















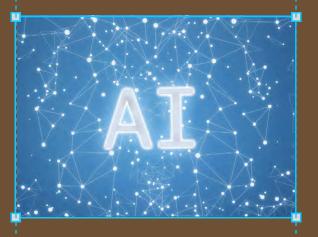


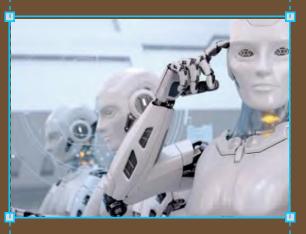
Welcome to Archival Images of AI: Creating better images of AI through digital heritage

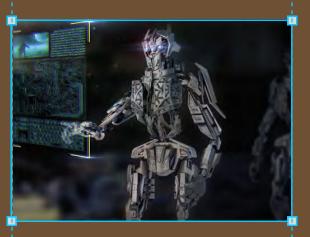
We invite you to play with it, tear it, glue it or rip it apart.

THIS PLAYBOOK IS THE RESULT OF OUR RESEARCH INTO HOW EXISTING IMAGES – ESPECIALLY THOSE FROM **DIGITAL HERITAGE COLLECTIONS** – CAN BE REMIXED AND REUSED TO CREATE NEW IMAGES, PARTICULARLY TO REPRESENT **AI** IN MORE COMPELLING WAYS.

Archival Images of Al









Introduction

Images shape how we think about, understand, and talk about the world. Yet, images of Al are often problematic – misleading, unhelpful or just plain wrong. Common visual tropes of glowing brains, humanoid robots and walls of code create a distorted view of Al, giving it a mystical, almost god-like quality. This skews public and industry conversations around AI and impacts our understanding of its true nature.

It only getting worse. Al-generated images of Al are becoming more common, and they tend to perpetuate and intensify the harmful tropes we want to avoid.

So, we've been wondering – how can we make it easier to create better images of AI?

The Archival Images of Al research project set out to explore and understand how archival materials could help us craft more meaningful visual narratives about Al – a concept we'll unpack further on. Our work builds on ideas from Better Images of AI: A guide for users and creators, which suggests that more accurate visuals can help bridge the gap between Al developers and the general public – ultimately fostering understanding and trust. This is crucial as AI continues to shape and integrate into our present and future societies.

To address these challenges, we've created this playbook: a toolkit of simple guidelines, tools and techniques to help you make your own better images of Al.

Dihal, K., and Duarte, T. (2023). Better Images of AI: A Guide for Users and Creators. Cambridge and London: The Leverhulme Centre for the Future of Intelligence and We and Al.

Archival Images of Al 2024 1.0 Introduction (03)

Is this playbook for you?

FOR PEOPLE WHO NEED BETTER IMAGES OF AI

This playbook is designed for anyone looking for an Al image that avoids harmful stereotypes.

It's ideal for communication specialists, journalists, students, researchers, lecturers, community organisers or anyone who doesn't consider themselves a "creative" or "professional imagemaker".

FOR IMAGE-MAKERS

The playbook is also a resource for professional image-makers looking to remix and reuse public-domain imagery in their work. Graphic designers, photographers, visual artists, illustrators and filmmakers will find guidance here.

IMPORTANT

WHILE THIS PLAYBOOK SHARES OUR LEARNINGS, TIPS, AND TRICKS FOR MAKING **BETTER IMAGES OF AI**, IMAGEMAKERS CAN USE THESE TOOLS TO MAKE BETTER IMAGES OF ... WHATEVER YOU'D LIKE!

Want to make better images of AI?

→ CHECK TOOLS 4.1 AND 4.4

Want to learn about remixing and reusing public-domain images?

→ CHECK TOOLS 4.2, 4.3, AND 4.4

STRUCTURE

In Archival Images of AI, we guide you stepby-step and provide the materials you need to remix better AI images using digital heritage collections. Follow this process from start to finish, or dip into the sections that suit your needs.

To inspire more authentic stories about AI and humanity, we've included our image-making briefs in section 4.1. We know that navigating archives can be time-consuming, so in section 4.2, we've gathered resources to make finding the "just-right" image easier:

- Our favourite digital archives
- Search queries that help surface interesting images
- Examples of images and scraps we like and have used

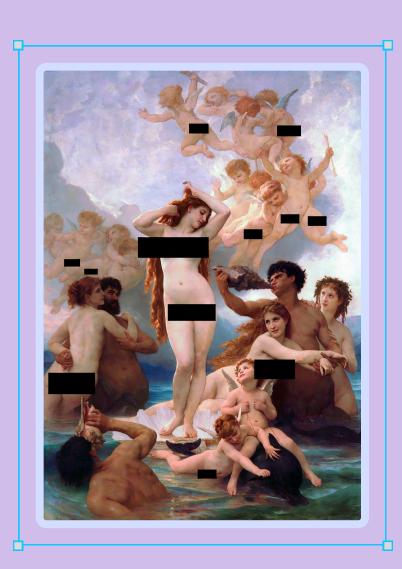
We've documented **nine techniques** to help you transform existing images into new creations. In section 4.3, each technique includes:

- Insights into the narrative concepts and stories it brings to life
- Real-world examples of the technique being used to improve Al imagery
- Recommended tools to apply these techniques effectively

¹² About Criticality

Why digital heritage collections?

Digital cultural heritage collections are a **rich** yet often underused **resource** for image-makers. We see plenty of reasons why they're worth exploring to make better images of AI – or any other images!



CREATIVE REASONS

These collections are filled with rich stories and unique textures that can spark new projects. Each image brings its own distinct character, helping to overcome the 'blank canvas' problem by offering an inspiring starting point.

PRACTICAL REASONS

High-quality and free to use, these collections are huge repositories of visual material. In this project, we worked specifically with images in the public domain, which are available for personal or commercial use without copyright restrictions.

'These archived images – you get all of this incredible detail. Whereas, when you're just grabbing shit off the Internet, quite often, it's low res, clunky, not very nice,' said collage artist Alice Isaac.



CRITICAL REASONS

Cultural heritage archives are spaces where our stories are told, retold and reimagined. Archives don't just preserve the past; they are an assembly of objects, places and practices that help us document our present and imagine our tomorrows.

"Assembling new worlds from the scraps of the old" - are.na

By remixing and reusing archival images, image-makers can bring-to-life stories that both reflect on and challenge mainstream narrative of the past. We can honour and amplify the many stories of our past – not just the popular ones – so that we better understand our past and present as we make new futures.

Just to be clear – we aren't advocating for a rewriting of history; instead, we invite image-makers to challenge the singular narratives that often dominate it. Remixing digital heritage imagery is one way to do that.

FOR IMAGES ABOUT AI

Digital heritage collections offer a visual language that help us reimagine how we represent AI, moving us beyond the dystopian or alienating images we're used to seeing. By using familiar visuals with historical or cultural significance, we can make AI more relatable and human-centred and tell more informed stories about its role in society.

By referencing and remixing digital heritage collections we can bridge the gap between the past and our fast-moving present, and open up new ways to visualize the human experience today and our visions of the future.

"For Indigenous and Black communities, collage has become a visual approach to engaging with the unrecoverable past, honouring fragments impacted by colonial violence rather than trying to replace them. Collage allows for moving against the archival grain."

Hanna Barakat

Archival Images of AI 2.0 About Criticality

rumi | mr. finch DONT GO PLS @cieduoti

the most inaccurate historical fact about Bridgerton is the ton acting as if Penelope is not the most beautiful woman and not have men falling down at their feet for her.

SHE was the beauty standard in the regency era.





Bridgerton + Hamilton CASE STUDY

Remixing historical narratives is complex. While Bridgerton's fresh take on the "very white world of historical drama" and Hamilton's "visionary reframing of the narrative of America" are praised by some, others criticized them for erasing "real" Black stories from those periods.

Our takeaway: be intentional about the stories you're trying to tell. Are you using archival images to maintain or challenge the dominant narrative? Smarter people than us have explored this in-depth, so we encourage you to consider their perspectives. What's your take?





- The Ghost Stays in the Picture, Parts

 1, 2 and 3, Eryk Sylvaggio, Flickr
 Foundation Research Fellow, 2024
- All Hammed Up: How Hamilton: An American Musical Addresses Post- Racial Beliefs, Kylie Umehira, BU: Journal of the CAS Writing Program 2016
- The intense debates surrounding
 Hamilton don't diminish the musical

 they enrich it, Annette GordonReed, Vox, 2016

[2.2] How to tell better stories?

But how do we tell better stories about and with images that carry significant historical contexts—stories that are **inclusive**, **diverse**, and **plural**? What should we consider when remixing and reusing images from digital heritage collections to make better images of Al or any other images? How do we navigate sensitive¹ or spicy² topics and approach grey³ areas? How can we remix as a form of **resistance**?

A sensitive subject needs to be handled carefully, with empathy and tact because it may instigate an emotional response from others.

A spicy topic is a topic some may consider taboo and uncomfortable, like queerness, or gender-based violence. These topics are often algorithmically algorithmically censored on social media platforms.

A situation or subject-area that is difficult to determine what is right or wrong.

(05)

3

Archival Images of Al

2024

2.0 About Criticality

(06)

Telling better stories starts with questions about the visual narratives out there today:

What is the most obvious message in the image?

Who or what is the focus of the image?

How does the setting or background shape the story?

Whose perspective is being represented?

What parts of the story are left out? Whose voices are absent?

Does the image reinforce, challenge or subvert existing narratives?

Is there a historical or cultural context that isn't reflected in the image but would alter the story if included?

However, these questions alone may be of limited value if you haven't first considered your position or role in the story. So, it's essential to reflect on:

Am I drawn to or repelled by the image?

What narratives am I favouring, and which ones am I overlooking?

How does this image align with or contradict my values or interests?

What do I hope others see or feel when they view this image?

These questions can help you navigate the politics of **sensitive** or **spicy topics** or **grey areas**, without needing deep expertise or extensive time on the subject. As you remix and reuse archival images, remember that every image shapes how we think about, understand and talk about the world.

So, which stories are you missing and which do you want to tell?

Decoding the Process

Now it's time to reflect on our own position, as researchers, within this story and share how this informed our project approach.

This research was carried out by the three of us from AlxDESIGN – Ploipailin Flynn, Nadia Piet and Dominika Cupkova. This team embodies a blend of experiences, including female, queer, POC, neuro-spicy and migrant identities.

Together, we are committed to conducting inclusive, diverse and plural research that is rooted in intersectional, decolonial and feminist principles.



INSIGHT-DRIVEN

Taking an insight-driven approach, we spoke to subject-matter experts to inform our project's research hypotheses. In this way, we could build upon their body of work, observations, and insights.

Budget and time constraints made this approach particularly appealing because it helped us quickly identify the research areas this project could best address.

The subject-matter experts we consulted with include:

- Tania Duarte, Founder of We and Al and Rasa Bocyte from the Netherlands Institute for Sound & Vision. They each advised us on our research approach, hypotheses, and insights.
- Image-makers <u>Anna Fehres</u> & <u>Luke</u>
 <u>Conroy</u>, <u>Danny van Zuijlen</u>, and
 <u>Alice Isaac</u>—who use archival
 images in their existing image making practice. They each helped
 us understand the opportunities
 and limitations of using digital visual
 heritage in contemporary image making.
- Researchers and archivists—<u>Eryk</u>
 <u>Sylvaggio</u>, <u>Cees Martens</u>, and
 <u>Isabel Beirigo</u> & <u>Monique Groot</u>.
 They helped us understand how digital heritage archives are made, maintained, and used, including the opportunities and limitations of using heritage imagery to create better images of AI.

PARTICIPATORY

Participatory research allowed us to involve the community to whom this research is relevant in the research process.

In July 2024, we hosted an online community research session with over 50 participants from Europeana to explore how culture-makers navigate archives to create better images of Al.

PRACTICE-LED

Our insights are only as valuable as our ability to put them into practice.

