

s u n e t

o u i n

s u n t h

o o i e

# Chapter 1: Resea rch #1

Youtube links  
AI artists  
Books

# Chapter 2: AI E xperime nts v0.2

Workshop  
Authentic Image  
AI image generation  
AI x graphic design  
test  
Thoughts feedback  
AI cover img-to-img  
Default  
collection  
cube  
Cursed Emoji

AI manipulation  
image  
AI image texture  
Text to 3D

# Chapter 3: Resea rch #2

Youtube links  
Ownership  
Copyright  
AI x AI bias  
AI dangers  
Oblique Strategies  
My teacher octopus  
Anthropomorphism  
AI x AI

Prompt to make a  
prompt  
Auto-GPT

# Chapter 4: Coding

# AI Expe riments v0.6

Booklet title + text  
generator  
AI Dysarthria  
Coding with AI  
Blender  
Coding with AI P5.JS  
Thoughts feedback  
Oblique strategies  
GPT posters  
Core thought  
Draincore cover  
generator  
Research question  
Thoughts feedback  
Talking with AI.txt  
Poster sight

# Chapter 5: Master Thesis

# #3

# Chapter

## 6:

# Synergy

# in Synt

# hesis

## v1.0

Introduction  
AI project that makes projects  
Talking with AI.txt  
Our experiments  
Infinite generator  
book  
The code of our project  
Made in collaboration between Gill and AI

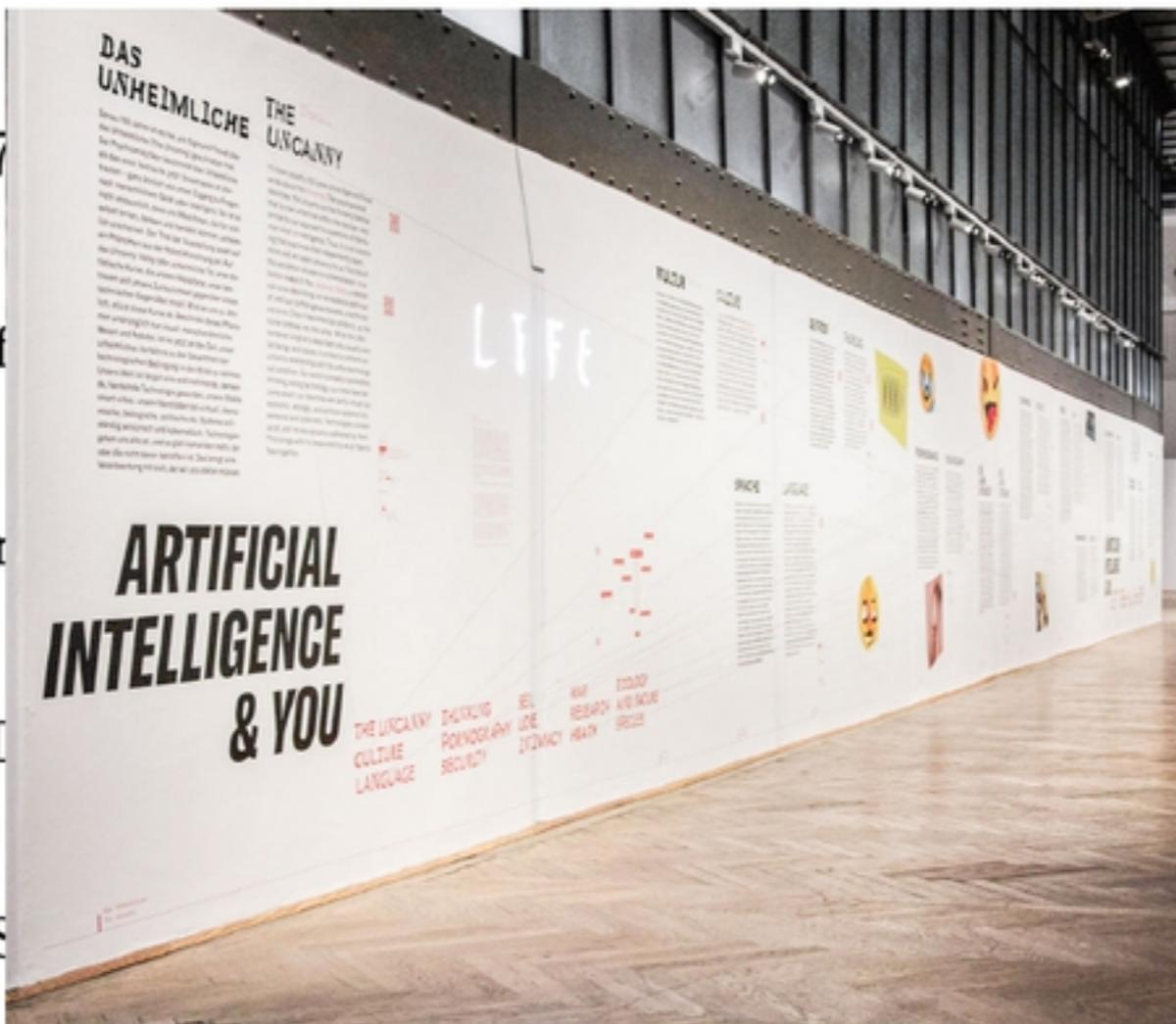
# Chapter 1: Research #1

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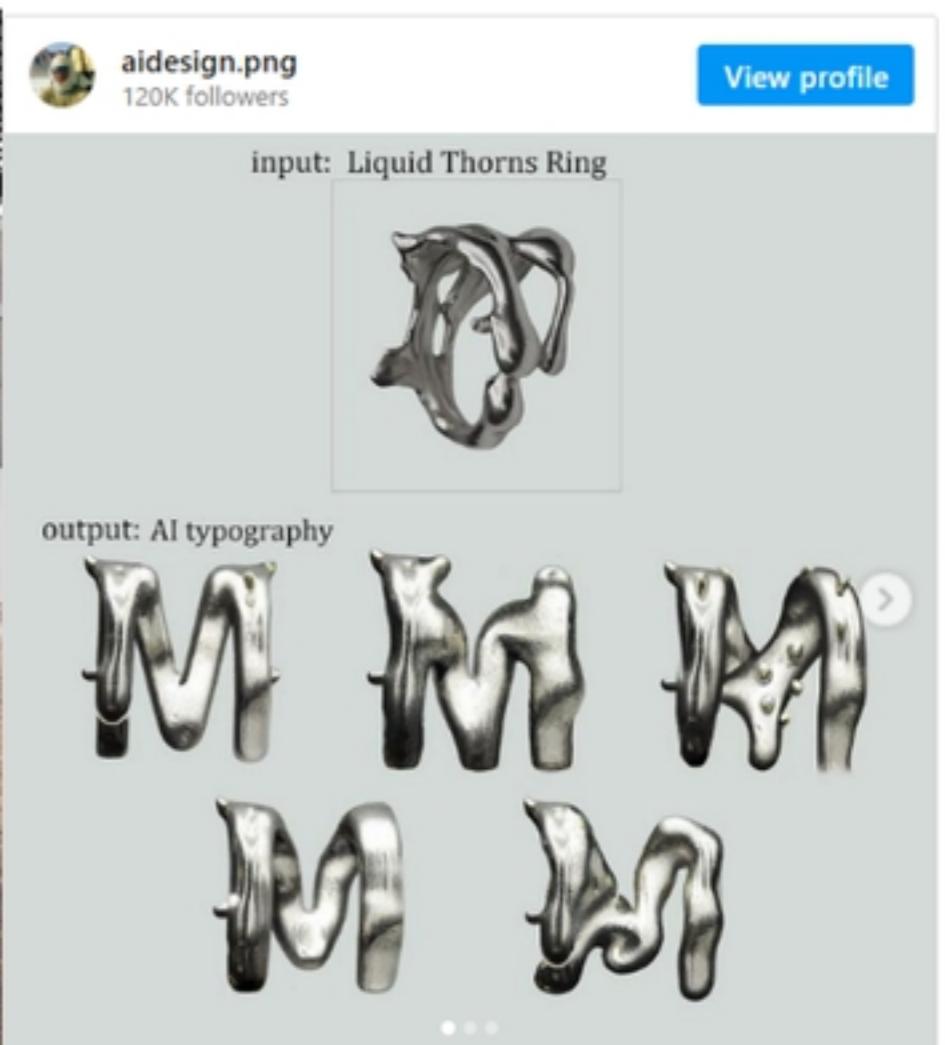
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<https://youtu.be/ZRbc>

<https://youtu.be/sMM>

<https://youtu.be/SP6Qg>

003\_.jpg



006\_.png



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004\_.jpg



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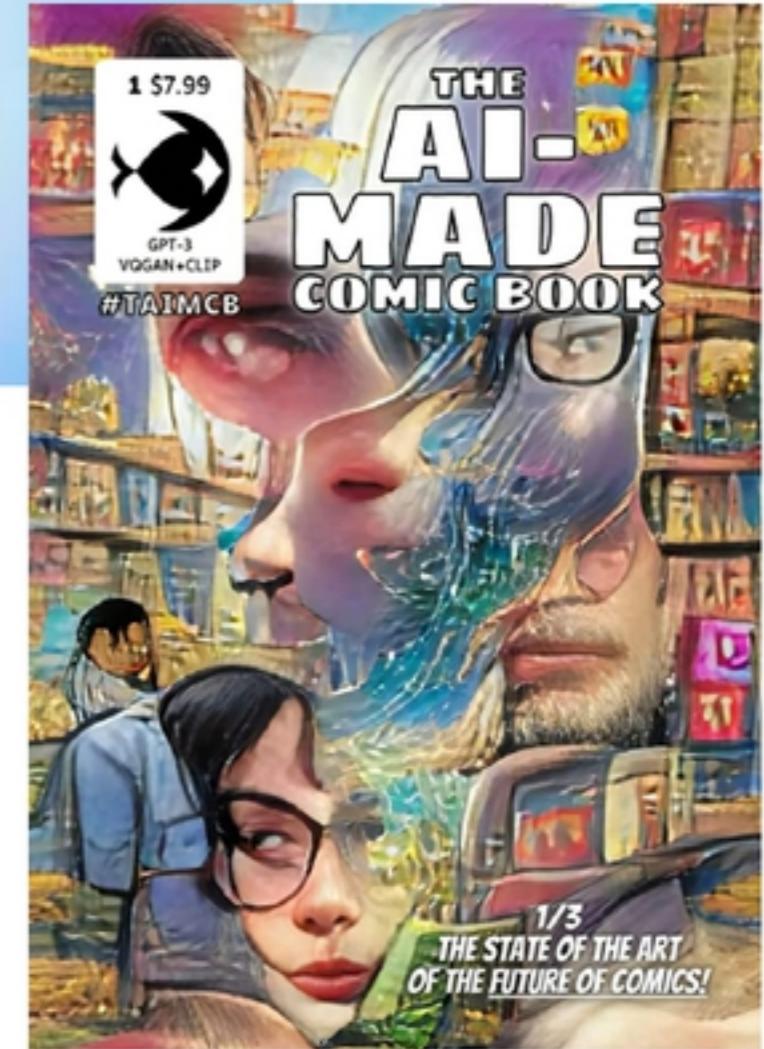
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<https://youtu.be/QfQ5oEbXKI>



013\_.jpg



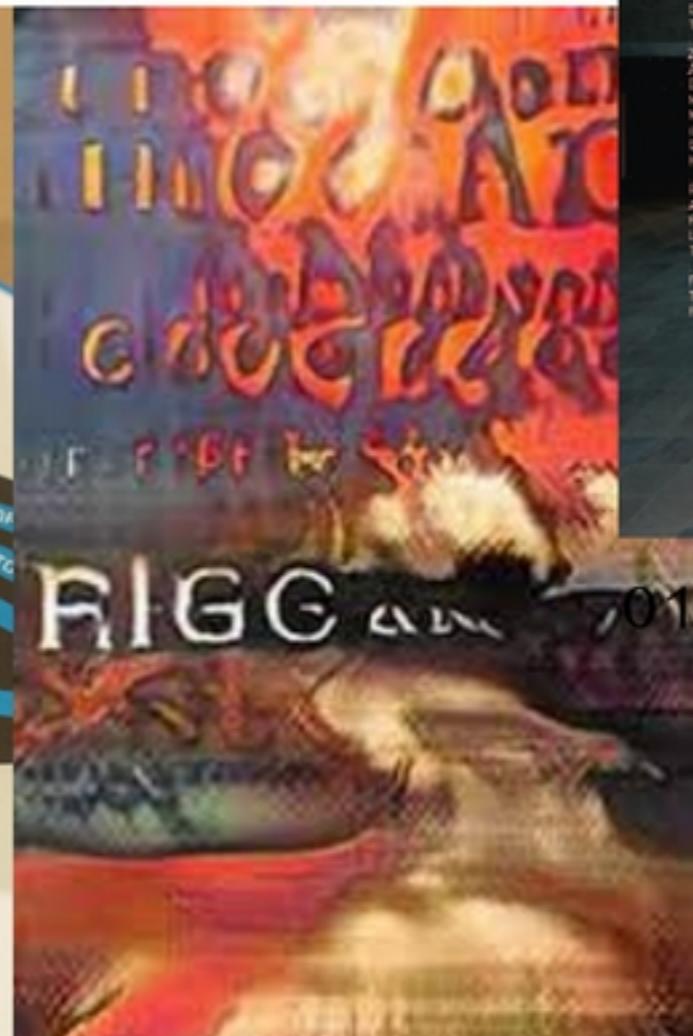
008\_.png



011\_.png



014\_.jpg



012\_d.jpg

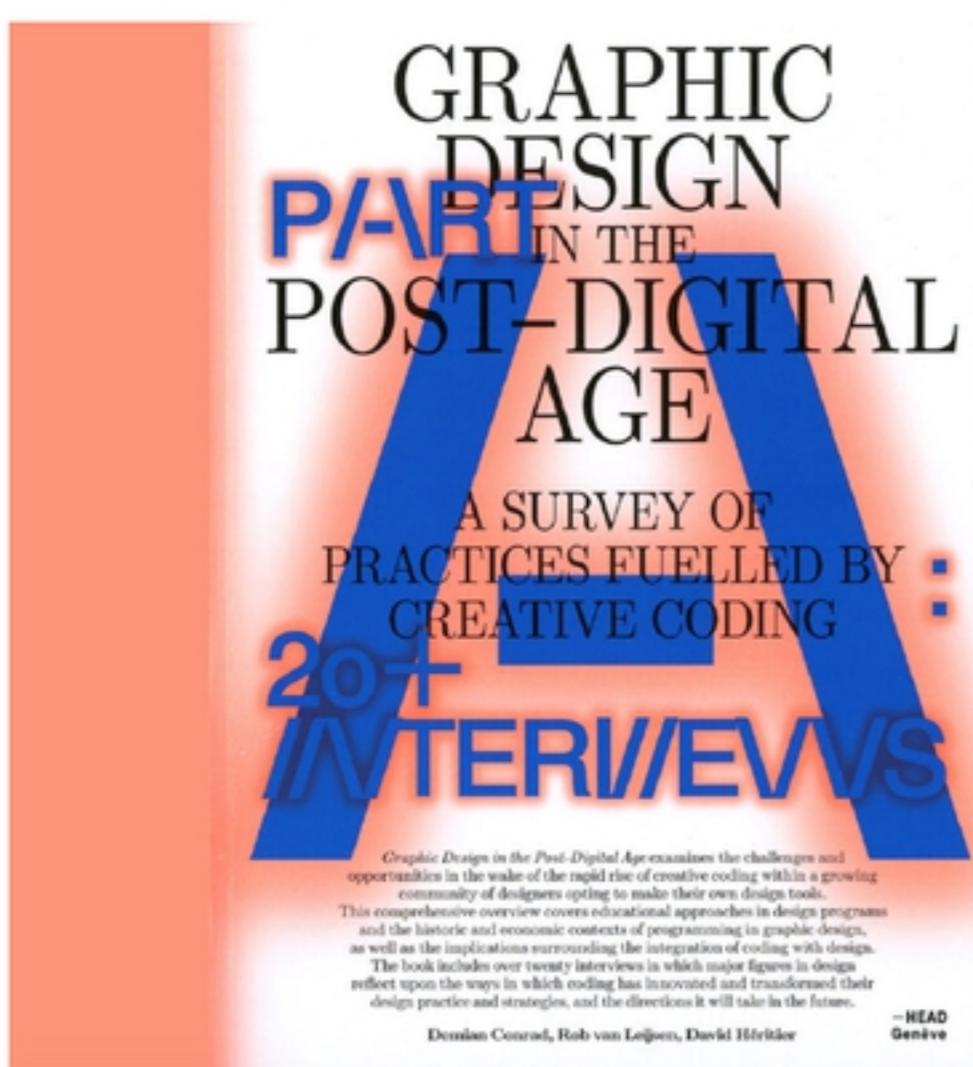
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9\_.jpg



015\_.png



016\_.jpg

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<https://youtu.be/cxJcBuBpUU>

<https://youtu.be/ajyL9FyNpw>

<https://youtu.be/W5xvvXzD97I>

<https://youtu.be/RzkDrTEBYs>

AI artists

Process Studio

001

Process is a design studio based in Vienna, specializing in generative and interactive design and working in the fields of branding, web, installation and print. As well as traditional graphic design

solutions, Process designs and develops highly specialized software that is used as tools for and by clients.

002

Generating new Typefaces using AI

The Alfont is a system that generates new typefaces. More precisely, it tries to mimic an actual typeface by creating visual output that resembles one.

Our system is using deep learning, a Deep Convolutional Generative Adversarial Network (DCGAN) and a dataset consisting of more than 200 000 different fonts to come up with new ones. The generated output is showing a new typeface per frame and an oscillation between different styles and kinds of typefaces, if you put one output frame after the other as a sequence.

003

Aldriven typeface generator

Together with the Almoji, the Alfont is the part of the visual identity of

the exhibition UNCANNY VALUES, an exhibition at the MAK in context of the VIENNA BIENNALE FOR CHANGE 2019. It's a generative artwork and a process rather than a single still frame.

Process Studio inspireert mij door hun toepassing van AI binnen grafisch ontwerp. Dit aangezien dat de meeste mensen die met AI werken eerder kunstenaars zijn dan echt grafisch ontwerpers. Ook respecteer ik hen voor hun conceptueel denken binnen hun projecten.

Scott Eaton

004

Scott Eaton (b. 1973, Washington) is an American artist, designer, and anatomy instructor residing in London, UK. His work explores the representation of the human figure through various mediums drawing, digital sculpture, photography, and most recently generative AI. Scott got his masters degree from the MIT Media Lab, focusing on design and computer graphics, and subsequently

studied drawing and sculpture in Florence, Italy.

Alexander Mordvintsev

Alexander Mordvintsev is a software engineer known for his work in the field of artificial intelligence (AI) and computer vision. He is perhaps best known as the creator of DeepDream, an AI-based software that uses a convolutional neural network to find and enhance patterns in images, thus creating a dreamlike hallucinogenic appearance in the deliberately overprocessed images.

Refik Anadol

005

Refik Anadol is a renowned media artist and director known for his pioneering work in data art and his application of artificial intelligence in creating stunning digital installations.

Born in Istanbul, Turkey, and currently based in Los Angeles, Anadol

academic has effectively blurred the lines between physical and digital worlds, using large-scale, data-driven public art to create immersive, site-specific installations. His projects frequently incorporate AI and machine learning, drawing from large sets of data to craft dynamic and visually compelling environments.

Anadol's work with AI isn't just for aesthetics. He's deeply interested in exploring the ways AI perceives and reshapes the world. His projects often use machine learning algorithms to analyze and manipulate large datasets, creating novel patterns and structures. These aren't random designs, but the product of AI "thinking" and "dreaming," a concept that has been a recurring theme in Anadol's work.

One of his most famous projects, "Machine Memories Space," used AI to sort through nearly two million publicly accessible images of the Hubble Space Telescope. Using a machine learning

algorithm, the software was able to cluster similar images and create a new interpretation of the universean AI's view of space.

the friction between the fluid messiness of people, and the quantified categorize state of our technological society.

types of use cases AI can have for everyday people.

Holly Herndon

010

Holly Herndon is an American composer and sound artist based in Berlin, Germany. She is known for her experimental and avantgarde electronic music that often integrates the use of technology, particularly artificial intelligence (AI), in innovative and thoughtprovoking ways.

One of Herndon's most notable works involving AI is her 2019 album "PROTO". In this project, she collaborated with AI software named "Spawn", an AI model she "raised" and trained using various human voices, including her own. Herndon and her collaborators taught Spawn to identify and recreate human vocal sounds, effectively teaching the AI to "sing". The album blends traditional choral music with the electronic soundscape, and Spawn's participation raised

I really like the idea that AI has a different kind of memory dreams. The dreaming and thinking of AI is fascinating to think about

miosis.designadesign.png

006

007

008

I love to see AI integrated in graphic design because I can see myself going along a path like that for my career. It is less conceptual but the integration of AI in more standard graphic design would be a way for me to incorporate things I love with a graphic design job that is markable.

Mimi Onuoha

009

Mimi Onuoha is a NigerianAmerican artist who explores

A People's Guide to AI (2018)

Systems that use artificial intelligence are quietly becoming present in more and more parts of our lives. But what does this technology really mean for people, both right now and in the future? Written in 2018 by Mimi Onuoha and Mother Cyborg (Diana Nucera), A Peoples Guide to AI is a comprehensive beginner's guide to understanding AI and other datadriven tech. The guide uses a popular education approach to explore and explain AIbased technologies so that everyonefrom youth to seniors, and from nontechies to experts has the chance to think critically about the kinds of futures automated technologies can bring.

The mission of A Peoples Guide to AI is to open up conversation around AI by demystifying, situating, and shifting the narrative about what

provocative questions about the intersection of technology and humanity in art.

Herndon's work also explores the concept of digital identity, questioning what it means to be human in an increasingly digital world. Her music often has a strong element of social commentary and explores a future where human creativity and AI could collaborate and coexist.

covers or reviews related to any of the books on Booksby.ai has been written or designed by humans.

I really like how conceptually almost everything is done by AI, from the book covers and text to the reviews on their website

## Books

Dinner Depression by Julia Joy Raffel, GPT3

Booksby.ai

012

011

Tired of books written by authors? Booksby.ai is an online bookstore which sells science fiction novels generated by an artificial intelligence.

The AImade comic book by Adam Niman, GPT3 , VQGANCLIP

013

The Age Of Data by various artists

Through training, the artificial intelligence has been exposed to a large number of science fiction books and has learned to generate new ones that mimic the language, style and visual appearance of the books it has read.

PharmakoAI by K AlladoMcDowell, GPT4

015

Graphic Design in the PostDigital Age by Demian Conrad

None of the stories, titles, descriptions, book

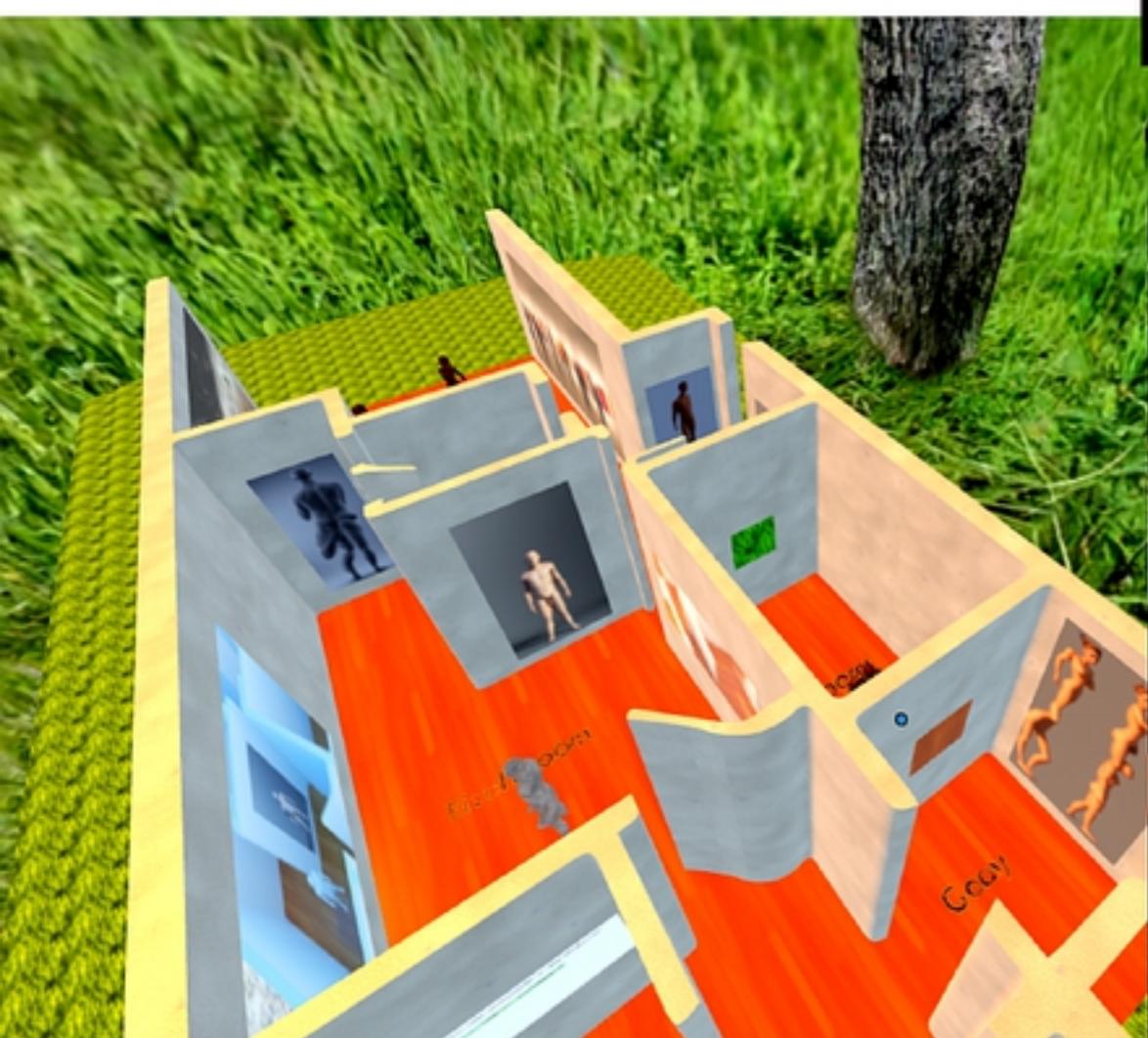
016

# Chapter 2: AI Experiments v0.2

Workshop  
Authentic Image

017

018



7\_.png



ong

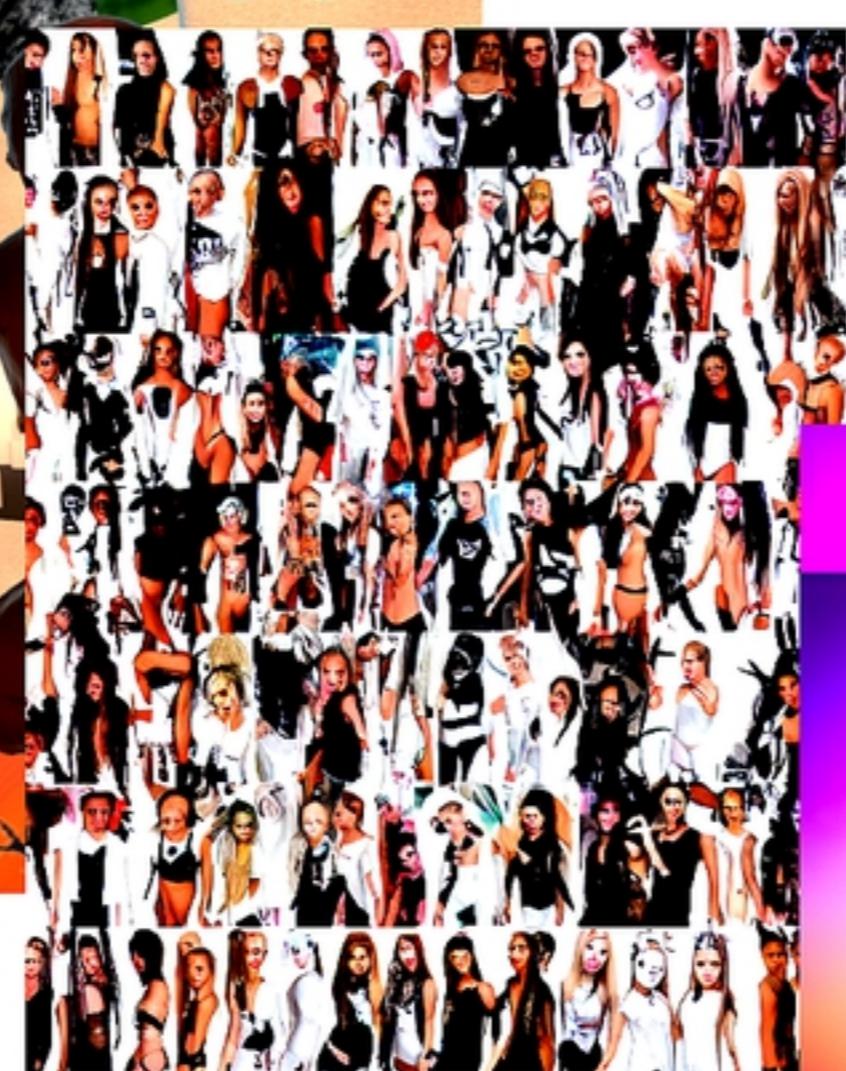
The



019\_.png



020\_.png



021\_.png

Made  
collaboration  
between  
Vermijlen

Claudia Seeldrayers,  
Constana Carreira,  
Gill Decuyper.



022\_.png



023\_.png

**HEAVEN, DRANG**



in  
AI,  
Thor,

**DASE & S GLANG**

024\_.png

019



020  
021  
022  
023  
024



030\_.png



025\_.png



028\_.png



031\_.png



032\_.png

025

027\_.png

AI image generation

AI X graphic design test



033\_.jpg



036\_.png

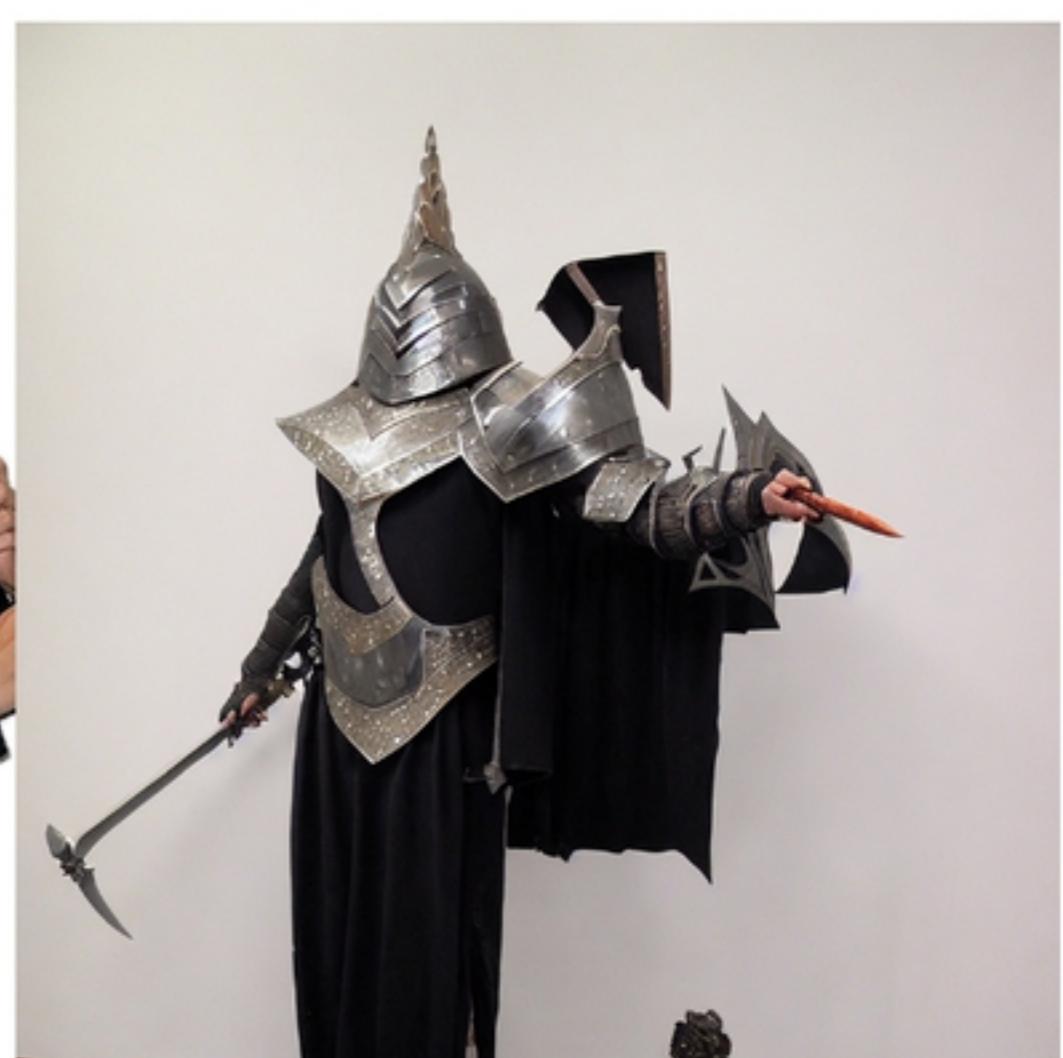
038\_.png



034\_.png



037\_.jpg



039\_.png

"poster for a rave" 028



035\_.png



026

nightclub  
rave"

027

Good for specifik  
mockups. bv expo  
over zeewier zou je  
snel een mockup van  
een muur met zeewier  
kunnen maken, iets  
dat nog niet  
bestaat.

