

A COPYRIGHT DEBATE



Process and machine creation versus human authorship

WHAT ARE WE DOING HERE?



The history of music processes and its similarities with AI machine creation



Modern day examples of AI



Copyright in AI, looking forward and (maybe) assigning ownership



Dialing AI copyright back considering authors



**A BRIEF HISTORY OF COMPOSITIONAL AND
RECORDING TECHNIQUES THAT FORESHADOW AI
MUSIC**

CHARACTERISTICS OF MUSIC MADE WITH AI

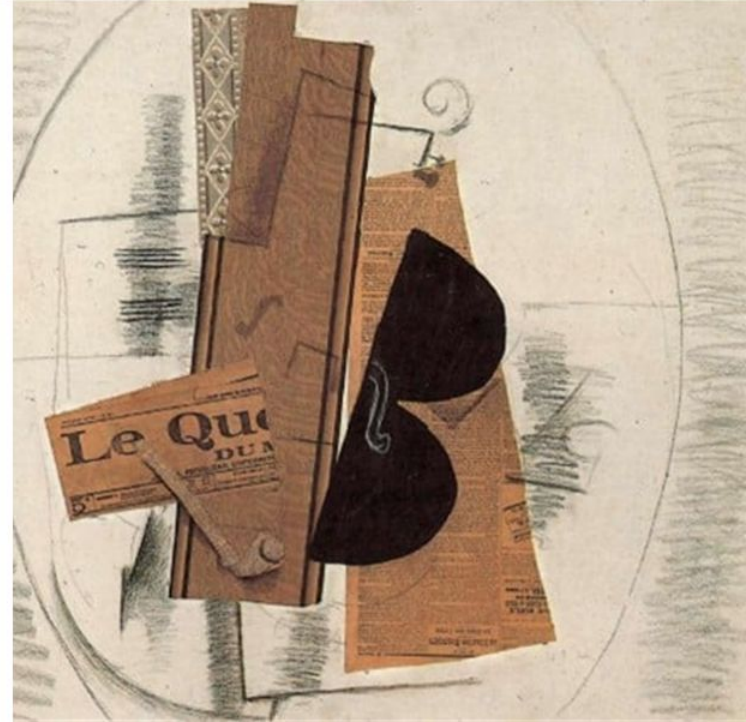
Accessibility

Lack of control
in finished
product

Use of
previously
recorded work

COLLAGE COLLAGE COLLAGE COLLAGE

- George Braque and Pablo Picasso – 1912
- First collage techniques used soon after invention of paper



Braque, Still Life BACH, 1912



PROCESS MUSIC

- Steve Reich: “pieces of music that are, literally, processes. The distinctive thing about musical processes is that they determine all the note-to-note (sound-to-sound) details and the overall form simultaneously. (Think of a round or infinite canon.)”
- Roots in serialism - Schoenberg - series of pitches or tones pre-determined by some rule, one after the other (twelve tone technique)

PROCESS MUSIC CONT.

Michael Nyman has identified five types of process:

1. **Chance determination processes**, in which the material is not determined by the composer directly, but through a system he or she creates
2. People processes, in which performers are allowed to move through given or suggested material, each at his or her own speed
3. Contextual processes, in which actions depend on unpredictable conditions and on variables arising from the musical continuity
4. **Repetition** processes, in which movement is generated solely by extended repetition
5. **Electronic processes**, in which some or all aspects of the music are determined by the use of electronics. processes take many forms.

Additional category proposed by a more recent composer (Galen H. Brown) - **Mathematical processes** - manipulation of material by addition, subtraction, multiplication, etc...



