DO ANDROIDS DREAM OF ELECTRIC COPYRIGHT?

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APOLOGIES

AI IN CREATIVITY

THE MACHINES ARE COMING!

ALL YOUR DATA ARE BELONG TO US

IMAGENET

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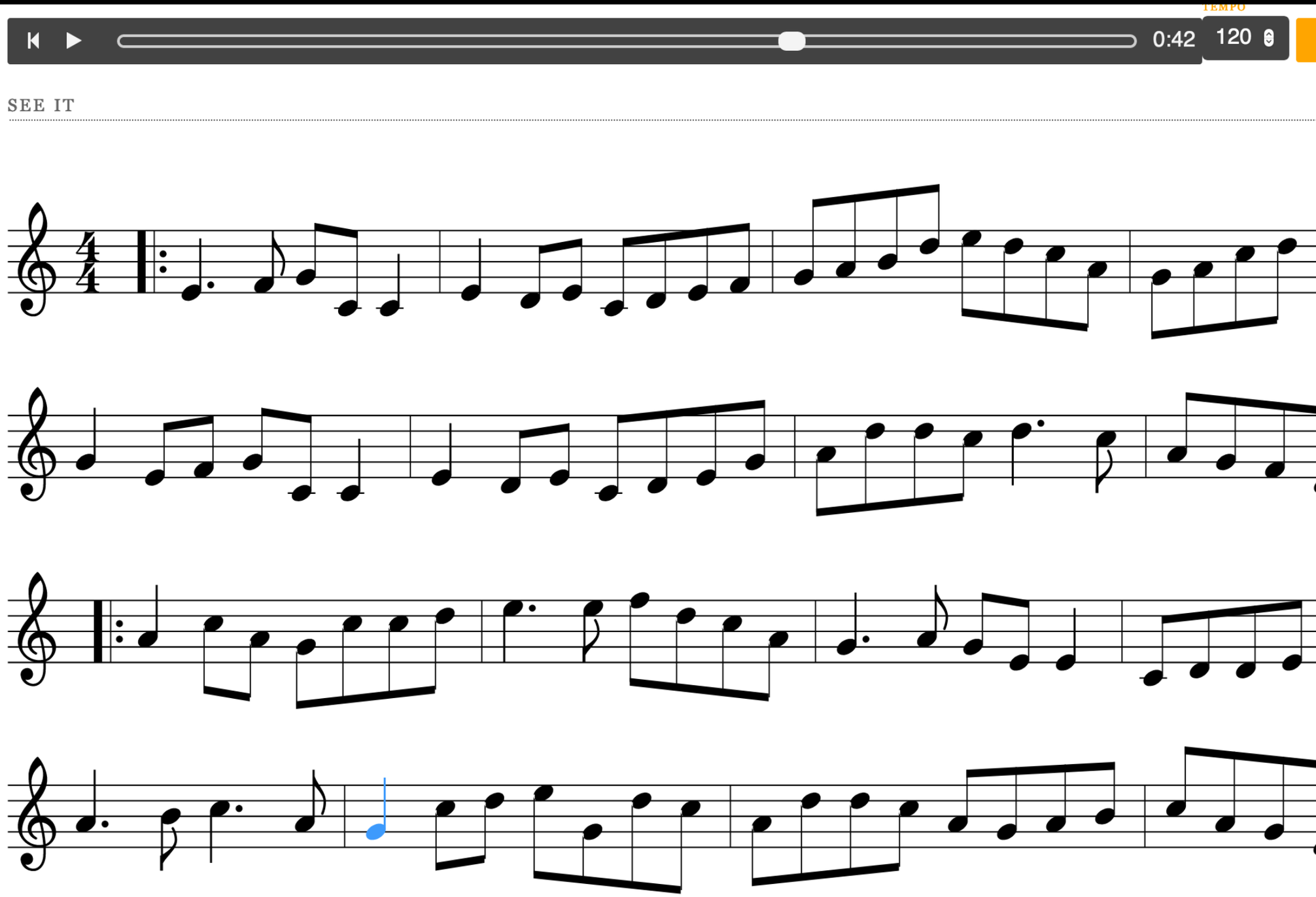
MEET BOT DYLAN



*folk*RNN

tune with a recurrent neural network

PRESS TO GENERATE TUNE

Compose

MODEL

w/ :| |:)