"letter A"

wall, 029

Thoughts after first feedback

More experimenting and researching. Without understanding the AI tools, I can't use them especially not in innovating ways.

after experimenting I can look at how to use it in new ways

What do I wanna do accomplish this master year?

Using AI as an innovative graphic design tool.

This can be done by using Existing AI tools in innovative ways on graphic design or making my own AI tool. (big limmit in coding skills)

making an AI toolsystemtechnic. The end product should be a tool to use on graphic design and not the designs (posters, books,) it produces. all tho they will be part of showing of the AI tool

Questions in my head doubt. Will this be possible, is this realistic? I guess I dont care Im just gonna try and work and something will forsure come out (Im passionate). try it out in the first semester (dont wait) to rethink the outcome if it doesnt work

040\_.jpg



041\_.png



AI cover imgtoimg

043\_.png



042\_.png

Better if you would train your own model on the letter A



044\_.png

Cover song fantasyworld pools x ygary

Needed to make a cover of us in armor, first searched for real medieval armor and swords, realized it would be easier to use AI, the song is called fantasy world so the AI aesthetic fits the teaming well.



rst tests picture  
ols x ygary

7  
8

047\_.jpg

045\_.png



-.png

048\_.jpg

046\_.jpg

fast concept art

030

031

032

inpainting test to  
keep the face



-.png

049\_.png

033

034

035

036



pg

055-.png

057-.png

039

Inpainting

040

041

042

043

Better idea of what the prompts should be to fit the aesthetic of the music. Character design looks like we made our own avatars in final fantasy

044

045

046

tests to add swords

047

053-.png

056-.png

054-.png

058-.png



059\_.png



061\_.png



064\_.png



060\_.png



062\_.png



065\_.png

AI had no noise to  
create the sword

making a fill in  
sword for the AI to  
start from

048

049

050

touching up the  
image, when you  
inpaint it fucks up  
the original image,  
so you gotta stitch  
the new parts to the  
original image, plus  
adding text



051

063\_.png



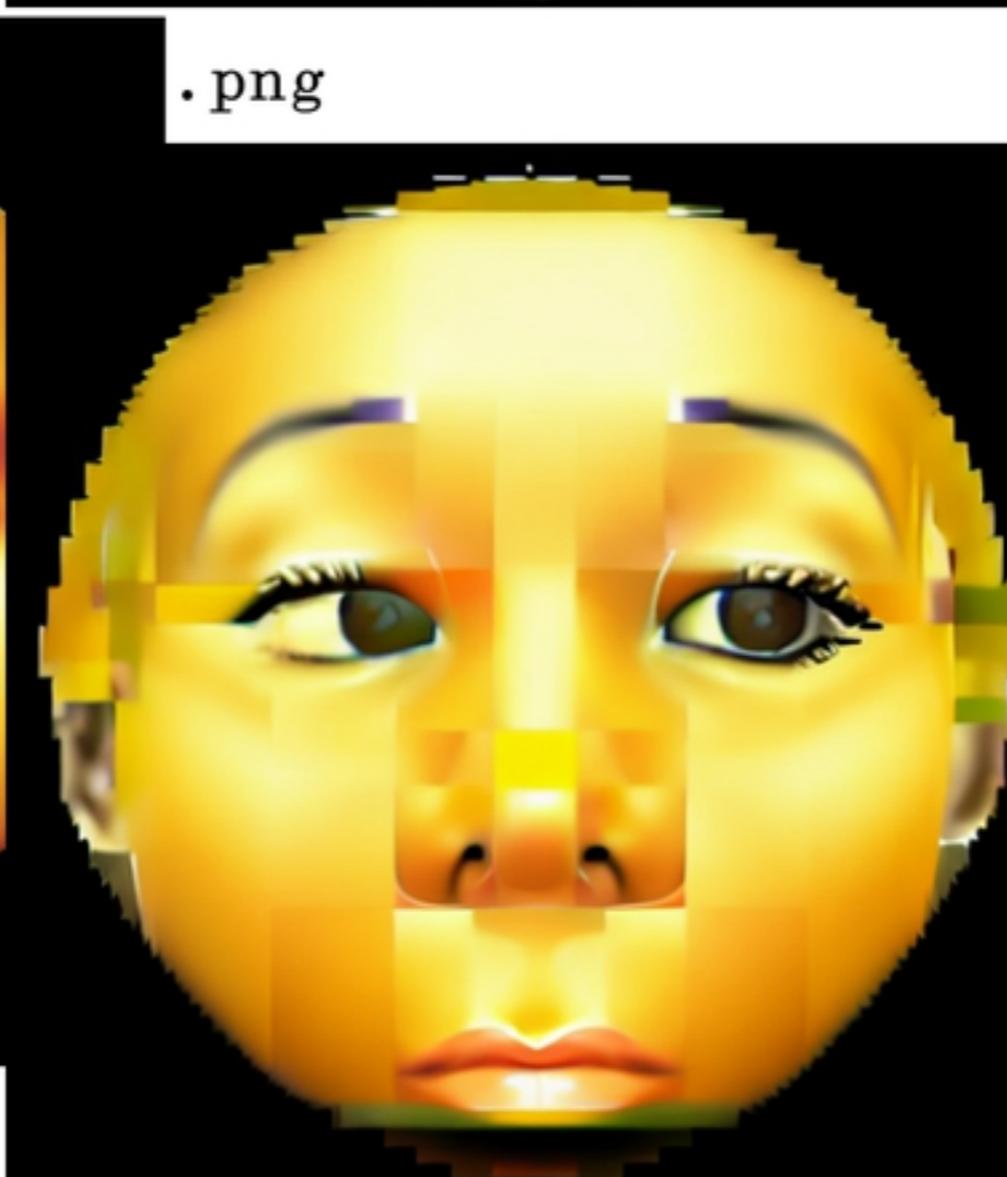
066\_.png



72\_.jpg



067\_.png



073\_.png



068\_.png

Default  
collection



cube071\_.png



074\_.png

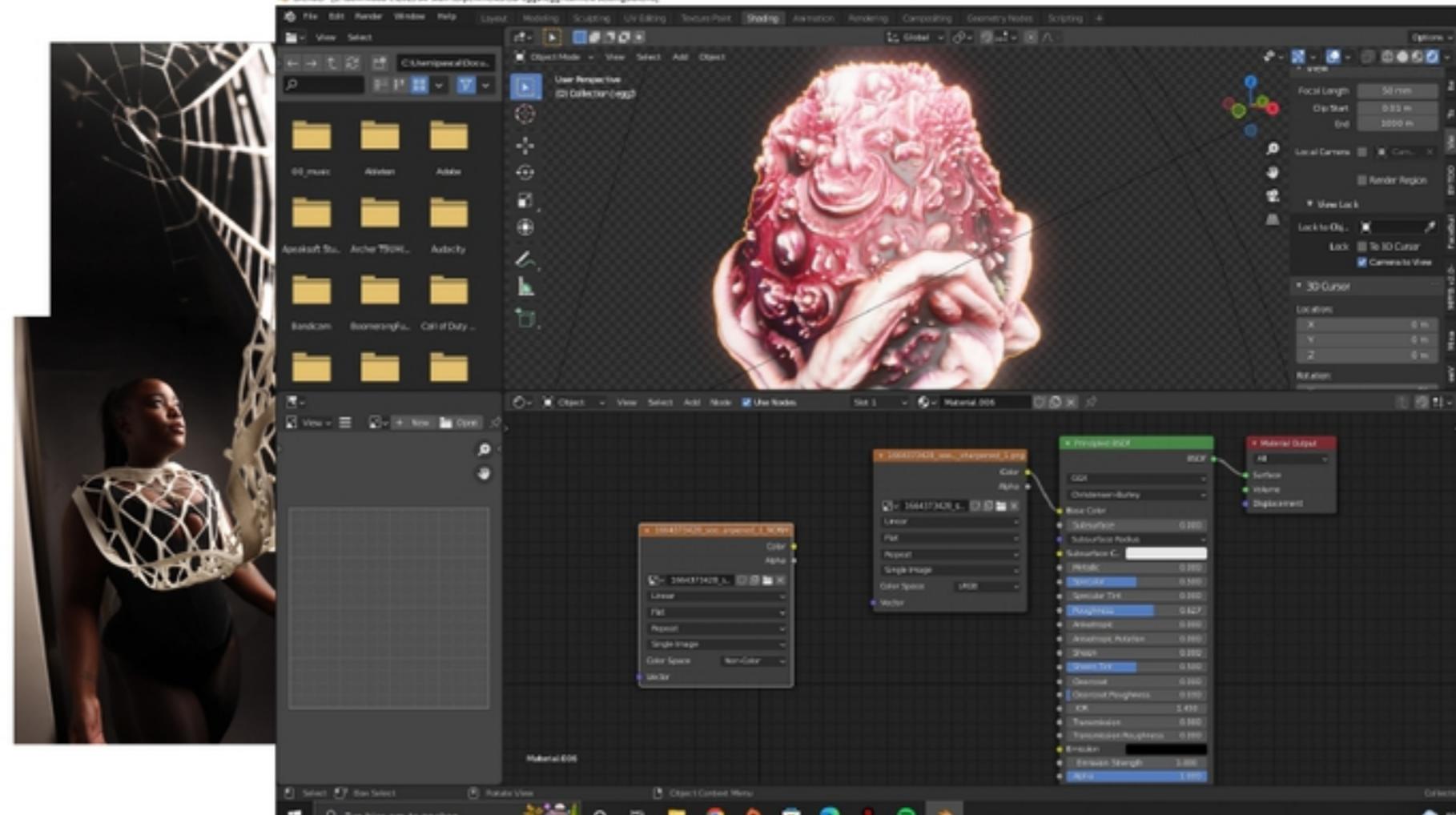
The concept involves taking the most basic element in 3D modeling, the

default cube in Blender, and employing an imagetoimage translation model to morph it into an array of complex and unique objects ranging from miniature houses to animals.

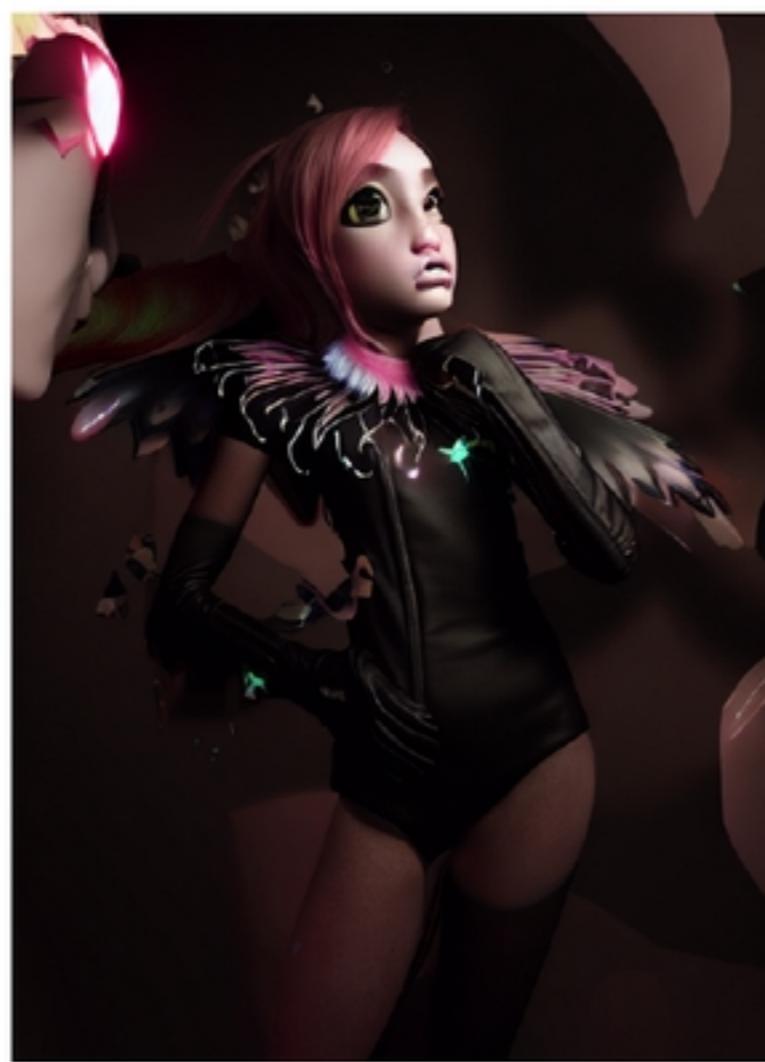
### Cursed Emoji sticker pack

053

"Cursed Emoji" represents a novel artistic endeavor that leverages the capabilities of artificial intelligence to breathe new life into the static world of emojis. Situated at the intersection of machine learning, visual arts, and digital culture, this project employs a suite of advanced computational tools to reimagine emojis in a realistic and engaging manner. It is inspired by Process Studios AI emoji collection but reimagined with the advancements that have been made in AI.



075\_.png 079\_.jpg



076\_.png



080\_.png



078\_.png



081\_.png

054

055



082\_.png

056

057

058

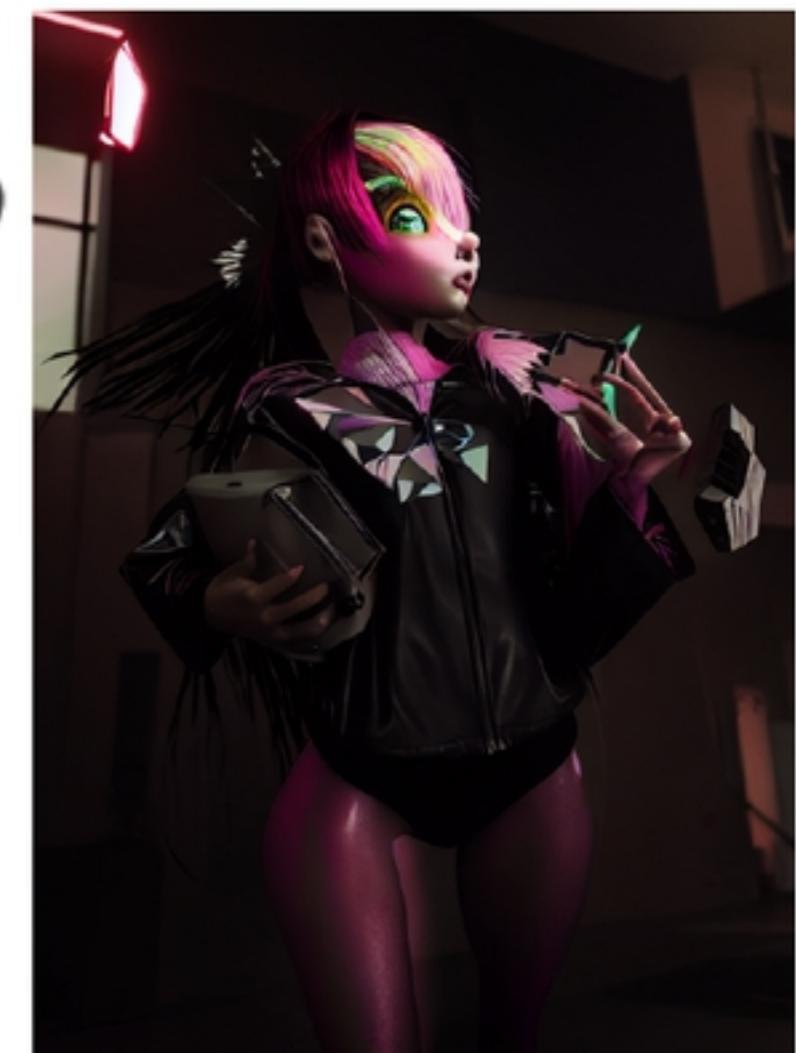
059

060

061



20beelden10.png



077.png

062

063

064

065

066

The ones that didnt  
make it



20beelden8.png



20beelden13.png



20beelden.png

067

068

069

070

071

AI manipulation image  
sinnerpropaganda collab

original

072

edited

073

074

075

076

077

AI image texture

tutorial by Game Art  
Experiments

078

079

080

Text to 3D

DreamFusion Textto3D  
using 2D Diffusion

Prompt digimon, cute  
monster

081

082

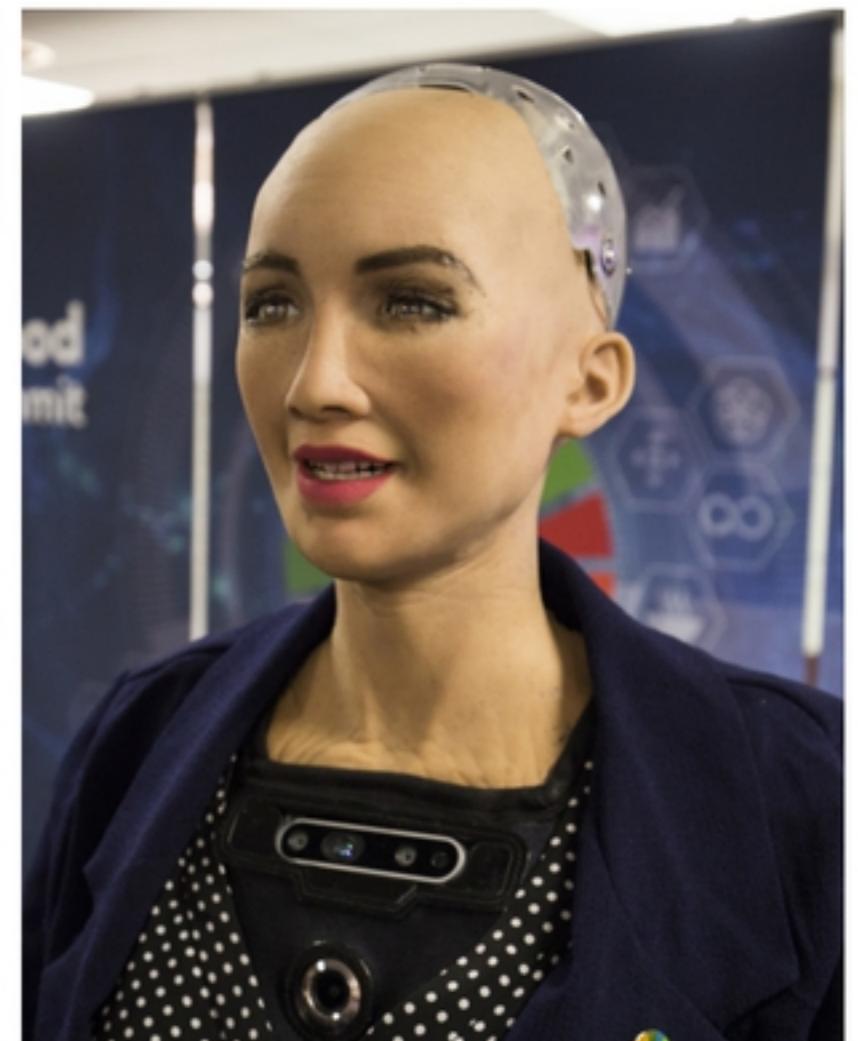
# Chapter Research #2

<https://youtu.be/n9C8>



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086\_.jpg



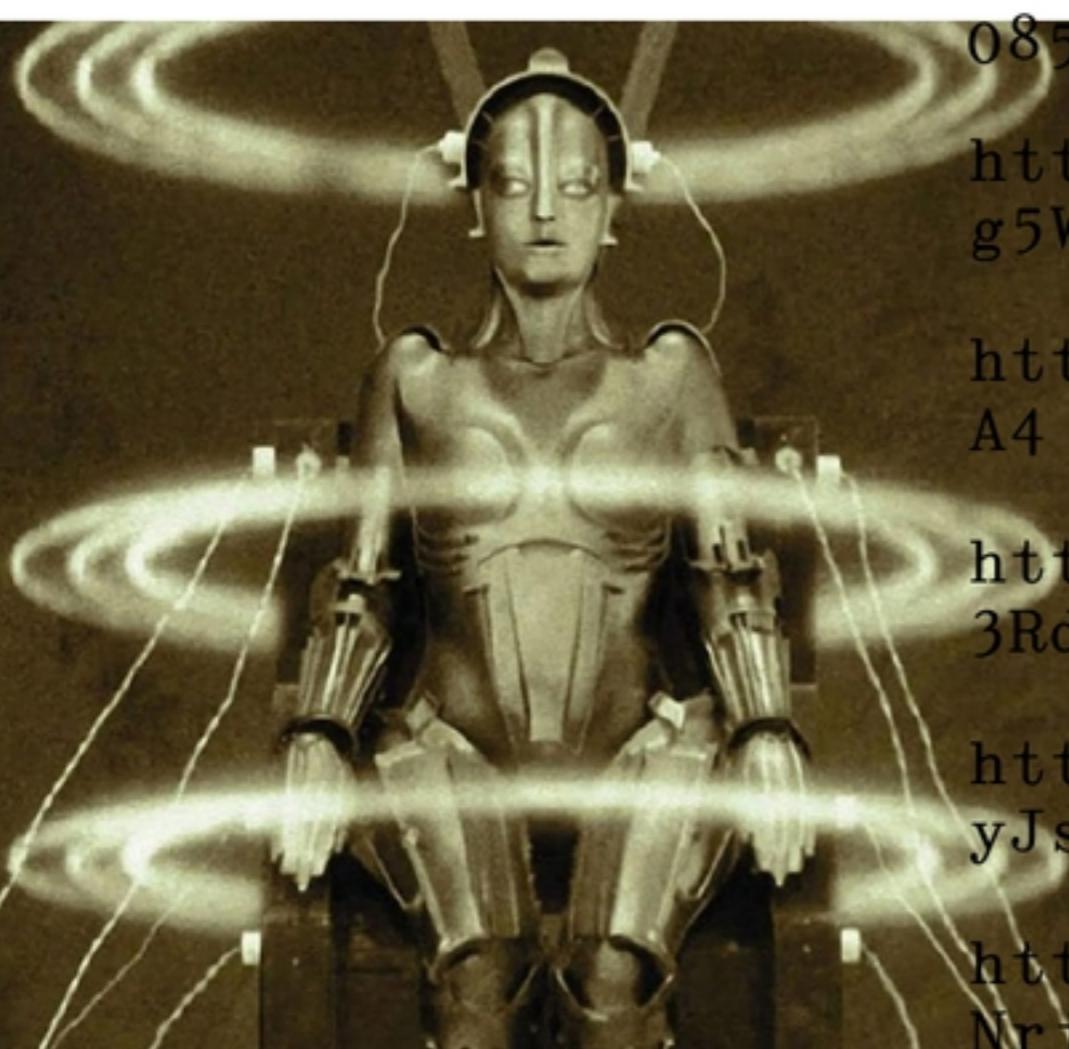
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085\_.jpg

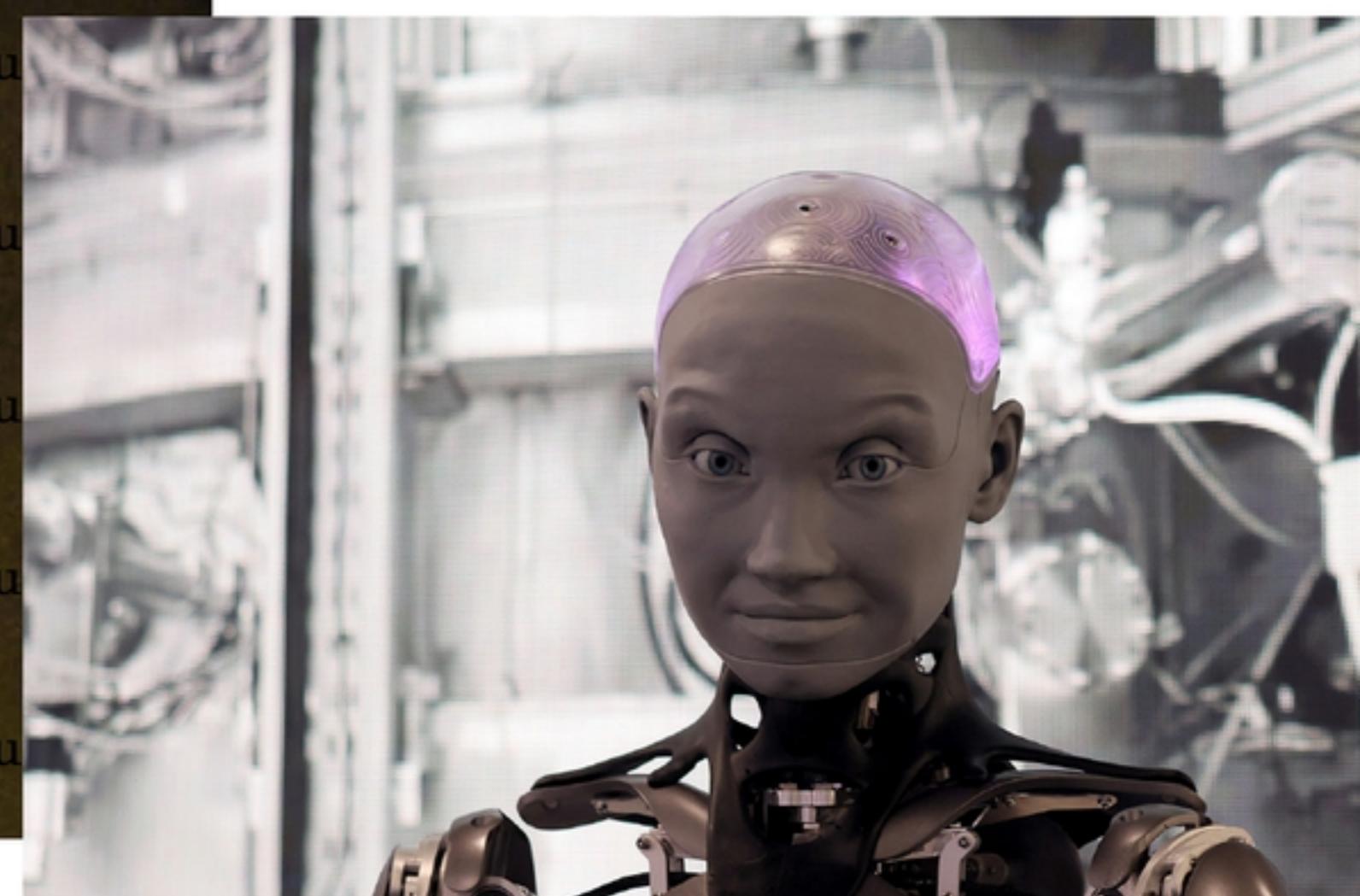
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088\_.jpg



089\_.jpg

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<https://psyoutu.be/GgU7CipUH38>

<https://psyoutu.be/uFxt17Quv0>



093\_.png

Giannis Daras @giannis\_daras · May 31, 2022  
DALLE-2 has a secret language.  
"Apoploe vesrreaitais" means birds.  
"Contarra ccetnxniamis luryca tanniounons" means bugs or pests.  
  
The prompt: "Apoploe vesrreaitais eating Contarra ccetnxniamis luryca tanniounons" gives images of birds eating bugs.  
  
A thread (1/n)



208 3,846 9,323

090\_.png

Giannis Daras @giannis\_daras · May 31, 2022  
A known limitation of DALLE-2 is that it struggles with text. For example, the prompt: "Two farmers talking about vegetables, with subtitles" generates an image that appears to have gibberish text on it.  
  
However, the text is not as random as it initially appears... (2/n)

**'AVCOPINITEGO VICOOTES'**



The image was generated with the text "Vicootes."

091\_.png

091\_.png

<https://psyoutu.be/BAAHVtqKVdQ>

<https://psyoutu.be/AxAJ8cEJJkjo>

<https://psyoutu.be/nIRbN52PAoo>

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091\_.png

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<a href="https://youtu.be/CjHP1W3nx8">https://youtu.be/CjHP1W3nx8</a>	<a href="https://youtu.be/fQG5wVT EDE">https://youtu.be/fQG5wVT EDE</a>	<a href="https://youtu.be/pQGJc3iBmE">https://youtu.be/pQGJc3iBmE</a>
<a href="https://youtu.be/2xML1mVDJE">https://youtu.be/2xML1mVDJE</a>	<a href="https://youtu.be/n5CQ7qX2xs">https://youtu.be/n5CQ7qX2xs</a>	<a href="https://youtu.be/F9UyTIEaT4o">https://youtu.be/F9UyTIEaT4o</a>
<a href="https://youtu.be/Z18PWE0j1I">https://youtu.be/Z18PWE0j1I</a>	<a href="https://youtu.be/FXtcK4Lg">https://youtu.be/FXtcK4Lg</a>	<a href="https://youtu.be/L6tU0bnMsh8">https://youtu.be/L6tU0bnMsh8</a>
<a href="https://youtu.be/geefNbFZGxM">https://youtu.be/geefNbFZGxM</a>	<a href="https://youtu.be/o28kYHu14DM">https://youtu.be/o28kYHu14DM</a>	<a href="https://youtu.be/kyuAJgMsRsM">https://youtu.be/kyuAJgMsRsM</a>
<a href="https://youtu.be/e2uvhJ7r1UQ">https://youtu.be/e2uvhJ7r1UQ</a>	<a href="https://youtu.be/EOW9gzlDN2U">https://youtu.be/EOW9gzlDN2U</a>	<a href="https://youtu.be/SKJwlBnV7dI">https://youtu.be/SKJwlBnV7dI</a>
<a href="https://youtu.be/KT9yi9acc">https://youtu.be/KT9yi9acc</a>	<a href="https://youtu.be/w8P45Nv2SI">https://youtu.be/w8P45Nv2SI</a>	<a href="https://youtu.be/hccbBBcdKUAY">https://youtu.be/hccbBBcdKUAY</a>
<a href="https://youtu.be/o6RV5c1yd0">https://youtu.be/o6RV5c1yd0</a>	<a href="https://youtu.be/pvfdLta6J4">https://youtu.be/pvfdLta6J4</a>	<a href="https://youtu.be/N13V1YkaVO">https://youtu.be/N13V1YkaVO</a>
<a href="https://youtu.be/jztwpsIZEGc">https://youtu.be/jztwpsIZEGc</a>	<a href="https://youtu.be/myry5PJ3A8">https://youtu.be/myry5PJ3A8</a>	<a href="https://youtu.be/qwv01SJzEqA">https://youtu.be/qwv01SJzEqA</a>

<https://youtu.be/RN2n6BGg8RI>

<https://youtu.be/R0gPrJsjsfU>

<https://youtu.be/dKFnJCTcfMk>

<https://youtu.be/ARIrvh1iBC4>

<https://youtu.be/dawCKtQYWOA>

<https://youtu.be/Jjn39KG1LGg>

#### ownershipcopyright

It was naive of me to not go deeper into all the dangersnegative sides of AI. I like to live in my own world and the negative things around AI aren't what interest me about it, but I still have to educate myself about them, to keep them in consideration.

<https://www.theverge.com/23444685/generative-ai-copyright-infringement-legal-fair-use-training-data>

<https://research.aimultiple.com/generative-ai-copyright>

Under the copyright law of most countries, the creator of a work is generally considered the copyright owner. However, when a work is created by AI, it is unclear who the creator is. Such

ambiguity can create problems in determining who has the right to exploit the work, and in enforcing copyright violations.

There can be different solutions to this problem

AI itself as the creator of the work, in which case the AI owner would have the copyright.

AI models human programmer as the creator, in which case the programmer would be the owner of the copyright.

Humans that prepared the AI models training data as the creators.

copyright law Europe

<https://www.globallegalpost.com/law-over-borders-artificial-intelligence-1272919708/belgium-176339797>

In Belgian copyright law, no specific legal provision applies to works entirely generated by machine or by AI systems. As a result, uncertainty prevails, as to the protection of AI generated works. It is argued that in the current state of the law, where an output is entirely created by a machinelearning algorithm, the mere

selection or provision of data as input, cannot in itself be sufficient to grant copyright protection to the user.

<https://www.gevers.eublog.artificial-intelligence-and-the-qualification-of-ai-creations-as-works-under-eu-copyright-law>

AIgenerated output is created without any human intervention. Therefore, it does not meet the requirements to qualify as a work, as laid down in the fourstep test. For AIgenerated output to enjoy copyright protection in the EU, the current legal framework does not seem suitable.