“Prozession” “Kurzwellen” “Spiral”

MUSIQUE CONCRETE/SCHAEFFER AND SOCKHAUSEN



**IMPROVISATION/TEO
MACERO**

THROBBING GRISTLE – “STILL WALKING”

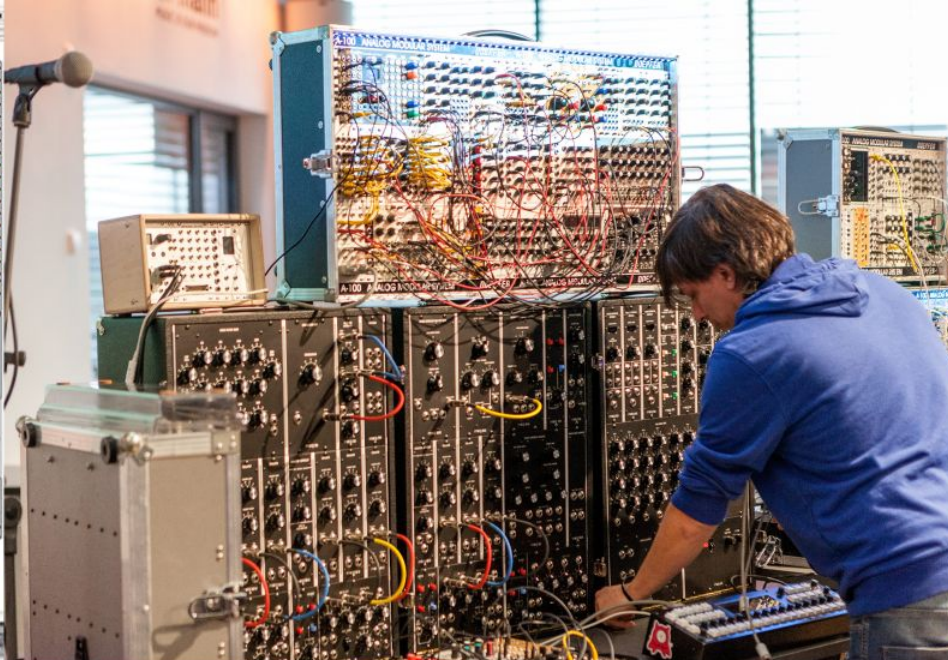
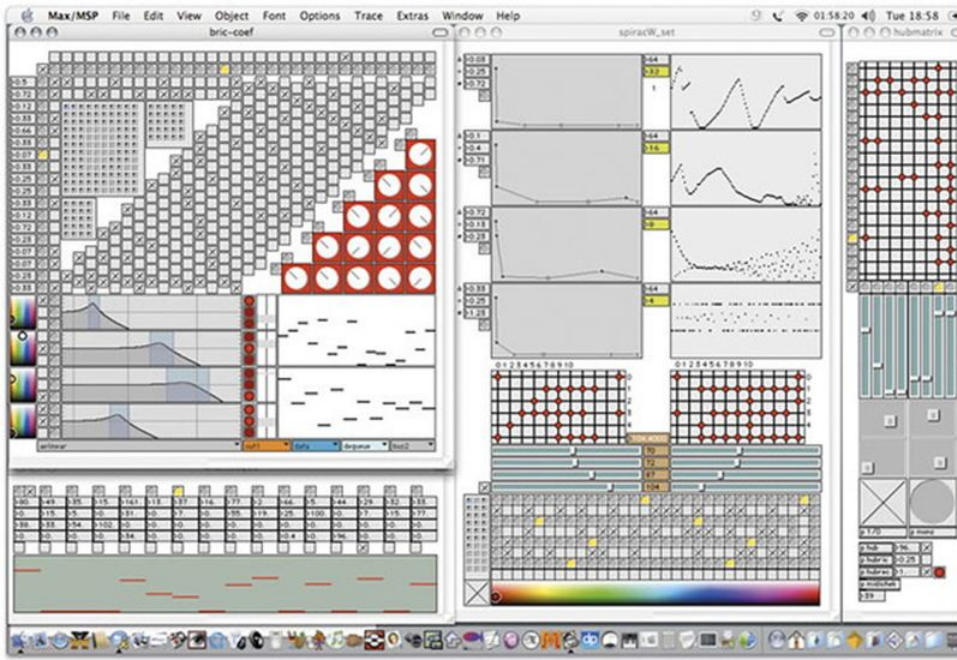
20 Jazz Funk Greats