ATURE

SEED

718320

METER

MODE

C Major

INITIAL ABC

e in ABC notation

JUKEDECK

MACHINE MUSIC

LIBRARY MY TRACKS

CREATE A TRACK

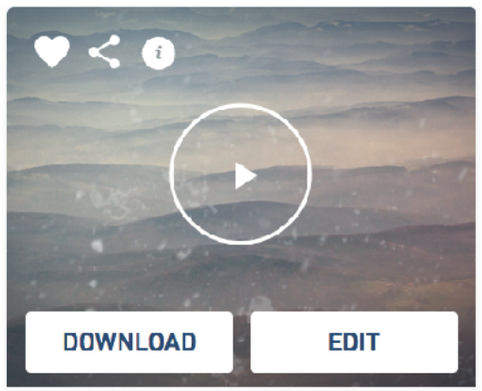
GENRE

PIANO
FOLK
ROCK
AMBIENT
CINEMATIC
POP
CHILLOUT
CORPORATE
DRUM AND BASS
SYNTH POP

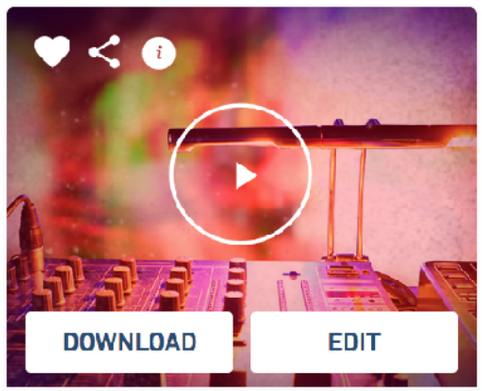
MOOD

UPLIFTING
MELANCHOLIC
DARK
ANGRY
SPARSE
MEDITATIVE
SCI-FI
ACTION
EMOTIVE
EASY LISTENING
TECH
AGGRESSIVE

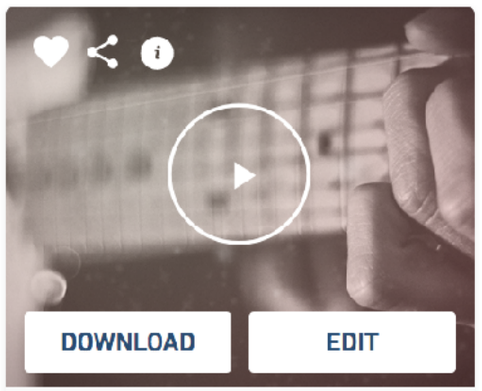
This is where you can browse our library of pre-made tracks.



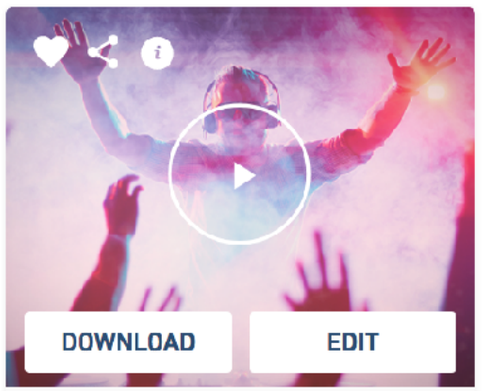
Brixton Moments
Ambient - Sparse - 1:30



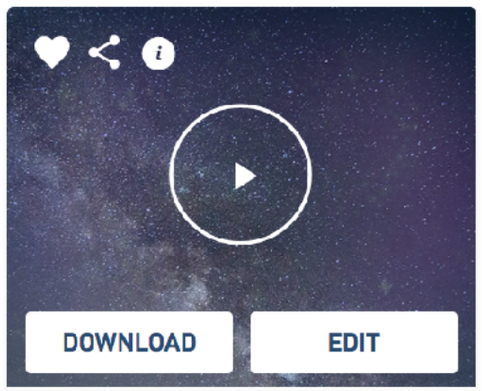
Camden Blackout
Drum and Bass - Aggressive - 1:30



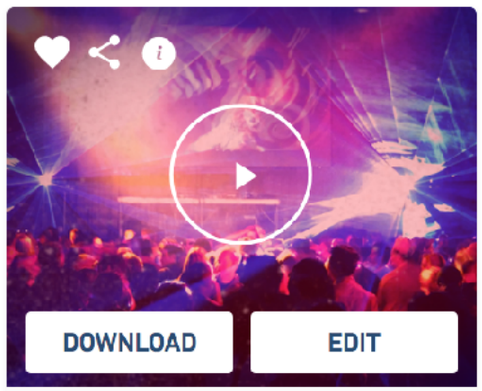
Anxious Chance
Pop - Uplifting - 1:30



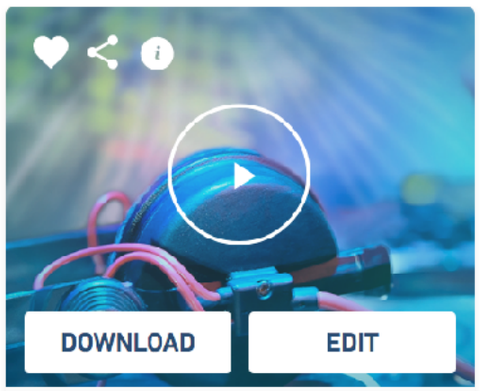
Dangerous Roots
Chillout - Uplifting - 1:30



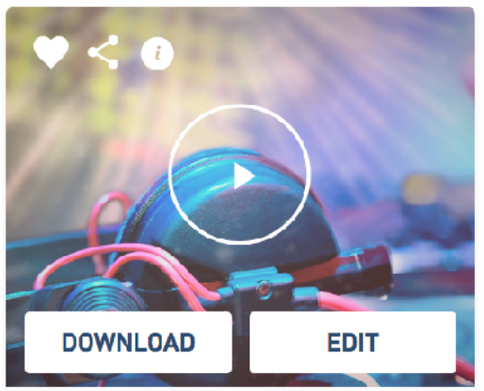
Sweet Worlds
Ambient - Meditative - 1:30



Impossible Opinion
Drum and Bass - Aggressive - 1:30



Red Direction
Chillout - Melancholic - 1:30



Scandalous Expansion
Chillout - Uplifting - 1:30

GPT-2 PREDICTIVE TEXT TOOL

ALLEN INSTITUTE *for* ARTIFICIAL INTELLIGENCE

GPT-2 Explorer

This demonstration uses the public **345M** 117M parameter OpenAI GPT-2 language model to generate sentences.

Enter some initial text and the model will generate the most likely next words. You can click on one of those words to choose it and continue or just keep typing. Click the left arrow at the bottom to undo your last choice.