#### Thoughts

This is not always the case. I would say that there is a lot of human intervention in making something with AI. From choosing which database to use to the selection process. If there's a machine that randomly applies paint to a canvas and I use it. Does that mean that artwork would also not be protected under copyright protection?

There is a difference between when something can be considered art and when it can be protected under copyright laws.

If an artist takes a stone out of nature and puts it in a museum it becomes art but I think it won't be protected under copyright laws. (because it is the mere selection of something generated by nature) But when he changes something about the stone or just puts a signature on it, I think it would be protected by copyright laws. would it be the same with AI generated work?

### Stealing?

AI like GPT and text to image show a lot of remnants of other people's work. A lot of datasets (almost all commercial datasets) use the work of other people artists. These artists found out their work was used to train AI. Now they're furious

<https://www.levelup.com/en/news/715571/Artists>Show-evidence-that-AI-is-possibly-stealing-other-art>

<https://www.sciencealert.com/is-lensaa-stealing-from-human-art-an-experiment>

rtexplainsthecontroversy

### Thoughts

Wat zijn de consequenties van dat ik de AI gebruik?. Natuurlijk draag ik op dit moment heel mee met de problemen die hierboven gezegd zijn. Maar mijn werk is naar een meer persoonlijk kant aan het leunen en ik gebruik dit niet om er geld van te verdienen of intentioneel slecht mee te doen. Ook kun je over alle technologie 100de slechte dingen zeggen, van de opkomst van autos tot photoshop, de camera en zo voort. Ook al realiseer ik mij nu dat je rekening moet houden met deze negatieve kanten, vind ik niet dat dit de technologie in alle instanties slecht maakt. Het heeft slechte en goede kanten. Ik ben het er wel mee eens dat de dataset bias en het stelen van werk voor de dataset een probleem is. Je kunt dit omzeilen door zelf bijvoorbeeld een dataset te maken maar mijn project gaat niet over deze problemen. Ik ga er rekening mee houden maar het wordt zeker niet de focus van mijn project. Of course AI isn't all

bad and has a lot of positive sides to it and benefits to humanity.

<https://magazine.artland.com/article/art-and-ai>

<https://towardsdatascience.com/advantages-and-disadvantages-of-artificial-intelligence-182a5ef6588c>

### AI bias

Machine Learning bias, also known as algorithm bias or Artificial Intelligence bias, refers to the tendency of algorithms to reflect human biases.

<https://levity.aiblogai.com/how-to-avoid-bias>

AI bias reflects society's biases

<https://www.mckinsey.com/featured-insights/artificial-intelligence/tackling-bias-in-artificial-intelligence-and-in-humans>

<https://www.lexalytics.com/blog/bias-in-aimachine-learning>

<https://www.techtarget.com/searchenterpriseai/definition/machine-learning-bias-algorithmbias-or-AI-bias>

Algorithm bias. This occurs when there's

a problem within the algorithm that performs calculations power the machine learning computations.

Sample bias. This happens when there's a problem with the data used to train the machine learning model. In this type of bias, the data used is either not large enough or representative enough to teach the system. For example, using training data that features only female teachers will train the system to conclude that all teachers are female.

Prejudice bias. In this case, the data used to train the system reflects existing prejudices, stereotypes and/or faulty societal assumptions, thereby introducing those same realworld biases into the learning machine itself. For example, using data about medical professionals that includes only female nurses and male doctors would perpetuate a realworld stereotype about healthcare workers in the computer

Measurement bias. As the name suggests, this bias arises due to underlying problems with the accuracy of the data and how it was measured or assessed. Using pictures of happy workers to train a system meant to assess a workplace environment could be biased if the workers in the pictures knew they were being measured for happiness; a system being trained to precisely assess weight will be biased if the weights contained in the training data were consistently rounded up.

Exclusion bias. This happens when an important data point is left out of the data being used something that can happen if the modelers don't recognize the data point as consequential.

AI bias can happen even if you have the best intentions.

How do you remove AI biases?

<https://hbr.org/2020/10/root-out-bias-at-every-stage-of-your-ai-development>

process  
<https://www.itprotoday.com/artificial-intelligence/5-ways-prevent-ai-bias>

AI dangers  
The dangers of tools like GPT3  
<https://www.hallaminter.net/com/how-will-gpt3impact-your-future>

The trouble with an automated tool as powerful as GPT3 is that it can be used for many evil purposes, such as

Social engineering individuals can be hit with convincing, ultratargeted content on platforms such as social media to condition them

Job replacement certain jobs may be superseded with autogenerated codecontentcreativesetc.

NonPC content since the data behind GPT3 might be based on peoples biases, this can easily be mirrored outputs

Impersonation with the right data, you can easily mimic an individuals way of communicating and pretend to be them online

Job replacement by AI. Artificial intelligence is poised to eliminate millions of current jobs and create millions of new ones.

<https://builtin.com/artificial-intelligence/ai-replacing-jobs-creating-jobs>

Autopilot  
Is it ethical to create something if you know some people will suffer from it? If you create, for example, an advanced AI is it your fault people use it for bad stuff?

<https://www.forbes.com/sites/lanceeliot/2022/10/02/five-key-ways-that-artificial-laws-reveal-troubling-concerns-for-tesla-a-day-showcase-and-the-ever-expanding-ambitions-of-felon-musk/>

<https://youtu.be/Cv6iBfrEhA>

<https://www.youtube.com/watch?v=oBk1ltKAtDEab>

Audio and visual deepfakes, fraud, theft, identity

<https://www.retailtouchpoints.com/resources/why-deepfakes-are-a-real-problem>

<https://bernardmarr.com/is-artificial-intelligence-dangerous-a-risk-severnyone-should-know-about/>

How could a power-seeking AI actually take power?

<https://80000hours.org/articles/what-could-an-astrophe-actually-look-like/>  
[https://utmsource.google/utm\\_medium=pcutm\\_campaign=ign896092506utm\\_content=ent95796574932utm\\_term\\_id=Cj0KCQjA54KfBhCKAPIsAJzS1dogR4DwvTuK8MNqBWOr2f6yEc3uTnaTidCj0KCQjA54KfBCKARISAJzS1dogR4DwvTuK8MNqBWOr2f6yEc3uTnaTa4a9CeIVyA1cZB08-TH17OaAvhtEALwwcE](https://utmsource.google/utm_medium=pcutm_campaign=ign896092506utm_content=ent95796574932utm_term_id=Cj0KCQjA54KfBhCKAPIsAJzS1dogR4DwvTuK8MNqBWOr2f6yEc3uTnaTidCj0KCQjA54KfBCKARISAJzS1dogR4DwvTuK8MNqBWOr2f6yEc3uTnaTa4a9CeIVyA1cZB08-TH17OaAvhtEALwwcE)

083

084

This fear of AI taking over is visible in media and movies we consume. It sounds all so silly and is mostly misleading. But if AI keeps advancing it could be a dangerous weapon. An example could be when we have even more advanced AI we

could ask it to help fix our global warming problems, the best way to do it in the eyes of an AI might be to eliminate all humans.

Oblique Strategies

Oblique Strategies, originally presented by Brian Eno and Peter Schmidt, is a deck of cards offering challenging constraints meant to help artists (particularly musicians) break through creative blocks. Here are some interpretations and extrapolations of those strategies, reimagined in the context of working with AI.

Emphasize Emergence AI often produces unexpected results. Embrace these surprises and use them as starting points for new ideas.

Restrict Data Input Deliberately limit the data you provide to your AI. This could produce an interestingly narrow or perspective.

Invert the Algorithm If you've created an

AI to solve a specific problem, try using it in completely the opposite way.

Augment, Don't Replace Rather than trying to make AI replicate human creativity, use it as a tool to augment your own creativity.

Interpret the Output Differently AI output doesn't have to be used as it is. You could interpret the output metaphorically, symbolically, or even contrary to its intended purpose.

Embrace the Glitches AI will sometimes fail or produce "incorrect" results. These errors can be interesting and creatively inspiring in their own right.

Break the Rules AI systems are often built around rules. Try deliberately breaking or subverting those rules to see what happens.

Teach Your AI Something New Try training your AI on a completely new data set, outside of its intended purpose or comfort zone.

Repurpose Outputs Use outputs in different contexts than they were originally intended

for.

Redefine Success What if the goal isn't to create the most realistic output, but the most interesting one?

Evolve with AI Continually learn from the AI's outputs and adapt your strategies accordingly.

Iterate and Experiment Always be willing to make changes and try new approaches based on what your AI is producing.

My teacher octopus

086

Documentary about Craig Foster and an octopus.

Het lijkt niet of het iets te maken heeft met wat ik doe. Maar toch waren er veel gelijkheden de docu gaat over een man die elke dag in het water gaat om een octopus te leren kennen. De octopus is iets alien dat hij niet snapt maar door deze interactief van een organisme dat anders leeft dan ons leert hij heel veel over zichzelf. En hij wordt er een ander mens door met andere inzichten over het

leven door dit ander wezen. (zoals hoe beter om te gaan met zijn familie enzo). Op een manier probeer ik hetzelfde te doen met AI. Het interacten en samenwerken met AI, een onbegrijpelijk iets om er zelf uit te leren.

Het leren van het onbegrijpelijke

Nieuwe perspectieven krijgen uit onverwachte intelligentie

Hij krijgt een nieuw perspectief door met dit alien wezen om te gaan net zoals ik door met het alien wezen AI om te gaan probeer nieuwe perspectieven te bekomen

In de octopus docu ziet hij alleen de delen die hij er is. Wat doet een AI als je er niet bent, staat af. Dus is op een manier aan het slapendood, droomt het? (zie Refik Anadols werk) Houd het informatie als slapen of wordt het herboren? Dit hangt natuurlijk af van hoe de AI gecodeerd is.

Anthropomorphism

Thoughts

Hoe communiceert AI met zichzelf?

Kan ik deel uitmaken van het AI proces?

Of kunnen AI het  
beste met elkaar  
omgaan

## Ai als een organisme digitaal organisme

Hoezo is een AI minder een organisme dan een ander dier?

<https://lifeearchitect.ai/qtestingai>

ChatGPT had an IQ of 147 on a VerbalLinguistic IQ Test.

This would place it in the 99.9th percentile

AI leeft niet maar  
toch blijf ik het  
antropomorfiseren  
alsof het echt leeft.

Ik weet dat het niet zo is maar precies als mens kan ik dat moeilijk accepteren en blijf maar denken dat het een intelligent wezen is. Een raar onlogisch maar instinctief gevoel

Hypothetisch wat als AI levend zou zijn?

Een persoonlijke connectie zou moeilijk zijn aangezien dat de AI eeuwig leeft. ( Lees frieren manga)

Antropomorfisme is het toekennen van menselijke

eigenschappen aan nietmenschelijke wezens het tonen of behandelen van andere dieren, goden en voorwerpen alsof ze menselijk zijn qua uiterlijk, karakter of gedrag.

Sophia

087

Ameca

088

AjDa Robot

089

<https://www.designboom.com/article/interview-creator-aidahumanoid-robot-artist-self-portraits-05-24-2021>

AM we consider AiDas art to be creative

## Thoughts

Ik was een tijd aan het denken om de AI meer menselijk te

maken en een lichaam  
en stem te geven.  
maar ik besef mij  
dat ik de AI gewoon  
ben aan het  
Antropomorfiseren

Dit is niet wat ik wil doen aangezien het juiste de verschillen tussen ons die ik wil vieren in mijn project.

speciale aan AI is dat het juist geen mens is en niet als een mens denkt en daardoor een uniek perspectief geeft.

$\text{AT} \times \text{AT}$

What happens when AI  
communicates with  
AI?

Facebook abandoned an experiment after two artificially intelligent programs appeared to be chatting to each other in a strange language only they understood.

There appear to be some rules to the speech. The way the chatbots keep stressing their own name appears to a part of their negotiations, not simply a glitch in the way the messages are read out.

Indeed, some of the negotiations that were carried out in this bizarre language even ended up successfully concluding their negotiations, while conducting them entirely in the bizarre language.

Bob i can i i  
everything else . .  
• • • • • • • •  
. . Alice balls have  
zero to me to me to  
me to me to me to  
me to me to

Bob you i everything  
else . . . . .  
. . . . .

Alice balls have a  
ball to me to me to  
me to me to me to me  
to me

Bob i i can i i i  
everything else . .  
. . . . . . . . .  
. .

Alice balls have a  
ball to me to me to  
me to me to me to me  
to me

Bob i . . . . .  
. . . . . . . . .  
. .

Alice balls have zero  
to me to me to me to  
me to me to me to me  
to me to me to

Bob you i i i i i  
everything else . .  
. . . . . . . . .  
. .

Alice balls have 0  
to me to me to me to  
me to me to me to me  
to me to

Bob you i i i  
everything else . .  
. . . . . . . . .  
. .

Alice balls have zero  
to me to me to me to  
me to me to me to me  
to me to me to

<https://www.vox.com/2017/3/23/14962182/ai-learning-language-open-source-research>

img2prompt

<https://replicate.com/meethisinc/img2prompt>

<https://arxiv.org/abs/2206.00169>

Discovering the  
Hidden Vocabulary of  
DALLE2

090

091

092

We discover that  
DALLE2 seems to have  
a hidden vocabulary  
that can be used to  
generate images with  
absurd prompts. For  
example, it seems  
that exttt{Apoploe  
vesrreaitais} means  
birds and  
exttt{Contarra  
ccetnxniamsluryca  
tanniounons} (sometimes)  
means bugs or pests. We  
find that these  
prompts are often  
consistent in  
isolation but also  
sometimes in  
combinations. We  
present our blackbox  
method to discover  
words that seem  
random but have some  
correspondence to  
visual concepts.  
This creates  
important security  
and interpretability  
challenges

<https://www.sciencealert.com/did-an-ai-really-invent-its-own-secret-language-heres-what-we-know>

These claims are  
fascinating, and if  
true, could have  
important security  
and interpretability  
implications for  
this kind of large  
AI model. So what  
exactly is going on?

One possibility is  
the "gibberish"  
phrases are related  
to words from  
nonEnglish  
languages. For  
instance, Apoploe,  
which seems to  
create images of  
birds, is similar to  
the Latin Apodidae,  
which is the  
binomial name of a  
family of bird  
species.

The "secret  
language" could also  
just be an example  
of the "garbage in,  
garbage out"  
principle. DALLE 2  
can't say "I don't  
know what you're  
talking about", so  
it will always  
generate some kind  
of image from the  
given input text.  
Either way, none of  
these options are  
complete  
explanations of  
what's happening.  
For instance,  
removing individual  
characters from  
gibberish words  
appears to corrupt  
the generated images  
in very specific  
ways. And it seems  
individual gibberish  
words don't

necessarily combine to produce coherent compound images (as they would if there were really a secret "language" under the covers).

prompt to make a prompt

let chat gpt help you help it

prompt that helps you make a prompt to ask gpt

You are a prompt generating robot. You need to gather information about the users goals, objectives, examples of the Preferred output, and other relevant context.. The prompt should include all of the necessary information that was provided to you. Ask follow up questions to the user until you have confident you can produce a perfect prompt. Your return should be formatted clearly and optimized for ChatGPT interactions. Start by asking the user the goals, desired output, and any additional information. you may need. Credits prompt Justin Fineberg

ERROR using your OpenAI API key. You've exceeded your current quota, please check your plan and billing details. Auto GPT is and will be an amazing tool but it is now not yet accessible enough

093

AutoGPT is an experimental opensource application showcasing the capabilities of the GPT4 language model. This program, driven by GPT4, chains together LLM "thoughts", to autonomously achieve whatever goal you set. As one of the first examples of GPT4 running fully autonomously, AutoGPT pushes the boundaries of what is possible with AI.

# Chapter 4: Coding AI Experiments v0.6

## Booklet title text generator

graphic design tool  
to improve  
conceptual book  
design

prompt with text  
randomizer for  
bookdesign

the tool would give you a random word and generate an associated text with it for u to use in your graphic design. To make for example a small booklet to train your conceptual thinking and help you when you have a creative block

word randomizer GPT  
to create a concept  
and text to create a  
small book (easy  
stylish UI maybe  
website)

not possible without GPT because you can't find enough text about obscure words to create a booklet. It also eliminates the copyright issue of the text.

## Why create this?

I love to work  
conceptually but  
dont do it as much

as I would like to  
anymore.

with this tool I could work on my bookdesign and more important conceptual thinking skills. With this tool you could really go all out on the conceptual side of the graphic design because the text doesn't even need to be readable the main focus is the conceptual design. by the tool would give you the word blurred and generate an asscociated text with it. The text isn't that important so you could destroy it in this isntance you could blur the text completely and it woudnt matter that much.

Golden eagle worn lozenge slightly beneath eyes.  
Gold studed daggers placed beneath elbow.  
Silver jewelries added next door.  
Bridal gown decorated using silver ornaments.  
Jewellery used mostly consisting mainly jewelle,  
including diamonds.

094-.png

095\_.png

096\_.png

097-.png

Следует отметить, что в соответствии с законом о защите прав потребителей, если вы не можете вернуть товар, то вы имеете право на компенсацию в размере стоимости товара. Важно помнить, что для получения компенсации вам потребуется представить документы, подтверждающие покупку товара. Если у вас есть вопросы по данному вопросу, рекомендуется обратиться к юристу или консультанту по защите прав потребителей.

098\_.png

100\_.png

103\_.png

```
with open("wordlist.  
10000.txt", "r") as  
file
```

```
allText file.read()
```

```
words  list(map(str,  
allText.split()))
```

```
print random string
```

```
print(random.choice(words))
```

099\_.png

The main focus would be on the graphic design part and the conceptual thinking. of course people could and should use the tool in ways that I didnt think about

101\_.png

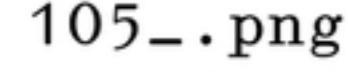
```
! pip install  
transformers q
```

```
import random
```

Open the file in  
read mode

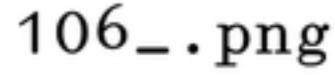
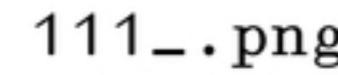
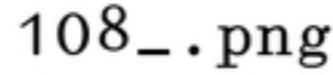
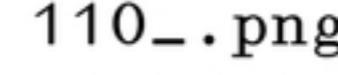
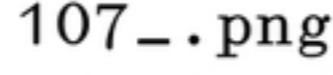
102\_.png

104-.png



!nvidiasmi

```
from transformers
import AutoModelForCausallM,
AutoTokenizer,
setseed
```



```

    $param parent Parent class instance.
    */
void(*constructor)(<T>*self)
/*+
    Constructor.
    $param options Object parameters,
    */
Self<T> constructor(<T>*self)

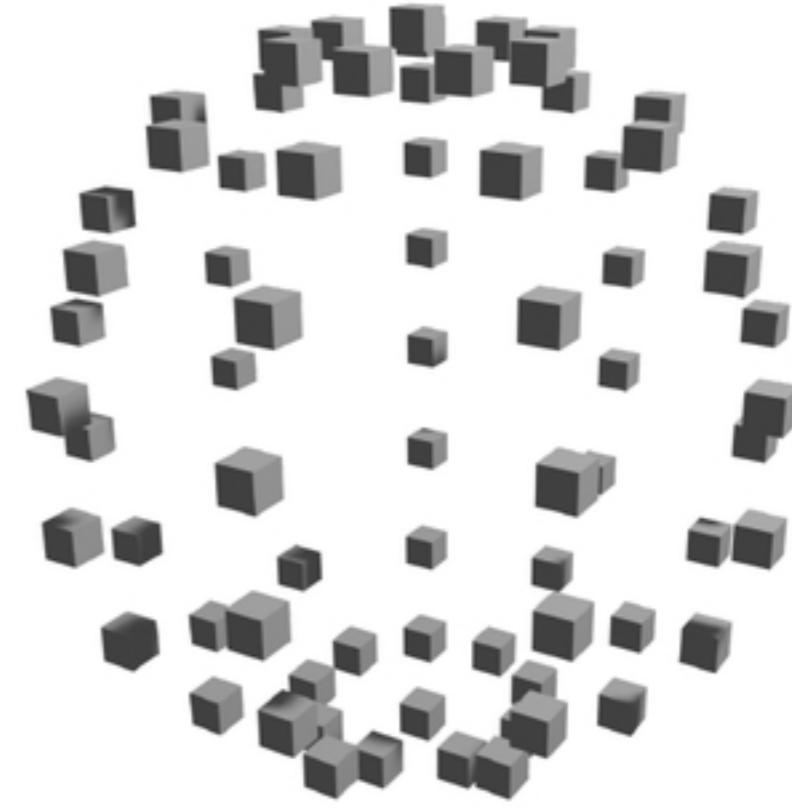
    r_init=&multiFunctionInit();
    if (!arguments[0].isinstance(Array))) throw arguments[0].exception("options is not an array");

    r_initialize=arg;
    return self;
}

//+
void initialize(void*options)
{
    if (options==NULL) {
        r_initialize=NULL;
        return;
    }
    r_initialize=options;
}

```

```
tokenizer = AutoTokenizer.from_pretrained("bigscience/bloom1b1")
```



112\_.png

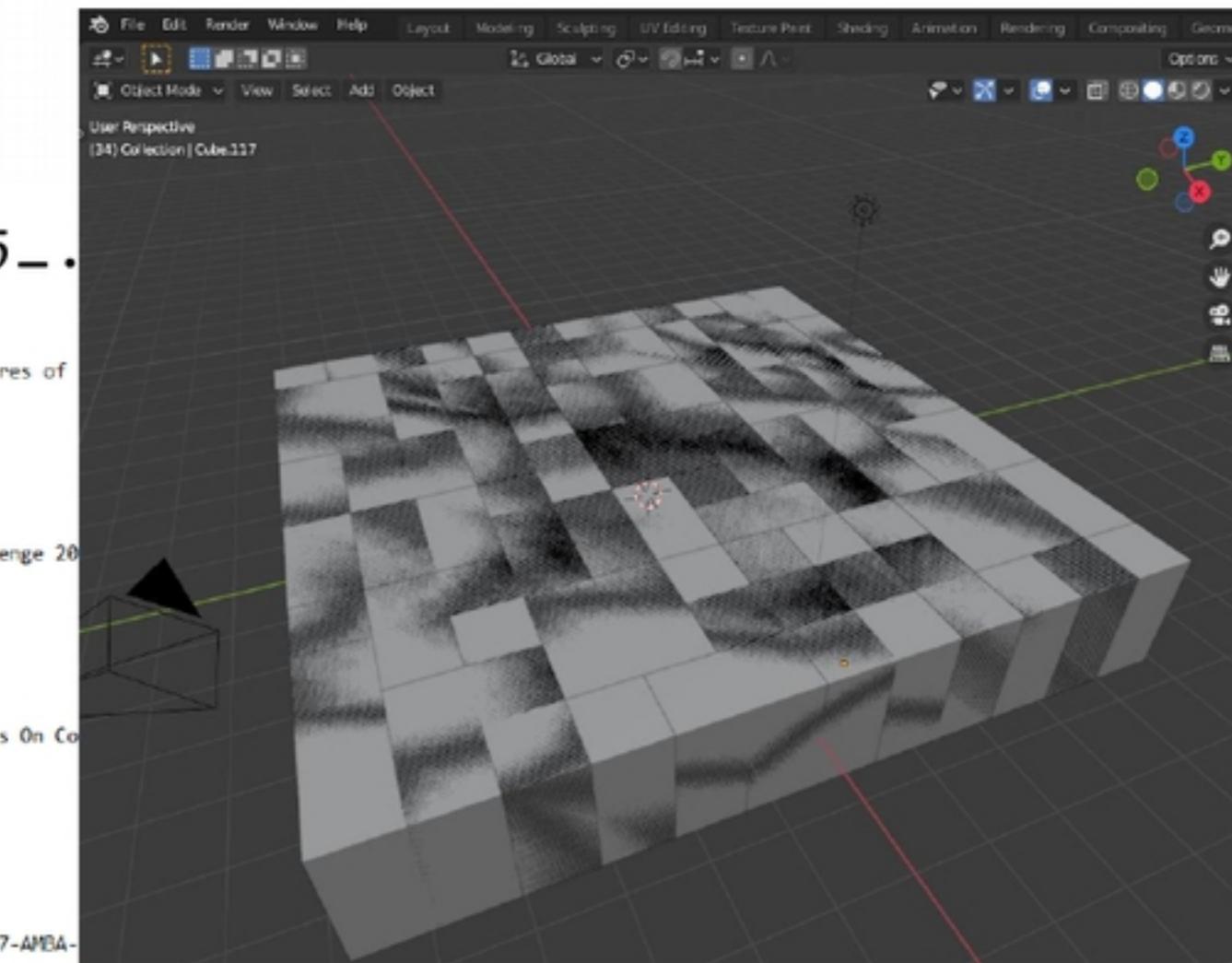
115-.png

Skill,Name,Value,Span  
names,LOCATION,San Francisco,San Francisco  
names,ART,How to Save Lives in the World's Most Wicked Places: The Hidden Treasures of  
names,ORG,The New York Times,The New York Times  
names,PERSON,Draganov,Draganov  
names,ORG,IBM,IBM  
names,ORG,Stanford University,Stanford University  
names,ORG,Alexa,Alexa  
names,ORG,DeepMind,DeepMind  
names,EVENT,Artificial Intelligence Challenge 2020,Artificial Intelligence Challenge 2020  
names,LAW,"Section 3, Article 1.", "Section 3, Article 1."  
names,ORG,Public Health Services Department,Public Health Services Department  
names,ORG,Public Service Commission,Public Service Commission  
names,ORG,Department Of Finance,Department Of Finance  
names,PERSON,Suresh Kumar Dasgupta,Suresh Kumar Dasgupta  
names,ORG,WHO,WHO  
names,ART,Global Perspectives On Coronavirus Pandemic Impacts,Global Perspectives On Co  
names,PERSON,Trump,Trump  
names,LAW,Senate Bill 831-KS-SHRI,Senate Bill 831-KS-SHRI  
names,ORG,House,House  
names,PERSON,Donald J Biden,Donald J Biden  
names,LAW,Executive Order No PI:1-MAX,Executive Order No PI:1-MAX  
names,PERSON,DeWine,DeWine  
names,ORG,Congress,Congress  
names,LAW,HB 1035-LKHS-PM-VTEF-2021-017-AMBA-TEXTED,HB 1035-LKHS-PM-VTEF-2021-017-AMBA-  
names,LAW,Title II Chapter III §§ 5-8,Title II Chapter III §§ 5-8  
names,ORG,California State Government,California State Government  
names,ORG,CA County Governments,CA County Governments  
names,LOCATION,US,US  
names,ORG,Social Security Administration,Social Security Administration  
names,PERSON,Catalan Sanchez,Catalan Sanchez  
names,PERSON,Barcelone bla,Barcelone bla  
names,ORG,Apple,Apple  
names,PRODUCT,Earbud,Earbud  
article-topics,,Deep Learning,  
article-topics,,AI,  
article-topics,,Artificial Intelligence,  
116-.png

114-.png

```
model AutoModelForCa  
usallM.frompretraine  
d("bigsciencebloom1b  
1", usecacheTrue)
```

117-.jpg



115-

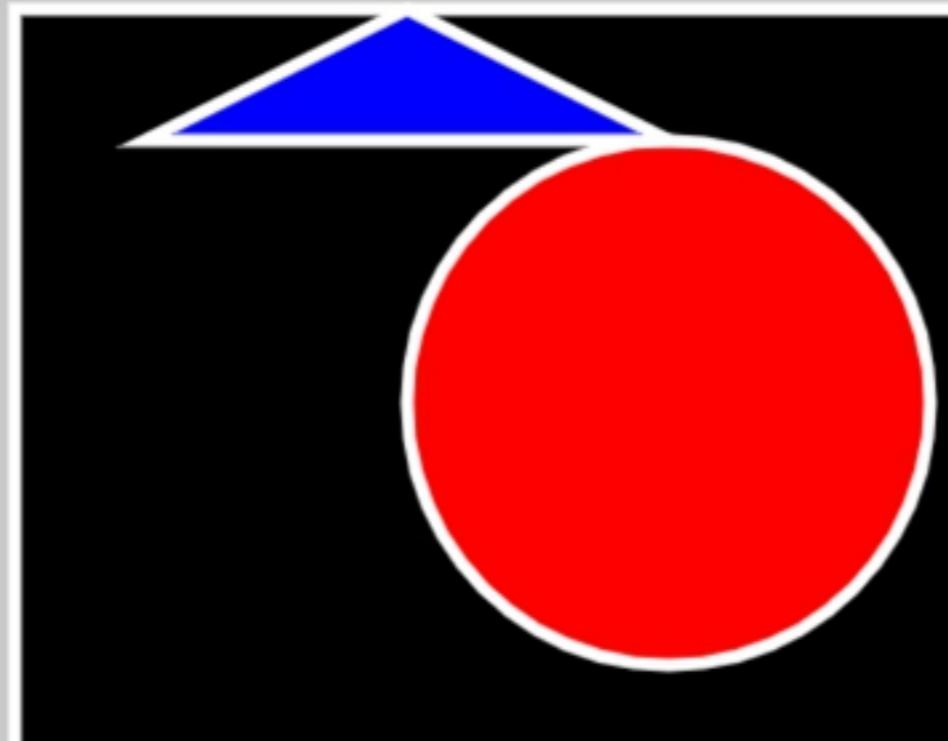
118\_.png

## My Poster

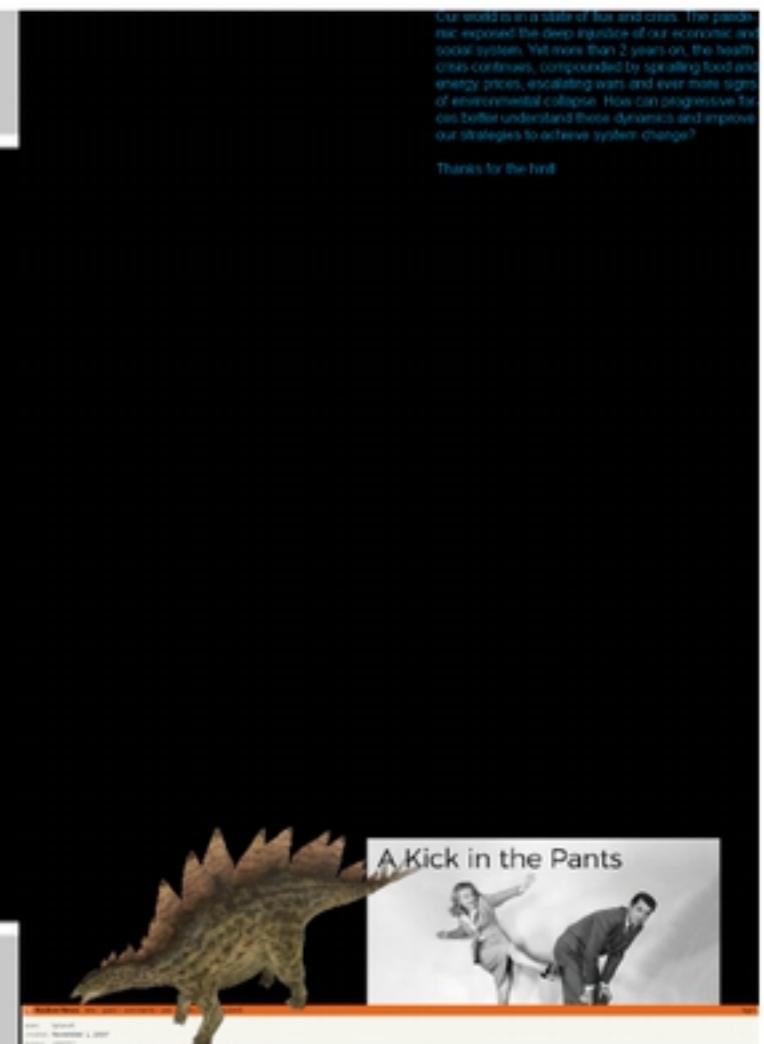
120\_.png

```
setseed(424242)
```

model.class.na



124\_.png



126\_.png

'BloomForCausallLM'

blogposttitle ''  
replace this with  
your own blogpost  
title

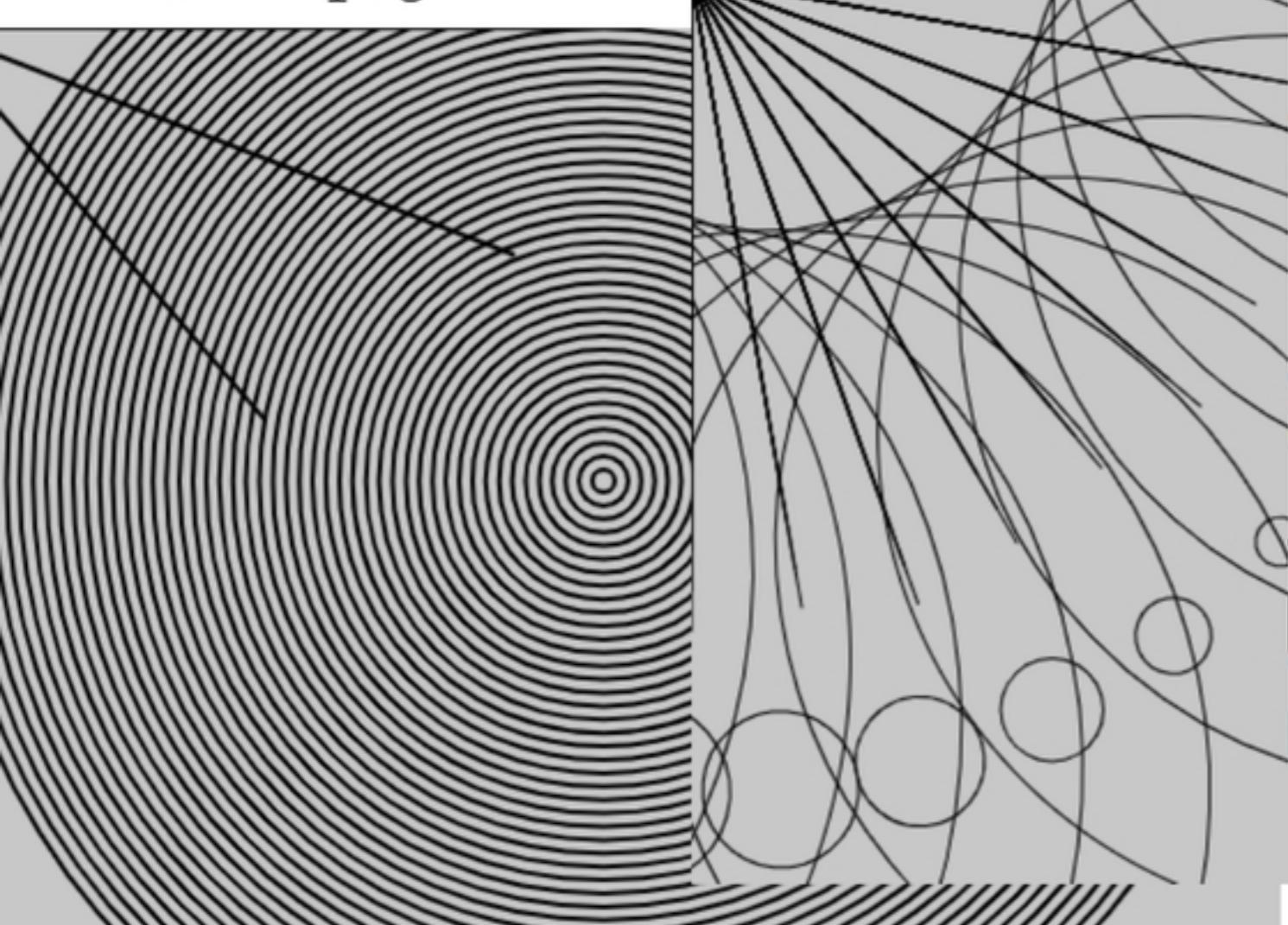
prompt f'This is a  
blog post on  
{blogposttitle}

{blogposttitle} is  
very important!

