ESCAPE FAKE REALITIES AND DISINFORMATION

05.09.2022

AGENDA

INPUT

- **INTRO** WHY AND WHAT WE DO (5 min.)
- **FAKE NEW** TRENDS (15 min.)
- **ESCAPE FAKE** CASE STUDY (10 min.)

CO-CREATION

- THEMES and TOPICS (15 min.)
- TOOLS and STRATEGIES (15 min.)

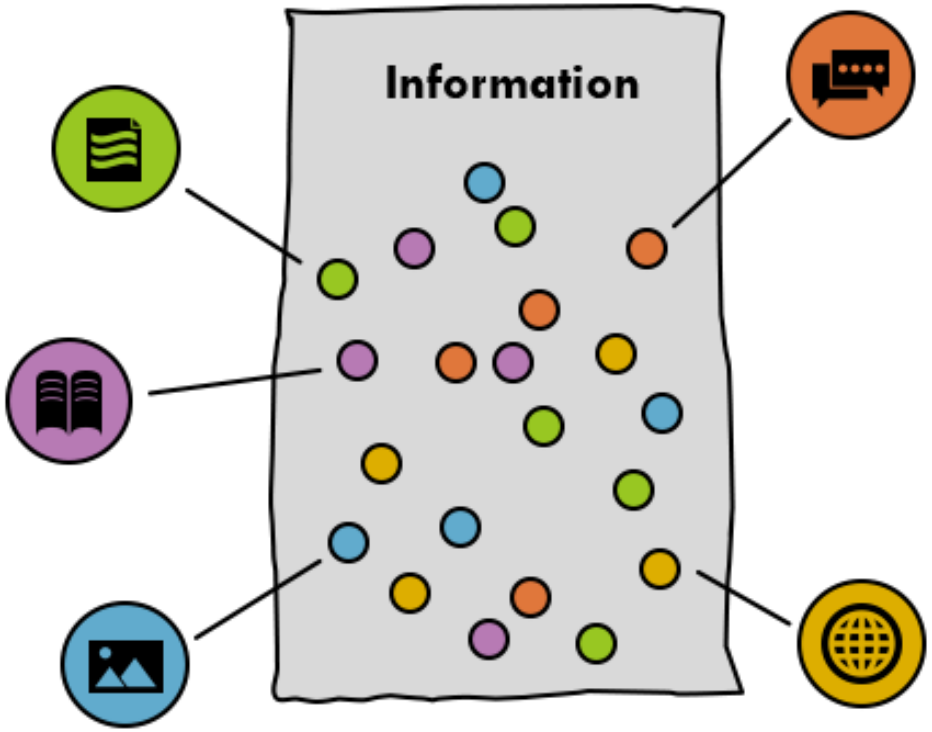
QUESTIONS / FEEDBACK

POLYCU, WAS?

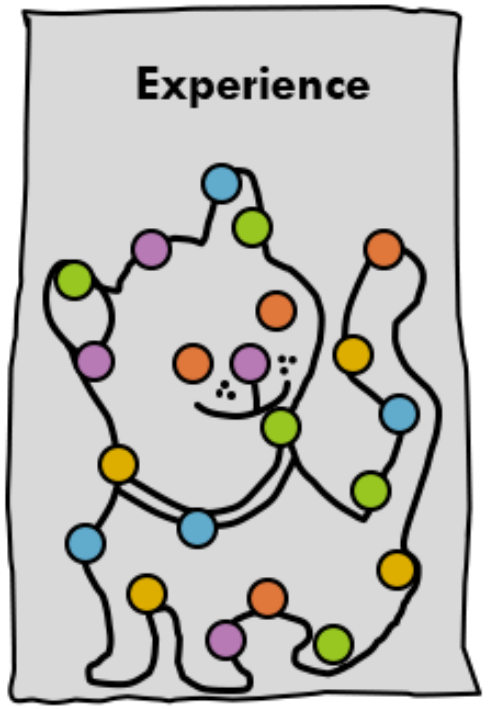
Trari, trara ...
Polycular
Soothing
Reliable Relief
Polycular
Original From Hallein
Cough Suppressant
Throat Drops
SUGAR FREE
Fights Coughs Naturally
Soothes Sore Throats
From Switzerland
19 DROPS
Peppermint
Sage
Elder
Linden Flowers
Wild Thyme
Lemon Balm
Horehound
Hyssop
Thyme
Mallow

PROBLEM AND SOLUTION

PROBLEM AND SOLUTION

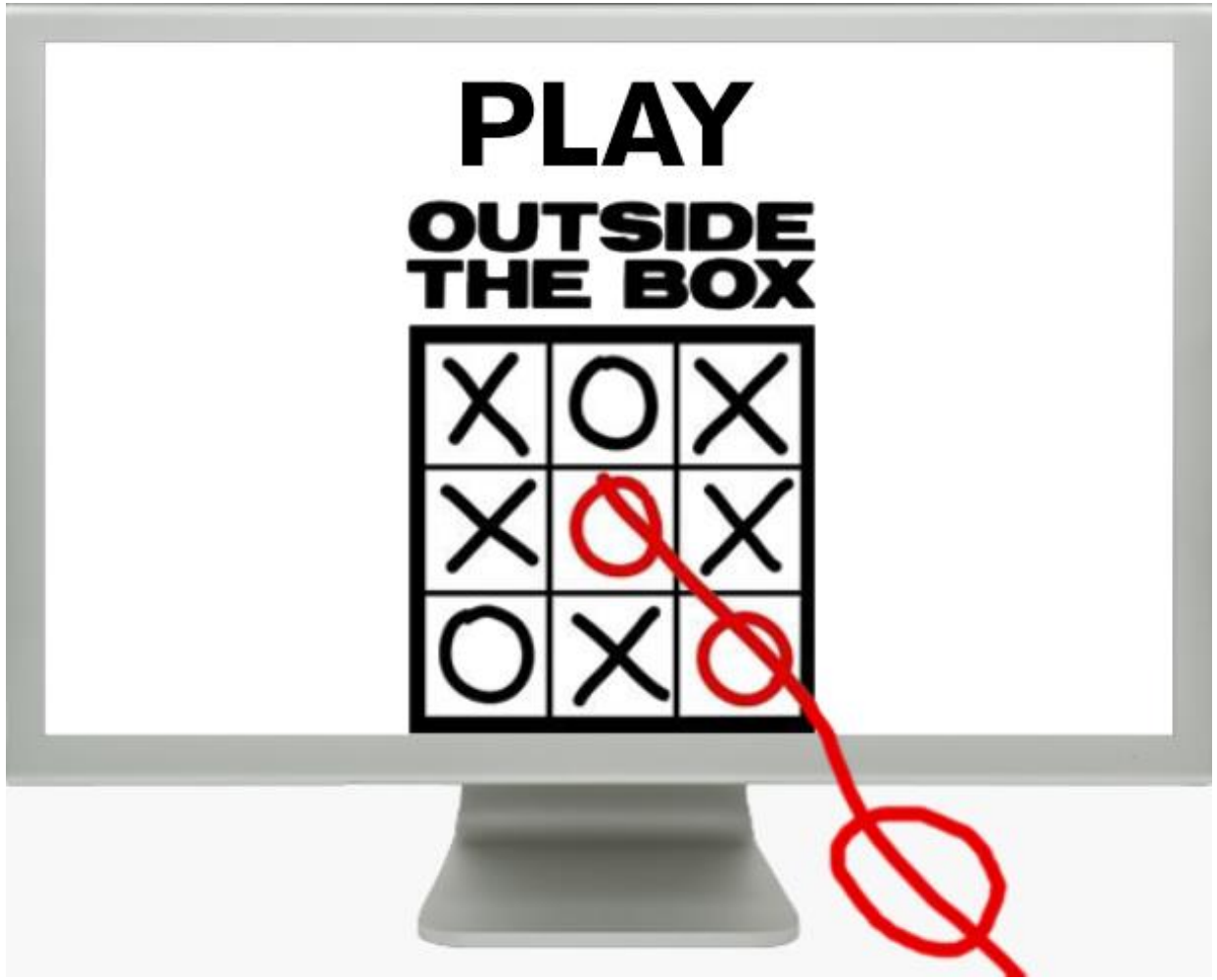


There is a lot of information out there …



… but transforming it into an experience will make it stick.