Sentence:

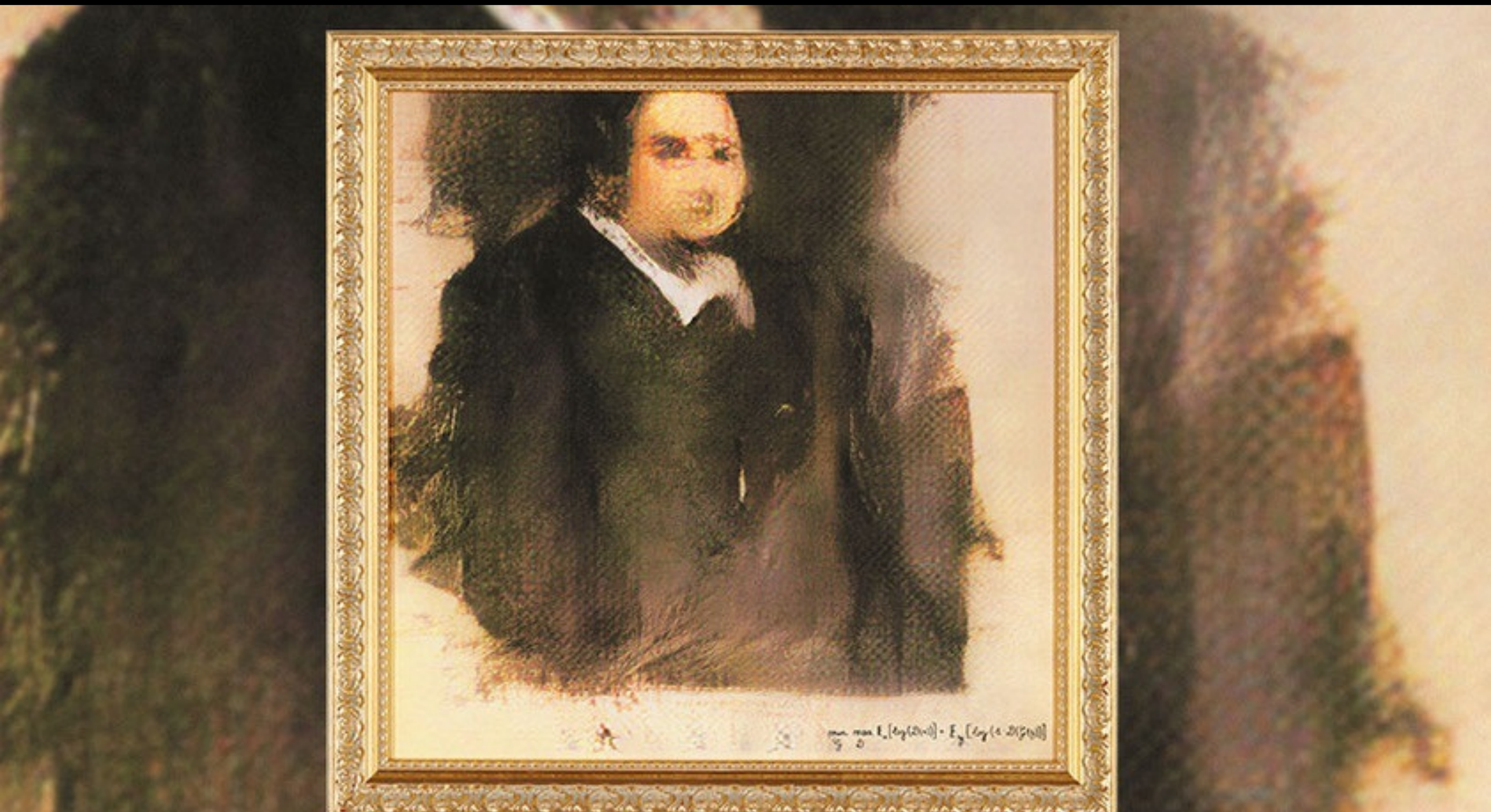
Andres is a member of the Spanish National Assembly and a member of the European Parliament.

Options:

39.1% He
19.7% ↵
7.0% <|endoftext|>
4.1% His
3.5% In
2.4% The
1.3% ↵↵
0.8% A
0.8% As
0.6% Since
← Undo