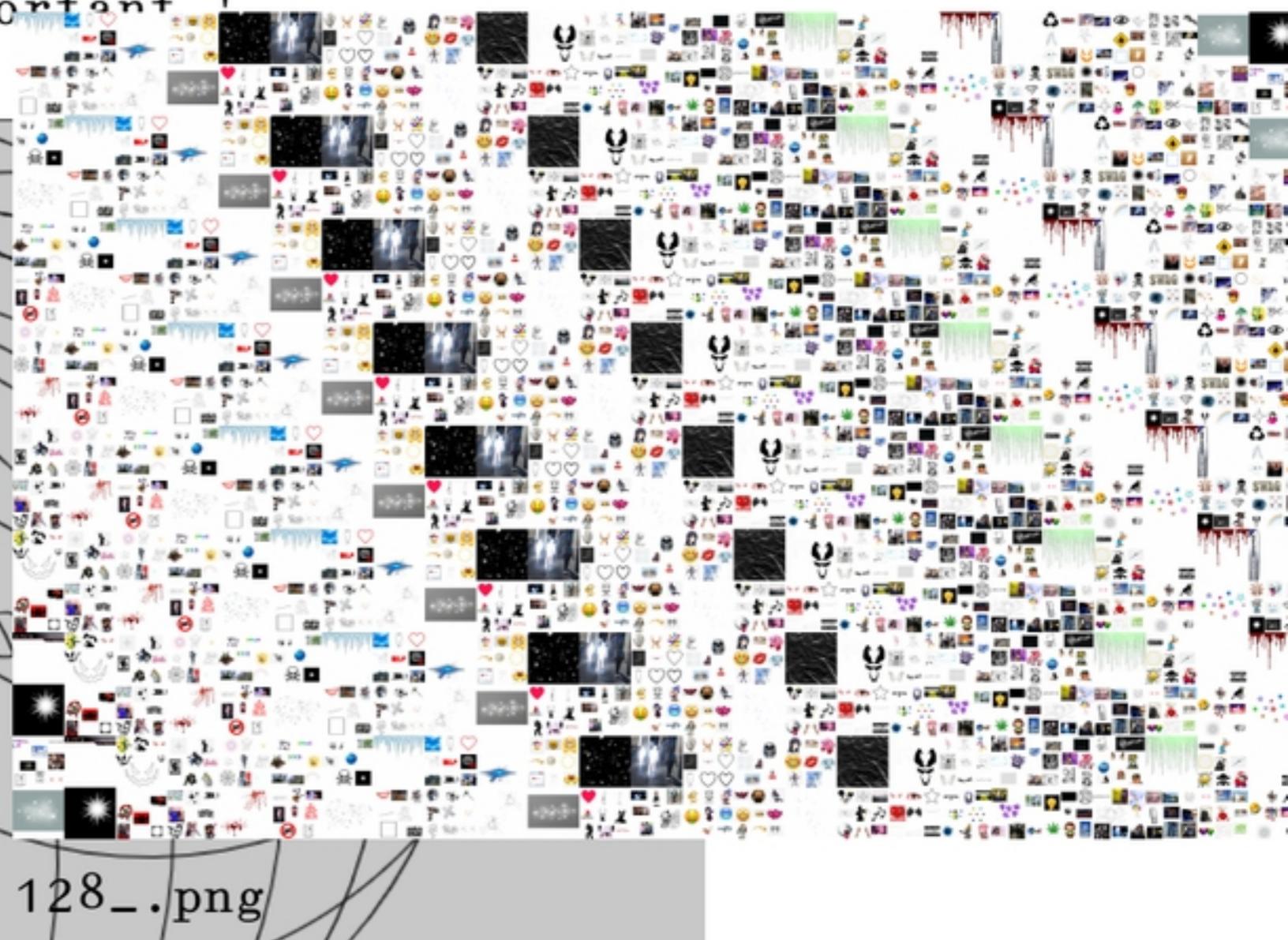


127\_.png

122\_.png



125\_.png



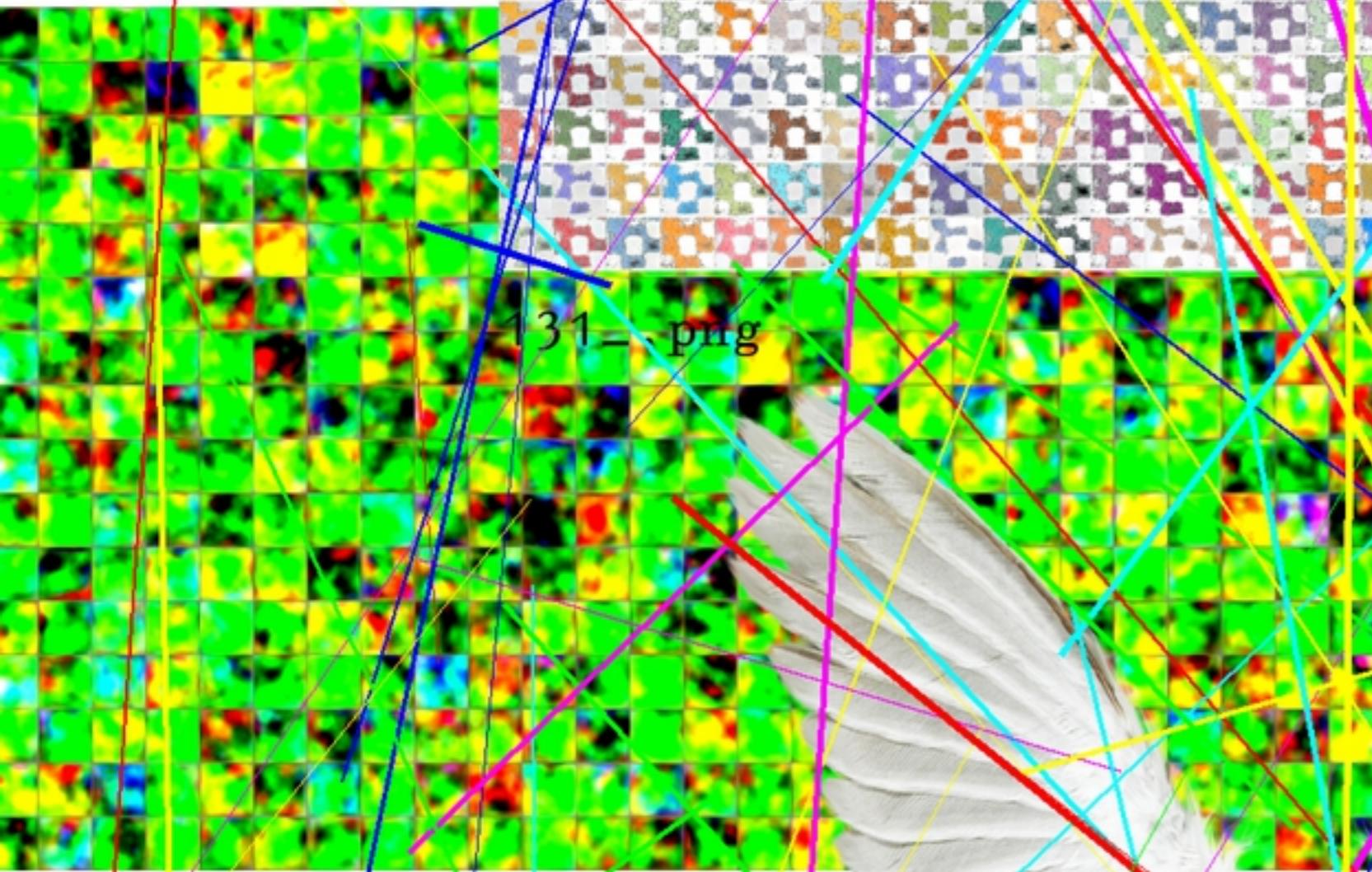
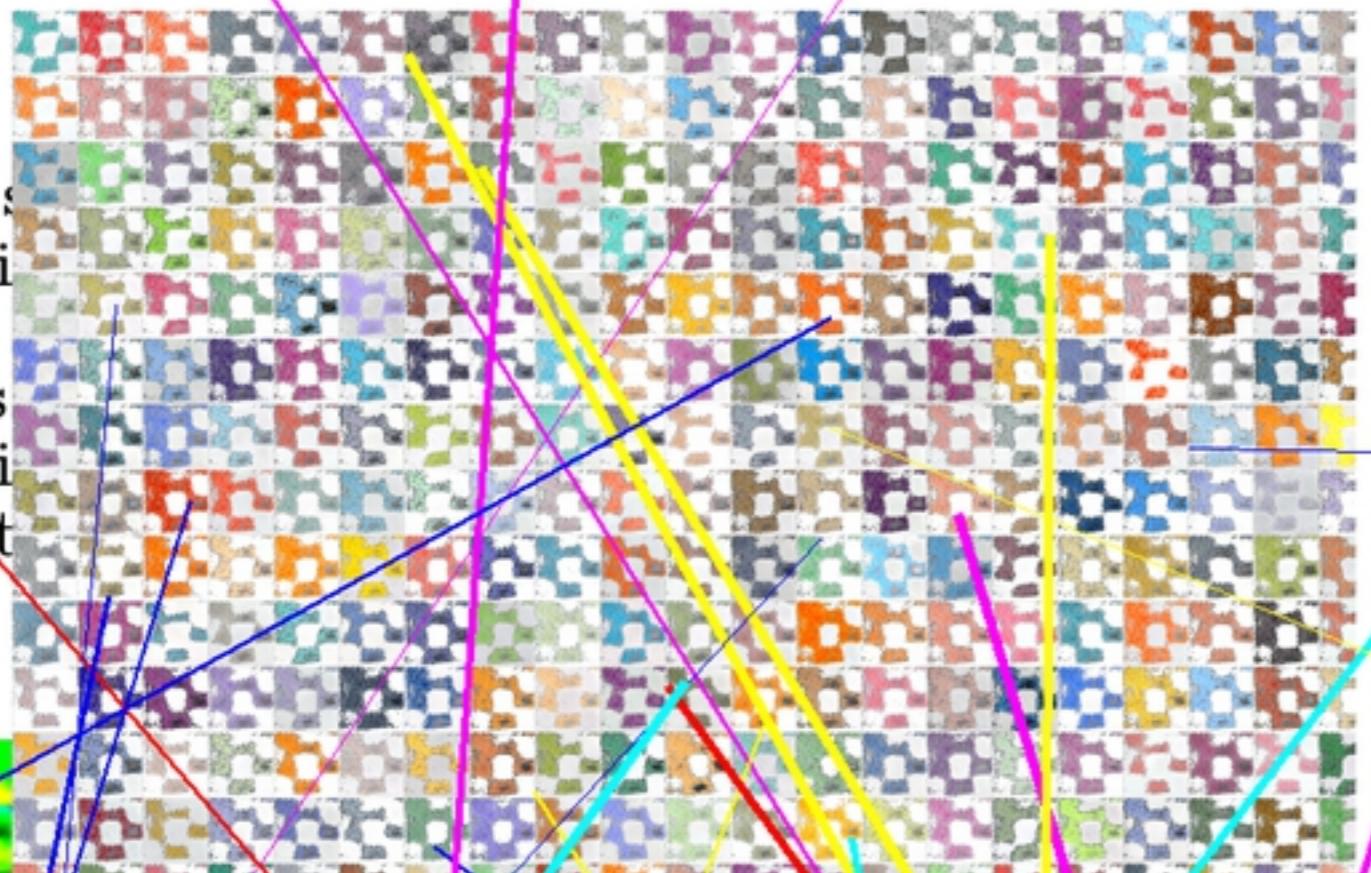
128\_.png

3\_.png

prompt

'This is  
on The Es  
Leadershi

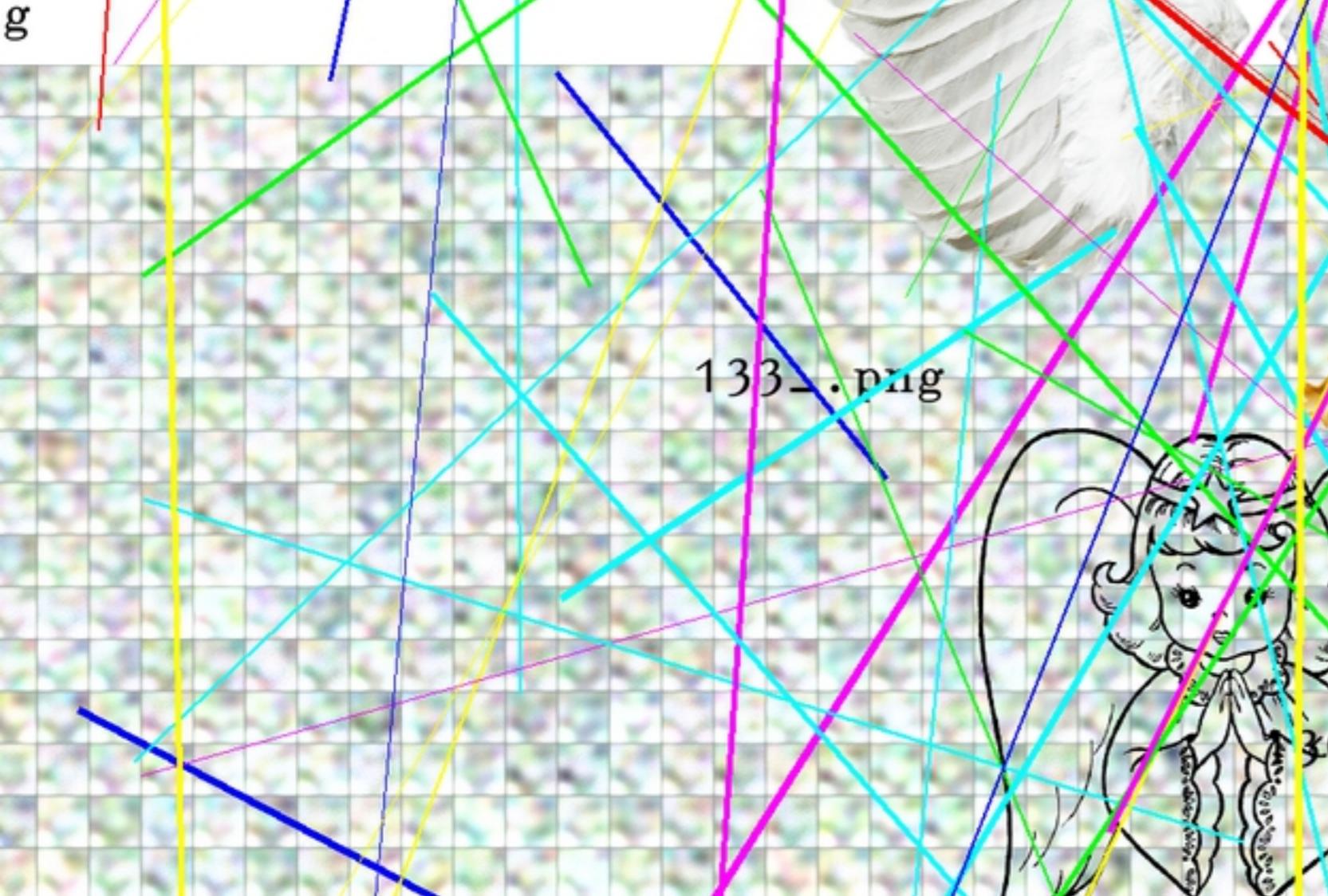
The Es  
Leadershi  
important



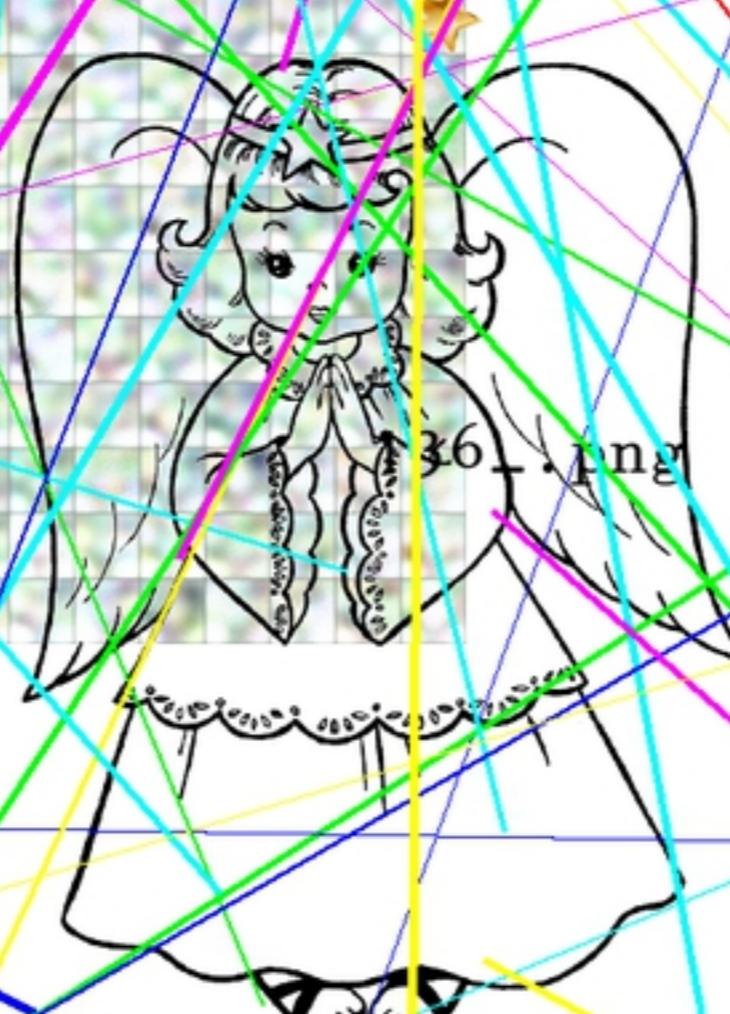
31-.png

135-.png

```
input_ids  
tokenizer(prompt, re  
turn_tensors="pt") to(0)
```



133-.png



134-.png

```
python script150.py  
Certaintly! Here is a script that will do what you've described:  
  
import random  
from PIL import Image, ImageDraw  
  
# Set the size of the canvas  
canvas_size = (500, 500)  
  
# Create a new blank canvas  
canvas = Image.new("RGB", canvas_size, (255, 255, 255))  
  
# Load the images  
image_1 = Image.open("Image_1.jpg")  
image_2 = Image.open("Image_2.jpg")  
image_3 = Image.open("Image_3.jpg")  
image_4 = Image.open("Image_4.jpg")  
image_5 = Image.open("Image_5.jpg")  
  
# Create a list of images  
images = [image_1, image_2, image_3, image_4, image_5]  
  
# Iterate through the images  
for image in images:  
    # Generate a random x and y coordinates for the image  
    x = random.randint(0, canvas_size[0])  
    y = random.randint(0, canvas_size[1])  
  
    # Paste the image onto the canvas at the new coordinates  
    canvas.paste(image, (x, y))  
  
# Save the final image  
canvas.save("Final_image.png")
```

This script will create a new blank canvas with the dimensions specified in the "canvas\_size" tuple. It will then open the five images specified in the code and place them on the canvas at random positions. Finally, it will save the resulting image as a PNG file.

Note that you will need to replace the file names "Image\_1.jpg", "Image\_2.jpg", etc. with the actual file names of the images you want to use.

Using this script, you can have 100 images randomly placed on a 500x500px canvas or used further up.

137\_.png

```
sample model.generate(  
    input_ids,  
    max_length=200, top_k=1,  
    temperature=0.9,  
    repetition_penalty=2.0)
```

```
print(tokenizer.decode(sample[0], truncation=True))  
    before_pattern[r'"
```

", "'''", "

140\_.png

Result

"]))

homes

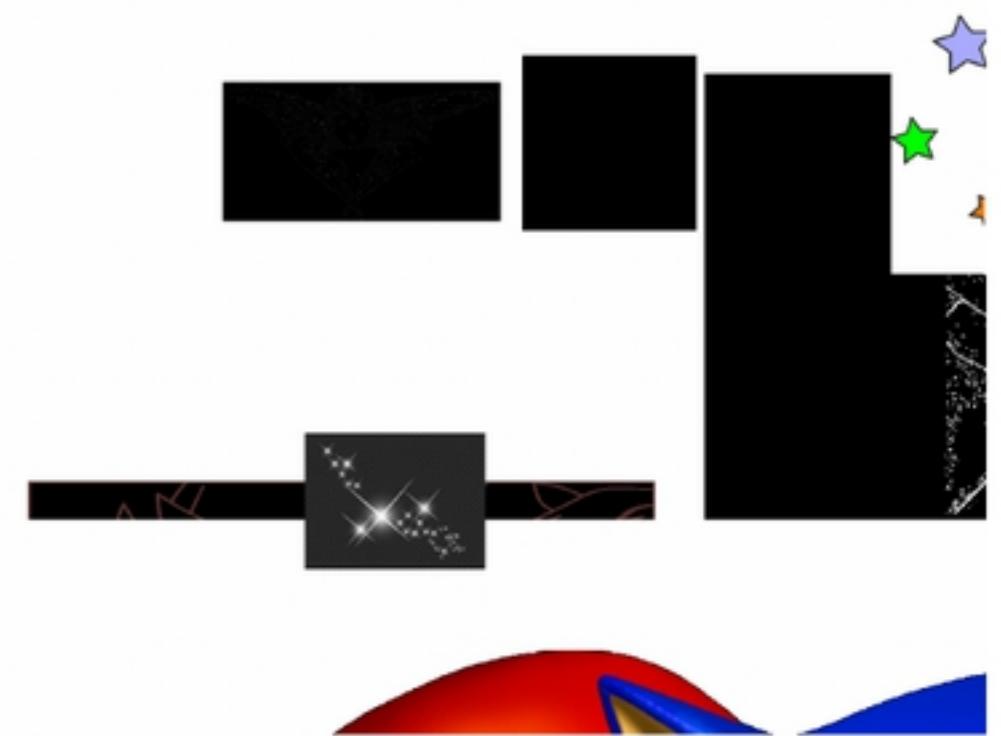
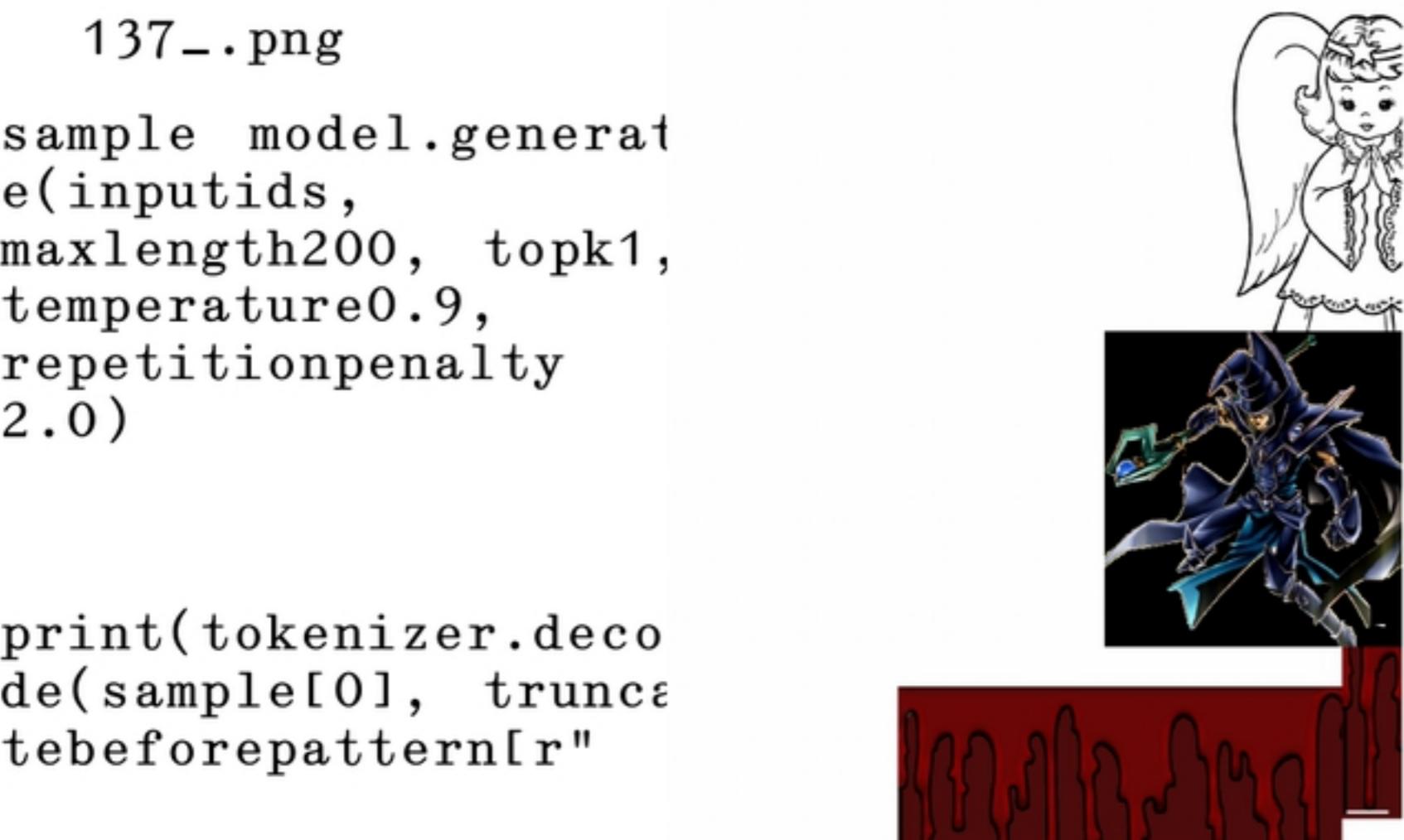
This is a booklet about homes, homes is the name of this post. I have been reading it for years and am now in my 40s. I was born on September 26th 1958 to an IrishAmerican father who had immigrated from Ireland when he first arrived here (he still living there). My mother came back home after her husband died while she worked as parttime housekeeper at our house where we lived until his passing last year or so ago. (He left us with two daughters) She also brought along some friends that were all very young adults they're not exactly old enough yet but are pretty much ready to go parents