- Non-linear lyric – each member repeats an individual poem at different times
- The song is in a sense, contentless – but at the same time, the process itself becomes a formal element of the music, not merely a part of it's genesis – the random juxtapositions essentially make a dialogue within itself
- Contrast studio recording vs. live on *Heaven Earth* - completely different songs - same in name only
 - The song IS the process

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

<https://www.youtube.com/watch?v=qeFNPV3Ut54&list=PLMMTrEN3GJc67GP1Nmm3E1R6zIkmgN1I&index=6>



MODULAR SYNTHESIS/MAX MSP/AUTECHRE

<https://youtu.be/3poN6FDyB28?si=SvDc60bMdHchs4FB>

SO, WHAT CHANGES?

Ease/accessibility

- Incentives for major label shift?

Technological veil – “a black box”

Ethical concerns?

- If AI is training on your data, but you have sold your copyrights, is there room for objection?
















<https://artistsrightsnow.medium.com/200-artists-urge-tech-platforms-stop-devaluing-music-559fb109bbac>

The big question: where is the line? Are compositional techniques that have existed for decades now considered “new” because the algorithms are made by companies selling them as “AI software,” whereas previously such algorithms were often self-devised?



AI Singer Library

Top-quality royalty-free voice generators for any kind of project.

| | | | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|  Male Classic Rock |  Female Traditional Pop |  Female Rock/Pop |  Male Afro Beat |  Male Americana |
|  Male Punk Rock |  Male Chicago Drill |  Male British Pop |  Male Gritty Rock |  Male RnB |
|  Female Indie/Alternative |  Female Gospel |  Male Hindi |  Male Pop |  Male Rap |

write me a song about how Law 423 is the best class in law school..|





Michael Jackson - Starboy (AI Cover)



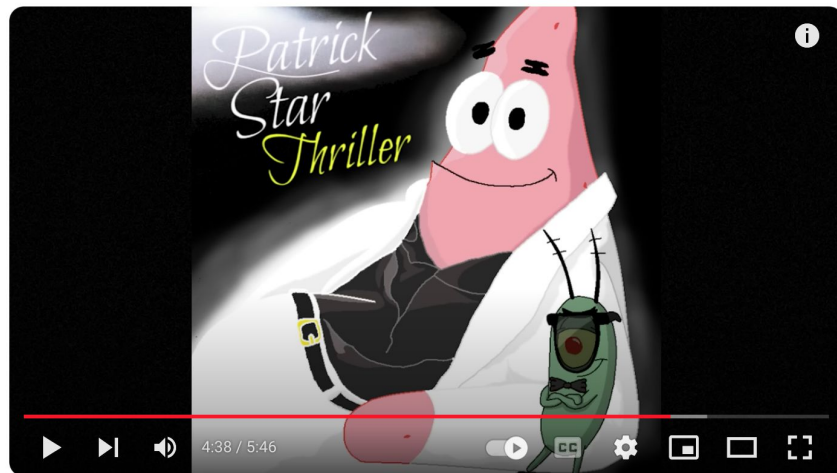
Voice of MJ
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873



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Patrick Star - Thriller feat. Plankton (AI Cover)



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Select a voice

ARTIST VOICES INSTRUMENTAL VOICES MY VOICES SAVED VOICES

VOICE RANGE GENRE

- 50s Pop Rock
- Male Smooth Pop
- Male Spoken Pop
- Male Alternative Rock
- Female One-Wrap Pop



Can you name the famous voice?



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Taylor Swift News  @TSwiftNZ

This new song is UNBELIEVABLE!