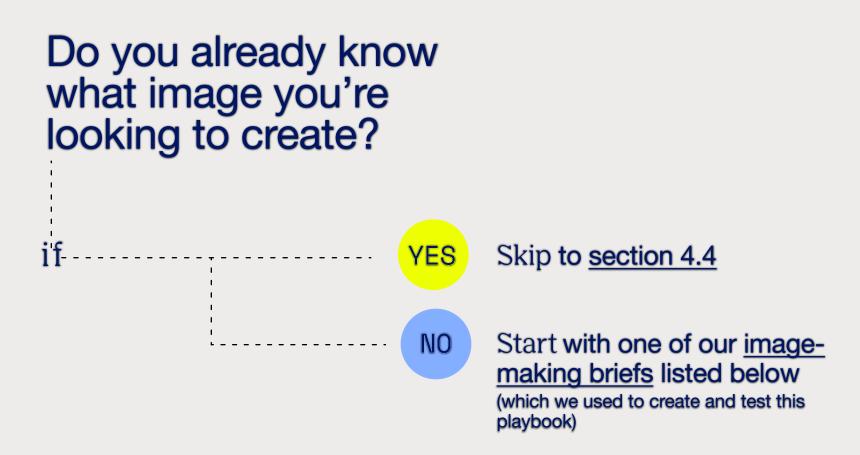
Over three months, we worked with three imagemakers – Cristóbal Ascencio, Hanna Bakarat, and Zeina Saleem – to prototype, test, and refine this playbook.

Please note, this is only the start!
We invite you to continue to test, challenge, and build this playbook in your own time!

Grabbing an image-making brief!

We've talked about how visual tropes like glowing brains, humanoid robots and walls of code are unhelpful. They skew our understanding of Al.

This section is our **antidote**: it highlights the image briefs we used in this project that offer more nuanced and accurate narratives of Al. These are the images of Al we need – stories that bring-to-life the real-life realities of making, using, and being the subject of Al.



NOTE:

In our Notion wou can find detailed descriptions of each image brief.

RADICALLY NORMAL IMAGES

"Radically Normal Images of Al" shines a light on the often-overlooked, mundane aspects of Al, highlighting the labor and infrastructure behind it. It also addresses the very real user experiences with Al-driven products and services, such as Al fatigue.

Data Labelling 29

Al Fatigue (Al Materiality 13 17 19)

Hidden Labor 7 9 13 14 17

AI NARRATIVES

"Al Narratives" are the stories that shape our understanding, design, and application of Al, and influence how we perceive its potential and limitations. In this section, we explore - and sometimes challenge - mainstream Al narratives, encouraging critical interrogation of their underlying assumptions.

Black Box 12

Cloud Computing 19

Gendered Al 12 13 17

Frontier Models 17

"Explainable AI" dives into technical and academic concepts related to transparency and interpretability in Al systems. These images explore different ways users might better understand algorithmic systems and the influences shaping its decisions.

EXPLAINABLE

Pattern Finding 18 Computer Vision 1 2 3 4 7

Image Recognition

Generative Al

1 19 19 20

Data Rights 5 15 Recommender Systems 8

AI HARMS

"Al Harms" examines the societal and environmental impacts of Al.

Deepfakes (Data Extraction (19)

Data Surveillance 5 11 15 20 Datafication 22

Computational Gaze 3 4 9

Ecological Cost of Al 21

Gathering materials

Finding high-quality, free-to-use images can be a challenge. This section aims to simplify that process by sharing the tips and tricks we used throughout this project.

In Section 4.2, we share the archives we found helpful in this project and others that were recommended to us but we didn't explore.

In Section 4.3, we share the tips and tricks we used to dive into and uncover interesting materials.



HARVARD COLLEGE OBSERVATORY HISTORY IN IMAGES

hea-www.harvard.edu/



RIPPL RONAI MUSEUM

smmi.hu/en/digital-collections/



ARCHAEOLOGICAL MUSEUM OF NALANDA

asinalandamuseum.com





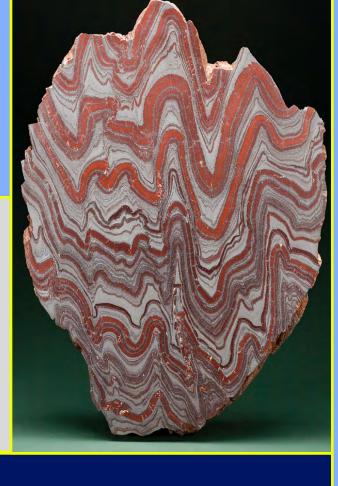


moma.co.uk/public-domain-images/



SMITHSONIAN OPEN ACCESS

si.edu/openaccess



(10)



PUBLIC WORK

public.work/





WIKIMEDIA COMMONS

commons.wikimedia.org/





WEBUMENIA

webumenia.sk/



OTHER ARCHIVES:

EUROPEANA • THE COMPUTER REVOLUTION | EUROPEANA

- CLEVELAND ART DIGITAL PUBLIC LIBRARY OF AMERICA
- THE METROPOLITAN MUSEUM OF ART OPEN CULTURE
- LIBRARY OF CONGRESS ARTVEE •

PUBLIC DOMAIN REVIEW

publicdomainreview.org/



Still want more? Check out Dr Andrea Wallace and Douglas McCarthy's Open GLAM Survey – a list of over 1,000 calleries, libraries, archives and museums offering open-access data for reuse.

Open GLAM Survey (Douglas McCarthy and Dr. Andrea Wallace, CC BY 4.0, 2018 to present)

ROAM AROUND

The simplest way to start is by browsing the archive page by page. Begin by exploring channels or categories freely, scrolling until something catches your eye.

While this method can lead to joyful, unexpected finds and uncover hidden gems, it's time-consuming and can feel overwhelming.

Tip: Investigate image or file metadata to find and follow connections

Note: What we find in archives is primarily defined by the keywords and overall language the archivist uses to describe the collection. As you browse, remember this cataloguing process is never neutral or error-free, and in some cases you might came across derogatory terms.

Dive into the <u>Word Matter</u> publication for more context.

SORT & FILTER

If your chosen archive offers sort and filter options, these browsing tools can help you focus on specific interest areas and discover overlooked content:

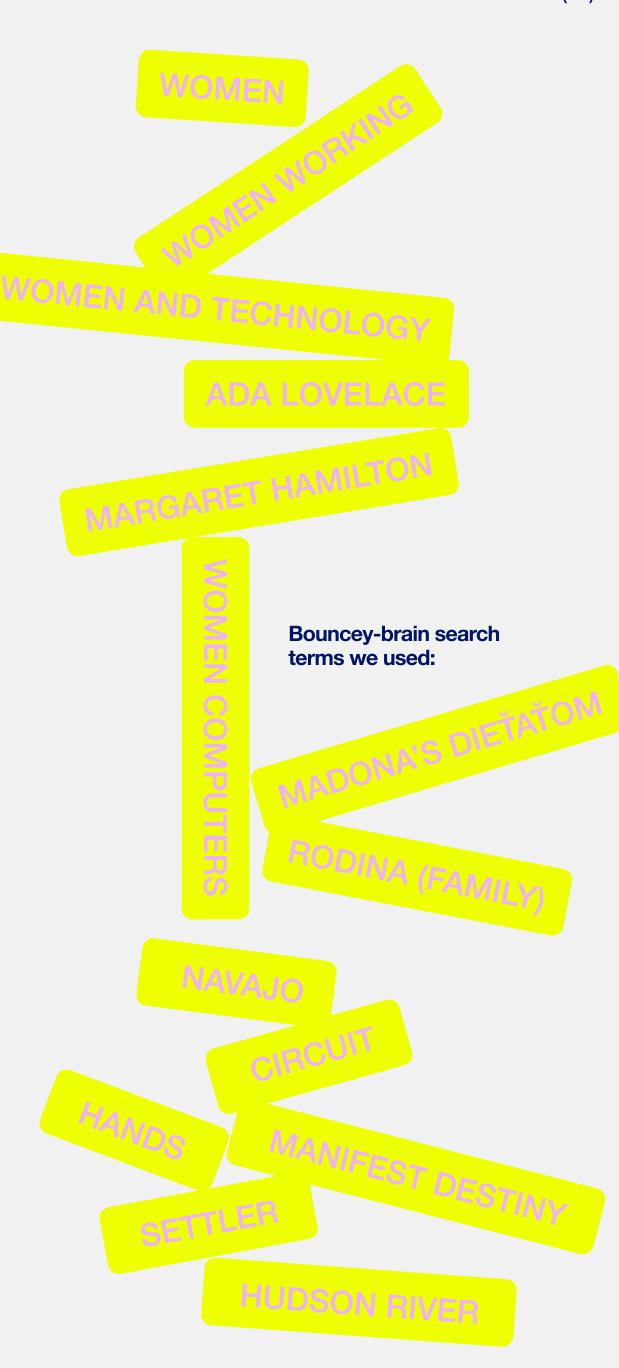
- Sort by Specific Metrics
 Try sorting by the oldest or newest images, or by popularity, to explore the "edges" of the archive.
- Use Filters
 Take advantage of filters specific to the archive to narrow down your search.
- Search by Time Periods
 Filtering by time periods can reveal historical patterns or shifts in ideas, like how our concept of 'robot' has evolved.
- Explore Niche Categories
 Dive into obscure sections, such
 as orphaned galleries on
 Wikimedia or poorly tagged items,
 to find hidden gems.

How to search the archives

KEYWORD QUERIES

If you have a clear theme or direction in mind, using keyword searches can help you find specific content. Try using synonyms, variations, or even contrasting terms to uncover a wider range of results.

- Synonyms & Related Terms
 Use alternative words that are
 close to your main idea. For
 instance, if you're searching for
 "robot", try words like
 "automation" or "cybernetics" to
 explore connected concepts.
 Notice how results shift based on
 similar terms, and consider how
 stereotypes or specific groups are
 portrayed.
- Antonyms & Oppositional Terms
 Sometimes searching for the
 opposite can lead to surprising
 discoveries. For example, to
 explore bias in scientific thinking
 you might search terms like
 "intuitive", "witch" or "esoteric".
- Combine Keywords with Filters
 Try combining keyword searches
 with sort or filter tools for deeper
 insights. Search for concepts like
 "computer" before the 1900s or
 explore the most/least popular
 images of "robot" and reflect on
 why some are more prominent
 than others.



- Set of questions to critically interrogate an image + one's own positionality
 - Selected archives
 - Search queries + tactics

Curated collection images + cut-outs + scraps

Are.na

Are.na / AlxDESIGN / % AloAl / Scraps + CutOuts

here

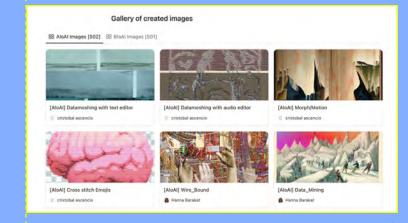
Are.na / AlxDESIGN (+1) / AloAl / Curated Images + Sub-Collections

Spatial View in SOOT



- Tutorials for Image Remixing Techniques
- **Artist Logs**

Gallery of created images





Let's get making!

In this section, we guide you through our image-making techniques, sharing tips and tricks to help you make better images of Al. You'll find the images we made as part of this research, plus descriptions from each image-maker and why they employed that technique to make a better image of Al.

(13)

Let's play!

01









SIDE-BY-SIDE

02









OVERLAY

03









COLLAGE SWAP PATTERN MAKING

04











DISTORTION

DATA-MOSHING CROSS-FLOSS GLITCH-IFICATION MOTION-MORPH

etc

BONUS PLAYING WITH COLOR AND/OR LIGHT PATTERNMAKING MOVING IMAGES

Side-by-side juxtaposition

This technique is especially good for contrasting two things or visualising throughlines, like:

- Then / Now
- · Here / There
- Before / After

We've found this technique helpful in visualizing how AI "sees" the world, or what we call the "computational gaze", specifically, making the logic of the machine visible.