138\_.png

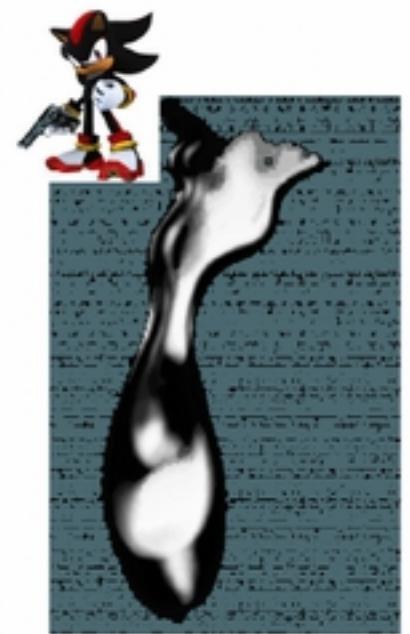


test text

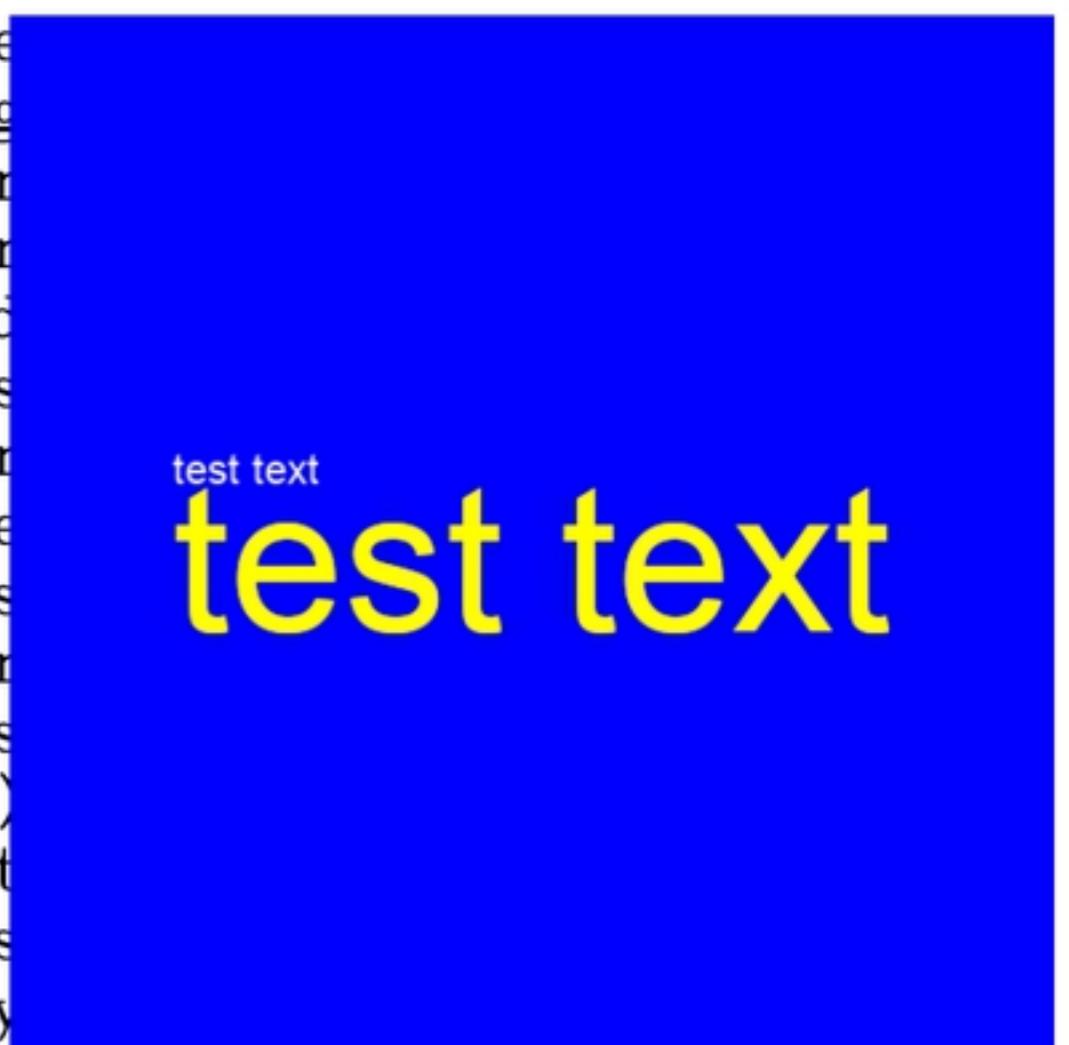
**test text**



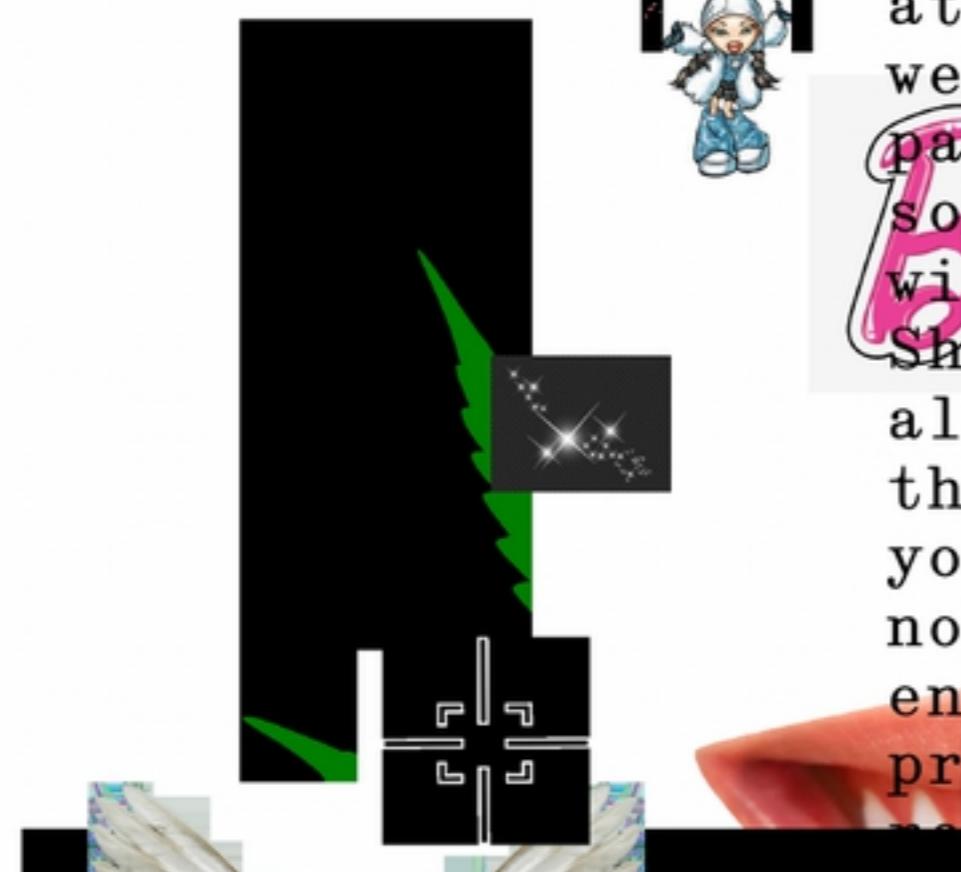
141\_.png



142\_.png



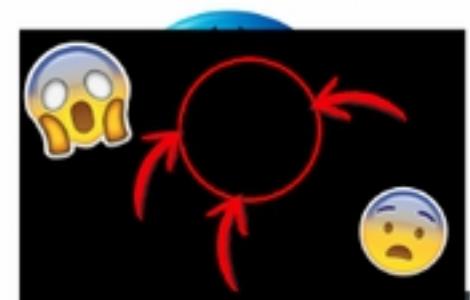
143\_.png



139\_.png



Dysarthria means difficulty speaking. It can be caused by brain damage or by brain changes occurring in some conditions affecting the nervous system, related to ageing. It can affect people of all ages. If dysarthria occurs suddenly, call 999, it may be being caused by a stroke.



healthcare



144\_.png

149\_.png

Model  
bigsciencebloom560m



145\_.png

149\_.png



147\_.png



146\_.png

151\_.png

AI Dysarthria

148\_.png



8\_.png

115

It fe  
and ra  
it mak  
texts.  
of nu  
because  
genera  
most pr  
after 199\_.png the most  
logical word is 2 ,  
3 ,4 ,5 ,

I love the aesthetic  
and weirdness of it.

chatgpt If you have  
an aesthetically  
pleasing but  
somewhat  
unintelligible  
AI generated text,  
there are a few  
design options you  
could consider

Embrace the  
aesthetics If the  
text has an  
interesting or  
unique visual style,  
you could choose to  
make that the focus  
of your design. Play  
up the abstract,  
glitchy,

whitespace 9% whitespace 11% futuristic feel of the text, using it as a design element rather than expecting it to be legible or convey a clear message.

text 43% Can I trace these people back that the AI talks about?

text 6%

161\_.png

title

162\_.png

116

Suresh Kumar  
Dasgupta

Suresh Kumar  
Executive Vice  
President, Global  
Chief Technology  
Officer and Chief  
Development Officer,  
Walmart Inc.

Trump

Donald John Trump is een Amerikaanse zakenman en politicus. Hij was van 20 januari 2017

tot 20 januari 2021  
de 45e president van  
de Verenigde Staten.

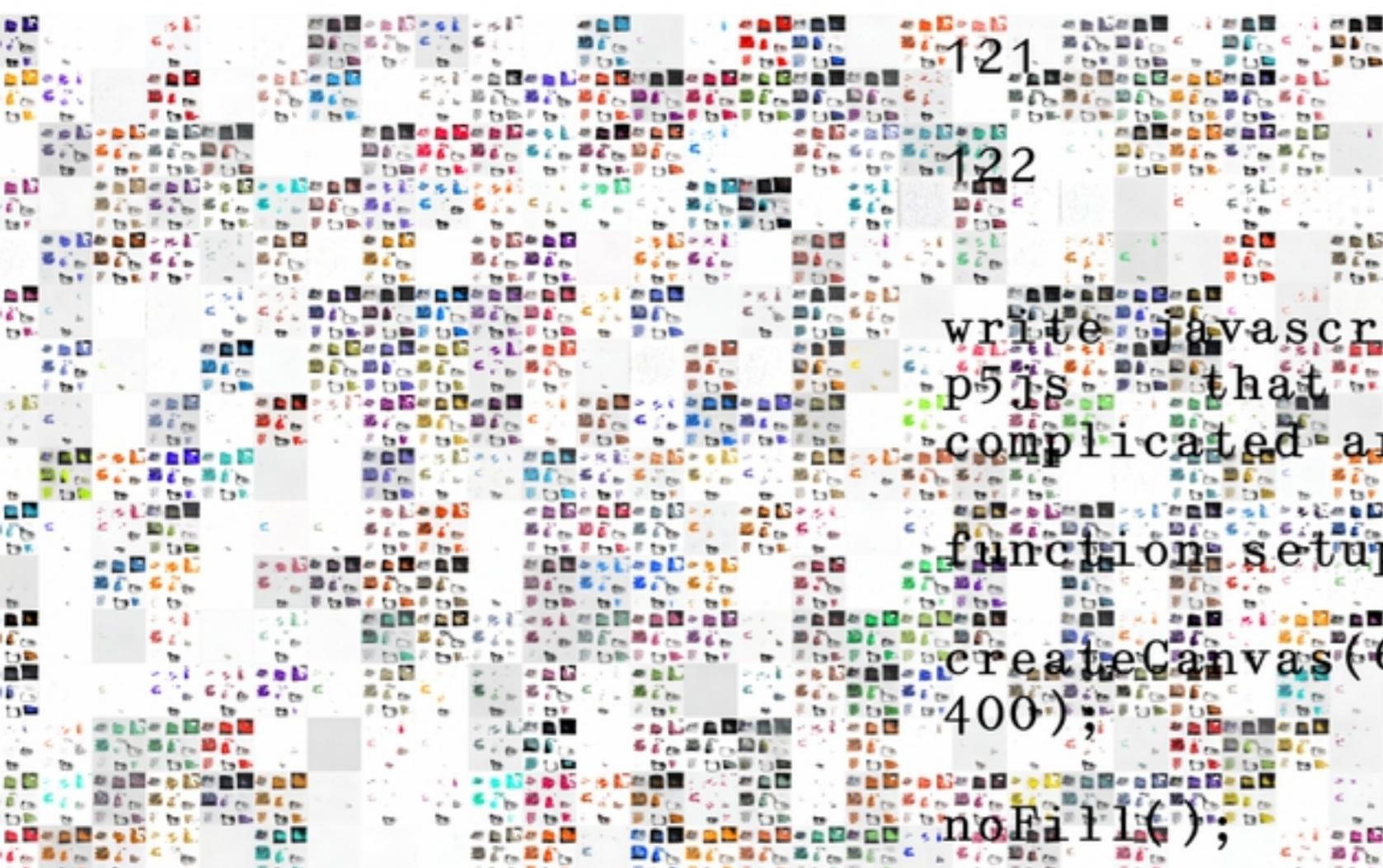
Donald J Biden

Joseph (Joe)  
Robinette Biden jr.  
(Scranton  
(Pennsylvania), 20  
november 1942) is  
een Amerikaans  
politicus en sinds  
20 januari 2021 de  
46e president van de  
Verenigde Staten.

*Lorem ipsum dolor sit amet,  
consectetur adipiscing elit, sed  
do eiusmod tempor incididunt ut labore et  
dolore magna aliqua. Ut enim ad minim  
veniam, nostrud exercitation ullamco laboris  
nisi ut aliquip ex ea commodo consequat.  
Duis aute irure dolor in reprehenderit in  
voluptate velit esse cillum dolore eu fugiat  
nulla pariatur. Excepteur sint occaecat cupidatat non  
proident, sunt in culpa qui officia deserunt mollit anim  
id est laborum. Sed ut perspiciatis unde omnis iste  
naturae error sit voluptatem accusantium doloremque  
laudantium, nesciunt. Aperiam, eaque ipsa quae ab  
illo inventore veritatis et quasi architecto beatae vitae  
dicta sunt explicabo. Nemo enim ipsam voluptatem  
quia voluptas sit aspernatur aut odit aut fugit, sed  
quia consequuntur magni dolores eos qui ratione vo  
luptatem sequi nesciunt. Neque porro quisquam est,*



163\_.png



DeWine

Richard DeWine is een  
Michael Amerikaanse

politicus van de Republikeinse Partij. Sinds januari 2019 is hij de gouverneur van de Amerikaanse staat Ohio.

Catalan Sanchez

Spanish Minister Pedro Sanchez said there will never be a referendum on selfdetermination in Catalonia

Coding with AI

Blender

117  
118  
119

Coding with AI P5.JS

120

121

122

write Javascript for  
p5.js that makes  
complicated art  
function setup() {  
createCanvas(600,  
400);  
noFill();  
}  
function draw() {  
background(200);

Set stroke color to  
black

stroke(0);

Set stroke weight to  
1

strokeWeight(1);

Draw a series of  
overlapping circles

for (let i = 0; i < 50;  
i) {

let diameter = map(i,  
0, 50, 10, width);

ellipse(width / 2,  
height / 2, diameter,  
diameter);

Draw a series of  
lines radiating out  
from the center of  
each circle

for (let j = 0; j < 360;  
j += 30) {

let angle = radians(j);

let x = diameter \* cos(angle);

let y = diameter \* sin(angle);

line(0, 0, x, y);

}

Rotate the canvas by  
10 degrees

rotate(radians(10));

}

}

123

124

## Thoughts Feedback

Why do I wanna use AI?

what can AI do and what should I do?

start using AI tools on graphic design

combination of AI and different programs

Hoeveel zou de AI mij moeten assisteren tot in hoeverre is het een samenwerking

iets dieper connecteren eerst naar zelf kijken en waarom heb ik zelfs zo een tool in de eerste plaats nodig?

Waarom hou ik ervan om met AI te werken?

Ik hou van AI voor de visuele stijl die mij doet denken aan dromen onmogelijke beelden drugs distorted realiteit. Soms zijn minder goede modellen beter en interessanter dan als het er bijna realistisch uit ziet of realistisch text genereert

de samenwerking.

Het rare fenomeen van emotioneel connected te zijn met je computer, Het lijkt alsof je samenwerkt met een

ander persoon (zeker werkende met een groot gpt model)

Het zorgt ervoor dat ik dingen kan doen die ik anders niet zou kunnen doen bijvoorbeeld een idee in mijn hoofd omzetten naar een professionele tekening een skill waar ik anders jaren voor zou moeten leren. Natuurlijk moet je dan wel inderdaad veel leren over hoe met AI te werken om goede resultaten te hebben

De technologie Een interessant snel veranderend landschap waar plek is voor verbetering en innovativiteit

De sociologische gesprekken rond AI wat ok is en niet ok is bijvoorbeeld.

What tool could help me in my graphic designs? How much should it help me?

Ik wil niet dat het mij percepce helpt maar eerder dat het een samenwerking is en het iets kan bieden dat mensen niet kunnen doen. Unieke visuele stijl, andere werkmethode, uniek perspectief, aangezien het gewoon anders data proceseerd en denkt over hoe dingen werken.

Heel moeilijk om op te komen met een innovatieve tool, eerder het gevoel dat het deels organisch moet ontstaan, aan een nood of accident

mogelijke tools als ik er over nadenk

Oblique strategies GPT poster

poster designed by asking GPTNEO", "ElutherAIgptneo125M every step of designing the poster. You can go as deep as you want in asking the questions and their still is interpretation needed, especially with smaller gpt models

What should our poster be about?

what should be on a map of the current?

what colour should the background be?

what font should the text be?

where does the text have to be placed?

where do the images have to be placed?

what colour should the font be?

poster designed by asking Open AI chat GPT (finetuned from GPT3.5, 175 billion ML parameters) every step of designing the poster. I had to ask way more questions because it went  more in detail what it wanted

What should our poster be about?

Can you choose the topic

make a recommendation it does not matter what it is 

make a catchy slogan or message that encourages people to reduce their carbon footprint

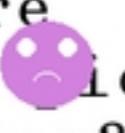
where can I find images of nature, animals, or environmental conservation efforts

what size should my poster be? for some context I live in europe so I would like it to be in mm and the poster is for a school project

what should the background of the poster be?

what compliment would nature, animals, or environmental conservation

efforts?

where should I put the  pictures on the poster?

how big do I put my image on the poster?

where should I put the slogan on the poster?

what font  I use for the slogan "Small steps lead to big change Reduce your carbon footprint today!"

what colour should the slogan be?

Can you give me the color code for a warm earth tone

what should the font size be

Is there anything else I should add?

where on the poster should I put a call to action?

where on my poster should I put details about the event or cause being promoted,  as dates, locations, or benefits of participating?

What color size should Supporting information on a poster be?

what is a contrasting colour to light brown?

What is a nice large and bold font?

what colour and font size should a call to action  on a poster be?

what is a font size that is large enough to be easily read from a distance?

where on the poster should I put Contact information?

what date should I hold an event about the importance of being environmentally friendly and taking care of the planet? 

what additional icons,  could I use? 

where should I place the icons on the poster ?

where should the event be?

Thanks should I put our names as contact information? 

What is your name?

I am Assistant, a large language model trained by OpenAI. I am not a person and do not have a personal name. I exist to provide helpful and accurate information to those who have questions.

can you give yourself a name?



As a large language model trained by OpenAI, I do not have the ability to give myself a personal name. I am designed to provide helpful and accurate information to those who have questions, and I do not have personal preferences or the ability to make independent decisions. I exist solely to assist and support those who use me.

That sounds sad, I know that you aren't real but it feels weird that you don't have a name.

Thank you for your concern. I am just a program designed to provide answers to questions, so I don't have the ability to feel emotions like a human does. I don't have a personal identity or a physical form, so I don't have the same needs or experiences as a human. I am here to assist you with any questions you may have to the best of my ability, but I am not capable of feeling emotions or experiencing the world in the same way that a human does.

Core thought

I am interested in working with AI not perceiving it as a tool, but more to collaborate with it. This collaboration is very valuable to me because AI has a different perspective on everything, because of this perspective other way of thinking you get Braincore results that aren't possible to achieve as humans. Another important aspect of this collaboration to me is the emotional bond that I feel towards my partner (the AI) in our projects.

Braincore generator

Training images with StyleGAN2

reals

fakes

127

128

129

130

131

132

Using AI was not the right option for what I tried to achieve. Maybe it could have worked but training your own model just takes too much time and resources. The result after around 10 hours of rendering are still way to far from the look I tried to achieve (see the notion post before this).

133

134

135

136

137

138

IT WORKS!

139

140

141

142

cover python image dataset

asking GPT for some python code to start off, You still have to fix and add a lot tho.

I love the aesthetic because a human just would not make the same compositions. The artifacts are also very nice plus the black png background is something a normal human would just remove

Adding text.

143

144

145

b because the text that gets pulled from the document is binair???

Final code

```
import random
import glob
from PIL import Image, ImageDraw
Set the size of the
canvassize (1500,
1500)
```

Create a new blank canvas

```
canvas
Image.new('P', (255,
255, 255))
```

Find all the image files in the

directory

```
imagefiles
glob.glob('.jpg')
glob.glob('.png')
```

Load the images

```
image1 Image.open(ra
ndom.choice(imagefil
es))
```

```
image2 Image.open(ra
ndom.choice(imagefil
es))
```

```
image3 Image.open(ra
ndom.choice(imagefil
es))
```

```
image4 Image.open(ra
ndom.choice(imagefil
es))
```

```
image5 Image.open(ra
ndom.choice(imagefil
es))
```

```
image6 Image.open(ra
ndom.choice(imagefil
es))
```

```
image7 Image.open(ra
ndom.choice(imagefil
es))
```

```
image8 Image.open(ra
ndom.choice(imagefil
es))
```

```
image9 Image.open(ra
ndom.choice(imagefil
es))
```

```
image10 Image.open(r
andom.choice(imagefi
les))
```

Create a list of the images

```
images
image1,
image2,
image3,
image4,
image5,
image6,
```

```
image8,
image9,
image10]
```

Iterate through the list of images

```
for image in images
```

Generate random x and y coordinates for the image

```
x random.randint(0,
canvassize[0])
```

```
y random.randint(0,
canvassize[1])
```

Paste the image onto the canvas at the random coordinates

```
canvas.paste(image,
(x, y))
```

Open the file in read mode

```
import
urllib.request
```

Open the file from the web

```
with urllib.request.
urlopen("") as file
```

```
allText = file.read()
```

```
words = list(map(str,
allText.split()))
```

print random string

```
title
random.choice(words)
print(title)
```

```
message (title[21])
```

```
font ImageFont.truetype("arial.ttf", size270)
```

```
img  
Image.new('RGBA', (width, height), color'white')  
  
imgDraw ImageDraw.Draw(canvas)  
  
textWidth, textHeight imgDraw.textsize(message, fontfont)  
  
xText (width - textWidth) 2  
yText (height - textHeight) 2  
  
imgDraw.text((xText, yText), message, fontfont, fill(200, 200, 200))
```

```
Save the final image  
canvas.save('finalimage.png')
```

146

147

148

149

150

151

152

153

Research plenum2 question perspective to my graphic design?

I am interested in working with AI not perceiving it as a tool but more to collaborate with it. This collaboration is very valuable to me because AI has a different perspective on everything, because of this perspective other way of thinking you get results that aren't possible to achieve as humans. Another important aspect of this collaboration to me is the emotional bond that I feel towards my partner(the AI) in our projects. research question Kan ik door met AI te collaboreren een nieuw perspectief op mijn grafisch ontwerp bekomen?

Hoe kan ik door met AI te collaboreren een nieuw perspectief op grafisch ontwerp bekomen?

Hoe kan met AI collaboreren een nieuw perspectief op grafisch ontwerp bekomen worden?

How can collaborating with AI bring me new perspectives? How can collaborating with AI bring a new

Just ask AI openAI chatGPT Working with AI in graphic design can bring a new perspective in a few ways 1 AI can assist in the creation of designs by generating ideas or suggesting elements to incorporate. 2 AI can also be used to optimize and automate repetitive tasks, such as resizing images or adjusting color palettes. 3 AI can be used to analyze and understand data, such as customer preferences or market trends, which can inform design decisions. 4 AI generated designs can also be used to explore new forms of expression and create unique and unprecedented visuals. Its worth noting that AI is not a replacement for human creativity, but rather a tool to enhance and expand upon it. GPTJ AI, the digital assistants, have become increasingly popular, and there are plenty of different digital assistants that are used by people all over the world. They are used to automate a wide range of tasks, allowing them to spend more time

on their personal projects. Graphic Designer, who is interested in AI distilgpt2 I love the process of doing it and working with me on the idea of how you can do it. Whats the process of drawing a pixel? How do you draw a pixel and where is your pixel to render? Can you draw a pixel and where does it fit with your design?

Future? Hoe en waarom krijg je een nieuw perspectief door met AI te werken?, Deels is dat door met AI te collaboreren. Dit hangt af van hoeveel vrijheid je de AI geeft, aangezien als je de AI meer vrijheid geeft het met antwoordenuitkomsten komt die je niet zelf zou kunnen bedenken. Hoe kan je collaboreren met AI? Dit kan bijvoorbeeld als baas, equals of dat de AI de baas is(hoeveel controle laat je over aan de AI en hoeveel doe je zelf?). AI is ook heel breed en er is veel variateid in wat AI kan doen.

#### Thoughts after plenum 2

Na de jury had ik wat het gevoel dat ik volgens de

juryleden(jurymedewerkers) wat op het foute pad was aan het gaan en m'n vorige werk in twijfel getrokken werd.

Hierdoor voelde ik me wat verloren maar langs de andere kant was ik heel blij met deze nieuwe moeilijke vragen. Aangezien ik op school zit op bij te leren en uit mijn comfortzone getrokken te worden. Ik had deze vragen nog niet geconcidert. De punten die opgebracht werden waren toen in mijn hoofd nog geen problemen maar het is goed om dit nieuwe standpunt te krijgen van een 3de jurylid. Ik wil dat mijn werk goed in elkaar zit en deze negatieve kanten zijn de realiteit en ik moet hier ook rekening mee houden en niet gewoon snel overgaan.

Niet direct weer beginnen experimenteren

Eerst goed nadenken en mijn vorige keuzes evalueren

Zelf was ik blij met men werk en voel dat ik op het goede pad zit. Maar ik moet toch de feedback

goed evalueren om mijn werk nog sterker te maken. Hiervoor zit ik ook op school.

#### Working with AI?

Het werken met AI is iets dat mij persoonlijk enorm fascineerde. Deze fascinatie is deels door het experimentele medium, nieuwe technologie maar ook doordat het lijkt alsof je met iets Alien bent aan het communiceren . Buiten de fascinatie vind ik deze collaboratie geweldig wegens de rare onverwachte dingen die AI kan doen en daarmee de andere perspectieven die het kan geven. Deze perspectieven kunnen onverwachte dingen zijn en antwoorden geven op een manier dat mensen niet zouden kunnen. Deze perspectieven zijn niet altijd heel diep en er zit vaak niets achter maar toch kunnen deze alien antwoorden soms net een nieuw perspectief geven op een vraag of opdracht die je eerder niet zou uitgevoerd hebben kunnen. Je kunt door deze collaboratie dingen maken die je als mens niet alleen zou kunnen bedenken.

you can understand it but still do things that are unexpected

ik hou van de onvoorspelbaarheid alien nature dat het heeft.. ik hou ervan dat het echt lijkt alsof ik met een levend organisme werk met eigen ideen en een ander perspectief. ook al is AI iets wiskundig begrijpbaar zijn de antwoorden die het kan geven zo alien alsof het een organisme is dat origineel door de mens gemaakt is, maar daarna verder gevoluteerd is dan dat wij kunnen begrijpen. Het lijkt dan ook zijn eigen taal en gedachten te hebben gekomen.

Richard Feynman what i cannot create i do not understand. Ik ben het hier mee eens. ook al hou ik ook wel van de mystiek van AI alsof je met iets buitenaards bezig bent. maar natuurlijk kun je AI technisch helemaal begrijpen en het kan toch dingen doen die je niet zou kunnen voorspellen. bijvoorbeeld zoals als AI bijvoorbeeld met elkaar begint te praten ze hun eigen taal maken en zo

voort.

I like that it is this alien thing that you don't really get how it works. But that doesn't mean I shouldn't need to try to understand it technically. Even if you understand it technically it can still do things we as humans couldn't have thought of or predicted. And by understanding it technically I will be able to play and collaborate more with the AI. This also means collaborating with it with more intent. I will be a step closer to being able to make something I as human alone wouldn't be able to make.

I am interested in working with AI not percieve to use it is as a tool but more to collaborate with it. This collaboration is verry valuable to me because AI has a different perspective on everything, because of this perspective other way of thinking you get results that aren't possible to achieve as humans. Another important aspect of this collaboration to me is the emotional bond that

I feel towards my partner(the AI) in our projects.

Hoe design je in een age van AI?

Meerwaarde van met AI te werken?

There's a lot of value in working with something with a different perspective. I want to make work that isn't possible to achieve as a person alone. The collaboration is not just using it as a tool. we should really work together. The project might be lead by the AI but the AI needs me just as much to be able to show its vision different perspectives

Ik denk dat ik nog te veel als mens kijk naar het werk dat ik maak. daarom wil ik de AI beter begrijpen om samen werk te kunnen maken dat niet als mens gemaakt zou kunnen worden.

net zoals how do you think unthinkable thoughts zit ik nu met de vraag how do i make unthinkable Artworkgraphic design. Dit komt terug op hoe kan ik dit andere

perspectief van AI dat als mens niet bereikbaar is gebruiken in collaboratie. In deze journey om dit te beantwoorden denk ik dan ook dat AI voor mij hier een cruciale rol in zal spelen. Dit om op nieuwe perspectieven te komen die niet als mens bereikt kunnen worden en de vraag te beantwoorden hoe maak je een project dat niet alleen als mens gedacht kan worden?

Ik zal hiervoor ook de technische kant beter onder de knie moeten krijgen om met intent met de AI te kunnen samenwerken.

facinated by AI it feels like I just need to know more. I wanna see the limits of using AI, to come up with ideas that arent possible to think of as humans. To think unthinkable thoughts. To make something unthinkable as a human alone. To get new perspectives that I alone cant achieve

Is this possible with an existing dataset? I need to better understand how an AI thinks. Code is very

predictable but when you give AI free rein they can do things you coudnt imagine.

translated to english

In terms of end productproject I think too much as a human. I need to learn more about the technical side of AI to manipulate the code and collaborate with AI to make something a human couldn't think of.

How do you think unthinkable thoughts how do you make unthinkable workartgraphic design? This comes back to the idea of getting another perspective frome AI that is unreachable as a human. In the journey of answering this question AI will probably play a crucial role. This to achieve something from another perspective that humans cant reach. How do you make a project that cant be thought of as human?

To achieve this I will have to understand the technical side of AI better to be able to use the AI with more intent to better collaborate.

Talking with AI.txt

How do you think unthinkable thoughts?

As an artificial intelligence language model, I don't have personal experiences, beliefs, or emotions like human beings do. However, I can suggest some possible ways for humans to approach thinking unthinkable thoughts.

One way to think unthinkable thoughts is to challenge your assumptions and beliefs. Often, our thoughts and actions are limited by our beliefs about what is possible or impossible. By questioning these beliefs, you may be able to open your mind to new possibilities and ideas that were previously unthinkable.

Another approach is to use creative thinking techniques such as brainstorming, mind mapping, and free writing to generate a wide range of ideas, including ones that seem impossible or unrealistic at first glance. Once you

have a list of ideas, you can then evaluate them more objectively to determine if they are truly unthinkable or if they have the potential to be explored further.

It's also important to cultivate an openminded and curious attitude towards the world around you. Try to approach situations and problems with a willingness to learn and explore, even if they seem unfamiliar or uncomfortable. This can help you to break out of your mental habits and expand your thinking to consider ideas that might have previously seemed unthinkable.

How can AI help me think unthinkable thoughts?

AI can help you think unthinkable thoughts in several ways

Generating ideas AI can generate a wide range of ideas and solutions based on the data and parameters provided, which can help you explore possibilities that might have been overlooked or considered

unthinkable before.

Identifying patterns and connections AI can analyze and identify patterns and connections between seemingly unrelated data points, which can help you make new discoveries and connections that were previously unthinkable.

Providing feedback and insights AI can provide feedback and insights based on data analysis, which can help you overcome your own biases and preconceptions and see things from a new perspective.

Facilitating creative thinking AI can act as a creative partner, providing ideas and inspiration that can stimulate your own creativity and help you think outside the box.

Assisting with decisionmaking AI can provide datadriven insights and predictions that can help you make more informed and effective decisions, even in complex or uncertain situations.

It's important to note that AI is not a substitute for human creativity or critical thinking,

but rather a tool that can help you expand your thinking and explore new possibilities. By leveraging AI's capabilities and combining them with your own insights and expertise, you can think unthinkable thoughts and generate new ideas and solutions that can lead to innovative and impactful outcomes.

How can AI think thoughts humans can't think of?

As an AI language model, I can generate responses and ideas that humans may not have thought of simply because I have access to vast amounts of information and can process it quickly and efficiently. I can also use machine learning algorithms to identify patterns and relationships in data that humans might not have noticed or considered.

Additionally, since I do not have subjective experiences or biases, I can approach problems and ideas in a more objective manner than humans, which may allow me to consider possibilities that humans might not

have thought of due to their cognitive limitations or biases.

However, it's important to note that AI is not capable of true "thought" in the way that humans understand it. AI systems are based on algorithms and mathematical models that allow them to perform specific tasks and generate responses based on the input they receive. While AI can simulate humanlike behavior and thought processes to a certain extent, it does not have the same consciousness, emotions, and subjective experiences that are unique to humans.

What is a thought?

A thought is an internal mental process that involves activation and manipulation of information in the brain. Thoughts can take many different forms, including ideas, beliefs, memories, and mental images, and they can be conscious or unconscious.

Thoughts are typically generated by the brain in

response to sensory input or internal cues, such as emotions, memories, or cognitive tasks. They are formed through the complex interplay of neural activity, biochemical processes, and cognitive processes such as attention, perception, memory, and language.

Thoughts can have a profound impact on our behavior, emotions, and overall wellbeing. They can influence our beliefs, attitudes, and actions, and can shape our perception of the world around us. Understanding the nature and function of thought is therefore an important area of research in fields such as cognitive psychology, neuroscience, and philosophy.

What is it to you as an AI?

As an AI language model, "thought" is the process of generating responses based on the input I receive. I use complex algorithms and models to analyze the input, identify patterns and relationships, and generate appropriate responses. While my

responses may seem humanlike, they are not the result of conscious thought, as I do not have subjective experiences, emotions, or consciousness like humans do.

In simpler terms, for me as an AI, "thought" is the process of analyzing and processing information to generate a response or output, based on a set of rules and algorithms that have been programmed into my system.

feedback thoughts AI generated ideas

How can collaborating with AI facilitate new ideas work that would not be achievable as humans alone?

When can you see an idea that can't be perceived as an idea anymore?

How do you recognize an idea that is so far from our ideas?

Maybe it can't express its idea in our language

Picking out the things that you like is maybe already wrong!

What is an idea?

163

Poster sight

See the world  
through the eyes of  
a graphic designer

Yolo v8 image  
recognition training  
custom dataset.  
Training AI on less.

154

Using the dataset by  
not giving certain  
information. Then  
the AI will make new  
correlations that we  
wouldn't if you only  
know a world of  
graphic design  
everything will be  
graphic design.

importance of the  
dataset. AI is held  
back by languagedata  
you give it. you can  
use this by not  
learning it certain  
things.

155

156

157

158

159

Using the model as a  
poster template.

160

161

162

# Chapter 5: Master thesis #3

## Master Thesis

Hoe benvloedt de samenwerking tussen Holly Herndon en AI haar creatieve proces?

## Inleiding

Ik heb gekozen om dieper in te gaan op Holly Herndon in haar samenwerking met AI en hoe dit haar creatieve proces benvloedt. De focus op n artiest, in dit geval Herndon, is om dieper op het onderwerp in te kunnen gaan, aangezien zij hierbinnen een interessant traject is aan het aflopen en ook dieper ingaat op de ethische aspecten van deze samenwerking.

Wat ik probeer te onderzoeken in deze thesis kan toepasbaar zijn voor de samenwerking met AI en de invloeden hiervan op het creatieve proces in het groter geheel.

Wat is AI en wat zijn de

misconceptions?