ALGORITHMIC PHOTOGRAPHY

EDMOND DE BELAMY

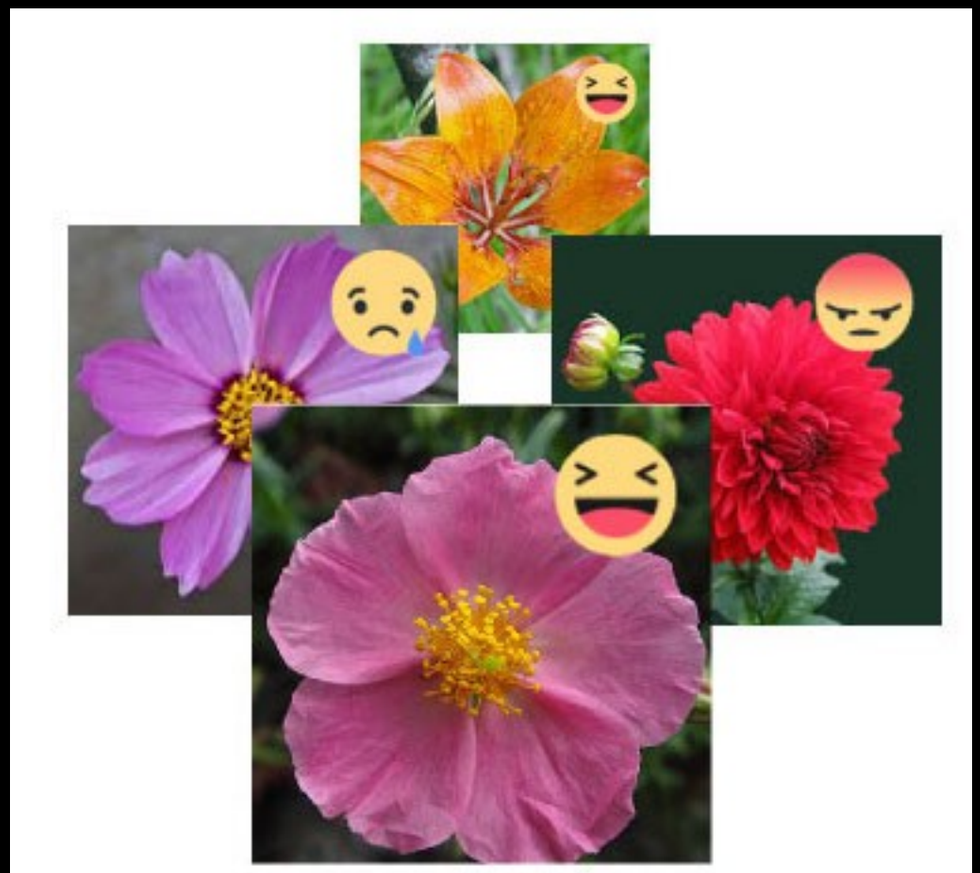


IMPOSSIBLE PEOPLE

GENERATIVE ADVERSARIAL NETWORKS (GANS)

THE TECHNOLOGY

USER INPUT

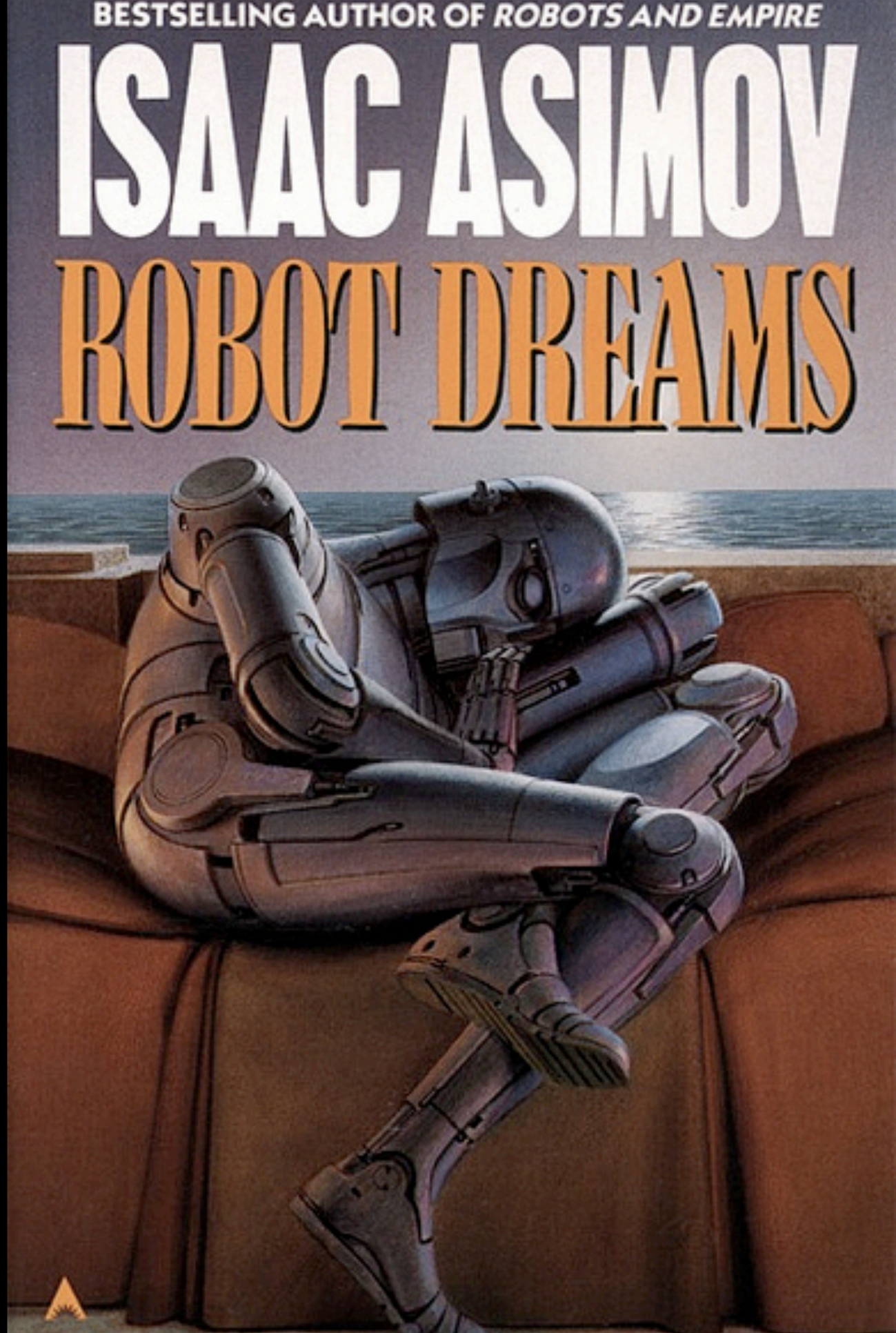


YOU MAY BE ASKING “SO WHAT?”

WHY IS IT IMPORTANT?

CREATIVE INDUSTRIES

- Procedurally-generated games.
- Journalistic pieces.
- Art.
- Music.
- Literature.



COPYRIGHT LAW

WHY DO WE HAVE COPYRIGHT?