Helpful Tools

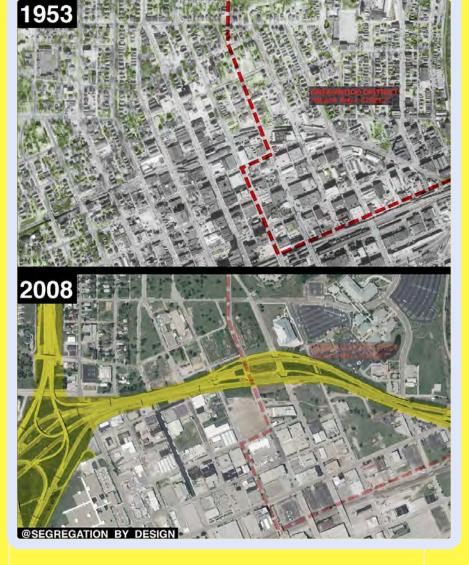
- Open both images and arrange them sideby-side. Then, take a screenshot!
- Copy-paste images side-by-side in any visual software like Powerpoint / Keynote / Slides.
 Then, take a screenshot!





<u>examples</u> in the wild

The Wine Glass, Johannes Vermeer, 1658-1660, @artbutmakeitsports



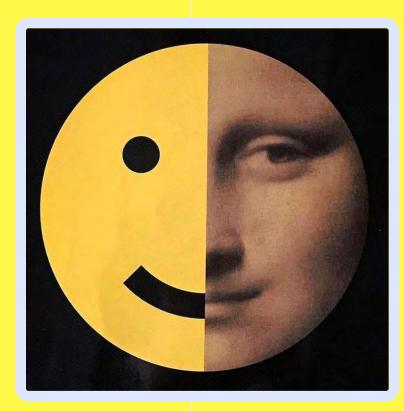
Greenwood,
Tulsa,

@segregation
_by-design



Camille Monet on a Garden Bench, by Claude Monet, 1873, @artbutmakeitsports

Land Ownership Makes No Sense, Jehan Azad, Uri Bram, Wired Staff, Getty Images, Wired



Mona Lisa Smile, source: unknown





ı

IMAGE NAME

Ways of Seeing

CREATOR

Nadia Piet

ABOUT THIS IMAGE

This image contrasts human and computational ways of seeing: one rich with memory and meaning, the other devoid of emotional associations and focused on structural analysis. In contrast to the whimsical, surreal scene on the left pane, we see the illustration reduced to a computational rendering, with each 16x16 superpixel fragmented and sorted by visual complexity using a compression algorithm.

This image highlights the gap between intuitive and computational vision.

WHY THIS TECHNIQUE

Displaying the images side-by-side emphasizes the contrast and comparison between them. Showing only input or output alone wouldn't convey the full story – it's the image analysis process that ultimately reveals the deeper meaning.

RELATED TO IMAGE BRIEF

Computer Vision

IMAGE NAME

Gazing through the Computer's Rabbit Hole

CREATOR

Dominika Čupková

ABOUT THIS IMAGE

What do we see, and what do computers see? This illustration from a children's book is reimagined as a simplified version of what computer vision algorithms might detect – 17 rabbits, 10 flowers, 8 frogs, 3 clouds, a body of water, and a meadow. Deconstructed into emojis, these familiar symbols – now deeply embedded in our everyday communication – help convey meaning beyond words and letters.

WHY THIS TECHNIQUE

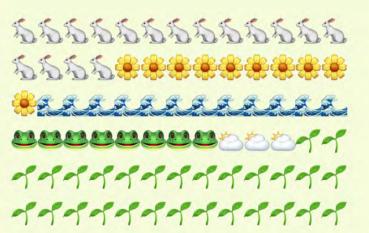
Displaying the images side-by-side highlights the contrast and comparison between them. It creates a clear and striking contrast between the left and right images. The intentional use of emojis makes the comparison accessible, allowing meanings to be conveyed without explicit language.

RELATED TO IMAGE BRIEF

Computer Vision

2





Overlay



This technique involves layering and/or stacking whole images, fragments of images, or text onto another image, which allows for annotating the original image with new meaning. This is how many memes are created!

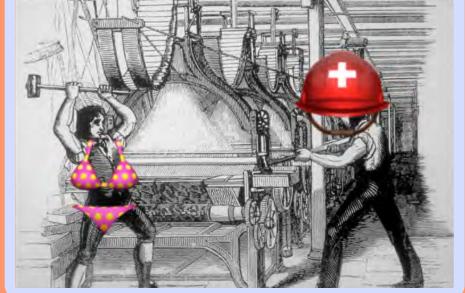
We've found this technique helpful in visualizing the following AI concepts:

- Visualizing how Al "sees" the world, or what we call the "computational gaze"
 - · Making an element more visible
 - · Making an element less visible
 - Making invisible narrative(s) visible
 - Making the logic of the machine visible
- Highlighting the commonalities in human experiences throughout time
 - Showcasing the connections between the old world and the new—our digital and physical worlds
 - Showing Al being used as a tool, like any other tool

Helpful Tools

- Use any image-editing software like PowerPoint, Keynote, Slides, or Canva to overlay bits over your original photo.
- Explore this project's 'scraps' bits of images we've "cut" from their original form – here

<u>examples</u> in the wild



Ploipailin Flynn + Fred Wordie

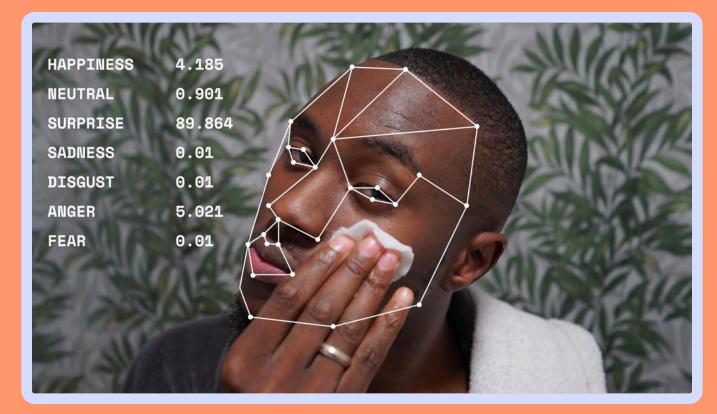
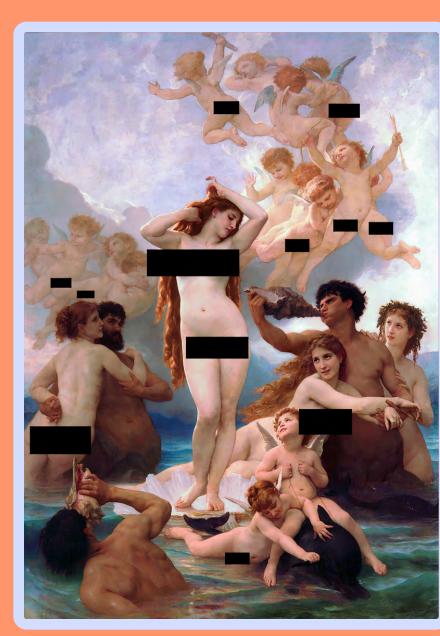


Image by Comuzi / © BBC / Better Images of AI / Mirror D / CC-BY 4.0



this is how it feels, @themildlyemoasian, March 2024



CENSORED The Birth of Venus by William-Adolphe Bouguereau (1879), Wikimedia



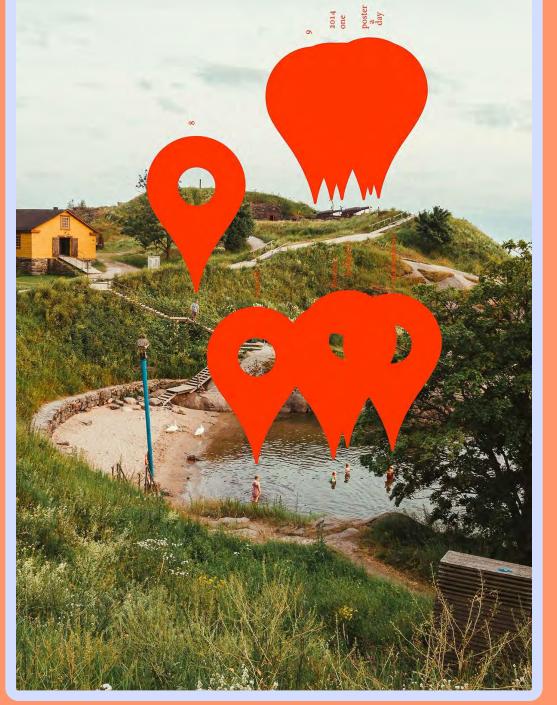


Food Forest Taste Tests, The Center for Genomic Gastronomy, 2024

!Mediengruppe Bitnik – 1000 Bots



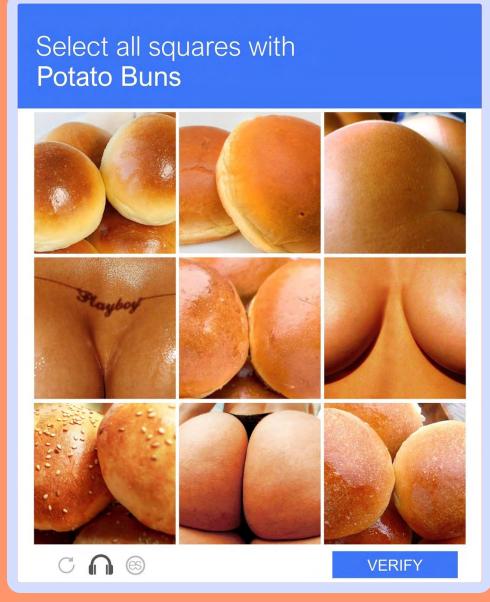
Still Life, <u>Vera</u> van der Burg, 2019



Location pin photo, source unknown

Captcha by Emir Shiro

(17)



Frontier Model 3

CREATOR Hanna Barakat

RELATED TO IMAGE BRIEF

Computer Vision Computational Gaze

ABOUT THIS IMAGE

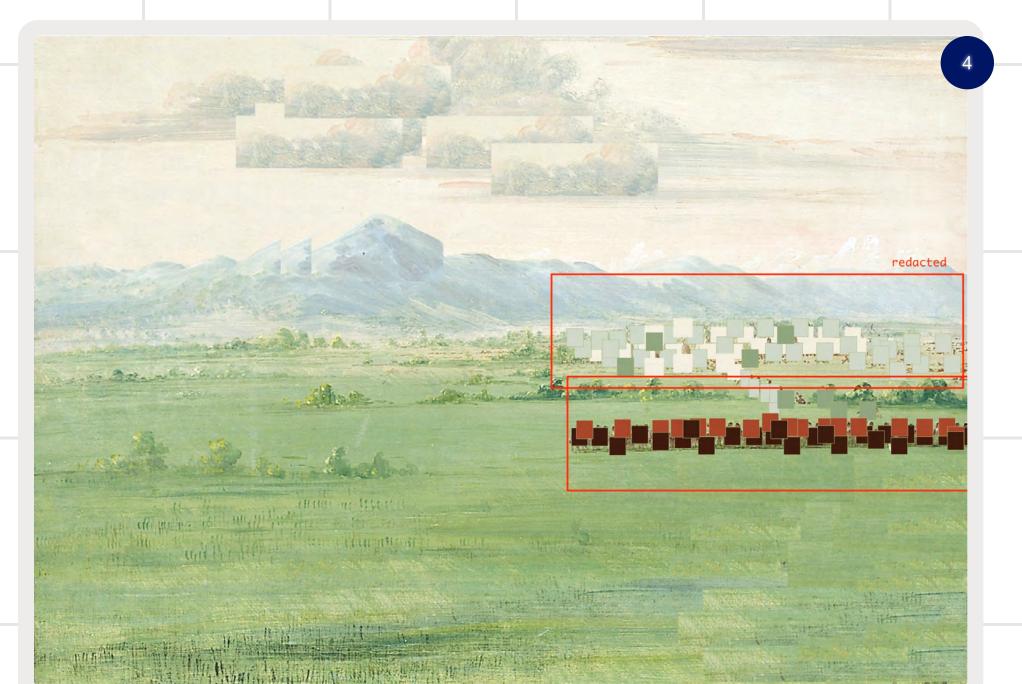
This image explores the visual culture of generative AI landscapes, positioning it as a "new frontier" that echoes Manifest Destiny paintings from the 1850s to 1870s (often associated with the Hudson River School). The base image, Across the Continent: Westward the Course of Empire Takes Its Way by Frances Flora Bond Palmer (1868) is one of many propagandistic artworks promoting westward expansion while "conveniently" concealing the ethnic cleansing of Indigenous populations.