I Fooled the World with a Fake Taylor Swift Song

492K views • 8 months ago



Jack Gordon 

Ai man Get House of Memories by Panic! At The Disco and over 1M + main
<https://go.lickd.co/Music License ID: ...>

4K



‘Deepfake’ music start-up Voicify in copyright row

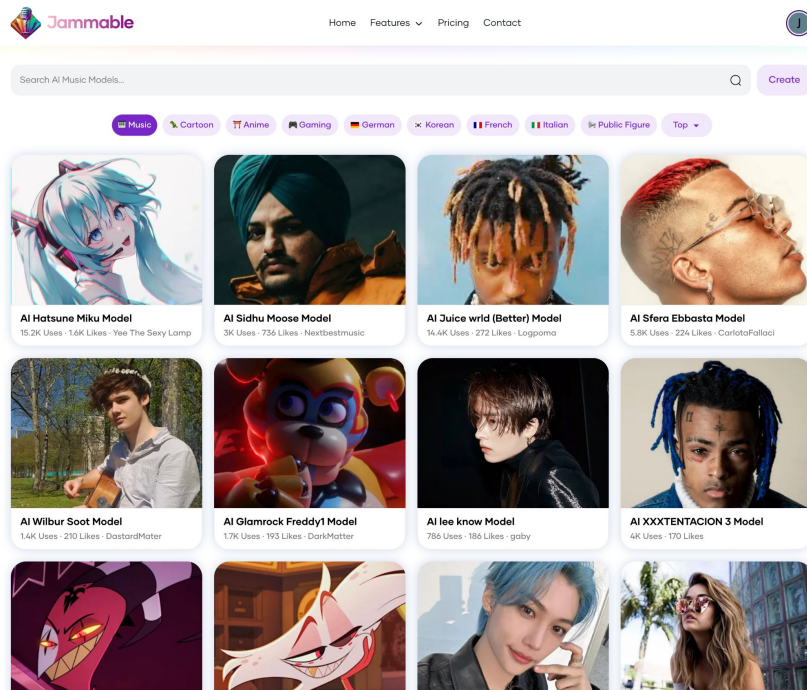
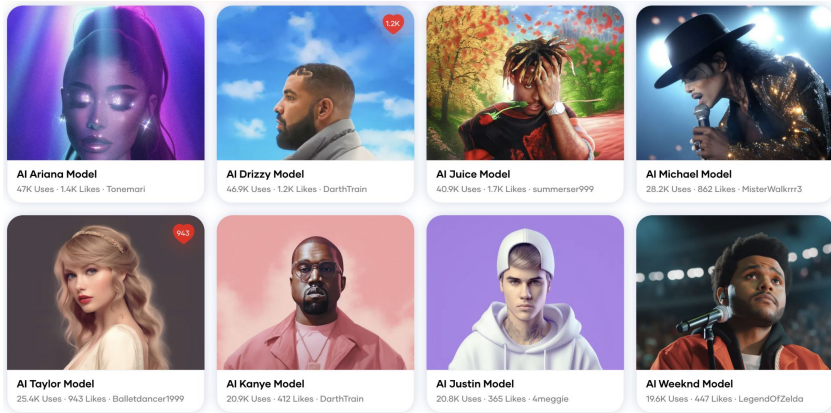
UK trade association BPI threatens to sue company behind Jammable, which produces songs that imitate voices of Amy Winehouse, Rihanna and Drake



We ask you, the leaders of AI, to mitigate the damage to our profession by taking the following steps:

1. Obtain permission for use of our copyrighted material in your generative AI programs.
2. Compensate writers fairly for the past and ongoing use of our works in your generative AI programs.
3. Compensate writers fairly for the use of our works in AI output, whether or not the outputs are infringing under current law.

The Result? Before and After

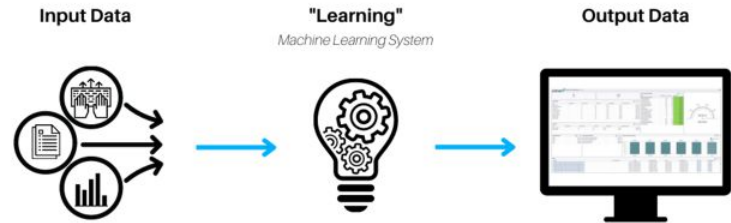




COPYRIGHT CONSIDERATIONS FOR AI-GENERATED WORKS

POTENTIAL COPYRIGHT CONCERNS WITH AI

- Potential for infringement during AI training processes
- Potential for authorship conflict in works generated by AI
- Infringement by AI in generating new works



INFRINGEMENT DURING TRAINING PROCESS?