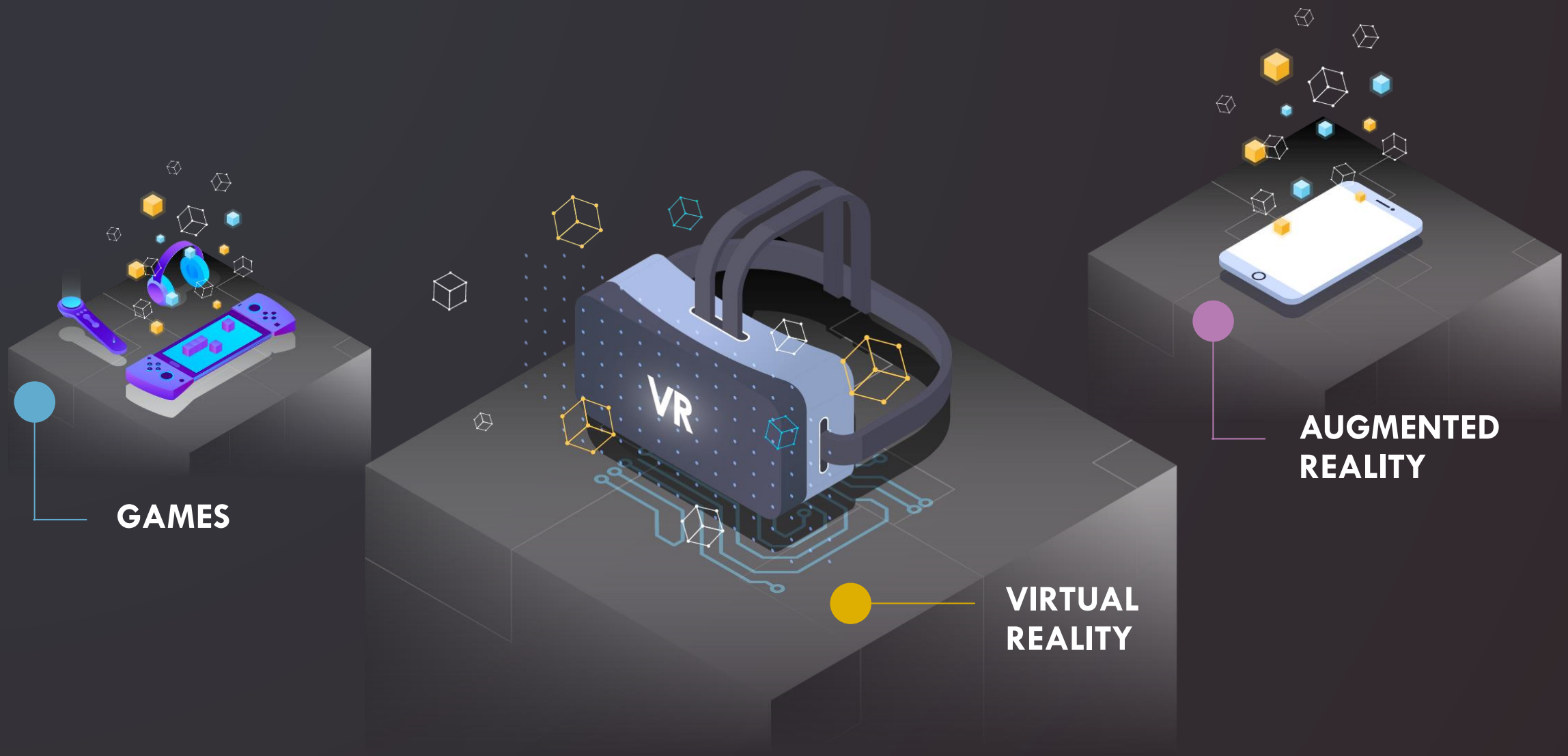
PROBLEM AND SOLUTION



Experience everywhere

PLAY.
EDUCATE.
INSPIRE

PROBLEM AND SOLUTION

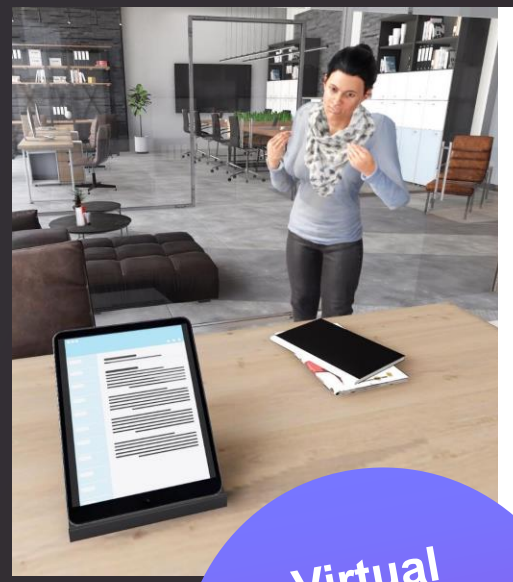


USE-CASES LEARNING AND AWARENESS RAISING

USE-CASES VR TRAINING AND LEARNING

PORR

COBOT STUDIO



Virtual Skills Lab

https://www.polycular.com/portfolio/virtual-skills-lab/

USE-CASES ESCAPE AR – AUGMENTED REALITY ESCAPE ROOMS

CITY DISCOVERY

SPACE dog Salzburg

VIRTUAL EXHIBITION

ONBOARDING AND CSR

PROBLEM AND SOLUTION

IMMERSIVE AND GAME BASED EXPERIENCES …

…. ARE MOTIVATING AND ENGAGING

… YOU LEARN THROUGH REFLECTION ON EXPERIENCES

… OFFER A SAFE ENVIRONMENT

… ARE A COMPLEMENTARY FORM OF LEARNING

FAKE NEW TRENDS

TECHNOLOGY and FAKE

(challenging reality)

Reality is an illusion.

FAKE NEWS SIND SO ALT WIE DIE MENSCHEN

The New York Sun – 1835 (Great Moon Hoax)

THE SUN.

NEW YORK, TUESDAY MORNING, AUGUST 25, 1835

GREAT ASTRONOMICAL DISCOVERIES, LATELY MADE BY SIR JOHN HERSCHEL, L.L.D. F.R.S. &c. At the Cape of Good Hope.

LUNAR TEMPLES

WIE WIRKLICH IST DIE WIRKLICHKEIT?

Image Fulgurator, Julius von Bismarck (2007)

MOONSHOT

AI detects objects it knows and replaces textures and details from internet stock footage with deep neural network so you see the moon as through a telescope almost, it changes the reality of your photograph

https://www.reddit.com/r/Android/comments/bfat9m/huawei_p30_pros_new_moon_mode_add_artificial/

DER TOD DER REALITÄT?