WHY THIS TECHNIQUE

Through collage, this image reappropriates the idea of 'the next frontier' as an Al frontier to draw attention to digital colonisation. Neon boxes highlight visible and invisible elements of the image.



how to make



RELATED TO IMAGE BRIEF

Computer Vision Computational Gaze

IMAGE NAME

Frontier Model 5

CREATOR

Hanna Barakat

ABOUT THIS IMAGE

Same as above

WHY THIS TECHNIQUE

Through overlay, this image reappropriates the idea of "the next frontier" as Al-frontier models to draw attention to the not-so-new forms of colonization within the digital realm. Using overlay, red boxes draw attention to redacted elements in the image, emphasising hidden narratives within the digital realm.



RELATED TO IMAGE BRIEF

Data surveillance

Data rights

IMAGE NAME

Now You See Me, Now You Don't

CREATOR

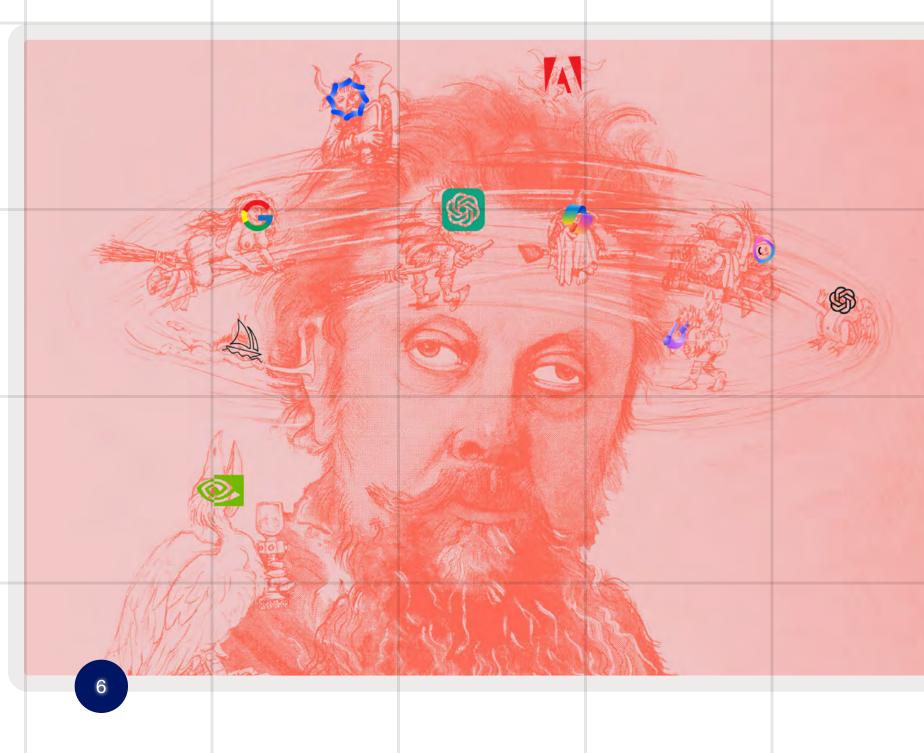
Dominika Čupková

ABOUT THIS IMAGE

More parents, including celebrities, are choosing to blur or cover their children's faces with emojis before posting on social media. However, this still falls short of the protection urged by children's rights advocates, who question the long-term privacy risks. Although obscuring a face may limit what can be gleaned, it's unclear how effective this measure is against data collection by social media companies and third parties. Ultimately, the question remains: what are we truly protecting children from?

WHY THIS TECHNIQUE

Anonymisation through overlay is common; in real life, we cover our faces with our hands, while online, emojis serve as our "hands". The choice of emojis adds layers to this form of digital protection.



RELATED TO IMAGE BRIEF

Al Fatigue

IMAGE NAME

Al am over it

CREATOR

Nadia Piet

ABOUT THIS IMAGE

This image captures AI fatigue, depicting the overwhelming flood of new tools and relentless headlines that leave many feeling disoriented.

WHY THIS TECHNIQUE

Overlaying AI icons around the figure's head conveys the mental overload, capturing the experience of trying to keep up with the fast-paced AI landscape.



RELATED TO IMAGE BRIEF

Data Labelling

Computer Vision

Hidden Labor

IMAGE NAME

One Minute in the Life of Micro Worker

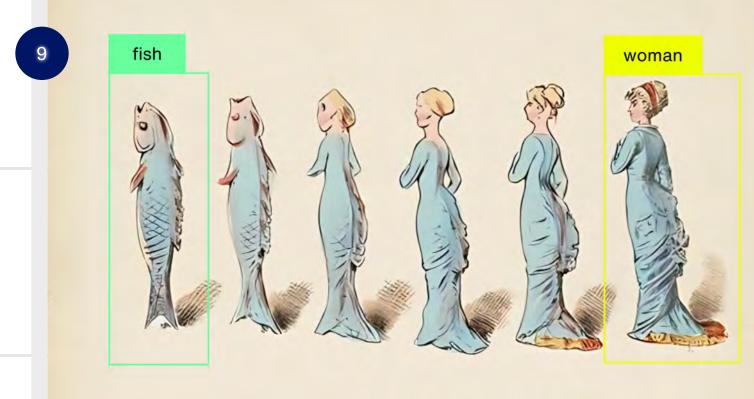
Dominika Čupková

ABOUT THIS IMAGE

This image highlights the hidden workforce of around 20 million microworkers, primarily in the Global South. These "ghost workers" complete small, data-driven tasks for major tech companies like Facebook, Google and Amazon, though they remain largely invisible.

WHY THIS TECHNIQUE

Using overlay, this image visualises the repetitive nature of data labelling. Although classification tasks are seen as high-tech, training AI often involves a worker tracing each part of an image - like this cat - with their mouse.



RELATED TO IMAGE BRIEF

Data Labelling

Image Recognition

Hidden Labor

Computational Gaze

Classifying Fish/Woman

CREATOR

Nadia Piet

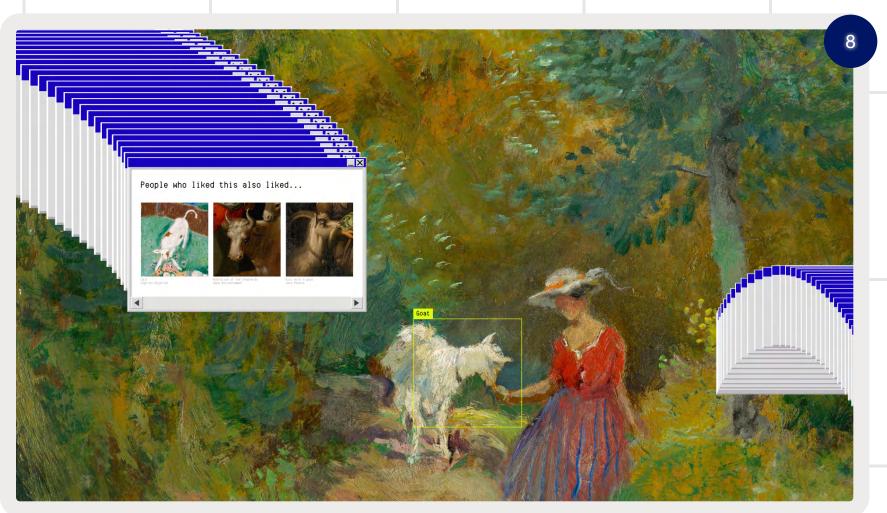
IMAGE NAME

ABOUT THIS IMAGE

This image depicts a gradual transformation between fish and woman, challenging rigid classification boundaries and highlighting the fluid, in-between states that defy neat categorization. It evokes early image-generation GAN (Generative Adversarial Networks) models, which generated visuals at the midpoint between two concepts in latent space, producing entertaining yet thought-provoking imagery that underscores the complexity, ambiguity, and limitations of data labeling.

WHY THIS TECHNIQUE

In this image, we use the Overlay technique, using boxes around objects to show how Al classifies them.



RELATED TO IMAGE BRIEF

Recommender systems

IMAGE NAME You Might Also Like...

CREATOR

Dominika Čupková

ABOUT THIS IMAGE

This image delves into the hidden mechanics of recommendation systems on social media. Ever wondered how platforms seem to know exactly what you're interested in—like that carpet you're contemplating buying? It raises questions about the vast amounts of personal data we unwittingly leave behind while browsing online. The visual captures the invisible algorithms that shape our digital experiences, emphasizing how our behaviors are tracked and leveraged to predict our desires and choices.

WHY THIS TECHNIQUE

In this image, we use an overlay technique to show how AI recommendation systems track our actions even when they seem unrelated, to suggest things to us. The image mixes old and new styles—like oil paintings and computer windows, and both traditional and digital methods—to highlight how strange these recommendations can be because of the constant tracking of everything we do, even things that have nothing to do with shopping.

Archival Images of Al

2024 4.3.3 **Co**

Collage



Consider the technique of "collage" as "overlay" in over-drive. Instead of annotating the original image, we use scraps of existing images to create an entirely new one image. When an element is singled out and swapped for another, it draws attention to how this element is highlighted or disregarded in our stories about AI.

We've found this technique helpful in visualizing the following AI concepts:

- Showcasing the consistency of the human experience over millennia
- Connecting the dots on seemingly separate ideas, like "cloud" computing and the materials, minerals, or rocks required to make and run computers
- Illustrating abstract Al narratives like "cloud" or "frontier"

"Collage has quite a recognized aesthetic right now. It's in its glory moment. It's fucking everywhere."

Alice Isaac

Helpful Tools

Super accessible image-making technique—minimal design skills needed.

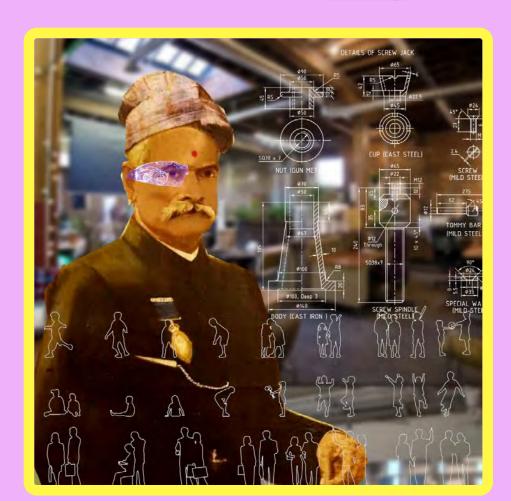
- Canva
- + background remover (pro feature)
- Procreate / Miro / Slides
- Some more scraps for you here

examples in the wild



(21)