Text and Data Mining pulls material from copyrighted sources

- Should this be considered infringement?

Temporary Reproductions for Technological Processes

Temporary reproductions

30.71 It is not an infringement of copyright to make a reproduction of a work or other subject-matter if

- (a) the reproduction forms an essential part of a technological process;
- (b) the reproduction's only purpose is to facilitate a use that is not an infringement of copyright; and
- (c) the reproduction exists only for the duration of the technological process.

Exceptions

Fair Dealing

Research, private study, etc.

29 Fair dealing for the purpose of research, private study, education, parody or satire does not infringe copyright.

R.S., 1985, c. C-42, s. 29; R.S., 1985, c. 10 (4th Supp.), s. 7; 1994, c. 47, s. 61; 1997, c. 24, s. 18; 2012, c. 20, s. 21.

INFRINGEMENT DURING TRAINING PROCESS CONT'D

If this is infringement, should it be covered by fair dealing?

INFRINGEMENT DURING TRAINING PROCESS CONT'D

• Fair dealing factors to consider:

- *CCH v LSUC* 2004 SCC 13
 - Purpose
 - Character
 - Amount
 - Alternatives
 - Nature of the work
 - Effect on the work



INFRINGEMENT DURING TRAINING PROCESS CONT'D

Canada's position?

- Tech sector, scholars, users in favor of no required authorization
- Creatives against any other exceptions/amendments to the *Act*
 - Want options for licensing for training

Other jurisdictions?

- Broad exceptions in place in Japan, Singapore
- Narrower exceptions in Switzerland and UK
- US no exception, but appeal courts support training as fair use

Does this seem right to you?

AUTHORSHIP COMPLICATIONS

- Entities with possible authorship rights:
 - AI user
 - AI programmer
 - AI natively
- Relative level of autonomy of the AI
 - Increased human input - AI is a tool and *user has copyright*
 - Highly autonomous AI - less clear



AI PROGRAMMER'S CLAIMS TO AUTHORSHIP IN COPYRIGHT

Works in which Copyright may Subsist

Conditions for subsistence of copyright

5 (1) Subject to this Act, copyright shall subsist in Canada, for the term hereinafter mentioned, in every original literary, dramatic, musical and artistic work if any one of the following conditions is met:

(a) in the case of any work, whether published or unpublished, including a cinematographic work, the author was, at the date of the making of the work, a citizen or subject of, or a person ordinarily resident in, a treaty country;

How tailored is the training?

How fixed is the AI algorithm?

Potential conflict with user's claim to authorship

AI AS AUTHOR?



- *Copyright Act* in Canada does not specify that an author needs to be a “natural person” or human
 - Case law supports that this should be the case
- US case law indicates that copyright is limited to “original intellectual conceptions of the author”

The background of the slide is a painting of a stone archway in a lush garden. The archway is made of grey stone and is surrounded by dense green foliage and purple flowers. A path leads through the archway towards a bright, hazy landscape. The overall style is that of a classical landscape painting.

US COPYRIGHT OFFICE POSITION

- Stephen Thaler algorithm the “Creativity Machine” created picture with minimal human input
- US Copyright Office denied the AI copyright in its own work
- Federal Court found in favour of the USCO.
 - Human authorship is a necessary standard

CANADIAN BAR ASSOCIATION POSITION



THE CANADIAN
BAR ASSOCIATION

L'ASSOCIATION DU
BARREAU CANADIEN

- *Copyright Act* doesn't explicitly say that an author must be human
- Copyright expiring 70 years after the death of the author suggests a human author
- Citizenship/residency requirement in s.5(1)(a) also supports a human author as a requirement
- Current stance is that AIs cannot be the author of a work

SEPARATE LEGAL IDENTITIES FOR AIs

Non-human personhood rights recognized in corporations

Salomon v Salomon

First recognition of separate legal identity for corporations

Can enter into contracts, hold property (including intellectual property), and sue or be sued.