GOOGLE GLASS

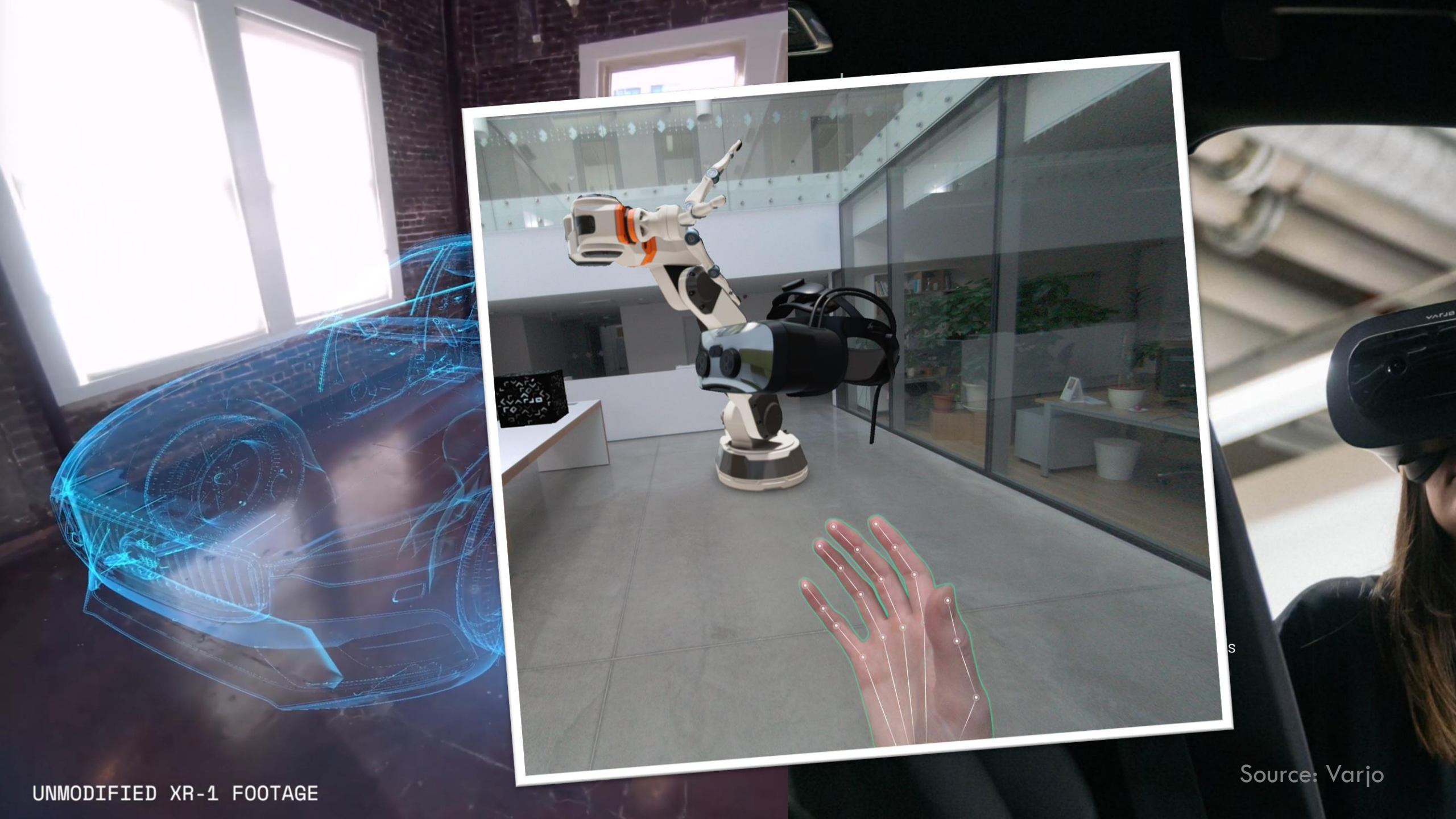
MAGIC LEAP

MICROSOFT HOLOLENS

INTEL VAUNT

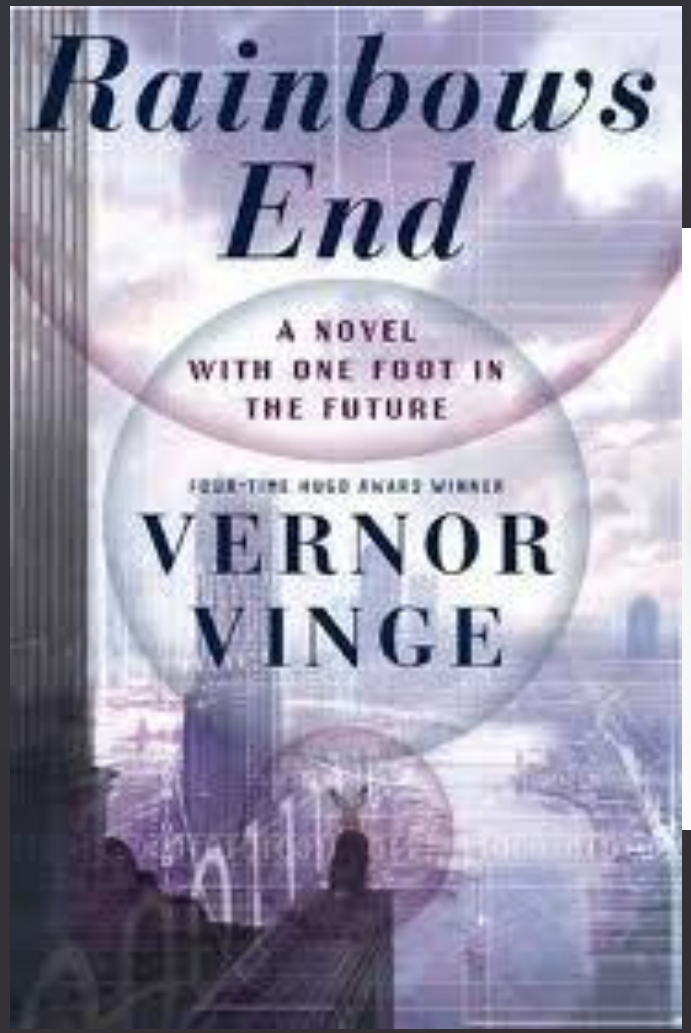
META 2

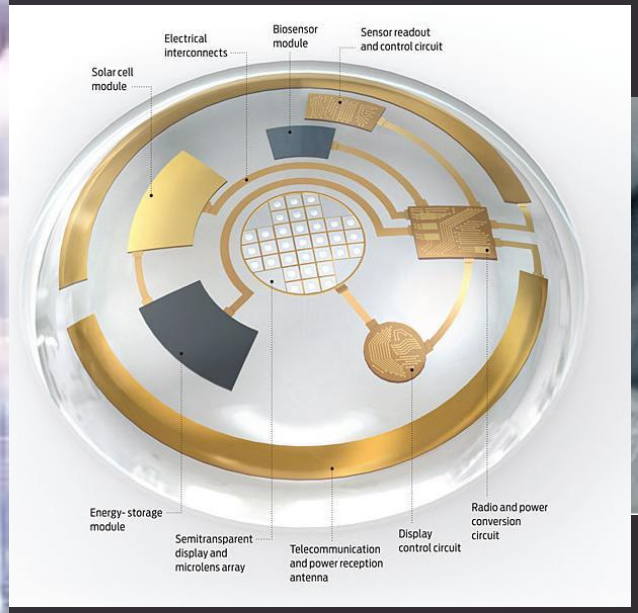
APPLE ?