- Natural rights
- Promote the arts
- Reward
- Incentive

SCENARIOS

- **Only humans can create copyright:** All AI works are in the public domain.
- **Sui Generis rights**. Akin to database rights, investment reward.
- **Machines can create copyright:** AI rights? Programmer?

UK LAW

S 9(3) “In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken.”

STANDING QUESTION

- Who gets the copyright? The programmer or the person who turned on the computer?
- Paper and pen analogy, pen makers do not get literary work copyright.
- Microsoft does not get copyright over everything written in Word.
- Interpretation that “whoever made arrangements” will usually mean the user.

OTHER EXPERTS HAVE SPOKEN

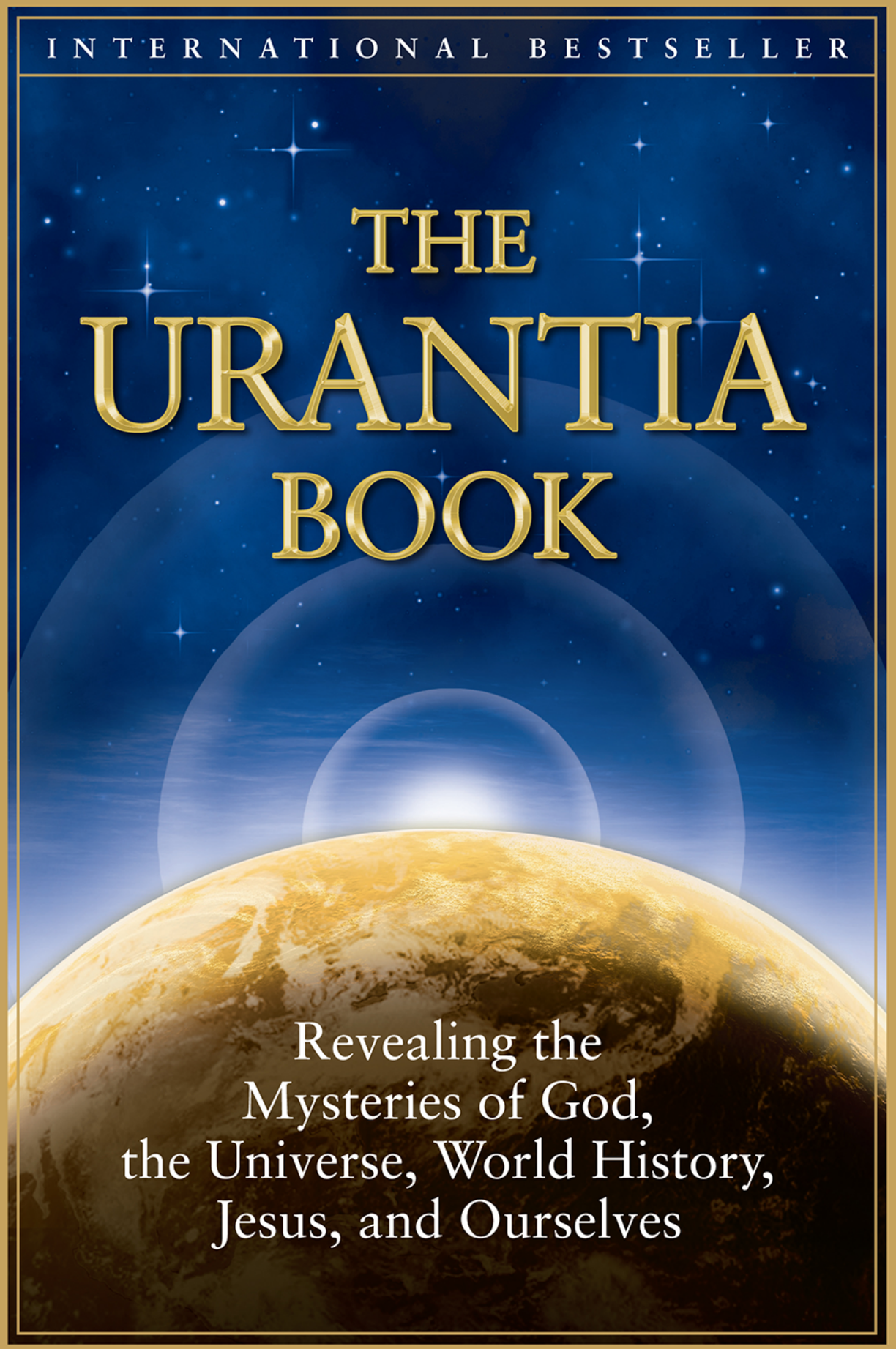
- s9(3) is a remnant of another time, intention was to clarify authorship of computer generated works, not AI.
- No person, no creativity, no “intellectual creation”. No originality.
- No case law.

US COPYRIGHT OFFICE

"In order to be entitled to copyright registration, a work must be the **product of human authorship**. Works produced by **mechanical processes** or random selection **without any contribution by a human author** are not registrable. Thus, a linoleum floor covering featuring a multicolored pebble design which was produced by a mechanical process in unrepeatable, random patterns, is not registrable."

GHOST IN THE SHELL?