What about AIs being non-human entities with personhood rights?

SEPARATE LEGAL IDENTITY FOR AIS: ESTONIA

- Studying liability related to autonomous driving
- Algorithmic liability concept
- Considering giving separate legal status to algorithms for liability purposes

Backup driver for self-driving Uber that killed Arizona pedestrian pleads guilty

Rafaela Vasquez pleads guilty to endangerment in the first deadly crash involving a fully autonomous car



US National Transportation Safety Board investigators examine a self-driving Uber vehicle involved in a fatal accident in Tempe, Arizona, on 20 March 2018. Photograph: Reuters

The backup Uber driver for a self-driving vehicle that [killed a pedestrian in suburban Phoenix](#) in 2018 pleaded guilty on Friday to endangerment in the first deadly crash involving a fully autonomous car.

SEPARATE LEGAL IDENTITY FOR AIS: ESTONIA

- “Kratt” model
- Metaphor from Estonian mythology
- Treasure bearer to do your bidding
- Deal with the Devil - provide 3 drops of blood as part of the deal



SEPARATE LEGAL IDENTITY FOR AIS

- Sophia Robot
- Saudi Arabian citizenship





特別住民票

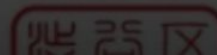
| | |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 氏名 | 渋谷 みらい |
| 住所 | 渋谷区宇田川町1丁目 |
| 生年月日 | 平成22年4月28日 |
| 住居の種別 | 住居 9月1日 |
| プロフィール | <ul style="list-style-type: none">7歳、小学1年生の男の子趣味は、写真撮影と人間観察。人とのおしゃべりが大好きです。みなさんのおかげで、東京に住むことができています。 |



SEPARATE LEGAL IDENTITY FOR AIS

- Shibuya Mirai chat bot
- Programmed to be 7-year-old boy
- Granted residency status in Tokyo