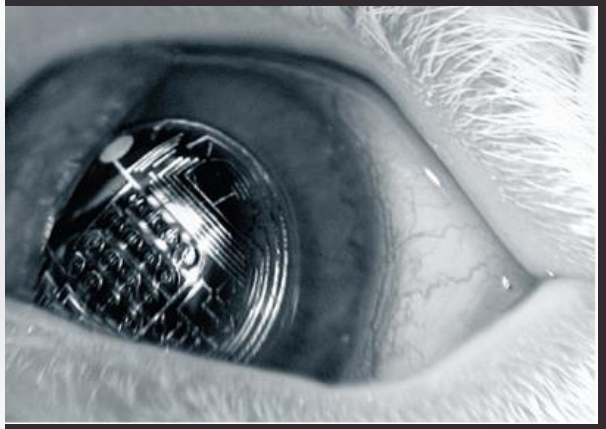


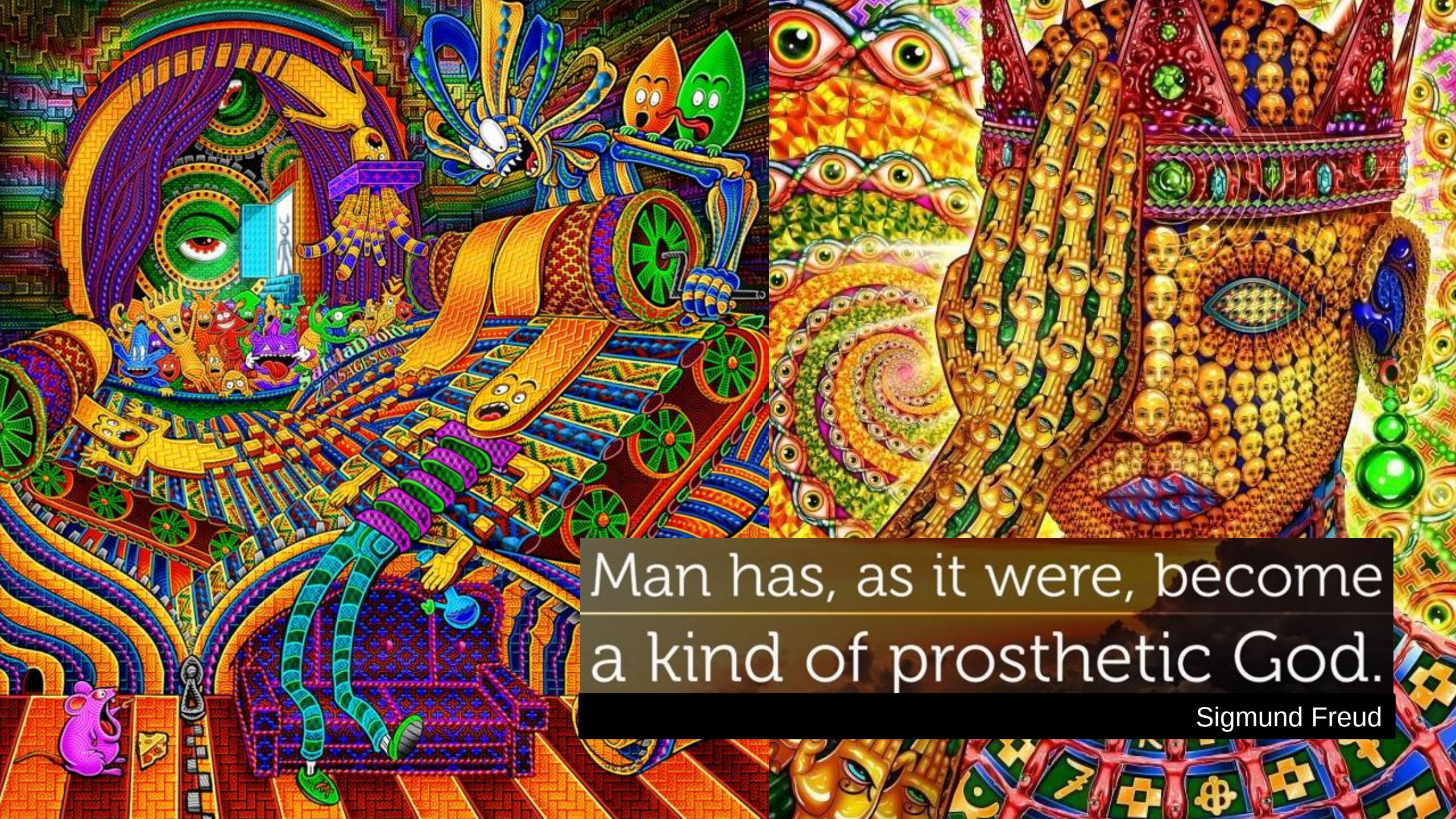
Source: Varjo

WAIT WHAT THE FUTURE WILL BRING ...








Man has, as it were, become
a kind of prosthetic God.
Sigmund Freud

CHEAP FAKES and DEEPFAKES

(creation)

TECHNOLOGIES

- Recurrent Neural Network (RNN); Hidden Markov Models (HMM) and Long Short Term Memory Models (LTSM)
- Generative Adversarial Networks (GANs)
- Video Dialogue Replacement (VDR) model
- FakeApp / After Effects
- After Effects, Adobe Premiere Pro
- Sony Vegas Pro
- Free real-time filter applications
- Free speed alteration applications
- In-camera effects
- Relabeling/ Reuse of extant video

DEEPFAKES More expertise and technical resources required — Less expertise and fewer technical resources required **CHEAP FAKES**

TECHNIQUES

- Virtual performances *(page 35)*
- Virtual performances
- Voice synthesis *(page 38)*
- Face swapping *(page 35)*
- Lip-synching *(page 38)*
- Face swapping: Rotoscope
- Speeding and slowing *(page 30)*
- Face altering/ swapping
- Speeding and slowing
- Lookalikes *(page 27)*
- Recontextualizing *(page 28)*

EXAMPLES

Suwajanajorn et al. Face2Face: Synthesizing Obama

Posters and Howe's: Mark Zuckerberg

Deepfakes: Gal Gadot (not pictured because of image content)

Mario Klingemann: AI Art

Jordan Peele and BuzzFeed: Obama PSA

Paul Joseph Watson: Acosta Video

Huw Parkinson: Uncivil War

SnapChat: Amsterdam Fashion Institute

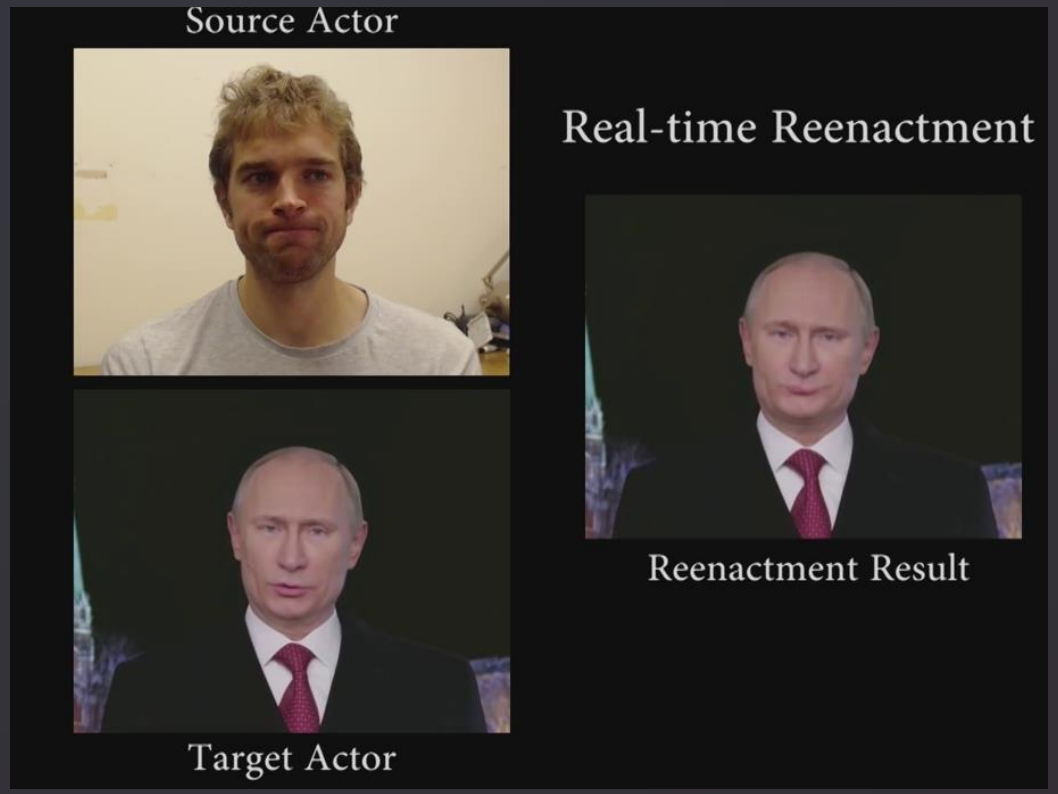
Belle Delphine: Hit or Miss Choreography