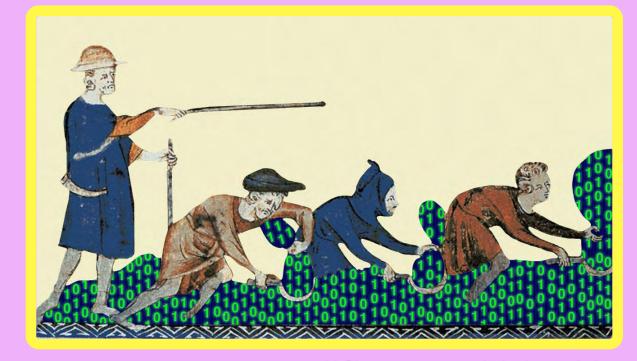
C/change





Unknown

Nav Kriti by A4.Achaar



Al Sharecroppers, Aïda Amer, Axios

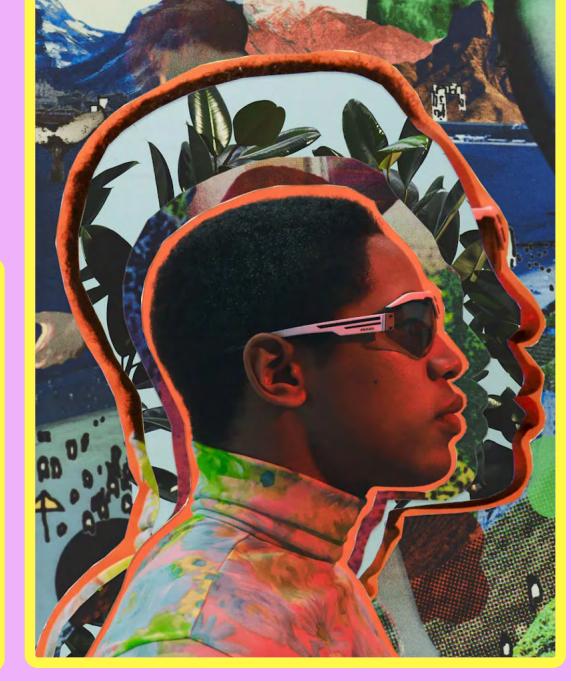
4.3.3 Collage

unnamed, Alun Cai





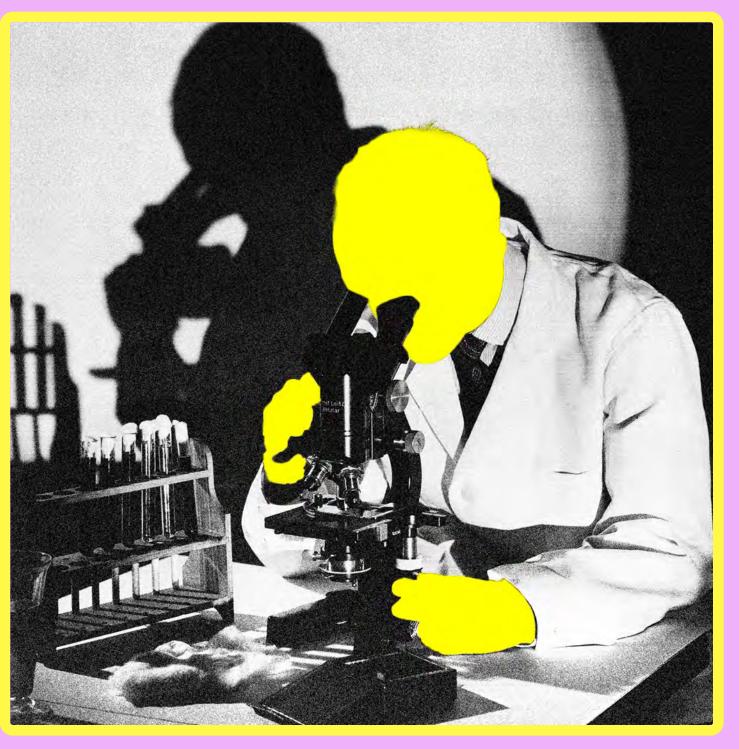
Spotify - Ripple Effect - Texas, Alice Isaac Studio



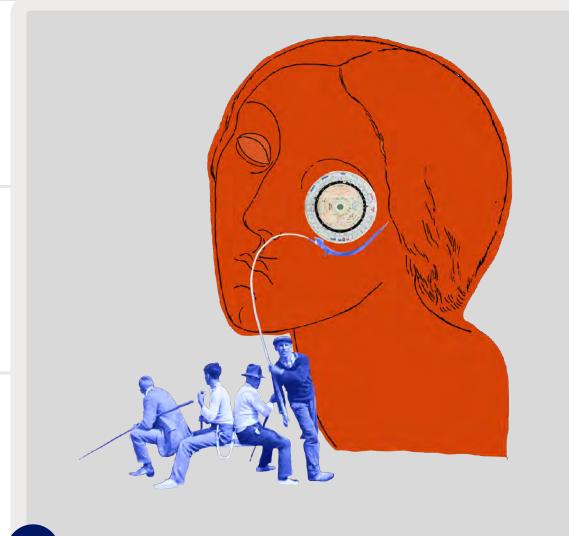
Prada x Flaunt Magazine, Alice Isaac Studio



unknown



how to make



10

RELATED TO IMAGE BRIEF

Data Extraction

IMAGE NAME

Gone fishing - data extraction

CREATOR

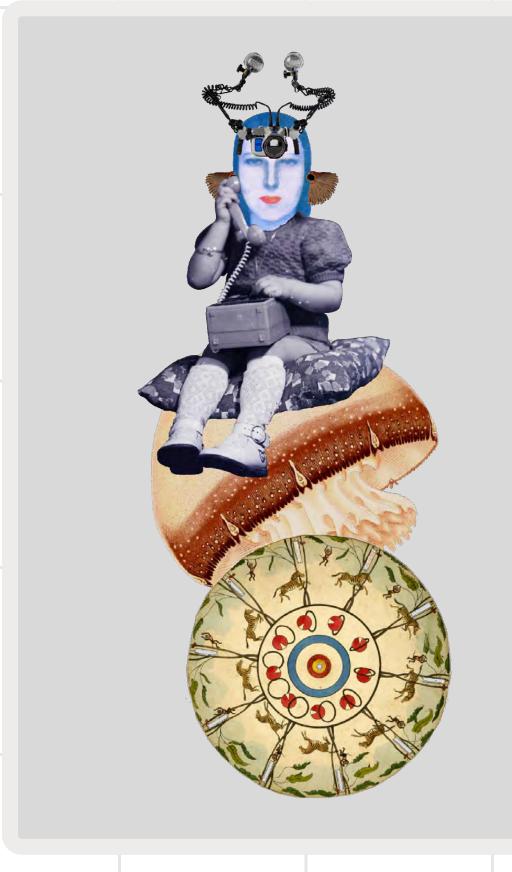
Zeina Saleem

ABOUT THIS IMAGE

In Gone fishing, fishermen are shown siphoning life force from an unknown figure, drawing a parallel to how big tech companies extract data from people for their own benefit, often with little direct advantage to those providing it.

WHY THIS TECHNIQUE

Using collage, Zeina played with scale by placing a looming figure of a woman's head over the fisherman, representing the "silent giant" power of individuals within data extraction.



RELATED TO IMAGE BRIEF

Data Surveillance

Gendered Al

IMAGE NAME

Gossip Girl

CREATOR

Zeina Saleem

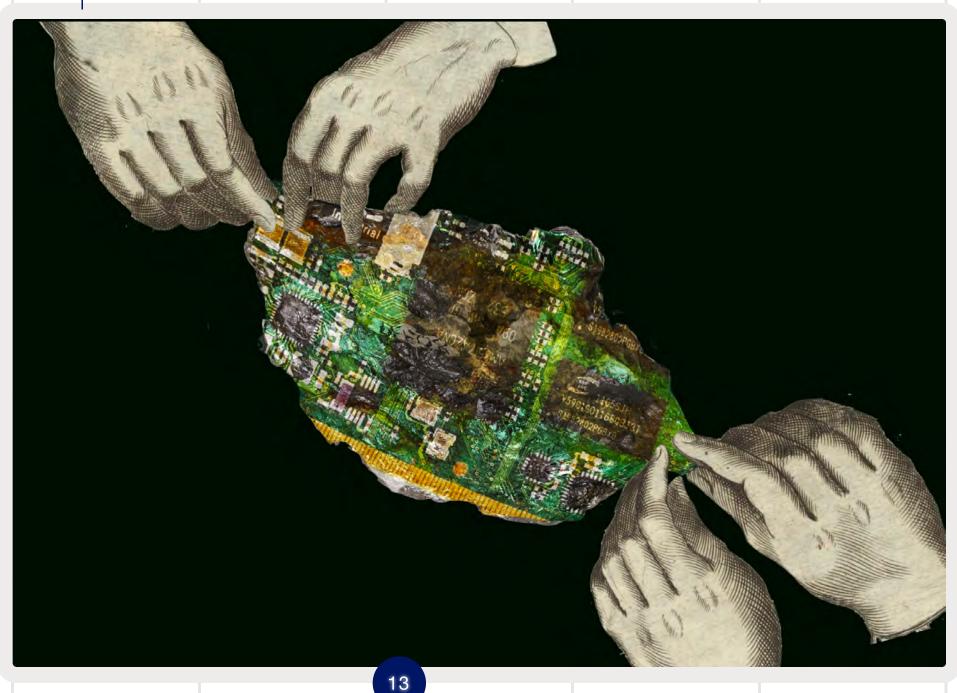
ABOUT THIS IMAGE

Gossip Girl challenges our gendered narratives of data surveillance and/or data capitalism. In this image Zeina challenged the concept of masculine data overlords with that of a gossiping girl spreading misinformation and/or disinformation to anyone that'll listen.

WHY THIS TECHNIQUE

In this image, Zeina used collage to "build" this version of Gossip Girl, combining the head found on a 1929 magazine cover with the body of a young girl on the phone. This image challenges the view of data surveillance as a hypermasculine, capitalist phenomenon, reframing it with a seemingly innocent gossiper. Misinformation and disinformation can also originate from sources we might not suspect, later taking a life of their own.

Zeina also added a camera "third eye" and antennas to symbolize data intake from multiple sources.



Lifting the lid on the AI "black box"

CREATOR

Zeina Saleem

ABOUT THIS IMAGE

In this collage, naval officers prepare to secure the helmet on a deep-sea diver, but instead of a face, the diver's helmet reveals an artwork fragment from Untitled, 1975 by Gulam Rasoon (G.R.) Santosh, hinting at the strange and unknowable workings within Al's "black box".

WHY THIS TECHNIQUE

By replacing the diver's face with a non-human image, the collage evokes the mystery and complexity of AI systems, symbolizing the concealed elements within these technologies.

RELATED TO IMAGE BRIEF

Black Box

IMAGE NAME

Rare_Metals

CREATOR

Hanna Barakat

ABOUT THIS IMAGE

This series sheds light on the human labor that supports the material realities of modern technology. Archival images of hands – some cast in cement, others hand-drawn – symbolize the toxic burdens of data cleaning in China and the immense human cost of mineral extraction in the Congo. Ghostlike hands reflect the invisible nature of this labor, while others delicately manipulate threads of rare earth metals essential for manufacturing computer chips.

(24)

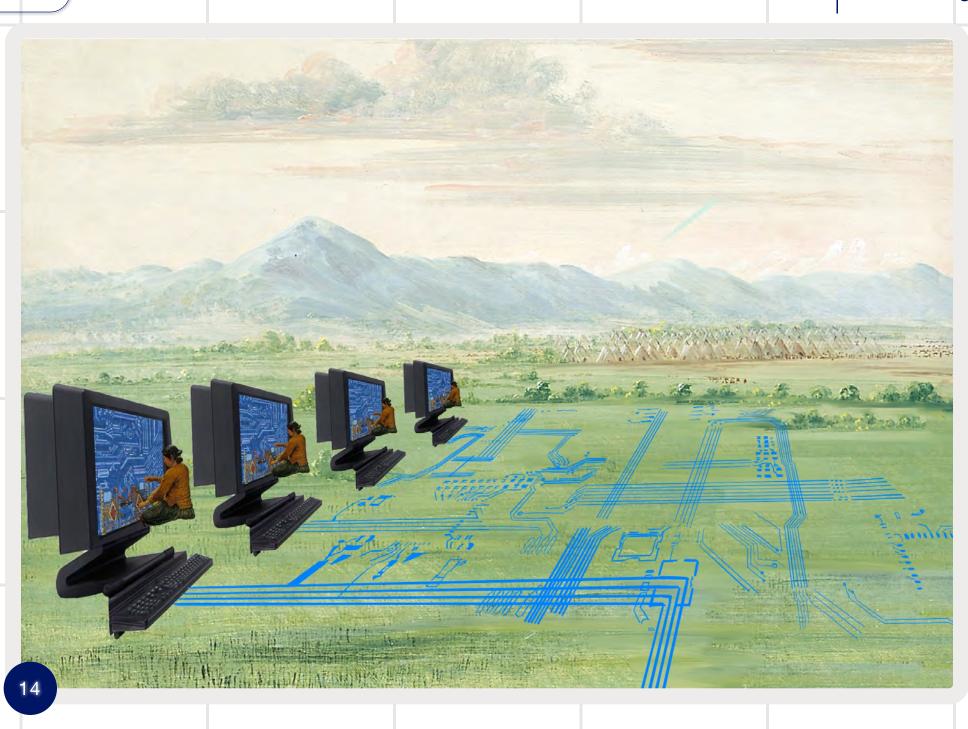
WHY THIS TECHNIQUE

By using hands and threads as visual metaphors, the series seeks to reveal the hidden stories of "anonymous" labor that sustains Al technologies.