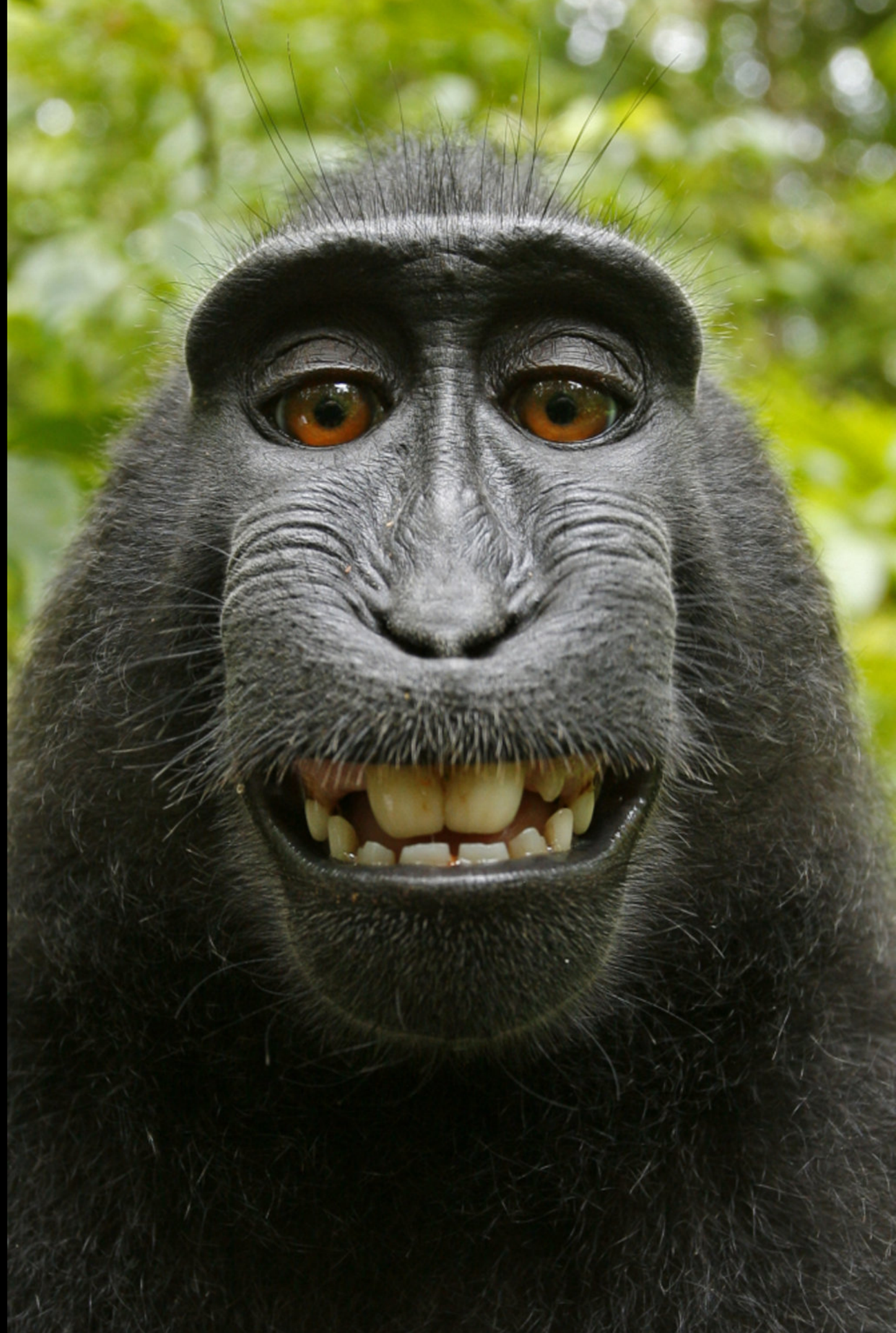
- There used to be a relatively strong case to be made towards the recognition of non-human rights in some US case law.
- Take Urantia Foundation v. Maaherra, 114 F.3d 955 (1997), where the spirit of dead aliens dictated a book, and it was argued that this work could have copyright: "copyright laws . . . do not expressly require 'human' authorship."
- Also see Jap Herron case (Mark Twain's ghost).
- Artificial solutions to fix similar issues involving spirit guides and mediums.