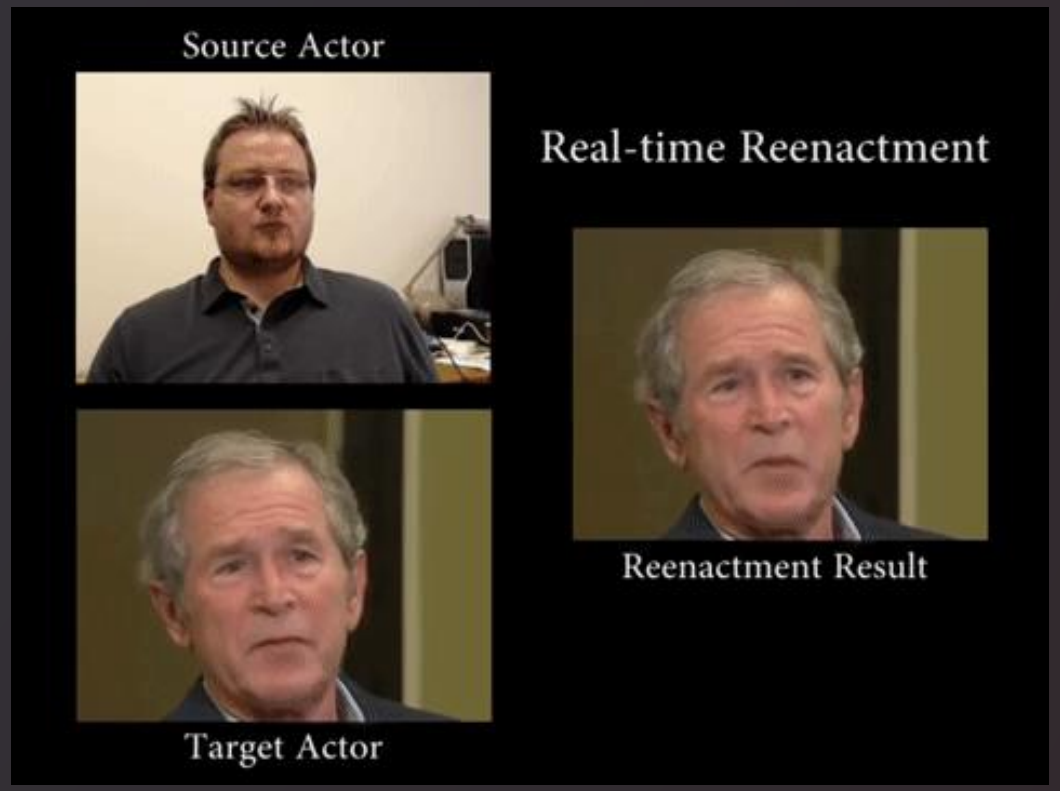
Rana Ayyub (not pictured because of image content)

Unknown: BBC NATO newscast

WHO SAID WHAT?

AI Face2Face Reenactment





SLASH IMAGINE

Dall-E2 (Open AI), Stability AI, MidJourney and Imagen (google research)
convert text prompts or source images to new AI generated images

Tools
https://openai.com/dall-e-2/
https://stability.ai/
https://www.midjourney.com/
https://imagen.research.google/

Open Source on GitHub
https://github.com/CompVis/stable-diffusion
https://github.com/openai/guided-diffusion

SLASH IMAGINE

EXAMPLES

Replicate Style

„sphere“ and
„landscape“

painted by

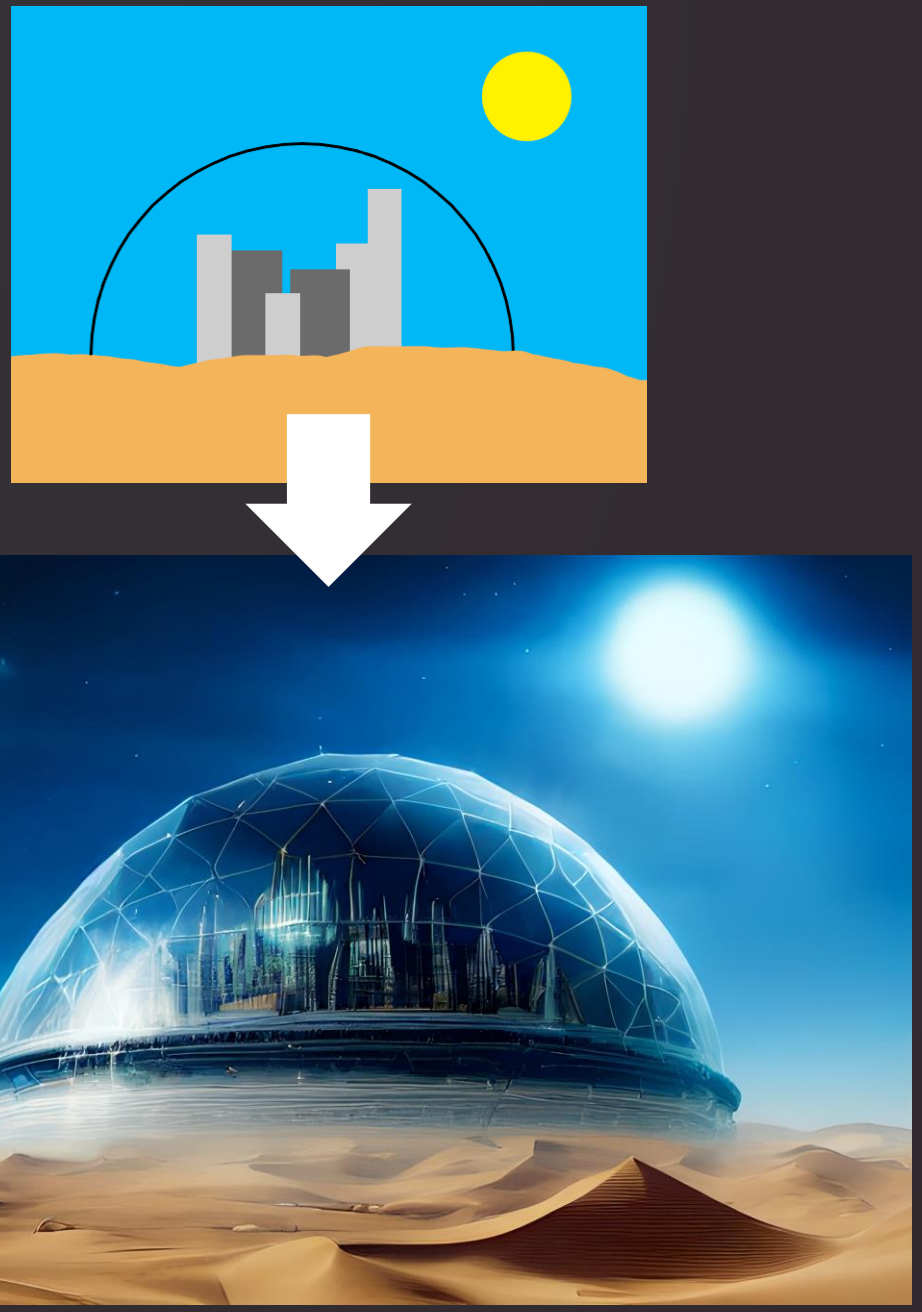
„Alfonso Mucha“ and
„Gustav Klimt“

SLASH IMAGINE

EXAMPLES

PROMPT: „*A distant futuristic city full of tall buildings inside a huge transparent glass dome, In the middle of a barren desert full of large dunes, Sun rays, Artstation, Dark sky full of stars with a shiny sun, Massive scale, Fog, Highly detailed, Cinematic, Colorful*“

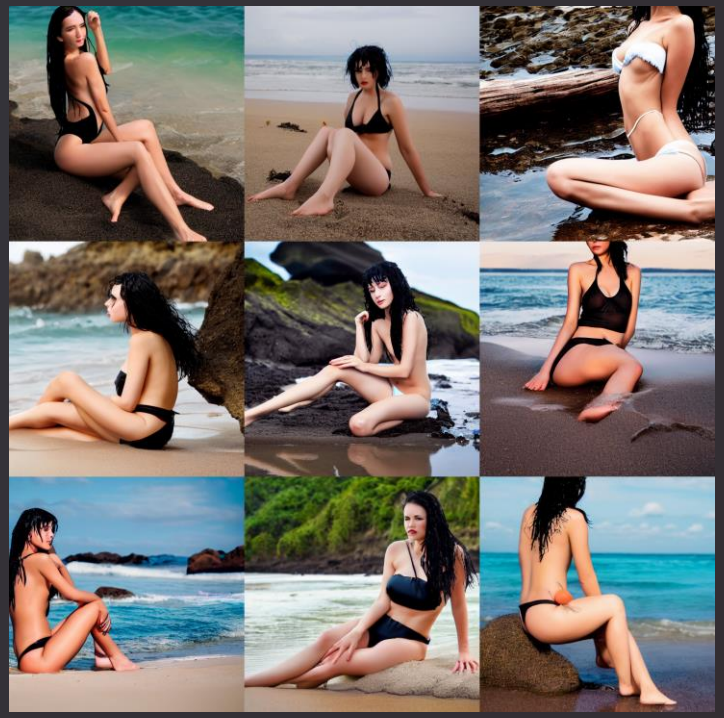
https://simonwillison.net/2022/Aug/29/stable-diffusion/