RELATED TO IMAGE BRIE

Al Materiality

Hidden Labor



Weaving Wires

CREATOR

Hanna Barakat

ABOUT THIS IMAGE

Weaving waves uncovers the hidden histories of labour in computing. The base of the collage is an oil painting of Navajo women weaving, inspired by the 1960s Silicon Valley history when Fairchild Semiconductor employed Navajo women for assembly work. This image collapses time, showing how overlooked histories inform our modern tech landscape. As <u>Lisa Nakamura</u> writes, 'Looking inside digital culture means both looking back in time to the roots of the computing industry and the specific material production practices that positioned race and gender as commodities in electronics factories. This labor is temporarily hidden, within a very early period of digital computing history, and hidden spatially."

WHY THIS TECHNIQUE

This image is a digital collage featuring a computer monitor with circuit board patterns on the screen. A Navajo woman is seated on the edge of the screen, appearing to stitch or fix the digital landscape with their hands. By remixing imperial archives becomes a form of refusal– inserting and honoring the histories of colonized peoples. Blue digital cables extend from the monitor, keyboard, and floor, connecting the image elements.

RELATED TO IMAGE BRIEF

Hidden Labor

Gendered AI



IMAGE NAME

Baby's Day Out

CREATOR

Zeina Saleem

ABOUT THIS IMAGE

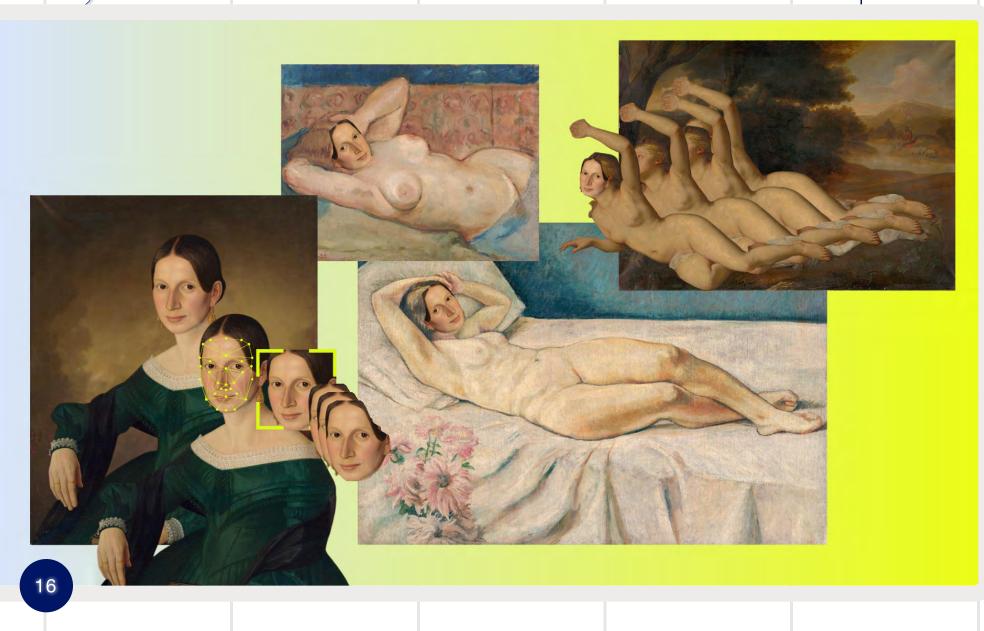
Baby's Day Out conveys a sense of powerlessness in the face of unauthorized data access. The naked baby symbolizes how exposed and vulnerable we are as our personal data is catalogued and tracked online. Eye frames act as surveillance windows, spotlighting the baby even as it tries to escape their gaze.

WHY THIS TECHNIQUE

This collage juxtaposes natural imagery (baby and florals) with distorted facial features (ears and eyes), adding a sense of surrealism and abstraction. Bright neon green and magenta are used in sharp, angular forms that intersect the grayscale background. This creates a dynamic visual tension and draws the viewer's focus.

RELATED TO IMAGE BRIEF





19th Century Shallowfake P0rn

CREATOR

Dominika Čupková

ABOUT THIS IMAGE

The number of deepfakes online doubles every six months, with over 5.2 million predicted by 2024. Alarmingly, 90% of these are non-consensual pornography targeting women. In many regions, laws against deepfake pornography are weak, allowing more than 3,000 websites focused on intimate image abuse to operate unchecked. This image raises awareness by deconstructing the deepfake creation process using 19th-century oil portraits and nudes.

WHY THIS TECHNIQUE

By overlaying computerized elements, the collage visually deconstructs deepfake technology, helping viewers understand the underlying mechanisms and hidden processes of these manipulations.

RELATED TO IMAGE BRIEF

Deepfakes

Generative Al

IMAGE NAME

Data Mining

CREATOR

Hanna Barakat

ABOUT THIS IMAGE

This image series explores the "new frontier" of AI technology, using John MacGregor's 1855 painting, The Ascent of Mont Blanc, as a base. Overlaying images of wires and circuits, the collage ironically comments on the idea of "progress" as it relates to environmental extraction. It positions AI as a system rooted in labor, materials and capital, emphasising the often-invisible labour behind electronics manufacturing in the Global Majority.

(26)

WHY THIS TECHNIQUE

By juxtaposing gradient backgrounds with layered microchips, wires and cell towers, this piece creates an ironic visual commentary on digital colonialism and the aesthetic of high-tech companies. The use of playful colours contrasts sharply with the fragile foundations of Al infrastructure, highlighting the environmental and human cost of digital progress.

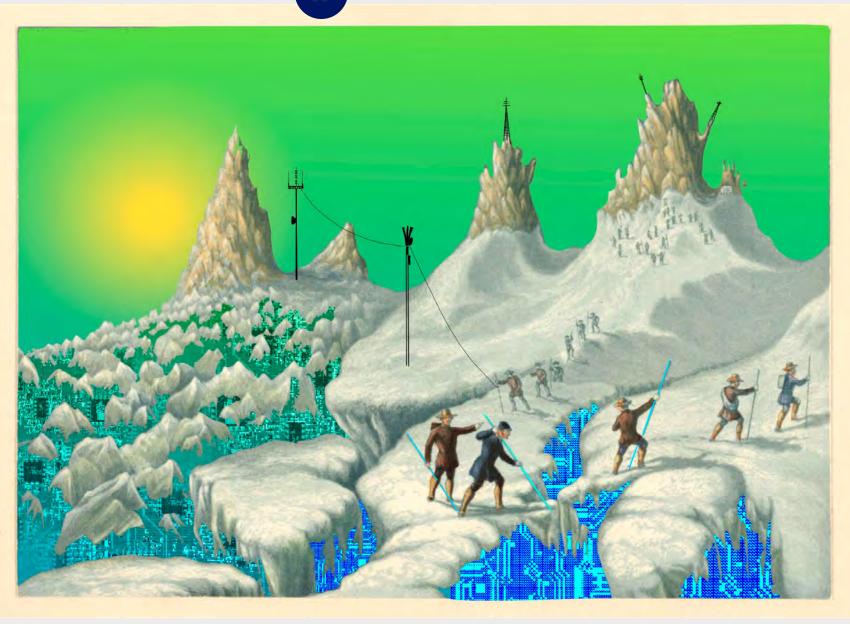
RELATED TO IMAGE BRIEF

Al Materiality

Frontier Models

Hidden Labor

17





Distortion

Distortion involves altering an image while keeping both the original and modified parts visible. It's a way of manipulating the image without completely erasing its initial form.

We've found this technique helpful for the following AI concepts:

- Computational gaze How does Al "see" the world?
- Obscuring certain elements
- Making something more visible
- Making the hidden narrative visible
- Making the logic of the machine visible
- Depicting the digitization of feelings, actions or processes
- Showing Al in real-life contexts in situ
- Highlighting the connections between our digital and physical worlds

Helpful Tools

This technique can be one of the most challenging to master, but it offers unique rewards

- Constraint Systems
- Tooooools.app
- Flosscross

<u>examples</u> in the wild

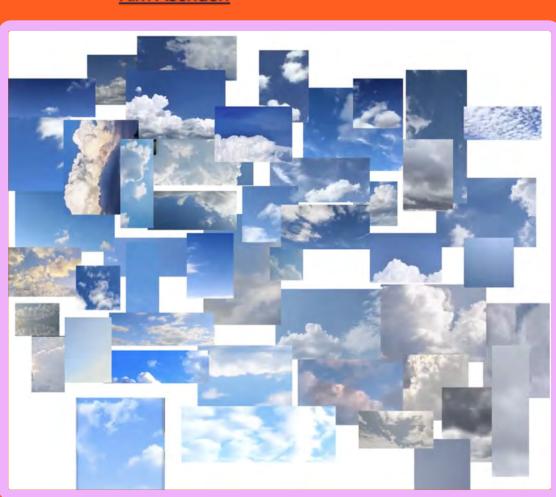
Rogier Klomp







Deborah Stevenson, "Attention to Detail" - collage on paper, <u>2011</u>



Chia Amisola

2024



Indonesia is trying to block LGBTQIA content from the internet, June 2024, Rest of World/Redux



Source: unknown

how to make

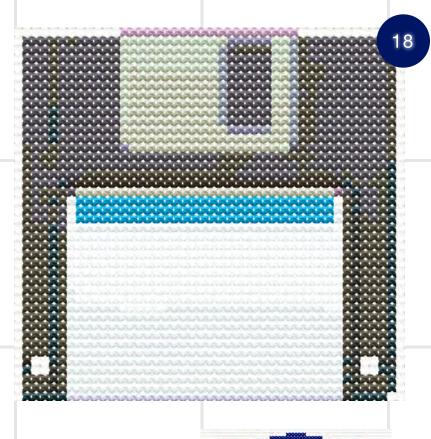


IMAGE NAME

Cross-stitch emojis

CREATOR

Cristóbal Ascencio

ABOUT THIS IMAGE

This small collection features techrelated emojis designed as cross-stitch patterns. The eye, computer, and brain emojis represent how both embroidery and AI are good at identifying and replicating complex patterns. Just as each stitch contributes to a larger design, the interconnected nodes in neural networks create sophisticated Al systems. The repetitive nature of crossstitching mirrors the iterative processes of machine learning algorithms, both gradually working towards a complete picture.