NARUTO V SLATER

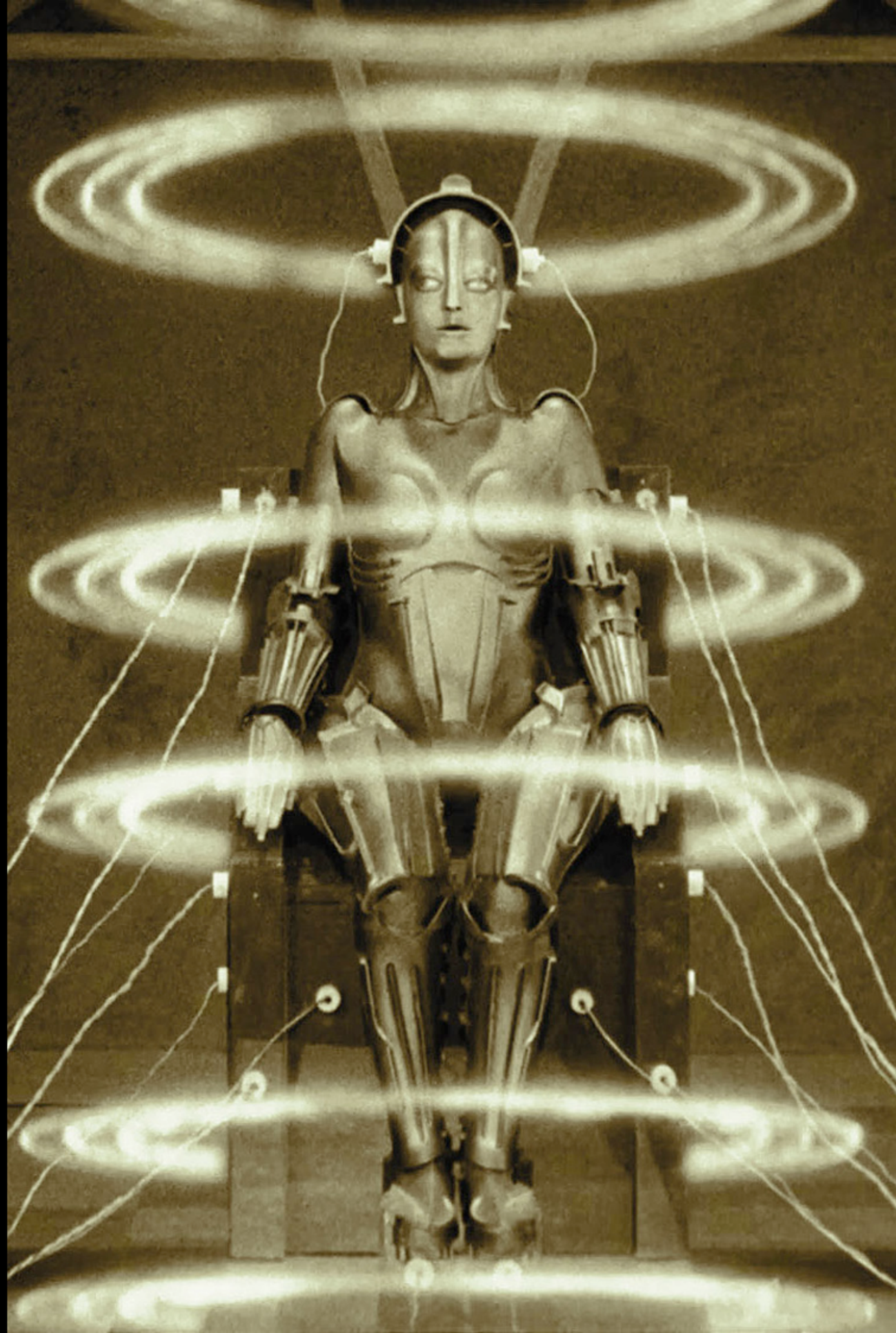
- PETA (acting as Naruto's friends), sue British photographer David Slater in a California court for copyright infringement.
- Case never deals with whether monkeys can own copyright, but rather on whether the monkey can sue at all.
- Case dismissed and appealed, then settled out of court (Naruto's wildlife refuge will receive percentage of royalties), so ownership question was not fully addressed.

Internet Policy Review: http://bit.ly/1O0qZSW



EUROPEAN LAW

- In Europe a work is original if it is “author’s own intellectual creation reflecting his personality”.
- Choice, selection of elements, composition, all may prove originality. (Infopaq, Painer cases).
- Unclear if setting parameters and algorithms would be enough.



JAPAN

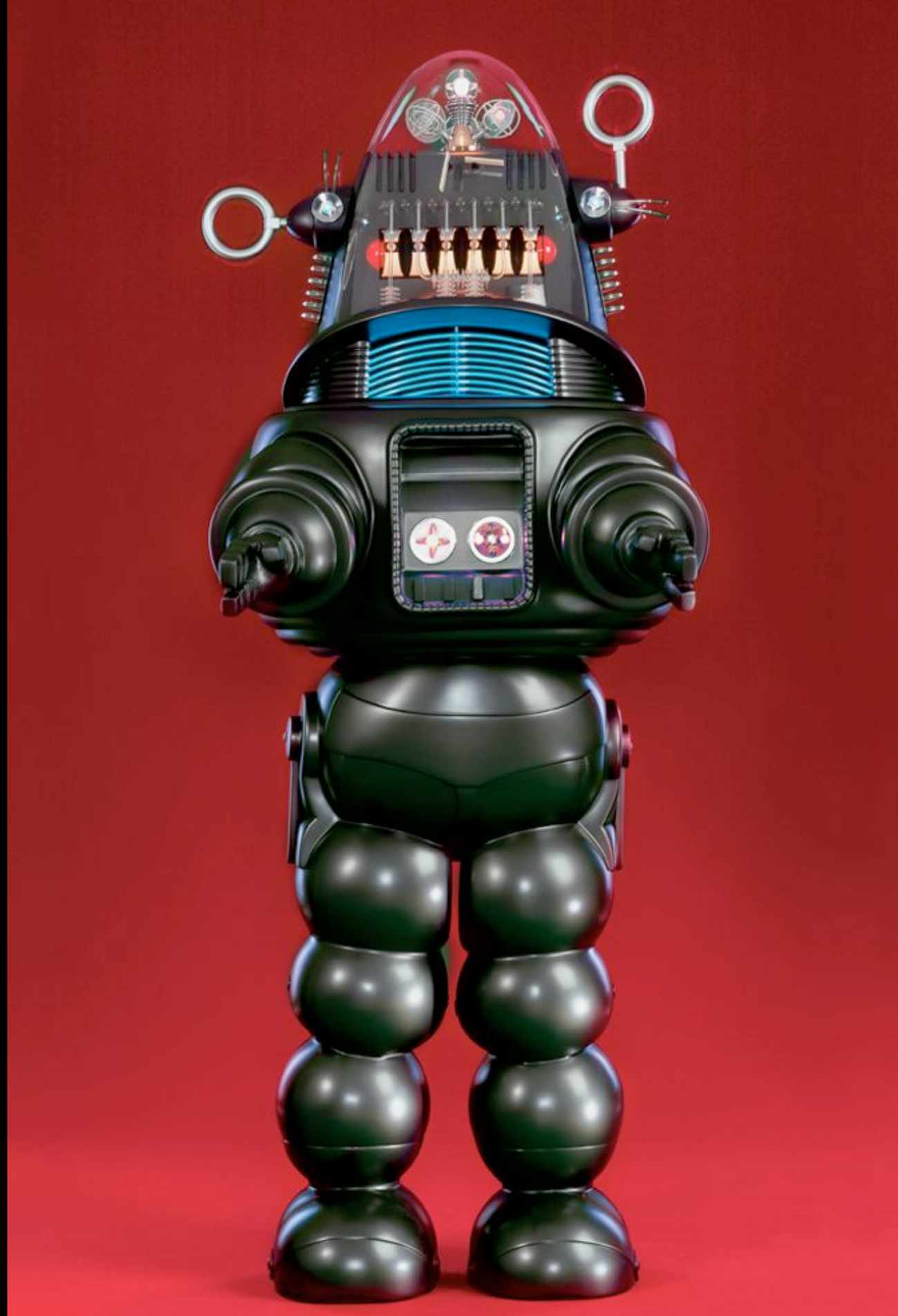
- “person” required under current law.
- Intellectual Property Strategic Program 2016 and 2017 includes overhaul to copyright law (not implemented yet).
- Computer-generated works given similar treatment to UK.
- However, not all works to be protected, only works with significant economic impact to be given protection.