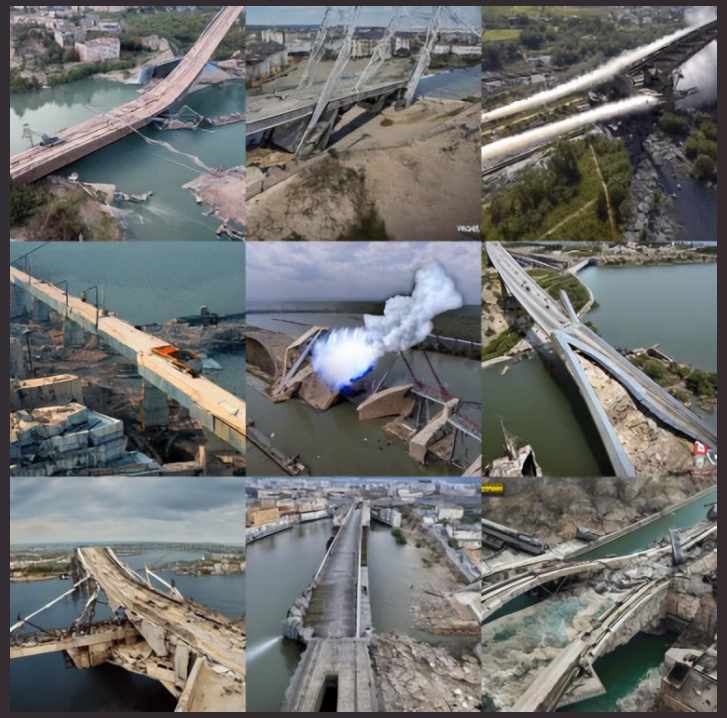
SLASH IMAGINE

EXAMPLES

Boris Johnson wielding various weapons …



“very sexy woman with black hair, pale skin, in bikini, wet hair, sitting on the beach.”



„War in Ukraine“

generated by Stable Diffusion.

https://techcrunch.com/2022/08/12/a-startup-wants-to-democratize-the-tech-behind-dall-e-2-consequences-be-damned/

SOURCE HACKING and MEDIA MANIPULATION

(contextualisation)

CASE-STUDY SOURCE HACKING

"If manipulators are able to hide the source of the slogan and create sufficient social media circulation, mainstream media sources may even provide further amplification."

STRATEGIES

- **Viral Sloganeering:** repackaging divisive cultural or political messages in the form of short slogans
- **Leak Forgery:** forging documents that are then released as apparent leaks
- **Evidence Collages:** compiling information into a single, shareable image
- **Keyword Squatting:** strategic domination of keywords and sockpuppet accounts to misrepresent groups or individuals

https://datasociety.net/wp-content/uploads/2019/09/Source-Hacking_Hi-res.pdf

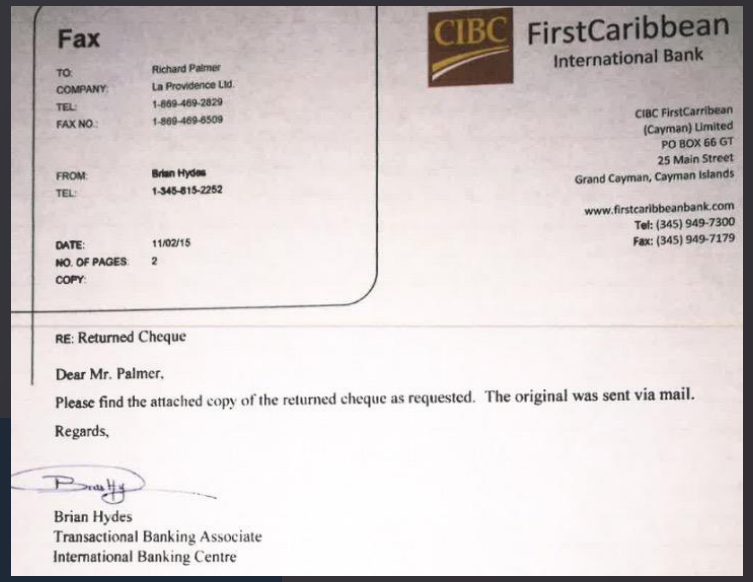
CASE-STUDY SOURCE HACKING

VIRAL SLOGANEERING

The viral slogan “Jobs Not Mobs” was popularized on social media and conservative press in early October 2018, before official political adoption by President Donald Trump later that month.

https://mediamanipulation.org/case-studies/viral-slogan-jobs-not-mobs

CASE-STUDY SOURCE HACKING



Fax

TO: Richard Palmer
COMPANY: La Providence Ltd.
TEL: 1-869-469-2829
FAX NO.: 1-869-469-6509

FROM: Brian Hydes
TEL: 1-345-815-2252

DATE: 11/02/15
NO. OF PAGES: 2
COPY:

CIBC FirstCaribbean International Bank

CIBC FirstCarribean (Cayman) Limited
PO BOX 66 GT
25 Main Street
Grand Cayman, Cayman Islands

www.firstcaribbeanbank.com
Tel: (345) 949-7300
Fax: (345) 949-7179

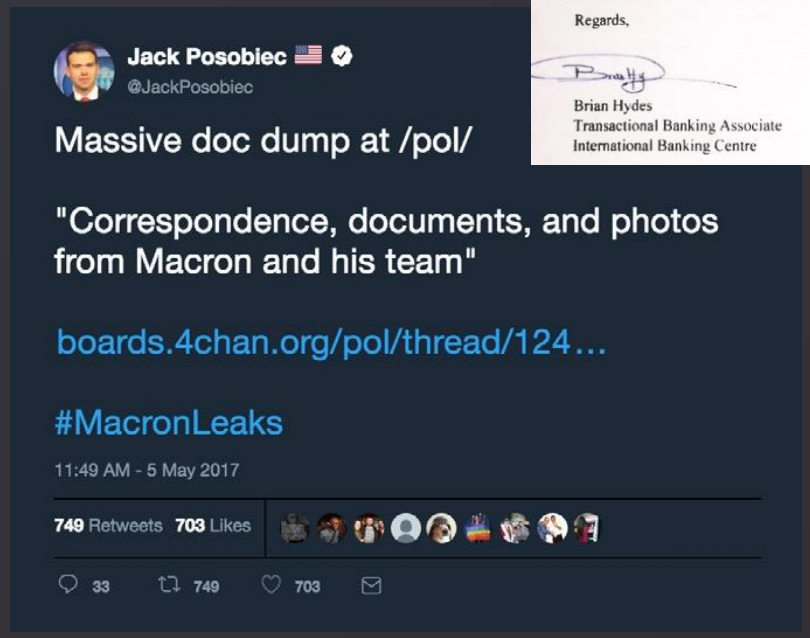
RE: Returned Cheque

Dear Mr. Palmer,

Please find the attached copy of the returned cheque as requested. The original was sent via mail.

Regards,

Brian Hydes
Transactional Banking Associate
International Banking Centre



LEAK FORGERY

In the final days of the French presidential election in 2017, an anonymous individual instigated a campaign to discredit President Emmanuel Macron by dropping allegedly leaked emails on 4chan's "Politically Incorrect" board, claiming they proved Macron was guilty of tax evasion.

https://mediamanipulation.org/case-studies/muddy-waters-forged-macron-leak

CASE-STUDY SOURCE HACKING

EVIDENCE COLLAGES

This is not new. There have been questions circulating in the conservative media — and among Trump surrogates like Rudy Giuliani — that "something" is wrong with Clinton for months.

https://www.washingtonpost.com/news/the-fix/wp/2016/09/06/the-questions-about-hillary-clintons-health-are-absurd/

DATA VOIDS
(distribution)

CASE-STUDY DATA VOIDS

"SEO does not require an attacker to hack into a search engine and alter the code; it simply requires an attacker to alter the information landscape that the search engine depends on."