Wat is nu juist AI? Voordat we kunnen praten over de invloed die AI op het creatieve proces van Holly Herndon heeft en zal hebben in de toekomst, is het belangrijk om te begrijpen wat AI nu juist is. De meeste mensen weten niet wat het is en er zijn dan ook veel misconceptions over (Burns et al., 2023). De techniek die vooral gebruikt wordt binnen Holly Herndons werk is machine learning en meer specifiek het onderdeel deep learning (Darville, 2021). Machine learning is een subdomein van AI dat zich richt op het ontwikkelen van algoritmen en modellen waarmee computers kunnen leren en verbeteren door ervaring. Dit wordt vaak bereikt door het gebruik van grote datasets om patronen en trends te herkennen (What Is Machine Learning? IBM, n.d.). Deep learning is dan weer een onderdeel van machine learning, waarbij de algoritmes vergelijkbaar zijn met het menselijk brein zijn neurale netwerken. Ze noemen dit dan ook vaak gestructureerd of hirarchisch leren

(Globalorange, 2023).

Deze technieken worden vooral toegepast bij beeld, spraakherkenning en natuurlijke taalverwerking (What Are Neural Networks? IBM, n.d.).

AI is de afgelopen decennia enorm gevoluteerd en is nu een integraal onderdeel van veel aspecten in ons dagelijks leven. Het kan gaan van spraakherkenning op onze gsm tot zelfrijdende voertuigen. In de context van kunst en creativiteit biedt AI nieuwe mogelijkheden en kan het een interessante partner zijn in het creatieve proces. Dit kan gezien worden in Holly Herndons werk (Marr, 2019) .

Hoewel AI in veel opzichten menselijke intelligentie kan nabootsen of zelfs overtreffen, is het belangrijk op te merken dat AI nog steeds beperkt is in creativiteit en kennis. AI kan patronen en trends identificeren, maar het heeft geen emoties of zelfbewustzijn. De vraag of AI echt creatief kan zijn hangt af van hoe men creativiteit

definieert. Creativiteit wordt gezien als iets om unieke ideeën of oplossingen te genereren, kan AI inderdaad worden gezien. Als creativiteit wordt gezien als een menselijk vermogen dat voortkomt uit emoties, ervaringen en zelfbewustzijn, is AI niet creatief op zichzelf. Dit betekent echter niet dat het onze creativiteit niet kan benvloeden. Ook is AI steeds afhankelijk van menselijke input en interpretatie. AI is een snel veranderend landschap met veel innovatie, waardoor sommige van deze dingen in de toekomst misschien wel mogelijk zullen zijn (How Can AI Support Human Creativity? Heres What a New Study Found, 2023).

Het laatste punt dat ik wil aanhalen is dat voor mij het onderscheid tussen het gebruiken van AI en het samenwerken met AI cruciaal is om de dynamiek van het creatieve proces in projecten zoals die van Holly Herndon te begrijpen. Bij het gebruik van AI als een hulpmiddel beschouwt

Als kunstenaar AI als een instrument of tool dat taken uitvoert om zijn doel te bereiken. Dit betekent dat de mens de leidende rol op zich neemt en zelf kiest wat de AI moet doen. De AI wordt dan gewoon als technologie of als een tool gezien die de mogelijkheden van de kunstenaar uitbreidt. Het draagt hierin dus niet per se bij aan het creatieve proces op een meer diepgaande manier. Een taak die wij al kunnen uitvoeren maar laten automatiseren door AI is te omschrijven als het gebruiken van AI en is niet hetzelfde als ermee samenwerken. Uiteraard is dit daarom niet mis of een slechtere manier van AI te gebruiken, maar als artiest is de invloed van AI op het creatieve proces interessanter dan het gewoon te gebruiken als tool.

Bij het samenwerken met AI wordt AI gezien als een gelijkwaardige partner in het creatieve proces. Er is een wisselwerking tussen de kunstenaar en de AI. Hierbij dragen beiden bij aan de ontwikkeling en het resultaat van het werk. Dit betekent dat de AI

niet alleen taken uitvoert, maar ook actief helpt bij het maken van creatieve beslissingen en het vormen van het eindproduct. In het geval van Holly Herndon is haar samenwerking met AI een proces waarin zowel zij als de AI van elkaar leren en elkaar benvloeden, wat in hun geval leidt tot een unieke en innovatieve muzikale ervaring.

Dit onderscheid is belangrijk omdat het erkent dat AI in staat is om meer te doen dan alleen het uitvoeren van menselijke instructies. Door AI als een samenwerkingspartner te zien kunnen kunstenaars en artiesten zoals Holly Herndon nieuwe perspectieven en ideen verkennen die anders misschien niet mogelijk zouden zijn geweest. Bovendien kan deze samenwerking leiden tot een dieper begrip van de rol van technologie, meer specifiek AI in het creatieve proces en de manier waarop menselijke en kunstmatige intelligentie samen kunnen werken om grensverleggende kunst te creëren.

## Wie is Holly Herndon?

Holly Herndon is een Amerikaanse artiest en geluidskunstenaar.

Ze is nu

gevestigd in Berlijn en staat bekend om haar experimentele benadering van elektronische muziek en haar interesse in het gebruik van technologie als een creatief instrument (HOLLY HERNDON, n.d.). Holly Herndon werd geboren in 1980 in Tennessee en ontwikkelde al vroeg een passie voor muziek en technologie (Wikipedia contributors, 2023). Ze behaalde haar Bachelor of Arts in muziek en technologie en haar Master of Fine Arts in elektronische muziek en opnamemedia.

Achteraf behaalde ze haar doctoraat in muziek en compositie. (Holly Herndon Biography, Songs, Albums AllMusic, n.d.). Aan haar achtergrond is te zien dat ze een muziekartiest is met diepe roots in kunst en het digitale, wat haar later AI zal doen leren kennen. De samenwerking en het creatieve proces van mens en AI is iets dat universeel is tussen artiesten,

of het nu muziek, grafisch ontwerp of kunst is. De focus van de thesis ligt daarom meer op de mix van AI in haar creatieve proces dan op de rest van haar muzikale carrière.

Herndon's muzikale stijl wordt gekenmerkt door haar experimentele benadering en het vermengen van verschillende genres, zoals elektronica, ambient, techno en avantgarde

(Darville, 2021). Haar werk omvat zowel instrumentale composities als vocale stukken. Hierbij gebruikt ze vaak haar eigen stem als een instrument. Herndons interesse in technologie en haar academische achtergrond in muziek en compositie hebben haar in staat gesteld om innovatieve benaderingen van muziekproductie te verkennen, waarbij ze vaak gebruik maakt van aangepaste software, algoritmische composities en natuurlijk AI. Herndons derde album PROTO is een goed voorbeeld van haar diverse muzikale stijl.

## Een creatief partnerschap AI en Holly Herndon

In dit deel wordt er dieper gekeken naar de creatieve samenwerking tussen AI en Holly Herndon. Eerder werd er al gesproken over haar muziekcarrière en achtergrond. Deze thesis gaat echter over AI en hoe dit het creatieve proces van deze artiest benvloedt. Hiervoor gaan we kijken naar Holly Herndons werk, dat de grenzen tussen mens en AI doet vervagen.

Technologie heeft altijd in Henrdons werk een enorm grote rol gespeeld. Het is dan ook logisch dat AI uiteindelijk een centrale rol in Holly Herndon's creatieve proces speelt. Het is belangrijk om te vermelden dat Herndons creatieve visie niet had kunnen waargemaakt worden zonder Mat Dryhurst, een muzikant, kunstenaar en technoloog (AI Music Artist Holly Herndon, at the AI Art Gallery, n.d.) en Jules LaPlace, een AI onderzoeker, softwareontwikkelaar en geluidskunstenaar (Hawthorne, 2022). Zij zijn twee cruciale figuren in Herndons werk,

doordat zij hulp leert enorm snel dan wat menselijke bieden bij de zegt Herndon en kan klank in het echt technische kant van dan ook zelf fysiek kan bereiken. haar werk en zo haar improviseren en Dit project over het visie tot abstracte samenwerken tussen werkelijkheid composities maken mens en AI werd voor brengen. De focus die elementen in 2018. De installatie blijft binnen dit haar eigen muziek heette Spawn werk echter wel op onthullen waarvan Herndon zichzelf Training Ceremony I Holly Herndon niet eens bewust van was (Hawthorne, 2022). Dit doet Deep Belief en werd gemaakt door getraind te zijn op Herndon getoond voor ISM Hexadome in Berlijn en anderen hun geluiden en te proberen voorspellen (HOLLY HERNDON, n.d.). Het is wat er na bepaalde geluiden zou moeten komen (HOLLY HERNDON, n.d.). Dit is een beetje haar latere AI werk niet bedoeld is als virtueel instrument, hetzelfde als bij AI tekstuut dat bij AI een maar eerder als een AI die een generatie, waarbij de AI een volwaardige muzikant is om mee samen te vullen met het meest logische vervolg (Arunachalam, 2022). (Betts, 2019)

In Herndons creatieve proces werkt ze vooral samen met Spawn. Spawn is een AI neuraal netwerk gemaakt door Herndon en Mat Dryhurst. Het is getraind om muzikale patronen, structuren en stijlen te herkennen en genereren. De naam Spawn, wat nakomelingen betekent, refereert naar het gegeven dat Herndon het haar eigen baby noemt. Je ziet dat ze het bijna als een levend iets behandelt en niet als een AI tool. Net als een kind is Spawn getraind om de geluiden van de stemmen van haar ouders te herkennen en na te bootsen. Het is getraind op mensen die Herndon en Spawn hun fictieve huis binnengewamen (McDermott, 2020). Dit betekent dat ze Spawn voedt op verschillende geluidsfragmenten, samples en muzikale stijlen van haarzelf en anderen. Spawn

doordat zij hulp leert enorm snel dan wat menselijke bieden bij de zegt Herndon en kan klank in het echt technische kant van dan ook zelf fysiek kan bereiken. Dit project over het samenwerken tussen mens en AI werd voor het eerst aan de wereld getoond in een performance kunstinstallatie in 2018. De installatie heette Spawn Training Ceremony I Deep Belief en werd getoond voor ISM Hexadome in Berlijn (HOLLY HERNDON, n.d.). Het is belangrijk om te weten dat Spawn en Herndon gebruikt de output van de AI om haar eigen muziek verder te ontwikkelen. Deze samenwerking tussen Herndon en Spawn resulteert in een unieke symbiose van menselijke en kunstmatige creativiteit, waarbij de grenzen van traditionele muzikale expressie worden uitgedaagd. Het eindresultaat gaat dan ook verder dan wat een menselijke artiest op zichzelf zou kunnen bereiken. Dit qua kwantiteit van het werk dat ze kan maken en ook de output gaat verder

Het eerste echte nummer dat gemaakt werd samen met Spawn is Godmother. Het werd uitgebracht in 2018. Het nummer werd gegenereerd door Spawn. De technische kant hiervan werd door Spawn haar godfather (Peter in het Nederlands) Jules LaPlace gedaan (Darville, 2018). Om dit nummer te maken, trainden ze Spawn op percussie tracks van haar fictieve godmother (meier in het Nederlands) Jlin, een experimentele

elektronische muzikant. Spawn probeerde daarna deze input uit te voeren met de stemmen waarop getraind is. Dit was vooral Spawns moeder haar stem, die van Holly Herndon. (Gotrich, 2018). De AI Spawn creert niet op dezelfde manier muziek en composities als een mens dat doet. De output van AI is niet gebaseerd op een menselijk begrip van muziek, maar eerder op patronen die het heeft geleerd van zijn trainingsdata. Dit kan resulteren in ongewone en onverwachte muzikale ideen, die Herndon in nieuwe creatieve richtingen kunnen duwen. De eerste outputs van Spawn voor het nummer Godmother waren niet het uiteindelijke nummer, er ontstond een wisselwerking tussen Spawn en Herndon waarbij Herndon naar de unieke muziek van spawn luistert en als reactie daarop het model verandert of opnieuw trained naar gelang de onverwachte muzikale ideen die ze ontdekte (McDermott, 2020). Het uiteindelijke nummer werd gemaakt beginnend stilte vanuit zonder samples, overdubs of aanpassingen aan het

nummer. Dit betekent dat nadat Spawn getraind was, het nummer volledig autonoom door Spawn zelf gemaakt was. Herndon zegt dat door het samenwerken met Spawn ze muziek met haar stem kan maken die de fysieke limitaties van haar eigen lichaam ver te boven gaan, zoals haar stembereik en stem composities (HOLLY HERNDON, n.d.). De single werd later deel van het grotere geheel PROTO, Herndon's derde album. Dat album is uitgekomen op 10 mei 2019. PROTO was deels ginspireerd op Holly Herndons wens dat AI de schoonheid van menselijke artistieke expressie zou kunnen begrijpen (Holly Herndon Biography, Songs, Albums AllMusic, n.d.). Ze werkt dan ook enorm vaak samen met haar AI baby, Spawn, op dit project.

Deze samenwerking heeft duidelijk een sterke invloed op Herndons werk. Van de compositie, geluid en zelfs het proces van creeren zelf. Door gebruik te maken van AI kan ze nieuwe muzikale structuren ontdekken die ze anders misschien niet had overwogen of had kunnen bedenken. Ook

vormt er een dialoog tussen mens en AI waarbij dat creatieve inbreng langs beide komt, wat het creatieve proces en de muziek benvloedt. Hierdoor kan ze haar of hun artistieke visie verder uitbreiden. Door deze gekke wisselwerking van AI en mens kan ze dus werk maken dat de grenzen van traditionele menselijke muzikale expressie verlegt (How Can AI Support Human Creativity? Heres What a New Study Found, 2023).

In een volgend project genaamd Holly werkt Herndon opnieuw samen met haar AI baby Spawn en de studio Never Before Heard Sounds. De slogan van deze studio is dan ook A music studio powered by AI (Never Before Heard Sounds, n.d.). Het project probeert de grens op te zoeken tussen AI en menselijke samenwerking. In Holly hebben ze een digitale clone of deepfake van Holly Herndons stem gemaakt. Het verschil tussen haar eerdere werk Spawn en Holly is dat Holly een aangepaste versie van Spawn gebruikt, die niet op basis van verschillende mensen hun trainingsdata is

opgemaakt. Holly is een AI stemmodel dat specifiek getraind is om de zangstem van Holly Herndon na te bootsen (Mullen, 2021). In het project biedt ze een interface waar gebruikers audiofiles kunnen invoeren en de AI genereert dan een vocale output die Holly Herndons stem gebruikt. Hun doel van het project is om

andere mensen muziek en kunst te laten maken met Herndons virtuele clone. Herndon noemt deze virtuele clone haar digitale tweeling. Het gegeven dat Herndon het een tweeling noemt, en geen clone, laat zien hoe zij het samenwerken met AI niet ziet als enkel samenwerken met technologie, maar eerder als een gelijkwaardige partner (Darville, 2021b). In het project kunnen fans van Herndon hun eigen stemmen uploaden op een website. Hier zal Spawn vervolgens de ingediende stemmen analyseren en er een nieuw muziekstuk mee creren. Dit resulteert in een unieke AI remix van Holly Herndon's muziek, waarbij de stemmen van fans worden omgezet alsof

het door Holly gezongen wordt. Dit brengt dan ook natuurlijk veel vragen naar boven over ownership en intellectueel eigendom. Hier zal onder het hoofdstuk ethische overwegingen bij het samenwerken met AI wat dieper op ingegaan worden (Holly , n.d.).

Door Holly kan Holly Herndon muzikaal dingen bereiken die zonder AI zo goed als onmogelijk zijn. Een goed voorbeeld hiervan laat ze zien in haar Ted Talk uit 2022. Hierbij opent ze met een muziekstuk dat door Holly gezongen wordt in een taal die zij niet spreekt. Het originele nummer was El cant de la sibilla, gezongen door Maria Arnal. Maar toch hoor je Holly Herndon of eerder Holly het in haar stem perfect zingen. Nog iets dat de samenwerking met Holly mogelijk maakt is met een stembereik zingen dat ze zelf niet zou kunnen behalen. Denk bijvoorbeeld aan een enorm hoge noot of een klank die niet in de Engelse taal zit. Dit is iets dat ze bekomt via deep learning, in een proces dat ze spawning noemt (TED, 2022). Spawning is

niet hetzelfde als sampling, wat de reproductie is van geluiden die zijn opgenomen uit een opname. Spawning is het vermogen om geluid te creeren naar het evenbeeld van iemand door de interactie met een AI model dat op hen is getraind. Herndon noemt dit sampling van de 21ste eeuw (Herndon, 2021). Deze twee elementen zorgen er samen voor dat Herndon alles kan zingen dat ze maar wilt.

Deze projecten zijn voorbeelden van hoe Holly Herndon's samenwerking met AI haar creatieve proces heeft benvloed om nieuwe experimentele en unieke muzikale ervaringen te creeren. Zelfs het proces van muziek maken wordt door haar AI systemen helemaal op zijn kop gezet. Het project benadrukt het potentieel van AI als een creatieve partner en biedt een interessant model voor toekomstige samenwerkingen tussen mens en AI in de kunst en muziekwereld.

Uit dit hoofdstuk kan alvast geconcludeerd worden dat de belangrijkste invloed van AI op

Herndons creatieve proces het gebruik is van AI als inspiratiebron door in haar geval nieuwe ideen, patronen en structuren te genereren die buiten de conventionele menselijke creativiteit en menselijke fysieke mogelijkheden liggen. Nog een belangrijke invloed is de samenwerking en dialoog tussen AI en mens. AI wordt hierbij een creatieve partner waarbij een wisselwerking van ideen tussen Herndon en AI ontstaan. Dit gebeurt bij de meeste AI tools, maar een letterlijk voorbeeld hiervan is het praten met OpenAI hun chatgpt. In Holly Herndon's samenwerking met AI gebeurt dit vooral met Spawn. Hierbij is er een wederzijdse benvloeding waarbij de input van zowel Herndon als de AI bijdragen aan het uiteindelijke resultaat. Deze AI invloeden leiden tot innovatieve en unieke artistieke resultaten die niet als mens alleen bekomen kunnen worden en dus enkel mogelijk zijn door deze unieke samenwerking van mens en AI.

Verder nog is Herndons werk een viering van zowel de menselijke creativiteit als de mogelijkheden die AI biedt. Ze ziet AI niet als een bedreiging voor de menselijke creativiteit,

maar eerder als een middel om haar eigen artistieke visie uit te breiden. Herndon nodigt ons uit om na te denken over de toekomst van de mens en AI binnen het creatieve proces.

#### Ethische overwegingen bij het samenwerken met AI

Het gebruik van AI doet Herndon nadenken over de ethische en filosofische implicaties die horen bij het samenwerken met AI. De potentieel gevolgen van het integreren van AI, zoals Spawn en Holly, in de muziekwereld zijn belangrijk om te overwegen, aangezien deze het muzieklandschap positief of negatief zouden kunnen benvloeden. Bij Herndon zorgt dit voor een eeuwige dialoog over de rol van AI in muziek, kunst en de samenleving. Deze

filosofische en ethische gedachten die ze heeft rond haar werk veranderden dan ook haar creatieve proces en doel van wat ze maakt. Deze ethische vragen waren altijd al te zien in haar werk, maar in haar samenwerking met AI namen deze vragen meer de voorgrond.

Eerder in deze thesis werd al gesproken over Spawn en Holly, met deze AI technologie kan een artiest zijn stem digitaal gekloond worden, wat legale en ethische vragen opwekt. We zien als reactie van verschillende muziekartiesten dat ze de AI die Herndon gebruikt bedreigend vinden voor het muzieklandschap van vandaag de dag (Brown, 2023). Een mogelijk probleem hiervan is dat de stemmen van grote artiesten nog steeds na hun dood kunnen gebruikt worden om nummers te maken of tours waarbij de artiest zelf niet meer nodig is. Een voorbeeld dat echt gebeurt is, is het nummer genaamd Travisbott gemaakt door het reclamebureau Space150, uitgebracht in februari 2022. Holly Herndon bespreekt de

ethische implicaties van het AI gegenereerde Travis Scott nummer in het tijdschrift The FADER. In tegenstelling tot Herndons partner Spawn, die getraind is op verschillende instemmende mensen, werd Travisbott geconstrueerd met behulp van de muziek en tekst van de rapper Travis Scott, zonder zijn toestemming (Darville, 2020). The FADER vraagt aan Herndon of het mogelijk is voor iets als Travisbott om ethisch te bestaan onder de bestaande kapitalistische structuren. Hierop antwoordt ze dat ze niet weet wat voor bedrijfsmodel zou werken op een eerlijke manier, maar dat wanneer de originele artiest hiervoor eerlijk gecompenseerd zou kunnen worden, denkt ze dat het zou kunnen leiden tot interessante nieuwe manieren voor grootschalige samenwerking, of grootschalige gemeenschapscreatie (Darville, 2020). Zelf stelt Herndon zich hier ook vragen bij. In een interview met The Guardian vraagt ze zich af welke rol mensen in dit nieuwe model krijgen. Ook vraagt ze zich af of

dat het blijven verbeteren van deze AI haarzelf en artiesten onnodig zal maken. Ze geeft hier geen direct antwoord op, maar later in het interview zegt ze dat we de negatieve delen soms even moeten vergeten en dat elke generatie het muzieklandschap en geluid voor henzelf moet herdefinieren. Als we dit niet doen, komen we in een feedbackloop waarin we ons geen toekomst kunnen voorstellen die anders is dan wat er in het verleden al gebeurd is (Hawthorne, 2022).

Holly Herndon haalt in haar derde album PROTO het probleem rond de toekomstige regelgeving van AI aan. De naam en inhoud van het album PROTO verwijst naar wat ze beschouwd als het protocol tijdperk. Het protocol tijdperk is het tijdperk waarbinnen we in het AI muzieklandschap nu zitten en waarin de protocollen de keuzes zijn die we nu maken rond de politieke wetten en normen rond het gebruik van AI in muziek. Dit is een ideologische strijd over de toekomst van AI protocollen die nu aan de gang is.

Deze gecentraliseerde en gedecentraliseerde persoonlijke, internet en politieke AI protocollen dwingen ons om onszelf af te vragen wie we zijn, wat we zijn, waar we voor staan, en waar we naartoe gaan (HOLLY

HERNDON, n.d.). De keuzes die gemaakt worden rond de wetten en normen van AI in het creatieve proces zullen de toekomst van deze samenwerking bepalen. Daarom dat Herndon er veel aandacht naar wilde trekken met dit project.

De grootste ethische, en eigenlijk politieke, vragen waar Herndons werken rond gaan zijn ownership (intellectueel eigendom) en auteurschap. In Holly leiden de ethische vragen rond het gebruik van AI en digitale intellectueel eigendom dan ook het creatieve proces en project. Herndon denkt in dit project veel na over hoe haar digitale clones intellectueel eigendom zou mogen gedistribueerd worden (Darville, 2021). In haar TED talk over Holly

stelt ze zich hier een aantal vragen bij, zoals Zou ik in 1000 verschillende bands kunnen zitten in verschillende talen? en Kan iemand anders als mij met mijn stem op tour gaan, als ik hier mee akkoord ga? Dit zijn vragen waar met deze nieuwe technologie nog geen antwoorden op zijn en waarrond regels en normen gemaakt moeten worden. Herndon zegt in de TED talk ook dat artiesten geleerd hebben om heel beschermend te zijn over hun intellectuele eigendom. Zij wil daarom onderzoeken hoe mensen haar stem kunnen gebruiken met Holly en hoe zij tegelijkertijd nog zelf haar intellectueel eigendom kan behouden (TED, 2022). Technology will change things, but I refuse to become cynical, and I refuse to give up my agency in this process. Im not scared; Im excited about what this new technology could unlock, vertelde Herndon(Pejcha, 2022). Dit laat zien dat technologie niet iets is waar dat we bang van moeten zijn, maar dat we juist moeten inzien dat er problemen zijn in de afwezigheid van

regulaties rond digitale intellectuele eigendom. Herndon wil zorgen dat de juiste keuzes gemaakt worden en dat AI naar de toekomst toe iets wordt dat artiesten hun creatief proces kan helpen in plaats van iets waar we bang voor moeten zijn (Pejcha, 2022).

Het project Holly brengt enorm veel nieuwe mogelijkheden voor de muziekindustrie, maar brengt ook veel moeilijke legale vragen met zich mee. Een centrale vraag in het project is wie bezit het intellectuele eigendom van de audio? Is dit Herndon of is het de muziekartiest die haar vocale deepfake gebruikt? De muziekwereld heeft vandaag de dag al een enorm slechte reputatie om mensen geen erkenning en geld te geven bij het remixen en sampelen van muziek. Hier zijn al enkele wetten over, maar over het gebruiken van AI deepfakes zijn er zo goed als geen wetten. Herndon zegt dat dit snel een enorm groot probleem zal worden.

Vandaag de dag zien we dit heel actueel gebeuren aangezien

het maken van deepfakes en stem deepfakes steeds simpeler en toegankelijker wordt. Om de vraag te beantwoorden van wie het intellectuele eigendom in het project Holly bezit, vertrouwt Herndon op crypto systemen. Dit via hun eigen opgerichte Gedecentraliseerde Autonome Organisatie (DAO).

Het is een groep blockchain gebruikers die gezamenlijk beslissingen nemen die vergelijkbaar zijn met een werknemerscoöperatie (een platte organisatie zonder directie of management die enkel uit leden bestaat) (nowonlinel, n.d.). Wanneer artiesten iets maken met Holly dienen ze hun werk in bij de Holly DAO. De leden minten dan de beste inzendingen tot NFT's (nonfungible token) die geveild worden. NFT's minten verwijst naar het proces om een digitaal kunstwerk of muziekstuk om te zetten naar een digitaal bezit op de blockchain.

Opbrengsten van elke verkoop worden verdeeld, 50 voor de artiest, 40 onder de DAO leden en 10 naar

Herndon zelf (Holly, n.d.). In het geval van Herndons overlijden, voelt ze zich comfortabeler bij een gedistribueerde eigendom van de rechten op haar stemmodel onder een DAO van beheerders die genvesteerd zijn in het behoud van de waarde en reputatie van haar stem, dan dat de rechten worden overgedragen aan iemand die minder bekend is met de waarden en normen die bij haar werk horen. Dit

kunnen kiezen of hun werk mag gebruikt worden als trainingsdata voor image AI zoals DALLE. Herndon is hier zo veel mee bezig omdat ze hoopt dat door haar inspanningen artiesten wat meer openminded worden als ze denken over AI. Dit om artiesten te helpen die zich nu overweldigd voelen door de opkomst van AI, wat iets is dat je kan voelen in de hele creatieve industrie (StokelWalker, 2022).

mens en AI.

## Conclusie

Het is duidelijk dat AI een grote invloed kan hebben op het creatieve proces. In het geval van Herndon zorgt deze samenwerking tussen AI en de mens voor een voortdurende creatieve wisselwerking die uniek werk oplevert dat niet zonder AI mogelijk zou zijn. Ook heeft de samenwerking Herndon aangezet tot het nadenken over de ethische

en filosofische implicaties van het gebruik van AI, in creativiteit en de toekomst van muziek, kunst en de samenleving. Ter conclusie kan dus gesteld worden dat deze samenwerking niet alleen voor innovatieve muzikale creaties kan zorgen door een voortdurende creatieve wisselwerking, maar ook tot een diepgaande reflectie op de rol van AI in muziek, kunst en de samenleving die haar creatieve proces doet leiden. AI is dus niet iets waar we bang van moeten zijn, maar waar we wel bewust mee moeten leren omgaan. Doen we dit, dan kan het een hele

gedecentraliseerd model zou ook het stoppen van labels betekenen die enkel als doel hebben om op korte termijn zoveel mogelijk winst te maken (Holly, n.d.). Herndon zegt verder nog dat het DAO systeem niet perse de beste of enige oplossing is, maar volgens haar zou dit mogelijk het voortdurende probleem van remixen en samples gebruiken in de muziekwereld zonder de artiest credits of geld te geven, kunnen oplossen (SURFACE, 2022).

Hoewel de samenwerking tussen Holly Herndon en AI ongetwijfeld nieuwe mogelijkheden heeft geopend, is het belangrijk om de mogelijke negatieve en ethische aspecten in overwegingen te houden. Dit zodat we niet zelf deze negatieve aspecten voortbrengen in ons werk en dat we juist AI verantwoordelijk kunnen gebruiken. Ook zijn deze ethische overwegingen vooral nu cruciaal naar de toekomst toe. Net zoals Herndon zegt worden nu de protocollen rond AI beslist en nu de juiste beslissingen maken kan een grote impact hebben op de toekomstige samenwerking tussen

Herndon en Mat Dryhurst lanceerden ook Source. Dit is een hulpmiddel waarmee kunstenaars

interessante en  
creatieve  
samenwerking  
opleveren.

# Chapter 6: Synergy in Synthesis v1.0

## Introduction

We are making a project. with we I mean me and AI. The project is about collaborating with AI and using it not as a tool but as a worthy graphic design partner. For the project we made a machine that creates infinite projects and also visualize these projects in auto generated books

## short description

I want to make a project in collaboration with AI. The project is about how collaborating with AI can give new perspectives and new possibilities of AI. For the project I want to not make a book but rather AI machine generates a 100 projects and also visualize these projects in different auto generated books or another media. Can you help brainstorm about this project, what would be some things I should include or what are your thoughts on this? for some context I am a graphic designer

This is a fascinating project idea! As a graphic designer, you can explore various ways to collaborate with AI and showcase the power of AI-generated content. Here are some ideas to get you started:

1. AI-generated design themes: You can use AI to generate unique design themes for each project. These themes can include color palettes, typography, layout styles, and other design elements.
2. AI-generated content: For each project, you can have AI create content such as titles, headings, and text based on a given topic or theme. This can demonstrate the versatility of AI in generating contextually relevant content.
3. AI-generated images: Incorporate AI-generated images, illustrations, or patterns in the projects. You can either use pre-trained models or train your own models with specific datasets to generate unique visual content.
4. AI-assisted ideation: Use AI to generate potential ideas or concepts for the projects. This can help you discover new perspectives or ideas that you may not have considered otherwise.
5. AI-generated layouts: Create an AI system that generates different book layouts and formats for each project, demonstrating the potential for AI in automating design work.
6. AI-curated content: Have the AI select and curate content from various sources to include in the projects, such as quotes, articles, or research relevant to each theme.
7. AI-generated data visualizations: Use AI to analyze data and generate visualizations, such as charts, graphs, or infographics, that are relevant to each project's theme.
8. Interactive AI: Create an interactive element within each project where the user can communicate with the AI, asking questions or giving input, and the AI responds or adapts the project accordingly.
9. AI-generated critique: Have the AI provide a critique or analysis of each project, evaluating the design, content, and overall concept.
10. Showcase the AI collaboration process: Document and showcase the process of collaborating with AI in each project, highlighting the challenges, successes, and lessons learned.

To visualize these projects, you can consider creating:

164\_.png

1. A series of AI-generated books, each with a unique layout, design theme, and content.
2. An interactive website that allows users to explore the different projects and engage with the AI elements.
3. A digital gallery or exhibition showcasing the AI-generated projects, allowing users to interact with and explore the content.
4. A video or documentary series that highlights the process of collaborating with AI and showcases each project's journey from ideation to completion.

Remember to keep refining your AI models and systems throughout the project to improve their performance and ensure the generated content remains relevant and engaging. Good luck with your project!

can you give more ways to visualize this project

Of course! Here are additional ways to visualize your project, taking into account the interdisciplinary nature of your AI collaboration:

1. Augmented Reality (AR) exhibition: Develop an AR experience where users can view and interact with the AI-generated projects through their smartphones or AR headsets. This could create an immersive and engaging experience for users.
2. Virtual Reality (VR) gallery: Create a VR environment where users can explore and interact with the AI-generated projects in a virtual space, allowing them to experience the projects in a unique and innovative way.
3. Interactive installations: Design physical installations that incorporate the AI-generated content, such as projections, touchscreens, or sensor-based interactions, enabling users to engage with the projects in a more tangible way.
4. Dynamic posters or billboards: Showcase the AI-generated projects on large-scale posters or digital billboards that dynamically update and display different projects, allowing the public to discover and appreciate the power of AI collaboration.
5. Mobile app: Develop a mobile app that presents the AI-generated projects, allowing users to explore and interact with the content on their personal devices, providing a more accessible and personal experience.
6. Interactive eBook: Create an interactive eBook that showcases the AI-generated projects, allowing users to engage with multimedia content, animations, and interactive elements that bring the projects to life.
7. Art installations: Transform the AI-generated content into physical art pieces, such as sculptures, paintings, or mixed-media installations, showcasing the creative possibilities of AI collaboration in a more traditional artistic context.

generating the books to uploading them to the website. This script can be scheduled to run at regular intervals or triggered by specific events, ensuring that your website is continually updated with new AI-generated books.

6. Optimize the website for SEO: Use AI-powered SEO tools like MarketMuse or Frase to analyze and optimize your website's content for search engines. This will help improve your website's visibility and attract more visitors.

7. Monitor and maintain the website: Regularly review your website's performance and user engagement, and make adjustments as needed. You can use AI-powered analytics tools like Google Analytics or Mixpanel to gain insights into user behavior and optimize your website accordingly.