AUSTRALIA

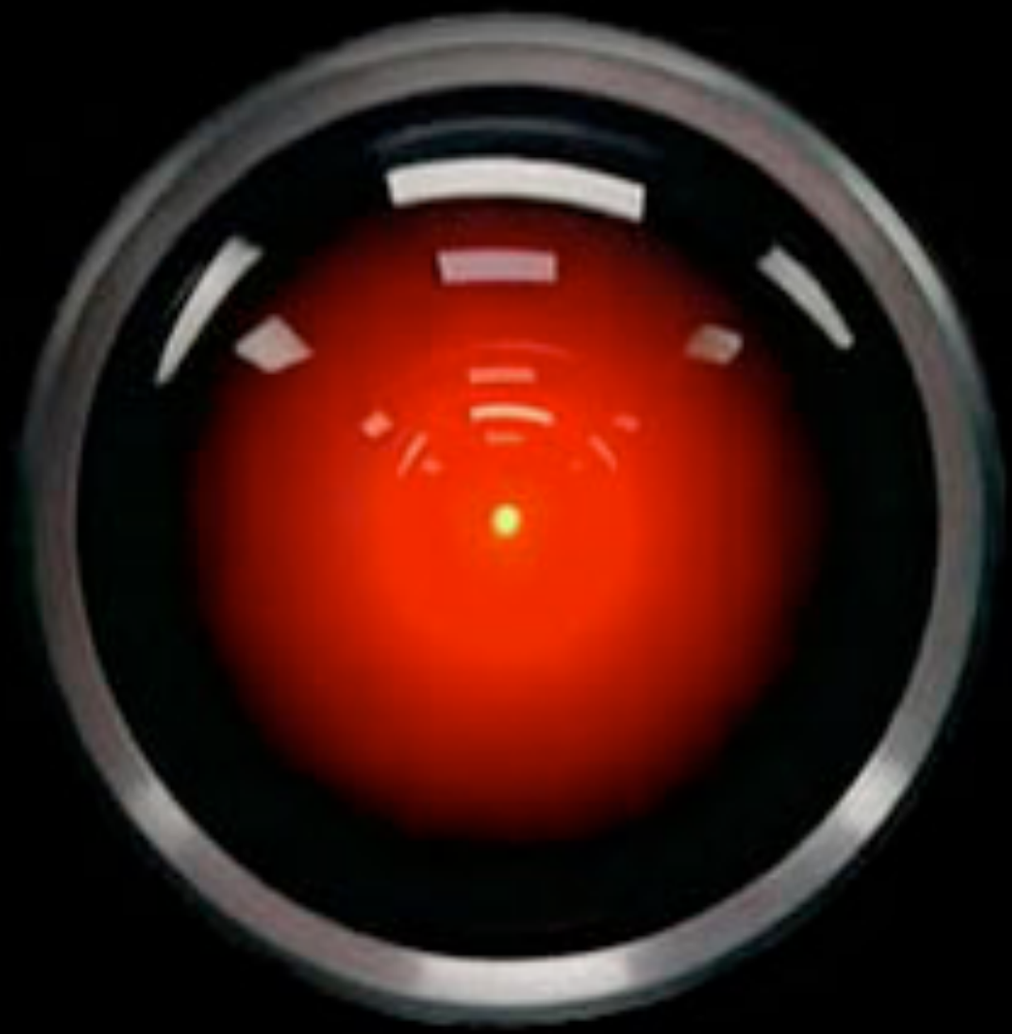
- Acohs Pty Ltd v Ucorp Pty Ltd [2012] FCAFC 16.
- HTML source code for some data sheets were generated by a computer program. Question arose whether the code can be protected by copyright as original work.
- In first instance judge found that the code was “not the work of any one human author”.
- Federal Court agrees that there’s no copyright as there’s no human author.

OPTIONS FOR AI COPYRIGHT

- No copyright due to no originality/creativity.
- No registration.
- Make UK's approach more widely used, programmer gets copyright.
- Take a wider approach: "copyright laws . . . do not expressly require 'human' authorship." Urantia Foundation v. Maaherra (1997).
- Artificial Intelligence rights?



	PUBLIC DOMAIN	SUI GENERIS	COMPUTER GENERATED WORKS
WHERE?	CONTINENTAL EUROPE/USA? AUSTRALIA	JAPAN?	UK
ORIGINALITY	INTELLECTUAL CREATION / CREATIVITY	ECONOMIC TESTED	SKILL AND LABOUR
EFFECT	¯_(ツ)_/¯	¯_(ツ)_/¯	¯_(ツ)_/¯

The mech shall inherit the Earth

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