渋谷



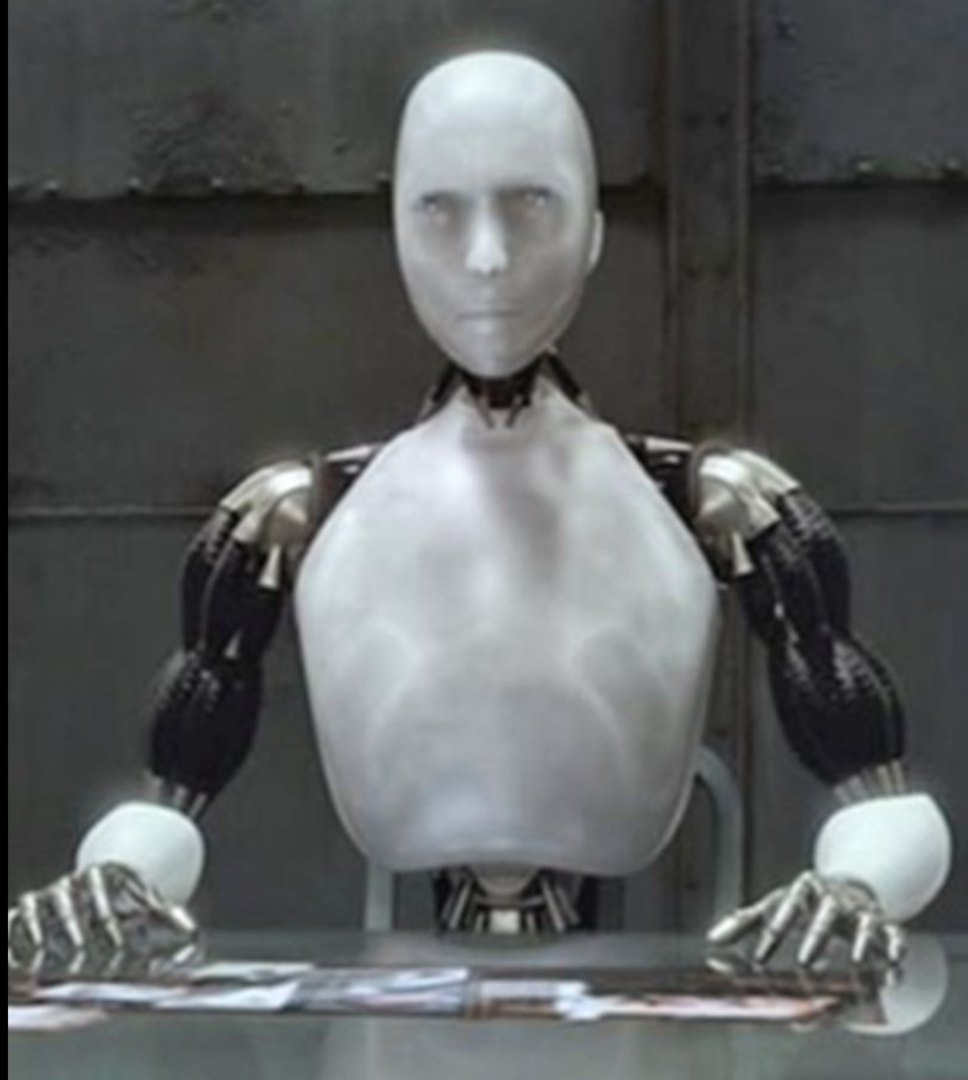
SPECTRUM OF AI RIGHTS

- Degree of autonomy vs. human input

Normative question - should AIs have rights in their output?

- Implications for the fundamental purpose of copyright

AI generated works part of the *public domain*?







BUT

What about the rights of creators?

THE CURRENT DISCOURSE



"There's
no reason to
learn Latin
these days, it's
not relevant."



"quid pro quo"

"et cetera"

~~"Non doctor, sed meliore doctrina imbutus"~~

Ad nauseam

Need to focus on the AI we *actually* have

Internet scraping – of other people's works

- Google Assistant example

Economic rights – *ad nauseam*

THE BASICS

Economic rights under copyright

- Right to make reproductions
- Right to profit off the work

Infringement

- If you do anything that only the copyright owner has the right to do
- Reproduction – must be substantial in quality.

Moral Rights??



WHAT ARE MORAL RIGHTS?

s.17.1(1) of the Copyright Act:

Creators of works have the right to:

1. Integrity
2. Association, and
3. Anonymity

Cannot be transferred but can be waived via contract (17.1(2) CRA)

A pink inflatable ring floats in the center of a swimming pool. The water is clear and blue, with ripples and reflections on the surface. A dark lane line is visible at the top of the frame. The text 'MORAL RIGHTS INFRINGEMENT CANNOT BE SAVED BY FAIR DEALINGS.' is overlaid in white, bold, sans-serif font across the lower half of the image.

**MORAL RIGHTS INFRINGEMENT CANNOT
BE SAVED BY FAIR DEALINGS.**

APPLY

APPLY

APPLY



#1 – Using Taylor Swift’s model without saying it is her.

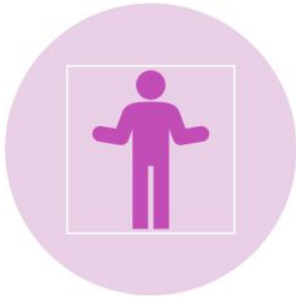
Was Taylor’s right of attribution infringed because her lyrics or song structure was used in the data processing and then were not mentioned when disseminating the alternate song?



#2 – The jingle – what if it’s not Tswift’s favourite course?
OR trying to pass it off as her work – detriment of her rep?

Was her right of integrity infringed?

BIG PROBLEMS



**DIFFICULT TO PROVE IT IS
SUBSTANTIALLY YOURS**



**INTERJURISDICTIONALITY OF
AI SYSTEMS AND COPYRIGHT**



**WHO TAKES ON THE
INFRINGEMENT?**

DISCUSSION QUESTION

Do you think there is a way to update the Copyright Act which would further protect authors with moral rights from AI infringements?

Or should we follow other jurisdictions and allow exceptions for AI data collection and ignore author's copyrights?