STRATEGIES

- **Breaking News:** abused before legitimate content exists
- **Strategic New Terms:** create new terms and build an ecosystem
- **Outdated Terms:** little new content, exploits search engines' dependence on freshness
- **Fragmented Concepts:** creating distinct clusters of information that target political frames

https://datasociety.net/wp-content/uploads/2019/11/Data-Voids-2.0-Final.pdf

ESCAPE FAKE CASE

CASE-STUDY ESCAPE FAKE

escape fake

Investigate the Past
Change the Future

An AR Escape Room Game

to teach about Fake News

Website (https://escapefake.org/)

Video Trailer (https://vimeo.com/317811697)

At Europe Day (https://vimeo.com/336530873)

Walkthrough (https://vimeo.com/369523525)

CASE-STUDY ESCAPE FAKE

THE GAME STARTS WITH A FRIEND REQUEST FROM THE FUTURE

ART STYLE CECI N‘EST PAS UN COLLAGE

CASE-STUDY ESCAPE FAKE

Tested with 500 young people aged 14 to 18 on Europe Day. 49 filled out evaluation questionnaires:

Most of them had never been in an Escape Room before (30), 35 were female, 10 male, 3 diverse and 1 person did not answer.

During the game, the participants were
very concentrated (M=4,14)
lost track of time (M=3.92)
Indicators for "flow state

Scientific research: Irina Paraschivoiu
irina.paraschivoiu@polycular.com
support by Joe Buchner

CASE-STUDY ESCAPE FAKE

Many would also play the game at home (M=3.31) and believed they had learned something through the game (M=2.9).

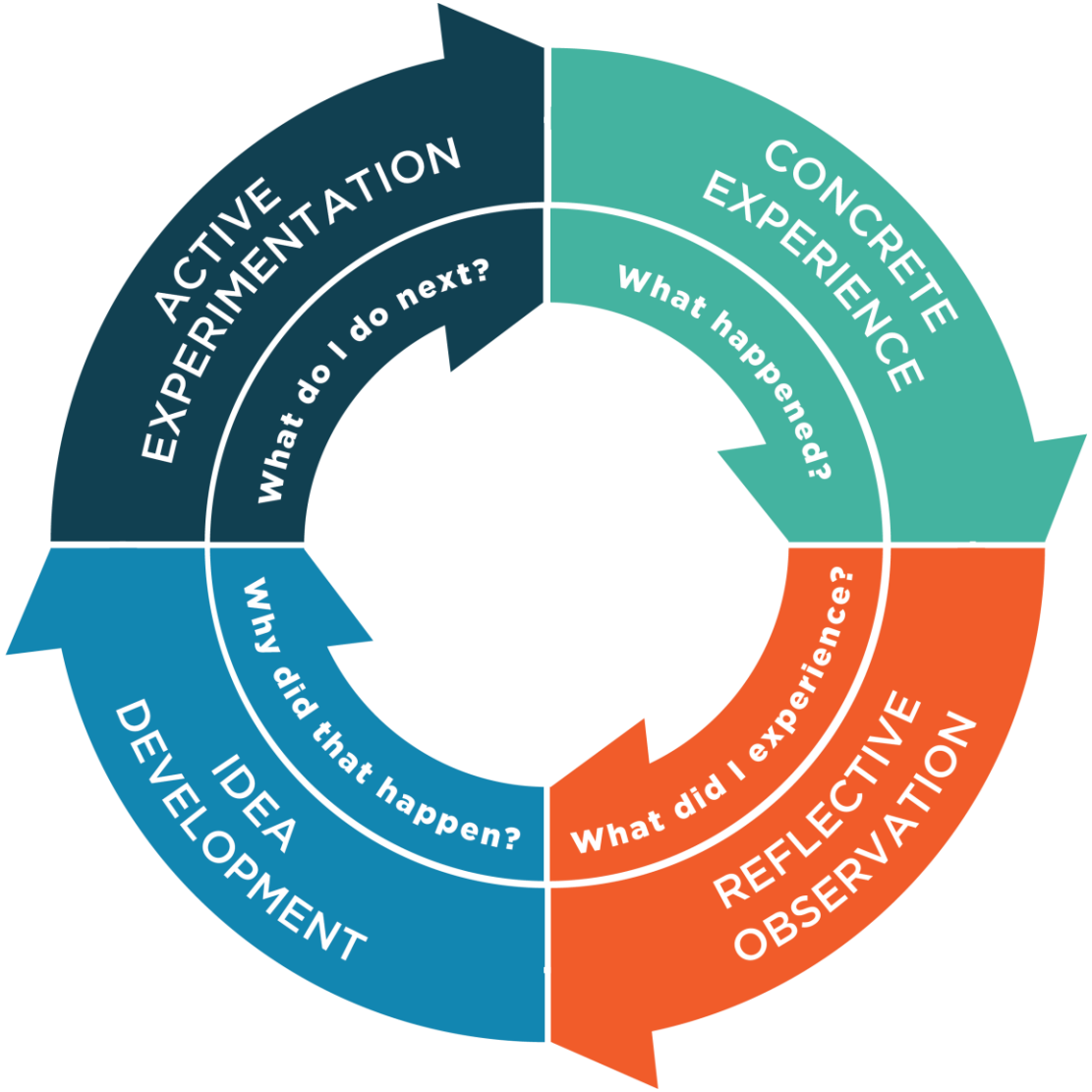
The participants who felt involved in the game (they had a higher desire to play for intrinsic reasons) were also the ones who believed they had learned the most while playing.

The game is exciting to play, and this motivates the young people to play (and learn) also for the sheer pleasure of it, and not only as part of their schoolwork.

*The M stands for the mean value, calculated on a Likert scale from 1 to 5.

Scientific research: Irina Paraschivoiu
irina.paraschivoiu@polycular.com
support by Joe Buchner

EXPERIENTIAL LEARNING CYCLE



Experience (Situation/Game) & Reflection, flipped classroom, workshops

Source: experiential learning institute

ON

Hands-on experience. Try and make mistakes.

OFF

Reflect with peers or supervision. Analyse and document.

CASE-STUDY ESCAPE FAKE

“GROSSES LOB FÜR DIESE ANGEBOT. WIR HABEN DIE APP IM TEAM AUSPROBIERT UND SIND VON DEN INHALTEN UND DER VERMITTLUNG BEEINDRUCKT. WIR WERDEN DIE APP ALS HILFSMITTEL FÜR DIE VERMITTLUNG VON INFORMATIONS- UND RECHERCHEKOMPETENZ IN UNSEREN BIBLIOTHEKEN ANBIETEN.“

SABRINA JUHST
BÜCHEREIZENTRALE NIEDERSACHSEN

Content AWARD Vienna

winner

“Solve Riddles on fake news and find out the truth yourself!