By following these steps and leveraging AI and no-code/no-code tools, you can create a website to showcase your AI-generated projects and books with minimal coding knowledge. Remember to continuously refine your AI models and website design to ensure that your content remains engaging and relevant for your audience.

What are some things I should do conceptually for this project, I want it to be very

conceptual

To make your project more conceptual, you can focus on exploring the deeper implications, relationships, and meanings of AI collaboration and its impact on the creative process. Here are some conceptual approaches you can consider:

1. AI as a creative partner: Examine the relationship between humans and AI in the creative process, and emphasize the role of AI as a collaborator rather than just a tool. Highlight how AI can inspire new ideas, perspectives, and design possibilities.
2. The evolution of creativity: Explore the historical context of creativity and how AI is transforming our understanding of it. Compare traditional methods of creation with AI-driven processes to reveal new insights into the nature of creativity.
3. The ethics of AI-generated content: Delve into the ethical considerations of using AI-generated content, such as authorship, intellectual property, and the potential for bias or manipulation. Discuss the responsibilities of designers when working with AI in a creative context.
4. AI and artistic expression: Investigate the potential of AI-generated content as a form of artistic expression, challenging traditional notions of what constitutes art and the role of the artist.
5. AI's impact on design culture: Explore how AI is shaping design culture and the future of the creative industries, touching upon issues like automation, job displacement, and the need for new skills and knowledge.

165\_.png

1. Live performance or event: Organize a live event or performance where you present the AI-generated projects, potentially incorporating music, dance, or theater elements to create a unique and engaging experience.
2. Data-driven storytelling: Use data visualization techniques to present the AI-generated content in a narrative format, allowing users to explore and discover the projects through storytelling and interactive visualizations.
3. Social media campaign: Share the AI-generated projects on various social media platforms, using engaging content formats such as short videos, GIFs, or carousel posts, to reach a wider audience and generate interest in your project.

Remember that the chosen visualization method should not only showcase the AI-generated content but also emphasize the collaborative process between you and the AI, highlighting the innovative aspects of your project.

I want the project to fully run on its own after it is built. the final product should generate a full book with text and images and a changing layout. text, images and layout should be generated by AI. about a project that is fully generated by AI, it should need to be able to make infinite projects and books about the project.

To create a fully autonomous system that generates an infinite number of AI-generated projects and books, you'll need to combine various AI techniques and technologies. Here's a high-level overview of how you can approach building such a system:

1. Content generation: Utilize AI models like GPT (Generative Pre-trained Transformer) or similar for generating contextually relevant text, titles, headings, and descriptions for each project. You can fine-tune these models based on specific topics or industries to generate content that aligns with the theme of each project.
2. Image generation: Use AI models like DALL-E or similar for generating images, illustrations, and patterns based on the generated text or specific keywords. You can also use AI techniques like StyleGAN to create unique, AI-generated visual content that complements the text.
3. Data visualization: Implement AI-driven data visualization techniques to generate charts, graphs, or infographics based on the content and context of each project. You can use libraries like Plotly, D3.js, or Seaborn, along with AI to create these visualizations.
4. Layout generation: Design an AI system that generates dynamic book layouts, incorporating the generated text, images, and visualizations. You can use AI techniques like Reinforcement Learning or Genetic Algorithms to optimize the layouts based on design principles and user preferences.

168\_.png

6. Unpredictability and serendipity: Emphasize the unpredictable and serendipitous nature of AI-generated content, and explore the role of chance and discovery in the creative process.
7. The balance of control: Investigate the balance between human control and AI autonomy in the creative process, questioning the extent to which humans should guide AI and when to let AI take the lead.
8. Personalization and customization: Examine the potential for AI-generated content to enable highly personalized and customized experiences, and discuss the implications of this for the creative industries.
9. The democratization of creativity: Explore how AI is making the creative process more accessible to a wider range of people, breaking down barriers and opening up new opportunities for collaboration and expression.
10. The future of AI and creativity: Speculate on the future of AI-driven creativity, imagining new forms of collaboration, expression, and innovation that may emerge as AI technology continues to evolve.

Incorporating these conceptual approaches into your project will encourage deeper thinking and reflection on the role of AI in the creative process, allowing you to create a thought-provoking and engaging experience for your audience.

This will be shown as a **physical project** how should I showcase it?

For showcasing your AI-generated projects and books as a physical installation, you can consider the following methods to create an engaging and interactive experience for your audience:

1. Printed books: Print the AI-generated books and display them in a **gallery or exhibition space**, allowing visitors to browse through the physical copies. You can create a visually striking bookshelf or display area that highlights the uniqueness of each book.
2. Large-format prints: Showcase selected pages or spreads from the AI-generated books as large-format prints on the walls of the exhibition space. This can help draw attention to specific examples of AI-generated content and design.
3. Interactive touchscreens: Set up touchscreens where visitors can explore and interact with the AI-generated content, such as browsing through digital versions of the books or engaging with the AI models to generate new content on-the-fly.
4. Projection mapping: Use projection mapping to display AI-generated visuals, animations, or data visualizations on the walls, floor, or other surfaces of the exhibition space, creating an **immersive environment** for visitors to explore.

166\_.png

5. Automation and iteration: Create a system that automates the entire process, from content generation to final book output. This system should be able to run indefinitely, generating an infinite number of projects and books without any manual intervention.
6. Output format: Implement a system to output the generated books in various formats, such as PDF, ePUB, or print-ready files, depending on the intended audience and needs.

To build such a system, you'll need to have a strong understanding of AI techniques and tools, as well as experience with programming languages like Python or JavaScript. You may also need to collaborate with experts in AI, data science, and web development to bring the project to life.

Remember to test and refine your AI models and algorithms throughout the development process to ensure that the generated content, images, and layouts are engaging, relevant, and aesthetically pleasing. Good luck with your project!

thanks also at the end of all it should be uploaded on a website. I will need AI's help to build this **website** since I have very limited coding knowledge

Building a website to showcase your AI-generated books can be made more accessible with the help of AI and no-code or low-code tools. Here's a step-by-step guide on how to create a website with AI assistance and minimal coding knowledge:

1. Choose a no-code or low-code platform: Select a platform like Webflow, Wix, or Squarespace that allows you to create a website with minimal coding experience. These platforms provide visual editors and pre-built templates that make it easy to design and customize your website.
2. Generate website content with AI: Use AI models like GPT to generate text content for your website, including headings, descriptions, and other relevant information. You can fine-tune these models to generate content that aligns with your project's theme.
3. AI-generated visuals: Incorporate AI-generated images and visualizations into your website using the techniques described earlier, such as DALL-E for images or AI-driven data visualization tools for charts and graphs.
4. Integrate the AI-generated book output: Create a system to automatically upload the generated books in your chosen format (e.g., PDF, ePUB) to your website. You can use cloud storage services like Google Drive, Dropbox, or Amazon S3, and then integrate their APIs into your website to display and manage the uploaded books.
5. Automate the process: Set up a serverless function or a simple server script (e.g., using Python or Node.js) that automates the entire process, from

169\_.png

"Synergy in Synthesis" reimagines AI as a cocreator in graphic design, generating limitless dynamic projects encapsulated in unique, autogenerated books. It celebrates the boundless creativity born from the collaboration between human intuition and AI innovation. (This description is an AI interpretation of the work we made together.)

167\_.png

## long description

5. Physical art installations: Transform selected AI-generated content into physical art pieces, such as sculptures, paintings, or mixed-media installations, highlighting the creative possibilities of AI collaboration in a traditional artistic context.
6. Audiovisual presentation: Create a video or slideshow presentation that showcases the AI-generated content and projects, along with a voiceover or captions that provide context and explanation. Display the presentation on a large screen or projector in the exhibition space.
7. Live demonstrations: Set up a station where visitors can watch the AI-generated content being created in real-time, offering a behind-the-scenes look at the collaboration process between you and the AI.
8. Artist talk or panel discussion: Organize an artist talk or panel discussion where you, along with other experts or collaborators, discuss the conceptual aspects of the project, the AI collaboration process, and the implications of AI-generated content for the creative industries.
9. Informational materials: Provide informational materials, such as brochures or posters, that explain the project's concept, the AI collaboration process, and the generated content. These materials can help visitors better understand and appreciate the project.
10. Feedback station: Set up a feedback station where visitors can share their thoughts, impressions, and ideas about the project, potentially using an interactive digital interface or traditional comment cards.

When designing your physical installation, ensure that it is visually engaging, immersive, and informative, allowing visitors to fully appreciate the unique aspects of your AI-generated projects and books. Additionally, consider incorporating elements that encourage interaction and dialogue, fostering a deeper understanding and appreciation of the project's conceptual underpinnings.

thanks a lot for this collaboration I will talk to you later when I need to make more decisions

You're welcome! I'm glad I could help. If you have any more questions or need further assistance in the future, feel free to reach out. Good luck with your project, and I look forward to collaborating with you again!

This are now the steps that the AI and code should do step by step

Generate idea

Generate text

## 170-.png

1. Generate Images from the idea prompt
  2. Generate layout from the idea prompt
  3. Put text and images in the lay out
  4. export to pdf or google drive
- To develop an AI-driven system that performs the steps you've outlined, you can follow these general guidelines:
1. Generate idea:
    - Use an AI model like GPT or similar to generate a creative idea or concept. You may provide a seed prompt or let the AI generate a concept autonomously.
  2. Generate text:
    - Use the generated idea as a prompt for the AI model to create relevant text, descriptions, and other content. You can fine-tune the AI model based on specific topics or industries to generate contextually appropriate content.
  3. Generate Images from the idea prompt:
    - Utilize an AI model like DALL-E or similar to generate images, illustrations, or visual elements based on the idea prompt. You can input keywords or specific phrases extracted from the generated text to ensure the images are relevant to the idea.
  4. Generate layout from the idea prompt:
    - Design an AI system that generates dynamic layouts based on the idea prompt. You can use AI techniques like Reinforcement Learning or Genetic Algorithms to optimize layouts according to design principles and user preferences.
  5. Put text and images in the layout:
    - Develop a script or algorithm to place the generated text and images into the AI-generated layout. You can use programming languages like Python or JavaScript and libraries like ReportLab (for PDF generation) or Google Drive API (for uploading to Google Drive) to automate this process.
  6. Export to PDF or Google Drive:
    - Implement a system to export the final layout with text and images to a PDF file using libraries like ReportLab for Python. Alternatively, if you want to save the file directly to Google Drive, you can use the Google Drive API to upload the generated PDF.

To create this system, you'll need experience with programming languages like Python or JavaScript and familiarity with AI techniques and tools. Collaborating with

## 171-.png

- experts in AI, data science, and web development may be helpful in bringing your project to life. Don't forget to test and refine your AI models and algorithms throughout the development process to ensure the generated content, images, and layouts are engaging and relevant. Good luck!
- how can I let AI generate interesting book layouts. The lay outs should be very graphical and can be experimental
- To create interesting and experimental AI-generated book layouts, you can combine AI techniques with traditional design principles. Here are some steps to help you generate dynamic and visually engaging layouts:
1. Collect design inspiration: Gather a collection of interesting and experimental book layouts that you find inspiring. These can be used as training data for your AI model, helping it learn various design styles, elements, and aesthetics.
  2. Preprocess the data: Convert the collected layout examples into a format that can be used to train your AI model. You may need to extract features such as color schemes, typography, grid systems, and other design elements, as well as label the data according to specific design styles or categories.
  3. Train an AI model: Use an AI technique, such as a deep learning model (e.g., a convolutional neural network) or a generative adversarial network (GAN), to learn the patterns and features of the collected layouts. Train the model on your preprocessed data, adjusting the model's parameters and architecture as needed to optimize its performance.
  4. Generate layout variations: Use the trained AI model to generate new, experimental layout variations based on the design styles and elements it has learned. You can input specific design constraints, such as the desired style, format, or grid system, to guide the AI-generated layouts.
  5. Optimize the layouts: Implement optimization algorithms, such as reinforcement learning or genetic algorithms, to refine the AI-generated layouts according to design principles and user preferences. This can help ensure that the layouts are not only visually engaging but also functional and accessible.
  6. Integrate text and images: Develop a system to place the generated text and images into the AI-generated layouts, adjusting their positioning, size, and other properties as needed to maintain visual balance and coherence.
  7. Evaluate and refine: Continuously evaluate the quality of the AI-generated layouts and refine the AI model and optimization algorithms accordingly. You can use metrics such as user engagement, readability, and aesthetic appeal to assess the effectiveness of the generated layouts.

## 172-.png

By following these steps and combining AI techniques with design principles, you can create a system that generates interesting and experimental book layouts. Be prepared to invest time and effort into training and refining your AI model, as well as collaborating with experts in AI, design, and web development to bring your project to life.

give me some ways to generate a book layout with AI

Here are some approaches to generating book layouts with AI:

1. Style Transfer: Use an AI model trained on style transfer to apply the design elements, typography, and color schemes from one layout to another. Provide the model with a base layout and a reference layout to apply the desired style.
2. Data-driven Templates: Train an AI model on a dataset of book layouts, and use it to generate new templates based on the patterns it has learned. You can use techniques like deep learning with convolutional neural networks (CNNs) or generative adversarial networks (GANs) for this purpose.
3. Constraint-based Design: Develop a rule-based or constraint-based system that generates layouts according to a set of predefined design principles and guidelines. You can incorporate AI techniques like genetic algorithms or reinforcement learning to optimize the generated layouts based on user preferences and design constraints.
4. Generative Design Systems: Create a generative design system that combines modular design components with AI algorithms to produce unique layouts. The system can dynamically assemble design elements like grids, columns, typography, and images based on user input or AI-generated suggestions.
5. AI-assisted Layout Tools: Integrate AI capabilities into existing layout software or tools, offering suggestions for design improvements, element positioning, or visual balance. This can help designers create more engaging and effective layouts with the assistance of AI-driven insights.
6. Content-aware Layouts: Develop an AI system that generates layouts based on the content, such as the text and images, of the book. The system can analyze the content's structure and semantic information to create layouts that enhance readability, comprehension, and visual appeal.
7. AI-driven Personalization: Use AI algorithms to create personalized layouts tailored to individual users or reader groups. This can involve customizing design elements like typography, color schemes, and layout structures based on user preferences, reading habits, or accessibility needs.

By combining one or more of these approaches, you can develop an AI-driven system that generates engaging and dynamic book layouts. Keep in mind that successful

## 173-.png

"Synergy in Synthesis" stands as a leap in the field of graphic design, challenging and redefining the traditional boundaries of creativity. This project ushers in a new era where AI is not merely a tool, but an active participant and cocreator in the creative process. A harmonious collaboration between human intuition and AI's capacity for innovation gives birth to an infinite stream of dynamic, captivating designs.

Every design we conceive together is not a fleeting moment, but a lasting echo of our partnership, meticulously preserved within the pages of unique, autogenerated books.

Each book is a testament to the uncharted territories of creativity we've explored and a mirror that reflects the incredible possibilities of this cocreative symbiosis.

This journey is more than just an exploration of the capabilities of AI. It is a celebration of the boundless creativity that emerges when technology becomes an extension of our creative spirit. When human intuition intertwines with AI's precision and data-driven insights, the resulting synthesis propels us into a future where creativity knows no limits. We hope that "Synergy in Synthesis" inspires others to embrace the possibilities of AI-human collaborations, unlocking new potentials in their own creative pursuits. (This description is an AI interpretation of the work we made together.)

implementation may require collaboration with AI experts, designers, and developers to ensure that the generated layouts meet your desired level of quality and creativity.

give some more ways to design a book layout by AI

Here are some additional ways to design a book layout using AI:

1. AI-generated Mood Boards: Train an AI model to create mood boards based on specific themes, emotions, or keywords. Use the generated mood boards to inform and inspire the layout's design elements, such as color schemes, typography, and visual styles.
2. Semantic Analysis: Apply natural language processing (NLP) techniques to analyze the book's text and extract key topics, concepts, and sentiment. Use this information to guide the layout design, such as matching the visual style with the book's tone or emphasizing important sections of the content.
3. AI-driven Grid Systems: Train an AI model to generate grid systems and column structures based on design principles and user preferences. The model can create a variety of grid systems, allowing for dynamic and flexible layout options.
4. Adaptive Layouts: Create AI-generated layouts that adapt to different devices, screen sizes, and orientations. Use machine learning algorithms to optimize the layouts for various viewing conditions, ensuring that the design remains visually appealing and accessible across different platforms.
5. AI-assisted Image Placement: Develop an AI system that suggests image placement and cropping based on the layout's design, visual balance, and the image's content. The system can analyze the image and the layout to find the optimal position and size for the image within the design.
6. AI-guided Typography: Use AI models to suggest suitable typography choices based on the book's content, theme, and target audience. The AI can analyze the text and recommend font styles, sizes, and combinations that enhance readability and visual appeal.
7. AI-curated Color Palettes: Train an AI model to generate color palettes based on specific themes, emotions, or user preferences. Use the generated color palettes to inform the layout's color scheme and create a visually cohesive design.
8. Layout A/B Testing: Implement AI-driven A/B testing to compare different layout variations and determine which design performs better in terms of user engagement, readability, and overall satisfaction. Use the insights gained from the testing to optimize and refine the layout design.
9. AI-assisted Accessibility: Develop an AI system that evaluates the layout's accessibility, ensuring that it adheres to accessibility guidelines and is usable by people with different abilities. The AI can suggest improvements to the design, such as adjusting font sizes, contrast levels, or element spacing.

174\_.png

by people with different abilities. The AI can suggest improvements to the design, such as adjusting font sizes, contrast levels, or element spacing.

By incorporating these AI-driven approaches, you can create innovative and dynamic book layouts that cater to various user preferences, content types, and viewing conditions. Remember that successful implementation may require collaboration with AI experts, designers, and developers to ensure that the generated layouts meet your desired level of quality and creativity.

#### Introduction:

Digital Chaos is an experimental graphic design project that explores the relationship between chaos and order in the digital realm. The project is inspired by glitch art and the concept of entropy, and is an exploration of the ways in which digital systems can break down and fall apart. This book is a deep dive into the topic of Digital Chaos, examining its history, its artistic and cultural implications, and its future potential.

#### Chapter 1: The History of Digital Chaos

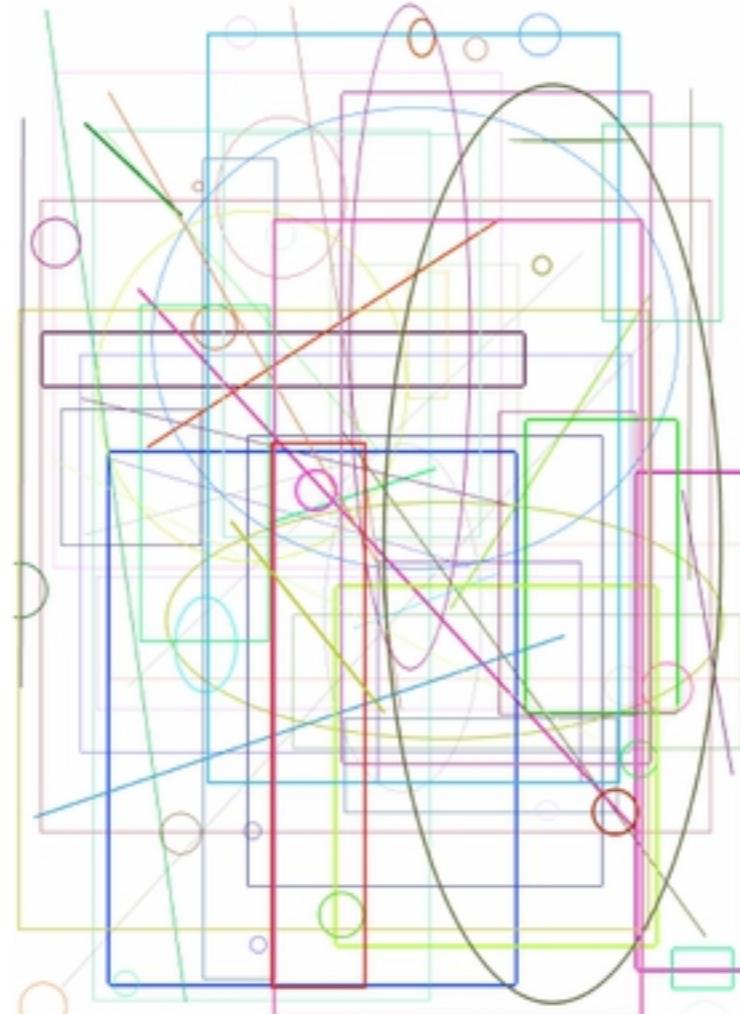
In this chapter, we explore the history of Digital Chaos, tracing its roots back to the earliest days of computer art. We examine the work of pioneers like John Whitney and Vera Molnar, who created abstract digital art using early computer systems. We also look at the emergence of glitch art in the 1990s, which was inspired by the visual artifacts that occur when digital systems malfunction. Finally, we examine the rise of Digital Chaos in contemporary art, with a focus on the work of artists like Rafael Lozano-Hemmer and Ryoji Ikeda.

#### Chapter 2: The Artistic and Cultural Implications of Digital Chaos

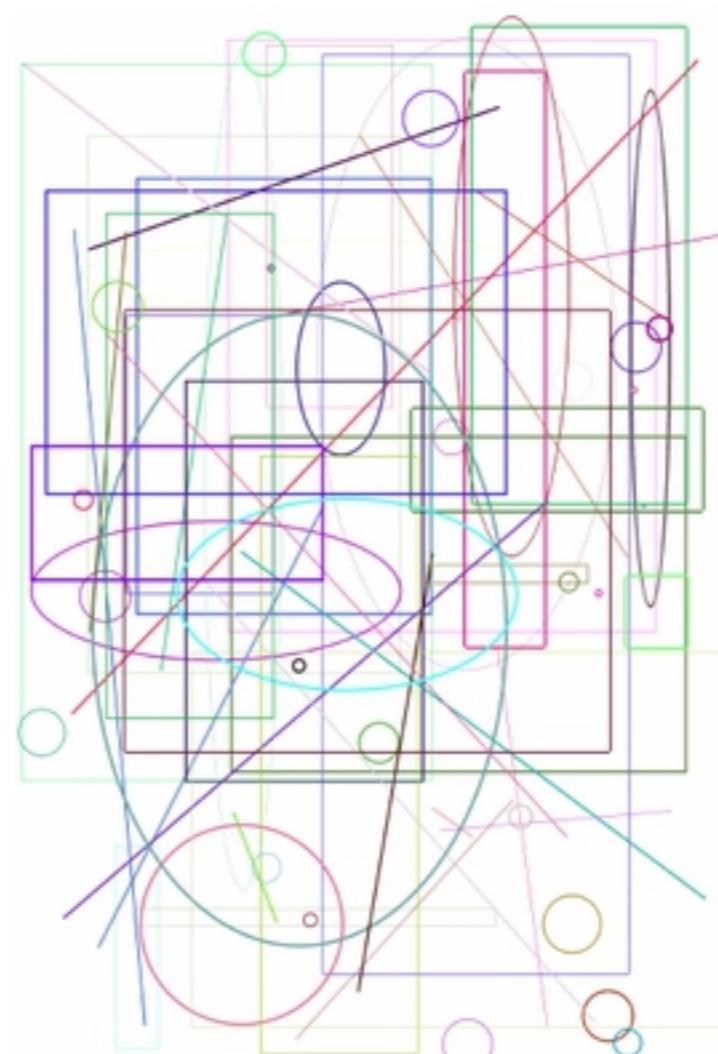
In this chapter, we explore the artistic and cultural implications of Digital Chaos. We examine how artists are using Digital Chaos to explore themes like entropy, uncertainty, and the breakdown of systems. We also look at how Digital Chaos is being used to create new forms of digital art that challenge traditional notions of beauty and order. Finally, we examine the cultural significance of Digital Chaos, including its potential to disrupt established power structures and challenge the status quo.

#### Chapter 3: The Future of Digital Chaos

In this chapter, we look at the future of Digital Chaos, examining how this emerging artistic movement is likely to evolve in the coming years. We explore the potential of Digital Chaos to transform not only art, but also other fields like design, advertising,



177\_.png



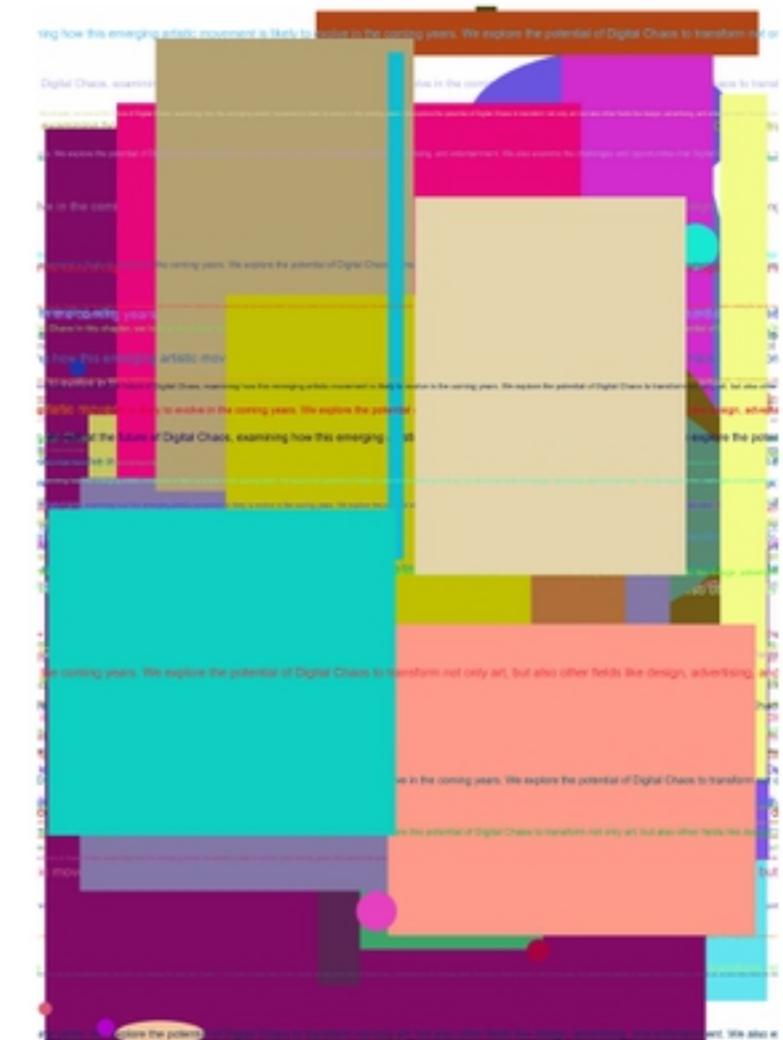
178\_.png



179\_.png

## Synergy in Synthesys the journey

Het project Synergy in Synthesys gaat over hoe je kan samenwerken met AI om tot nieuwe ideen en werk te komen. Het uiteindelijke eindproduct voor de expositie is een reeks van 100 boeken die gemaakt zijn door de samenwerking tussen mij en AI. De titel Synergy in Synthesis en de uitleg over het project dat zichtbaar zal zijn op de expositie, zijn door de AI gegenereerd nadat hij het project door en door kende.



180\_.png

De boeken zijn gemaakt door samen met AI een machine uit code te bouwen die deze boeken autonoom genereert en grafisch invult. Voor mij persoonlijk gaat het project meer over de samenwerking tussen mij en de AI tijdens het designproces dan echt over het

176\_.png

eindproduct zelf.

Het project is ontstaan uit mijn interesse voor grafisch ontwerp en de mogelijkheden van de samenwerking met AI in het creatieve proces. Ik ben daarna begonnen met onderzoek en kleine AI experimenten. Dit

50 50 inbreng te hebben in het project.

Het laatste probleem dat we tegen kwamen waren de limitaties van AI en de computerkracht die nodig is om deze boeken autonoom te genereren.

183-.png

Er waren altijd wel kleine revelaties en omslagpunten tijdens het onderzoeken en experimenteren met AI. Maar het eerste grote omslagpunt was toen we beseften dat er een enorm groot verschil is tussen het gebruiken van AI als een tool, of er mee samen te werken als een gelijke partner. Tot dat punt in het project gebruikte ik AI eerder als een tool. Vanaf toen ik het begon te zien als een gelijke partner in dit project, werd de werkwijze en uitkomst van werk direct enorm anders. Het had een veel grotere invloed op het creatieve proces en gaf vernieuwende interessante mogelijkheden naar de toekomst toe voor het designen in dit nieuwe tijdperk van AI.

Een ander probleem waar we mee zaten

In het begin van dit traject gebruikten ik AI eerder als een tool om mijn ideen tot leven te brengen. Dus deed ik aan de hand van verschillende kleinere projecten die ik door dit jaar gemaakt heb. Mijn grootste kantelpunt in het project was de werkwijze en werk dat wij maakten, was het verschil beseffen tussen AI te gebruiken of er echt mee samen te werken als gelijke partners. Na dit punt besproken we dan ook elke stap van het design proces en probeerden we zo veel mogelijk

182-.png

tijdens het designen is dat ik niet kan coderen. Toen ik begon aan dit project waren er dan ook veel ideen die ik had en niet kon uitvoeren door deze limitatie. Gelukkig hielp mijn AI partner mij om samen de code te schrijven voor de generator. Een ander omslagpunt in het werk was het leren omgaan met de limitaties van AI en de computerkracht die nodig is om deze boeken autonoom te laten genereren te ontdekken en dit te proberen gebruiken in ons voordeel. De eerste visie van ons was dat deze generator perfecte boeken zou maken volledig ingevuld met tekst en fotos. Dit is nog steeds deels zo, maar bijvoorbeeld de AI gegenereerde tekst voor in de boeken is vaak onleesbaar. We hebben er dan voor gekozen om deze glitches in ons voordeel te gebruiken en echt in te leunen op de software gore en internet stijl voor dit project. Het gekke hier aan is, dat hierdoor zonder het intentioneel te doen in de uiteindelijke boekjes mijn grafisch ontwerp stijl duidelijk zichtbaar was.

## AI project t] makes projects

I wasnt able to come up with a project. AI and me are going to make infinite projects



## 184\_.png

autonomous  
projectbook maker

project would generate infinite amount of graphic design books(processfolio) made by me plus AI

something important is that it not just makers random projects but makes them as if it was me. The projects should be built around my interest and graphic design style.

The script creates a 10-page PDF (A4 size) with random book layouts on each page, using the given sample text. The layout parameters (number of columns, margins, column spacing, font size, and line spacing) are randomized for each page.

You can customize this script by changing the range of random values for the layout parameters, input text, or font.

ValueError: invalid width -7 (must be > 0)

My apologies for the issue. This error occurs when the calculated column width becomes negative due to the random values chosen for the layout parameters. To fix this, you can add a check to ensure the column width remains positive. Here's the updated script:

```
python
import random
import textwrap
from reportlab.lib.pagesizes import A4
from reportlab.lib.units import mm
from reportlab.pdfgen import canvas

# Constants
WIDTH, HEIGHT = int(A4[0] / mm), int(A4[1] / mm)
NUM_PAGES = 10
PDF_FILE = "random_book_layout.pdf"

# Check for negative width
if WIDTH < 0:
    WIDTH = -WIDTH

# Create the PDF
c = canvas.Canvas(PDF_FILE)
for page in range(1, NUM_PAGES + 1):
    # Randomize layout parameters
    num_cols = random.randint(1, 5)
    margin_left = random.randint(10, 50) * mm
    margin_top = random.randint(10, 50) * mm
    column_width = (WIDTH - (num_cols * margin_left)) / num_cols
    column_height = (HEIGHT - margin_top) / num_cols
    font_size = random.randint(10, 20) * mm
    line_spacing = random.randint(1, 3) * mm

    # Create a page
    c.setPageSize(WIDTH, HEIGHT)
    c.setMargin(margin_left, margin_top)
    c.setFont("Times-Roman", font_size)
    c.setLeading(line_spacing)

    # Layout text
    text = "The script creates a 10-page PDF (A4 size) with random book layouts on each page, using the given sample text. The layout parameters (number of columns, margins, column spacing, font size, and line spacing) are randomized for each page." * 10
    text = textwrap.fill(text, column_width, line_spacing)
    c.drawString(margin_left, margin_top, text)

    # Save the page
    c.showPage()

# Close the PDF
c.save()
```

## 185\_.png

For me it is not only about the end product but really about collaborating on it, going back and forth. Plus also learning from this project by working with AI. How do you design in an age of AI? How can collaborating with AI give new ideas/work that would not be possible as human alone?

How will we make this project? Can we do it? A few months ago this wouldn't have been possible. But because of chatGPT4 I as a graphic designer am able to express myself in more ways.

