) research Middlesex University, 2003.
Free zooming text and image editor
https://notesstoryboard.com
https://storylite.com

Geoff Davis
Main site
https://geoffdavis.org
Digital art is mostly at
https://microartsgroup.com

GPT-4 Release Notes (March 14 2023)
https://help.openai.com/en/articles/6825453-chatgpt-release-notes

Creative Writing with GPT-3
'From Emoji to Flash Fiction, enhancing the creative writing process with AI.' Yennie Jun, Nov 23, 2022. Available at:
https://blog.yenniejun.com/p/creative-writing-with-gpt-3-from

Overview:

'ChatGPT started a new kind of AI race — and made text boxes cool again.'
https://www.theverge.com/2023/3/26/23655456/chatgpt-bard-bing-ai-race-text-boxes

OpenAI's GPT-3, initially released two years ago, was a big improvement over earlier models, but it produces many logical errors and false information presented as if true. ChatGPT is based on GPT3.5, which has improvements in real word knowledge, making it more 'sensible', mainly by coding responses to many edge case questions. It is just as unreliable but more generally useful, and is due to be rolled out for search engines (Bing), replacing a list of possible links with a single text answer. This doesn't usually end well. GPT-4 has just been released (March 2023) and has many improvements ChatGPT. See link above.
OpenAI has just (27/3/2023) released a GPT extensbility framework that lets the generator work with up-to-date information sources. The framework is also a programming model that lets developers to create their own plugins.

Human-AI Collaborative Editor for Story Writing
Using Wordcraft. This is interesting, as they do tests for different types of story writing. It has examples of collaborative stories.
Andy Coenen, Luke Davis, Daphne Ippolito, Emily Reif, Ann Yuan, July 2021. Available at:
https://arxiv.org/abs/2107.07430

Stories By AI
This has many examples and a chat section.
https://storiesby.ai/

AI Chatbots article
https://lastweekin.ai/p/ai-chatbots

Computer Poetry – Strachey 1953
https://en.wikipedia.org/wiki/Strachey_love_letter_algorithm

Poetry example
https://medium.com/@thomasbuysens/i-sometimes-pretend-that-i-am-a-machine-71af840762ca

Tool discussion on OpenAI
https://community.openai.com/t/a-theoretical-novel-writing-tool/10855

Character.ai chatbots
Has a Novel Writing AI
https://beta.character.ai/

How GPT-3 Helps Me Write Short Stories
Celeste Kallio, Sep 2, 2022. Available at:
https://storiesby.ai/p/ai-is-my-co-writer

Using OpenAI's GPT-3 to Fine-Tune a Podcast into a Script
Anthonio
https://community.openai.com/t/the-art-of-fine-tuning-how-i-used-gpt-3-to-bring-my-podcast-to-life-on-the-page/31144

And…

Plagiarism checker
There are many services to detect generated text. The best is GPTZero. It is not that accurate but better than the others.
https://gptzero.me

LARGE LANGUAGE MODELS (LLMS)

AI Large Language Model Sizes
Survey
https://aibusiness.com/nlp/7-language-models-you-need-to-know

Huggingface API
Huge variety of technical and support resources.
https://huggingface.co/docs/api-inference/index
openai-gpt 110M parameters,
gpt2 117M parameters,
gpt2-medium 345M parameters,
gpt2-large 774M parameters and
gpt2-xl 1558M parameters.

Summary of new generative AI (January 2023)
https://substack.com/inbox/post/96691351

Google
'Bard' is the latest sensation, even if it presents factual errors as answers.

Claude AI from **Anthropic**, in beta, better than ChatGPT?
https://gpt3demo.com/apps/claude-by-anthropic

https://www.anthropic.com/

Alpaca AI - tools and workflow

https://www.getalpaca.io/

OpenAI / Microsoft
ChatGPT
https://openai.com/blog/new-and-improved-embedding-model/
Version: text-embedding-ada-002
GPT and text to image, text to program code (ChatGPT experiments here)
https://codepen.io/collection/YyYWLz

Postmodernism Generator 1996
The Postmodernism Generator is a computer program that automatically produces "close imitations" of postmodernist writing. It was written in 1996 by Andrew C. Bulhak of Monash University using the Dada...
https://en.wikipedia.org/wiki/Postmodernism_Generator

Early Writing Software
Three Computer-Based Models of Storytelling: BRUTUS, MINSTREL and MEXICA.
Perez & Sharples, Universidad Nacional Autónoma de México and Birmingham University UK 2004.
https://www.researchgate.net/publication/255672930_Three_computer-based_models_of_storytelling_BRUTUS_MINSTREL_and_MEXICA

MA4: Story Generator
Geoff Davis, Micro Arts, 1985.
A procedural story generator based on a short story Cow Boils Head.
https://microartsgroup.com/ma4-geoff-davis-cow-boils-head-story-generator/

Large Language Models LLM analysis Stanford Nov. 2022
Holistic Evaluation
405 datasets evaluated across all major language modelling works
https://hai.stanford.edu/news/language-models-are-changing-ai-we-need-understand-them

Robots
"Big Tech Is Now Developing Powerful AI Brains for Real-World Robots"
https://www.vice.com/en/article/4a3gqw/big-tech-is-now-developing-powerful-ai-brains-for-real-world-robots

TEXT ART / ART TEXT

This is a vast area that did not exist a couple of years ago: Dall · E and Dall · E2, Midjourney, Stable Diffusion, Night Café, and many more.

There is also AI to video. This will lead to AI generated movies, anime, and new art forms althogether. Add that to VR and you could create imaginary environments to live in.

The general problem with text to image is the overproduction of derivative (by definition) images, which is kitsch. Since the images are produced with no personal effort, there is a loss of subjectivity. Being (for example) an artist like Basquiat is not the same at all as making Basquiat-like images, and trying to sell them as NFT art. It is decorative or wallpaper only, but that is hardly new.

See the chapter 'The We of We Say I'.

Lensa portrait editor is controversial for racialising and sexualising portraits, and creating impossible images that are not the actual person leading to mental health problems. See the Ethics chapter.

https://prisma-ai.com/lensa

Prompt programming (or engineering) for art generation

Text to image suggestions and improvements.
https://simpleprompt.com/

EXPERT AND TECHNICAL REFERENCES

Selected references from Geoff Davis's academic research, which is used in the Historical Background chapter. If you want to research the area, there are sections on Ethics, Background, and Conclusions that are worth a look. These links are for further information.

"Investigating attitudes of professional writers to GPT text generation AI based creative support tools," Geoff Davis 2020.

https://ualresearchonline.arts.ac.uk/id/eprint/18621/

References in alphabetical order.

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https://arxiv.org/abs/1603.04467

Ai-Da Robot (2019). "Her artist persona is the artwork." Available at:
https://www.ai-darobot.com/

Artificial Lawyer (2018) LawGeex Hits 94% Accuracy in NDA Review vs 85% for Human Lawyers (summary). LawGeex research is paywalled. Available at:
https://www.artificiallawyer.com/2018/02/26/lawgeex-hits-94-accuracy-in-nda-review-vs-85-for-human-lawyers/

Bailey J. (March 2018) A Brief History of Article Spinning. Available at:
https://www.plagiarismtoday.com/2018/03/08/a-brief-history-of-article-spinning/

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CHAPTER 1
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