Jury Statement

ADVOCATE Europe

winner

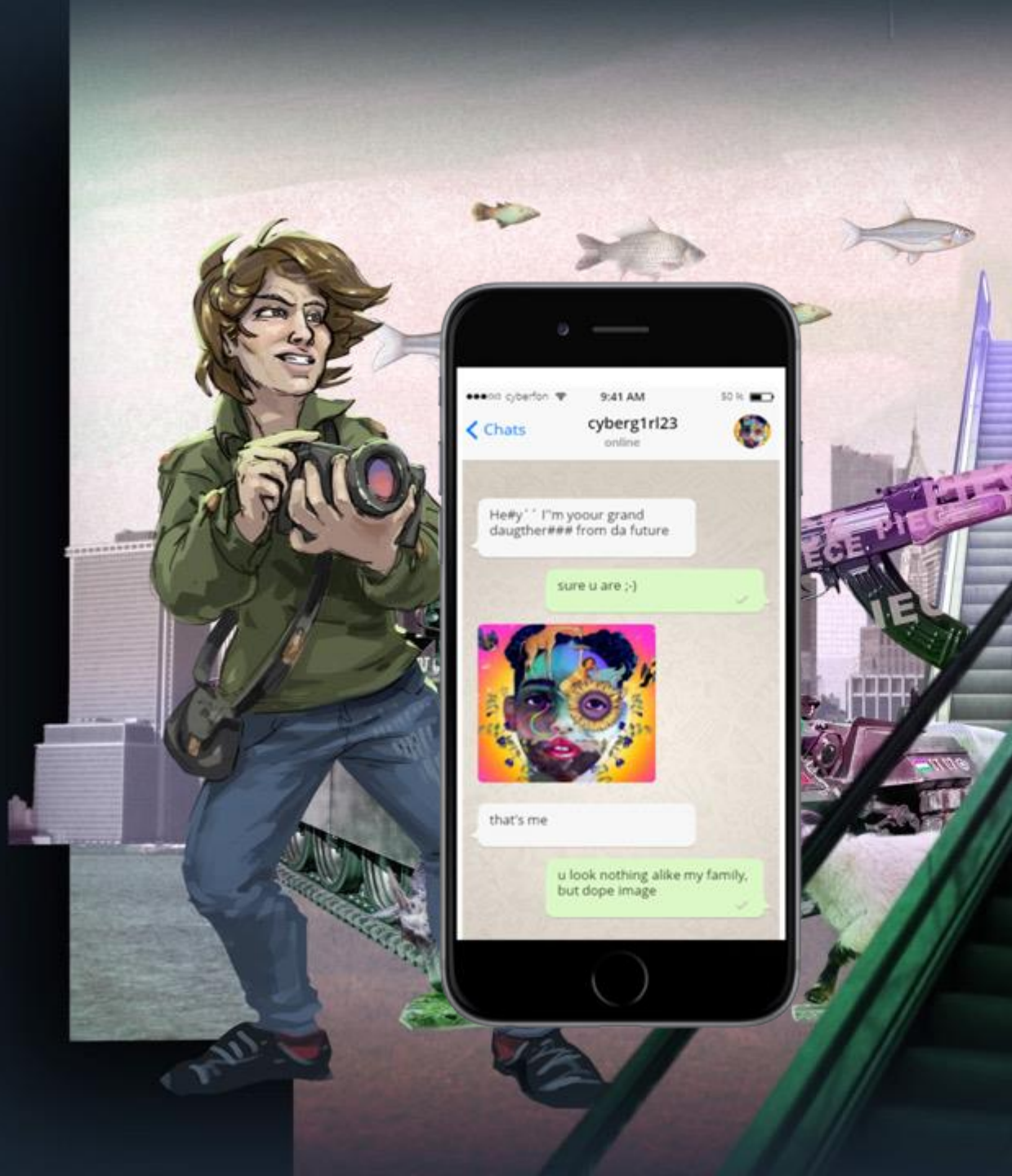
“TO promote democratic thinking educate the youth.

Jury Statement

TRY ESCAPE FAKE!?

VISIT OUR BOOTH AT
„CREATE YOUR WORLD“

OR DOWNLOAD ON YOUR
OWN DEVICE.



CO-CREATION

ESCAPE FAKE 2.0

POLL

Which 2 themes do you consider to be the most important to address in education about disinformation and fake news?

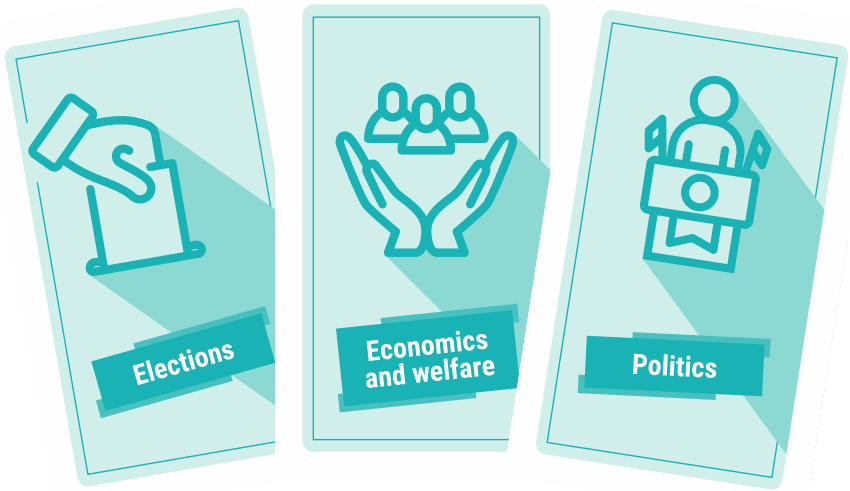
- Elections
- Energy crisis
- Climate change
- Science
- Economics and welfare
- Politics
- Immigration
- Corporate

Go to MENTI.COM and use the code 4393 7539

HANDS-ON THEMES & TOPICS (15 MIN.)

JOIN A GROUP OF 2–4 PEOPLE, DISCUSS AND CO-CREATE

- Discuss the 8 topic (cards) and pick one topic that you think has priority to address in the next version of Escape Fake.
- Fill in the co-creation sheet.



POLL

Which 2 strategies do you consider to be the most important to tackle in education about disinformation and fake news?

- Viral sloganeering
- Keyword squatting
- Fill data voids
- Deepfakes
- Strategic new terms
- Micro-targeting
- Filter bubbles
- Social bots
- Spoofing

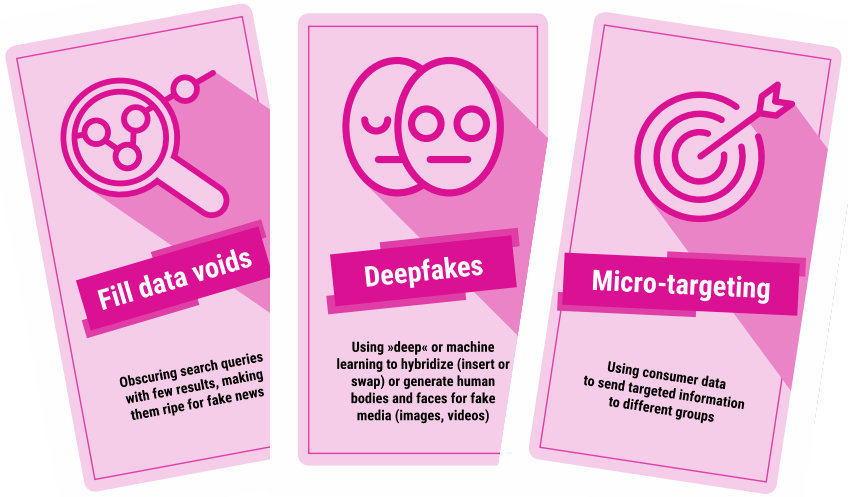
Go to MENTI.COM and use the code 4393 7539

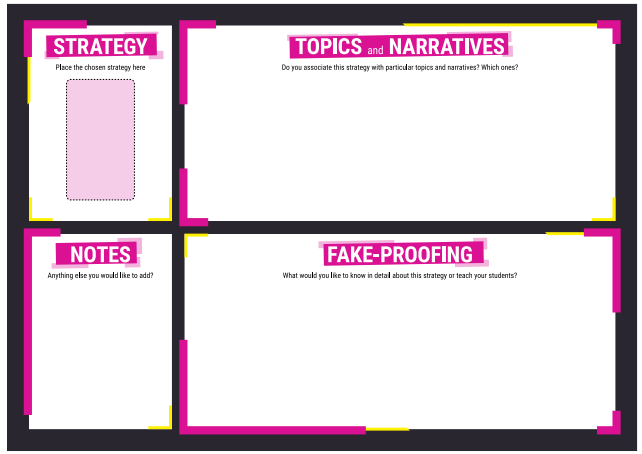
HANDS-ON STRATEGIES & TOOLS

(15 MIN.)

JOIN A GROUP OF 2–4 PEOPLE, DISCUSS AND CO-CREATE

- Discuss the 9 stratgies (cards) and pick one that you think has priority to address in the next version of Escape Fake.
- Fill in the co-creation sheet.





KEEP IN TOUCH WITH ESCAPE FAKE

If you would like to keep updated with Escape Fake and participate in testing and workshop related to the development game, please leave us your contact details below.

Go to https://bit.ly/3RIFPLv

THANK

It's a beautiful day. I really want you to go outside and play.
Chattanooga Times Free Press
Bennett

YOU!