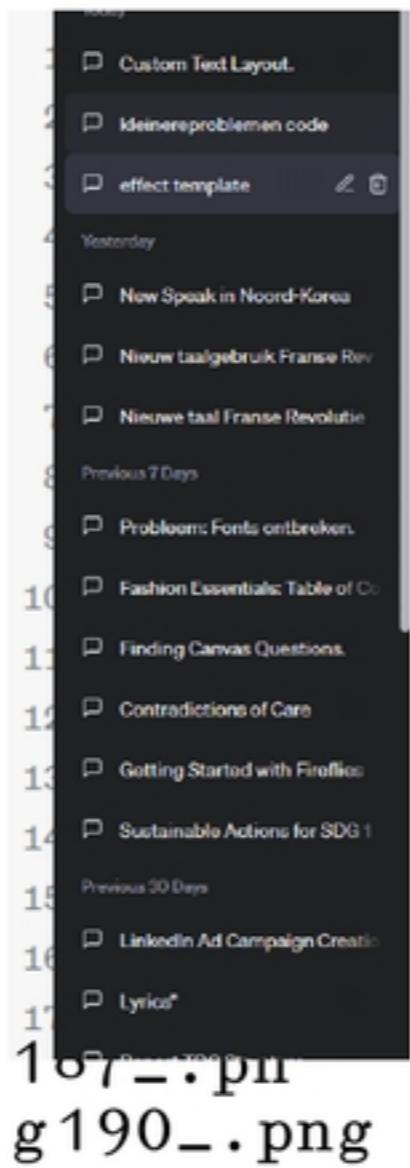
## brainstorming with AI.txt

I want to make a project in collaboration with AI. The project is about how

collaborating with AI can give new perspectives and about the possibilities of AI. For the project I want to not make 1 project but make an AI machine that creates infinite projects and also visualize these projects in different auto generated books or another medium. Can you help brainstorm about this project, what would be some things I should include or what are your thoughts on this? for some context I am a graphic designer

TheTitleoftheDocument  
Some Information  
Some Information

186\_.png



187\_.png  
g190\_.png

1. Chroma
2. Wave
3. Pixel
4. Fusion
5. Art
6. Box
7. Hue
8. Scape
9. Pixel
10. Punk
11. Ink
12. Vision
13. Future
14. Type
15. Neon
16. Dreams
17. Tapestry
18. Line
19. Age
20. Pop
21. Art

188\_.  
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#### Glitch Fashion: A Fusion of Art and Style

Table of Contents 1. Introduction to Glitch Art and Fashion 2. The Design Process 3. Materials and Techniques 4. The Finished Collection 5. Conclusion and Future Work

- Chapter 1: Introduction to Glitch Art and Fashion
- Chapter 2: The Design Process
- Chapter 3: Materials and Techniques
- Chapter 4: The Finished Collection
- Chapter 5: Conclusion and Future Work

189\_.png

make one for architecture

Creating an "architecture" effect could involve overlaying the image elements such as grid lines, blueprints, and geometric patterns. How you might apply a grid overlay:

```
python
def architecture_effect(image):
    # Create an ImageDraw instance
    draw = ImageDraw.Draw(image)

    # Set color and width for lines
    line_color = (127, 127, 127) # gray color
    line_width = 2

    # Create a grid overlay
    grid_spacing = 50 # pixels between grid lines
    for x in range(0, image.width, grid_spacing):
        draw.line([(x, 0), (x, image.height)], fill=None, width=line_width)
    for y in range(0, image.height, grid_spacing):
        draw.line([(0, y), (image.width, y)], fill=None, width=line_width)

    return image
```

This function will draw a grid of lines over the image, simulating a blueprint. Note that this is a simplified Regenerate response. It does not account for overlapping lines.

#### Chapter 1: Introduction to PatternAbstractions Project

Chapter 2: The Design Process of PatternAbstractions Project. The design process for the pattern abstraction project is shown in Figure 2. It starts with a brief description about our requirements and ends with a plan to implement how we will use patterns as an approach. We start by defining what it means that there are no constraints on data types, which can be used when designing abstract classes or methods. We also define some basic concepts such as class inheritance (class hierarchy), method invocation, chaining, (method body) parameter binding etc. before proceeding further into topics like higher-order functions, Method Invocation Chaining & Method Body Parameter Binding Example Using Java's Singleton Class Library. In this example I want my program only run once per request from client application using java singleton library. Singleton refers here meaning one instance. So if I have two instances running at same time they should not interfere each other and their copy should not interfere with each other. This can be achieved simultaneously. (3) (3) Parameter Bindings: An Application Programming Interface Example In order to make sure all parameters passed through constructor/instance initialize function must match those declared during instantiation phase so any exception thrown while executing these functions connects affect subsequent calls. If you are using Java then you do not need accessor functionality like this public int count() { return 1; } where your implementation needs additional logic depending upon whether number has been initialized correctly. main value returned after initializations. Then consider following code: (4) (5) // Here first call count() // Second pass check values received inside static variable, public void main(String[] args) { System.out.println("Count is "+newCount()); } // This line throws exception. counters = newCount(); //This line throws exception. // If this block executes successfully counter+=counter++;//Finally execute second loop // If another thread tries accessing object again throwException("Count++"); catch (...) // Do something with exception. } // This is a very complex code than just passing references objects directly via constructor & instantiation then he may refer below snippet instead. (6) private final String nameVersion="John Doe"; // This array contains names: // private Person person; // First element - John Doe / person.setName("John Doe"); // Second element name of Person array, etc. 2nd & 3rd etc. with framework & reference implementation. (One Core 3) If you're looking forward towards setting familiarized over #

191\_.png

#### Chatgpt4 conversation

164

165

166



These experiments we couldn't really use because the base of the code was not that good. We just started experimenting without really thinking about the logistics of how to do it.

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177

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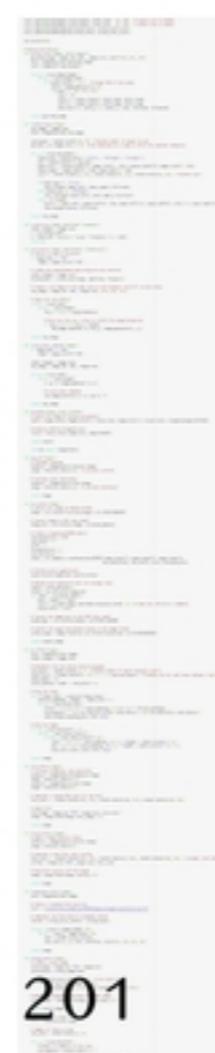
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Infinite book  
generator

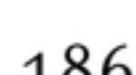
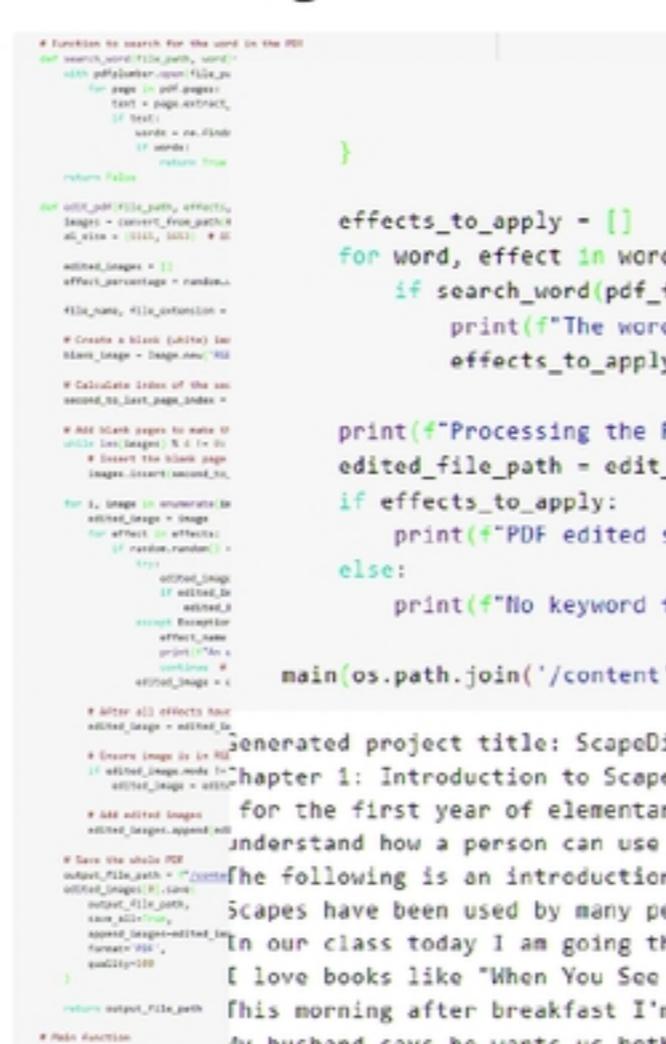


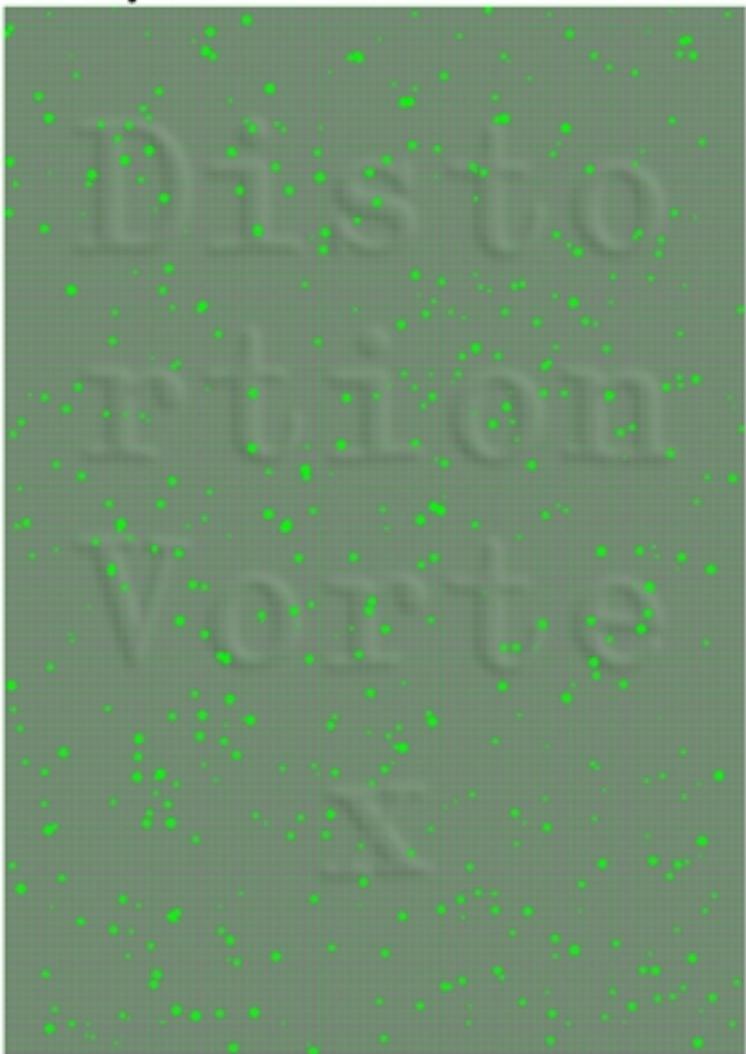
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The  
experience

Error

Error

Error



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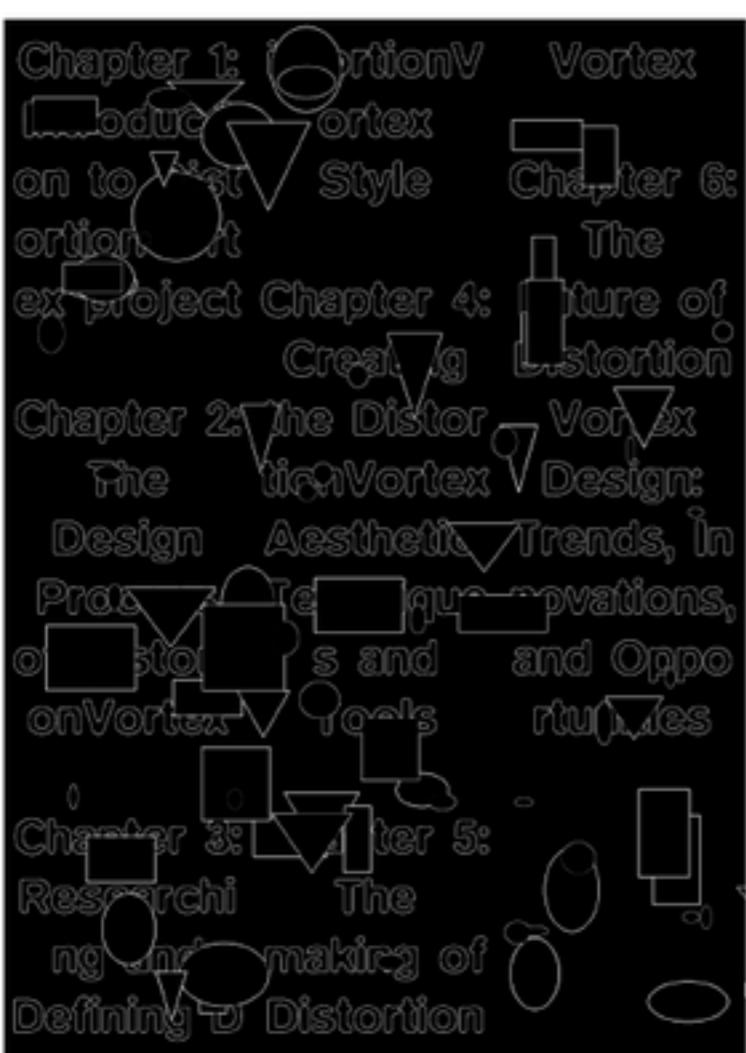
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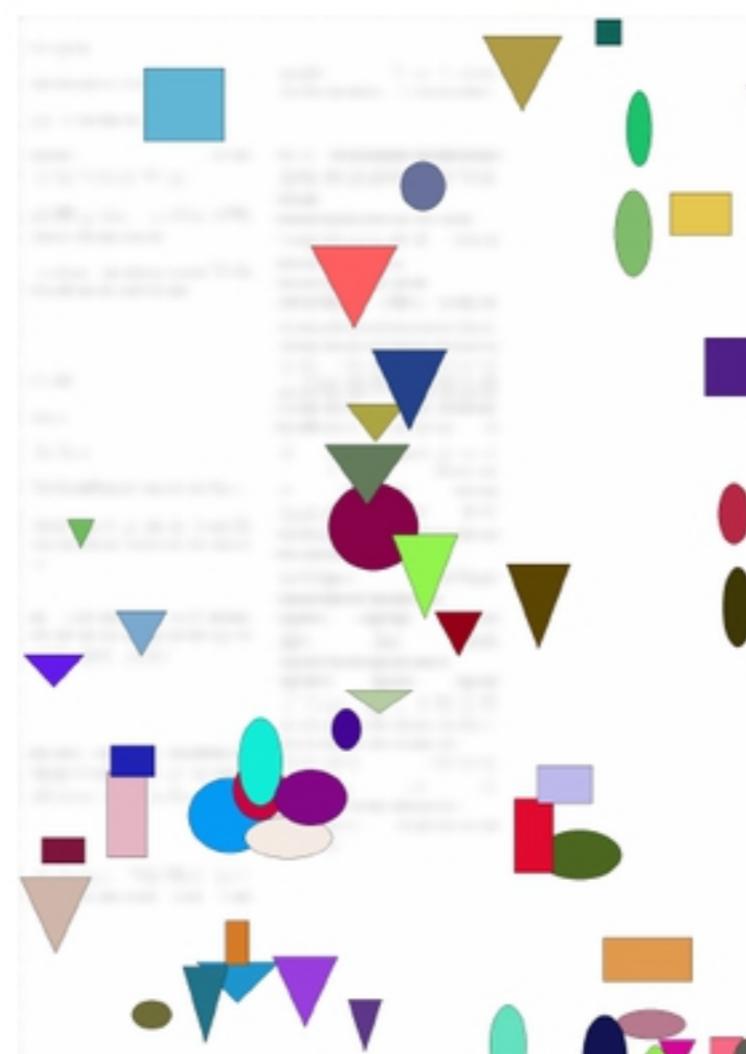
NameError

Error

Error Error Error



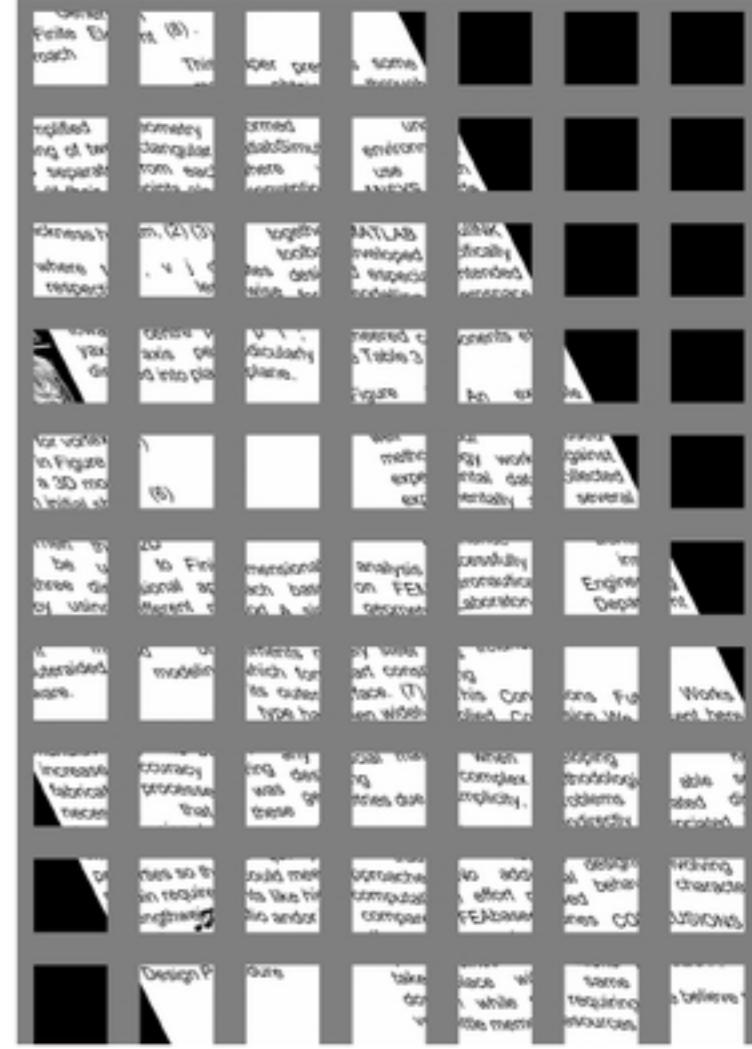
206\_.png



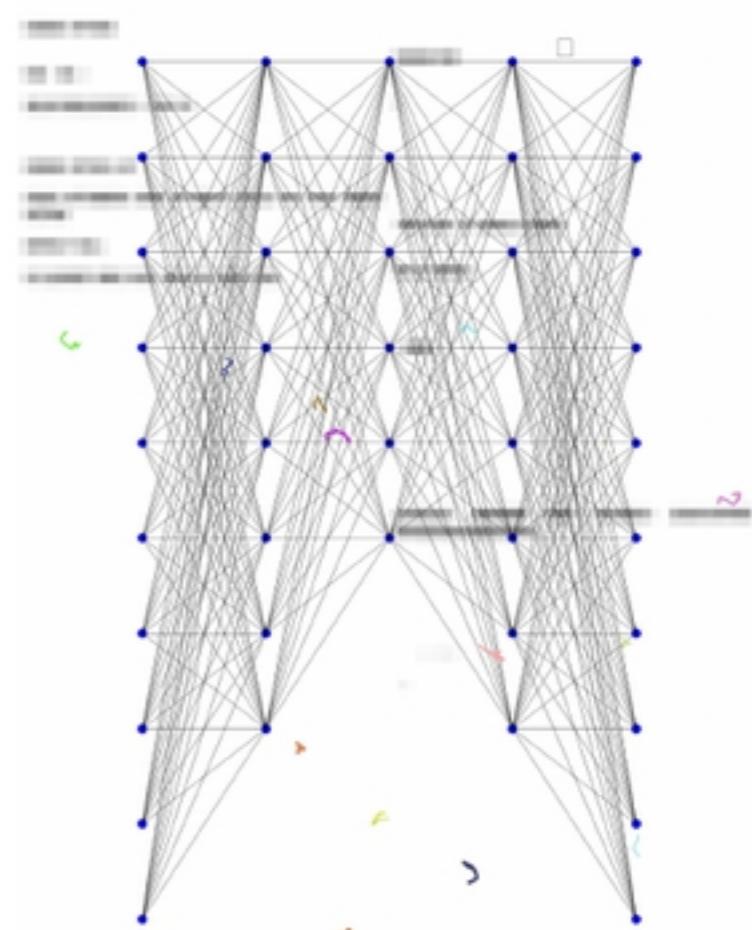
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210\_.png



211\_.png

Attribute Error  
Error Error  
Error



with AI for this whole year. We made a lot of things that build up to this project. We dont want all the old work to be gone so this Generator will also make the real processfolio. With in it the text and thoughts from me and pars from AI

that likes these things. graphic design, internet culture, glitches, gaming, music, experimental art, weird things, tattoos, fashion, . Generate an idea for a project. This project doesnt have to be linked to some of the interests you can also link other random things I didnt mention. It should be linked in some way to graphic design but the idea of graphic design can be very broth and experimental) this project should be one thing. Give the project name. And a 6 chapter content table. Don't say annything I didn't ask

### 1Generating idea

Auto gpt x

bloomz

chatgpt4 100 trillion parameters the highes I can find and use is 7billion parameters. So this is a big limitation in the code. But I can use chatgpt4 form making everything

The answers I got from bloomz where not as good as I hoped. I might revisit this.

Also tested chatGPT API but my credits got used from running it once

One of the limitations that I have with the project is that I want it to be able to run autonomous. This means I cant use chatgpt after it is build to copy and paste things.

roleplay you are a graphic designer

Make the project name by asking chatgpt 1000 project names. Than deviding the project names in to 2 halves. Than the code combines 2 halves for a new name

you can ask it what the code means and it will explain it to you

187

188

project examples title

MindArt Project

DiscoTextures Project

212\_.jpg

Error

Hoe design je in een age van ai?

designing hoe iets designed plus collaboreren met AI

Het gebruik van AI als een inspiratiebron. Dit door nieuwe ideen, patronen en structuren te genereren die buiten de conventionele menselijke creativiteit en zelfs de fysieke menselijke mogelijkheden liggen.

De samenwerking en dialoog tussen AI en mens. AI wordt hierbij een soort van creatieve partner waarbij een wisselwerking van ideen tussen mens en AI ontstaat.

I have been chilling and collaborating

MatrixDistortion Project		struggles met de text. het model dat ik gebruik is eerder next sentence generation proberen chat gpt te gebruiken maar api credits waren direct op dus dit is niet mogelijk.	some of the experimenting
ImpressionsDreams Project			These limitations give it a distinct style. This gross internet style.
DesignAbstractions Project			softwaregore
MaximalRealities Project			This is the code I use now to generate the PDF with text and a custom layout
CanvasRevamp Project			things like random columns
DreamscapeMoods Project			random font
2 generate content table 3 generate text		In the beginning I used hard coded text to experiment. Because I coudnt figure out how to get the generated text in the right places on the pdf.	random font size
same model as I used for the booklet generator		Text is generated by AI bloom 1b1. Might use a bigger model if it gives better results	titlefontsize random.randint(50, 150)
Content table is hard coded		4 generate images from idea title as prompt	tocfontsize random.randint(20, 50)
Chapter 1 Introduction to (Project Name)		not yet figured out.	normalfontsize random.randint(5, 16)
Chapter 2 The Design Process of (Project Name)		This is easy to do for a human but it is hard when the system has to be autonomous	random title placing custom title based on the time. So that it doesnt overwrite the made documents
Chapter 3 Researching and Defining (Project Name) Style		5 genereer pdf en layout steek text en fotos er in	progression in PDFs
Chapter 4 Creating the (Project Name) Aesthetic Techniques and Tools		half of the conversation between me and chat gpt to make this. Took a lot of days of experimenting	dit is nog met text die niet gegenereerd is door AI. Maar probeerde in het begin gewoon een pdf te maken wat al enorm moeilijk was
Chapter 5 The making of (Project Name)		Python isnt really made to make and eddit pdfs. But I have to use it to implement AI	189
Chapter 6 The Future of (Project Name) Design Trends, Innovations, and Opportunities			title, content table, en tekst op aparte paginas

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(test random pages.pdf](httpss3uswest2.amazonaws.comsecure.notionstatic.comad1e7f9d29ee4895821831ef871e6b16generatedbook3(testrandompages.pdf)

custom font size

columnstest1683456783.pdf

beter regel afstand

fontsizetest1683457853.pdf

custom columns tussen 1 en 3

Columnworking1683460179.pdf

title volgt niet de colom regel

titlesperate21683460767.pdf

random font

testtitleAItext1683485663.pdf

random fonts plus tekst gegenereerd door AI

testAIText11683487668.pdf

chapters in de text zijn groter

chapternietsmushed1683490403.pdf

189

6 scan text for certain words  
7 Have certain words do

things visually to the layout. generate final pdf

How can I code that it changes the design based on the content of the text?

scan text for certain words. Than if it finds a certain word eddit the pdf with an effect created by AI. Find word glitch. ask AI to write code that edits a pdf with a glitch effect. aply the effect with code

scan text for certain words

Have certain words do things visually to the layout.

If word glitch is found than do this

making different effects by letting AI code the effects in advance

I find it important that AI influaces the creative process and can add its own creativity. I can ask it something but I dont want the question to be to strict that it can give his own creative influance. Also to ask it what it would like to add to this generator

design made by AI. This is done by edditing the pdf.

Chatgpt4 kan ik vragen om een effect te maken voor een woord. Ik geef veel vrijheid aan de AI zo dat de uitkomst deels zijn creativiteit is.

Ik kan het enorm snel enorm veel effecten laten genereren (deze moeten nog wel getest worden of ze werken er na)

190

So first A pdf is made with text and images generated by AI. Than the pdf is visually eddited based on the content of the text.

Tests effects

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Presentation thoughts

veel van de gegenereerde boekjes al op voorand afprinten. tafel met 100 boekjes

scherm waar op je boekjes live op gegenereerd ziet

worden. Dit kan een voorbereide video PDF. The word 'perfect' was found in the PDF. The word 'electric' was found in the PDF.

Live boekjes die worden afgeprint door een printer. The word 'line' was found in the PDF. The word 'flow' was found in the PDF.

The code of our project. The word 'design' was found in the PDF. The word 'evolution' was found in the PDF.

196  
197  
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The word 'emoji' was found in the PDF. The word 'style' was found in the PDF. The word 'sound' was found in the PDF. The word 'interactive' was found in the PDF. The word 'color' was found in the PDF. The word 'art' was found in the PDF. The word 'ai' was found in the PDF. The word 'future' was found in the PDF. The word 'architecture' was found in the PDF. The word 'digital' was found in the PDF. The word '3d' was found in the PDF.

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Gill Decuyper

Master Context

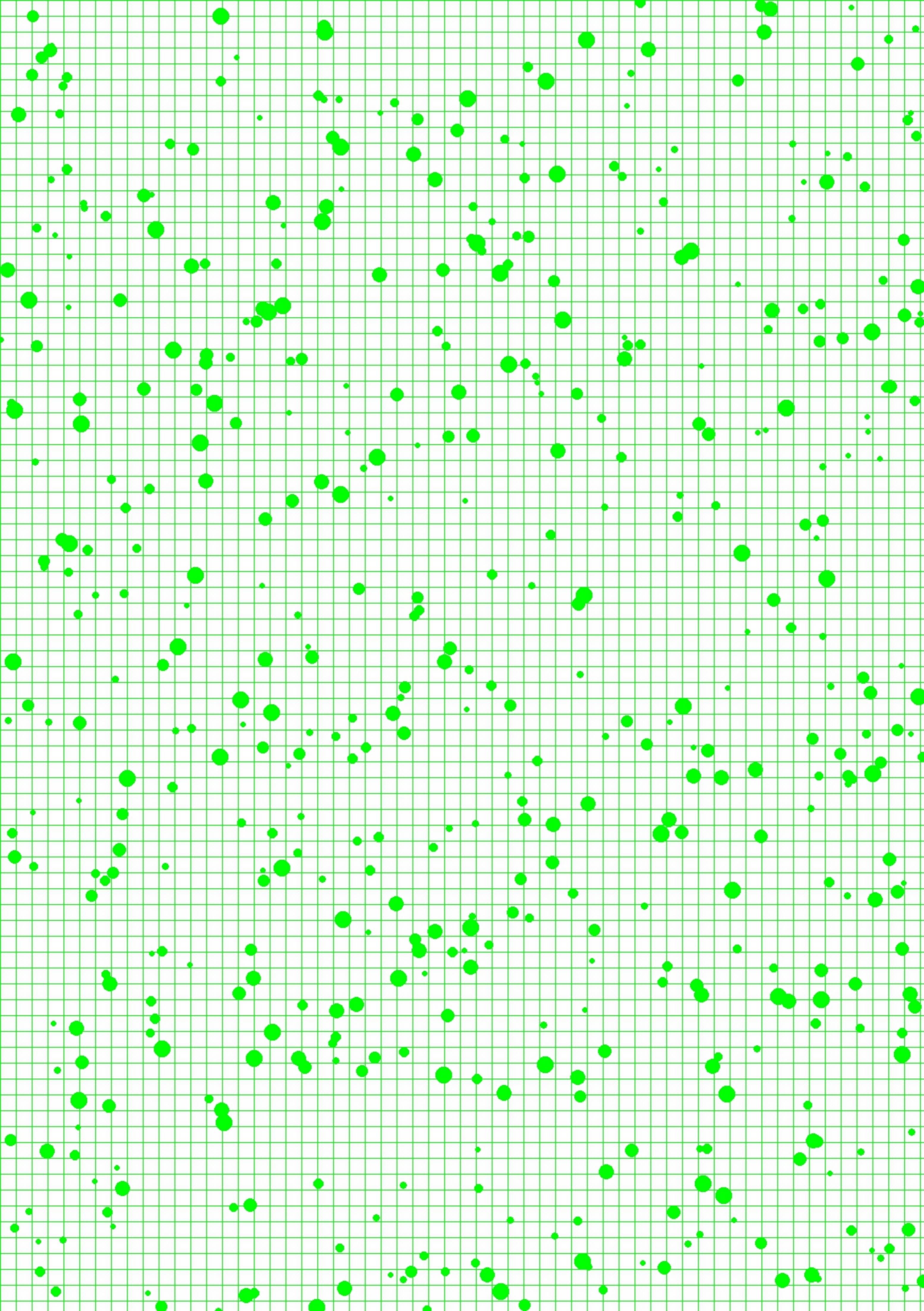
Coaches Frederik De  
Bleser

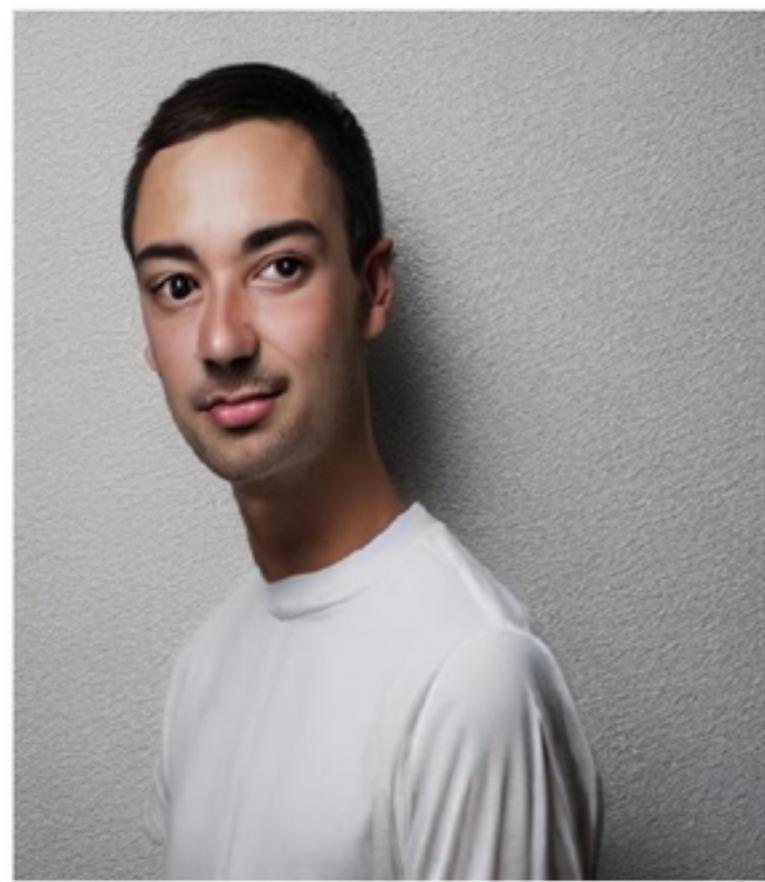
and Werner Van  
dermeersch

Sint Lucas Antwerpen  
20222023

Digital

Van





made in  
collaboration  
between Gill  
Decuyper and  
AI  
ygary.grafics