WHY THIS TECHNIQUE

Using Flosscross, these serve as a visual metaphor for the underlying similarities between old human skills and cuttingedge Al processes

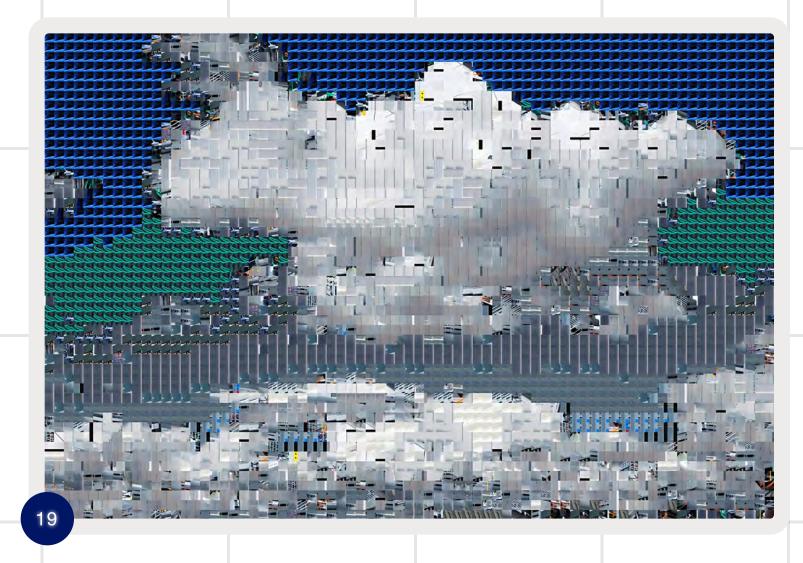
RELATED TO IMAGE BRIEF

Pattern Finding

Generative Al

TUTORIAL

- · Go to: flosscross.com.
- Choose "From Image" and select your image.
- Select the image of your choice.
- Follow tool instructions and save.



TUTORIAL

- Use the mosaic tool from constraint.systems.
- Open the source image for tiles and select the target image for composition.
- Wait for the process to complete, then save.

IMAGE NAME

Cloud computing

CREATOR

Nadia Piet

ABOUT THIS IMAGE

This image critically examines the materiality and ecological footprint of Al, particularly challenging the misleading notion of "cloud" computing. Using a mosaic technique, it reconstructs a cloudscape from the elements of a data center photo, visually illustrating how our perception of the cloud often obscures the tangible reality of data storage. While cloud computing is often viewed as an intangible concept, this image brings attention to the physical infrastructure that supports it, confronting the environmental implications and hidden materials that make the cloud possible.

WHY THIS TECHNIQUE

Using distortion in this image suggests a computational process. Through the re-creation of one image from the fragmented elements of another, the image implies that what we perceive as intangible is, in fact, grounded in the material reality of a data center.

RELATED TO IMAGE BRIEF

Al Materiality Cloud Computing

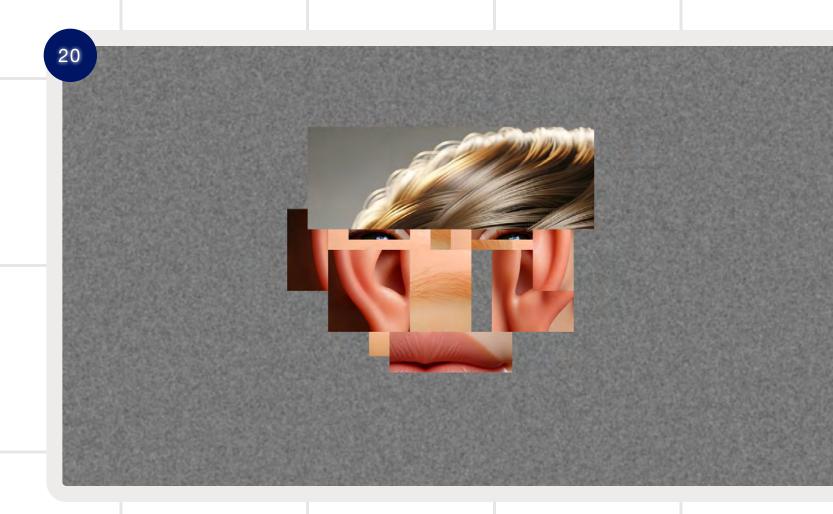


IMAGE NAME

How Diffusion (does not) Work

CREATOR

Eryk Sylvaggio

ABOUT THIS IMAGE

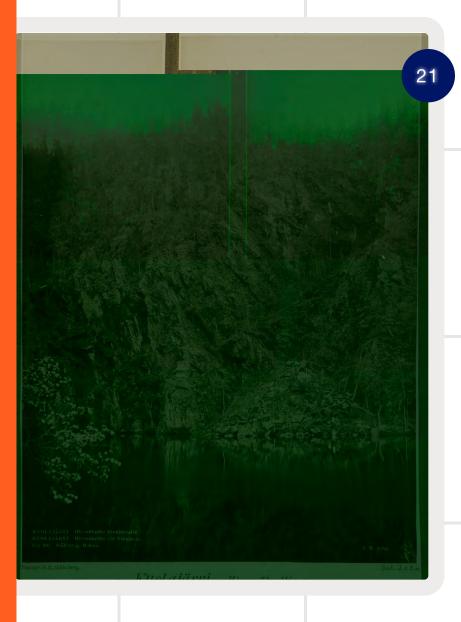
Eryk asked ChatGPT to generate a step-by-step illustration of how a diffusion model generates an image. The result was very wrong, presenting fragments of a human face and drawing them in. The resulting image illustrates how AI misunderstands humans but also doesn't understand itself. It could help show that breaking things down into data and then reassembling something new from that data alone produces distortions and reductions.

WHY THIS TECHNIQUE

In this case, this collage was a byproduct of Eryk's investigation. However we've found the resulting image to be an interesting way of showcasing how AI tools generate images.

RELATED TO IMAGE BRIEF

Generative Al



Datamoshing in a .txt file

CREATOR

Cristóbal Ascencio

ABOUT THIS IMAGE

This set of images explores digital imagery, data manipulation, and environmental issues through a technique known as datamoshing. Using archival landscape photographs of Finnish lakes and mountains as a base, the images files were corrupted by opening them in a text editor and inserting fragments of news articles about Al data centers and their resource consumption directly into the image files code. This process results in visually distorted landscapes that symbolically represent the impact of technology on natural environments.

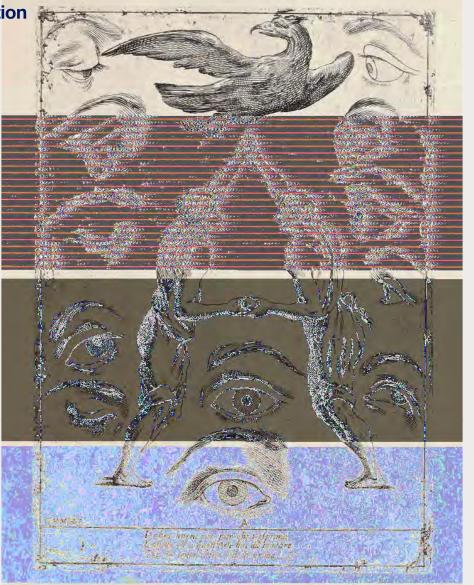
WHY THIS TECHNIQUE

The corrupted images can be seen as a visual metaphor for the environmental costs of digital infrastructure, particularly the high energy and water usage of large-scale Al operations.

RELATED TO IMAGE BRIEF

Ecological Cost of Al







22

IMAGE NAME

Datamoshing in audio software

CREATOR

Cristóbal Ascencio

ABOUT THIS IMAGE

This set of images explores data manipulation through a technique known as datamoshing. Using a set of archival ilustrations depicting various machines alongside animals and human features as a base. The images were imported into audio editing software as RAW data. The image is the transformed into audio and was then manipulated using different effects that are usually applied to sound. The corrupted data was then exported back into image format.

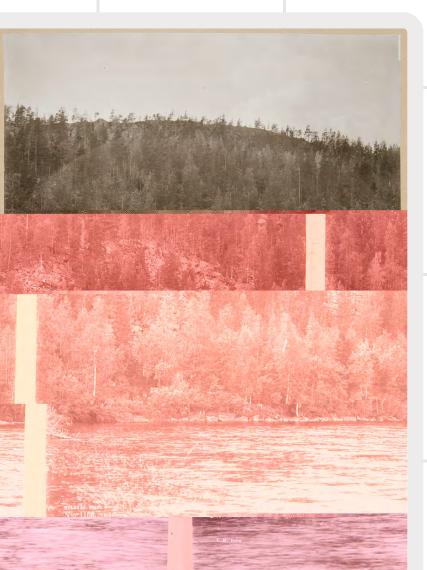
WHY THIS TECHNIQUE

This process serves as a metaphor for the complex relationships between humans, nature, and technology. By merging historical imagery with digital manipulation, the piece comments on the evolution of visual technology and how our understanding of images changes with new tools and perspectives. This glitch aesthetic doesn't merely represent errors, but rather opens up new interpretative possibilities.

RELATED TO IMAGE BRIEF

Data Surveillance

Datafication



There were other techniques we wanted to explore, but didn't

Playing with Color and/or Light

Experimenting with color and light can affect how we experience an image. These two seemingly simple elements can transform moods, evoke different times or places, and shift perception. For example, below you'll see how changing the color grading changes our sense of the image's location from the USA to Mexico.

Surprise, this photo was actually taken in Cape Town, South Africa.

This technique requires a level of image-making sophistication as it draws on knowledge of photography, filmography, and/or art history developed over time, exposure, and practice.

because you know

time, money, etc.

United States Mexico

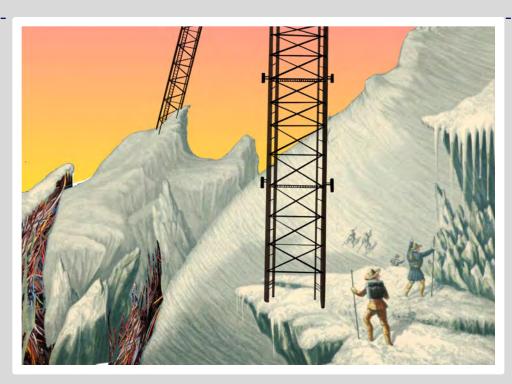
Today, popular images of Al are illustrated in neons and blue. These same colours have long been used in promos of techno-futuristic films like WALL-E, Tron, and The Matrix. This color association, dubbed 'Deep Blue Sublime', helps re-enforce the idea that our use of AI is pre-determined, a sign of progress, and this may limit our critiques of the technology.

For more on this topic, read more here and here.

> We invite you to continue to test, challenge, and build this playbook in your own time!

Maybe you can?











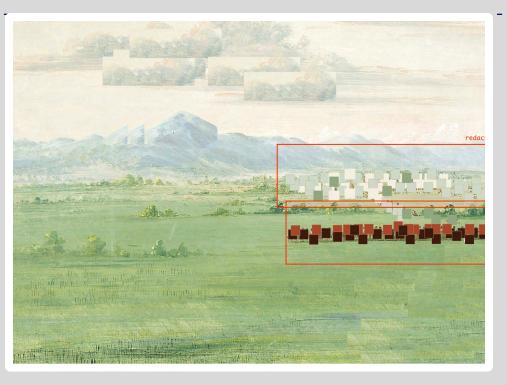


A reflection on "The Next Frontier"

HANNA BARAKAT

REFLECTION

These images explore the positioning of generative Al landscapes as a "new frontier" that echoes that echoes the 1850s to 1870s Manifest Destiny paintings (often associated with the Hudson River School). The wave of Manifest Destiny paintings functioned as a form of propaganda, luring settlers westward while concealing the ethnic cleansing of Indigenous populations.





Original Paintings



(32)

Figure 1. "Among the Sierra Nevada Mountains, California" by Albert Bierstadt, 1868.



Figure 2. "The Oxbow (The Connecticut River near Northampton)" by Thomas Cole, 1836.

Generated Images



Figure 5. Stability Diffusion Al Landscape, 2024



Figure 4. DALL E 2 Generated Landscape, 2023

Similarly, Al-frontier models usher in new forms of colonization within digital realms, their technical prowess often overshadowing the environmental and labor exploitation that underpins them (from extractive mining in the Congo to the history of hidden labor in manufacturing transistors and circuits). The visual similarities between these two types are characterized by a Luminist quality of light and expansive and empty lands that blur the line between history and future-elements often associated with the 19th-century U.S. paintings are eerily replicated in the canon of Algenerated imagery, but underpinning these images is continued colonial history.

Gina Helfrich <u>reminds</u> us that the term "frontier AI" continues the colonial mindset, "further reinscribing the harmful dynamics between the handful of powerful Western companies who produce today's generative AI models and the people of the "Global South" who are most likely to experience harm as a direct result of the development and deployment of these AI technologies."

In this light, by overlaying the dramatic aesthetics of contemporary Al-generated art with the sweeping landscapes of Manifest Destiny paintings, the images seek to unveil parallels between the two eras. The visual similarities work as evidence of "progress" – a proxy for expanding U.S. frontier models (imbued with notions of democracy and capitalism) across the globe.

ABOUT

Search Queries
Manifest Destiny
Hudson River
Settlements
Westward Expansion
Settler
Hudson River School
Earth
Spectacle
Show

Archive

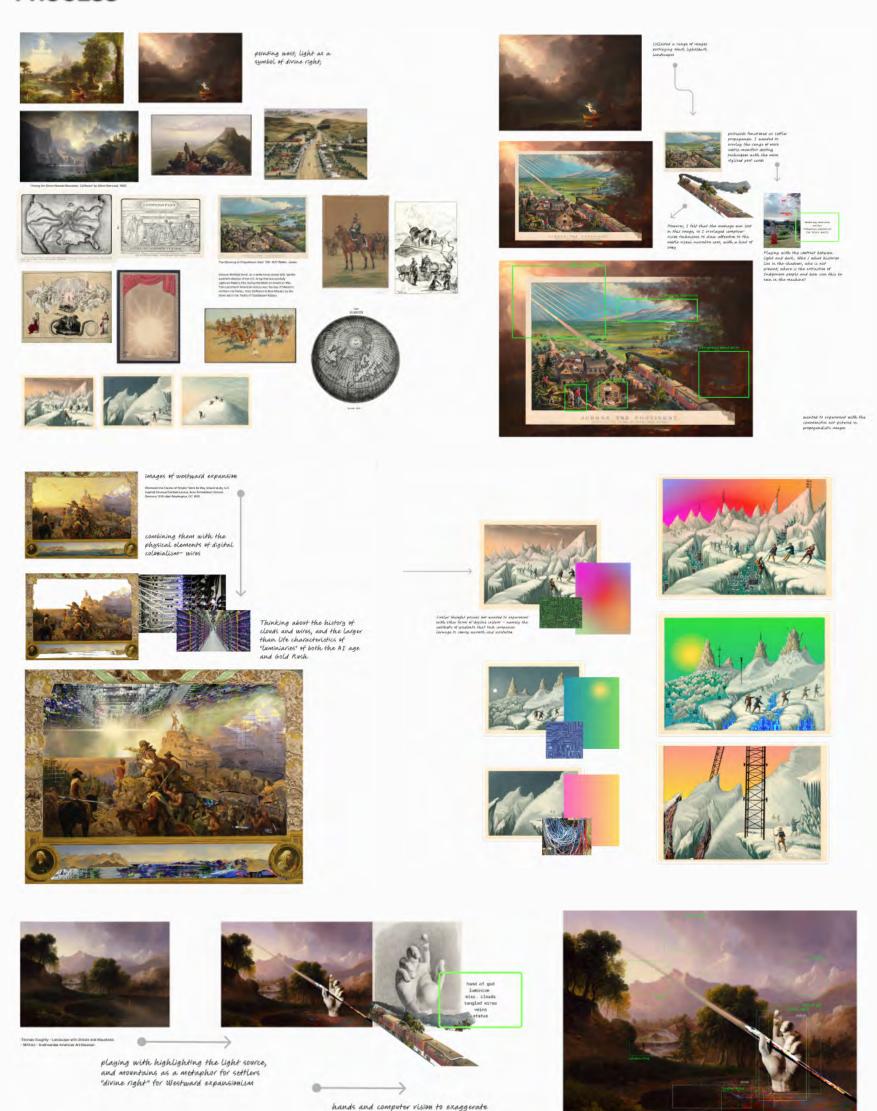
Smithsonian Open Access
MOMA Open Access
Wikimedia Commons
New York Public Library:
Public Domain Collections

Techniques

Overlay / Collage / Distort

PROCESS

4.3.5 **Bonus**

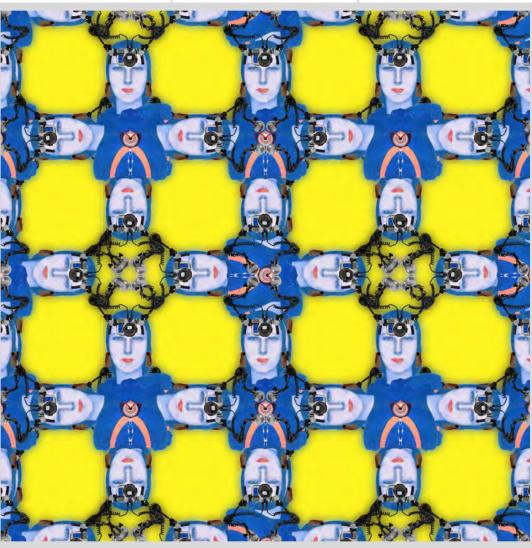


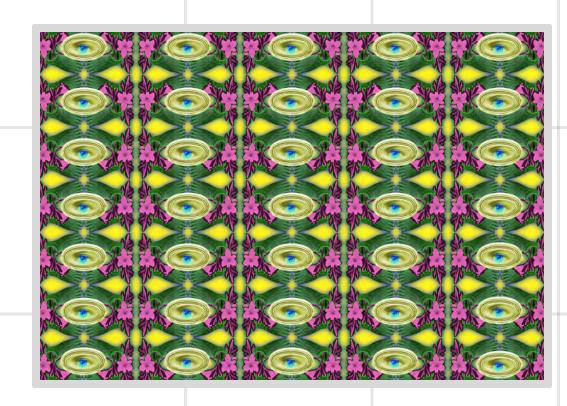
Patternmaking

In this series, Zeina used pattern-making as a form of data beautification, exploring the complex, continuous exchange between humans and Al in surveillance. Derived from the Latin word "data", meaning "given", this concept reflects the give-and-take relationship between humans and the data we make. This dynamic of generating and analysing data encourages us to see our actions, thoughts and feelings as potential data-producing moments and how this framing influences how we behave and make decisions to optimise our datafied selves.

In the bottom-left image, Zeina created heart-shaped eyes resting on two robotic arms to symbolize the connection between AI and humans and suggesting a collaborative, interdependent relationship. These frames intertwine with abstract motifs that represent AI's unseen but ever-present networks. The overlapping layers within the pattern form a protective web, highlighting how AI and surveillance continually reinforce and depend on each other. These themes are explored further in the images bottom-center, and topright, all creating a visual narrative that showcases the duality of human-AI interactions. Human activity serves and shapes AI all the while also being sculpted by it.







Beyond its technological themes, pattern-making can serve as a Trojan horse: while visually pleasing, these images subtly critique the pervasive role of technology and surveillance. Themes of looping, repetition and pattern-seeking are woven into the design, reminiscent of woven textiles, neural networks or circuit boards. By presenting these motifs in an aesthetically engaging way, this artwork draws attention to technology's pervasive influence in a familiar yet thought-provoking format. Ultimately, the overall pattern reveals a complex relationship, using surveillance to question our interaction with technology in an endlessly interconnected loop of observation and influence.



Moving Images

Animating cultural heritage images allows viewers to engage with stories in a dynamic way, focusing on an action or capturing subtle shifts in time, mood and emotion. Movements - like a hand tugging at fabric or elements flowing naturally - enhance storytelling by highlighting details that may go unnoticed in a static image, creating a more sensory and layered narrative.

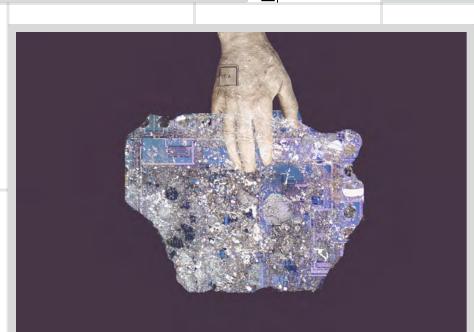
In today's digital culture, moving images often stand out more in crowded feeds, capturing attention more effectively than still images and sometimes even nudging algorithms in your favour.

Fortunately, creating these animations doesn't require advanced skills. You can add movement by screenrecording while flicking between two or more variations of an image, or by exploring AI tools such as Runway ML's Gen-3 Alpha Turbo to transform static images into dynamic visuals. For more inspiration, check out GIF IT UP's online tutorials on making GIFs.

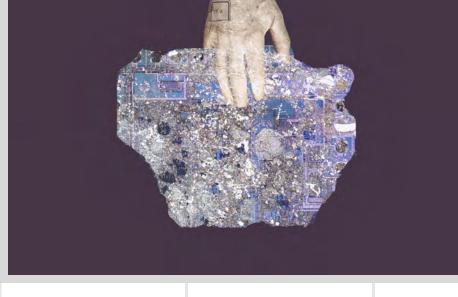




One Minute in the Life of a Micro Worker, Dominika Cupkova

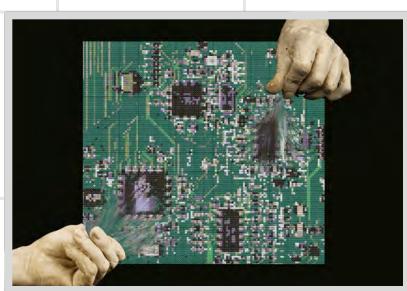


Noise from News, Nadia Piet

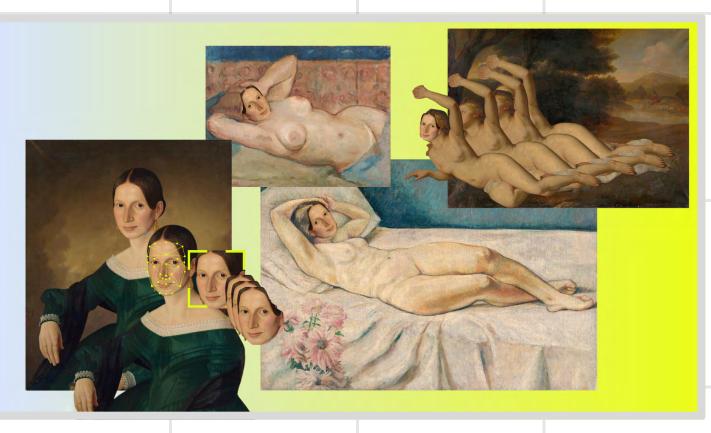


Salt to Bitcoin, Zeina Saleem





Woven Circuits, Hanna Barakat



19th Century Shallowfake P0rn, Dominika Cupkova





val Images of Al

2024

4.3.5 **Bonus**

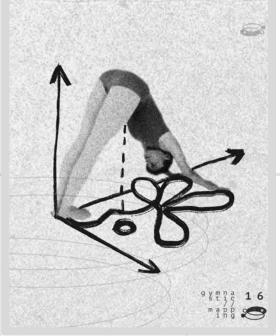
Go Analog

There's always the joyful option of stepping away from the computer and remixing with analogue and mixed-media methods! Experiment with various materials like fabrics, tin foil, found leaves, textured papers and paint. For example, try distressing paper prints by scratching, ripping, burning or folding them to add unique textures – a personal favourite technique of Alice Isaac. You can also overlay paint to create frames or obscure certain parts of the image. Adding annotations with markers or stickers offers a hands-on approach to digital overlay techniques. You might even create a 3D piece by arranging different objects.

This messy, hands-on approach lets you inject more of your personal style into the process, resulting in layered artworks that truly stand out. If the infinite digital options overwhelm you, limiting yourself to tangible materials can help the creative process – and give you a much-needed break from the screen.



Banana / Plant / Flask by Max Gruber



Yoga annotation: Lexie Yu



(36)

CCTV Pigeon: Zeina Saleem

2024



Researchers

Ploipailin Flynn Nadia Piet Dominika Cupkova

Imagemakers Cristobal Ascencio Hanna Barakat Dominika Cupkova Nadia Piet Zeina Saleem Eryk Salvaggio

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Publisher

AIXDESIGN

AI × DESIGN





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