

# **Creative inputs / outputs**

**ML Meetup vol 2**

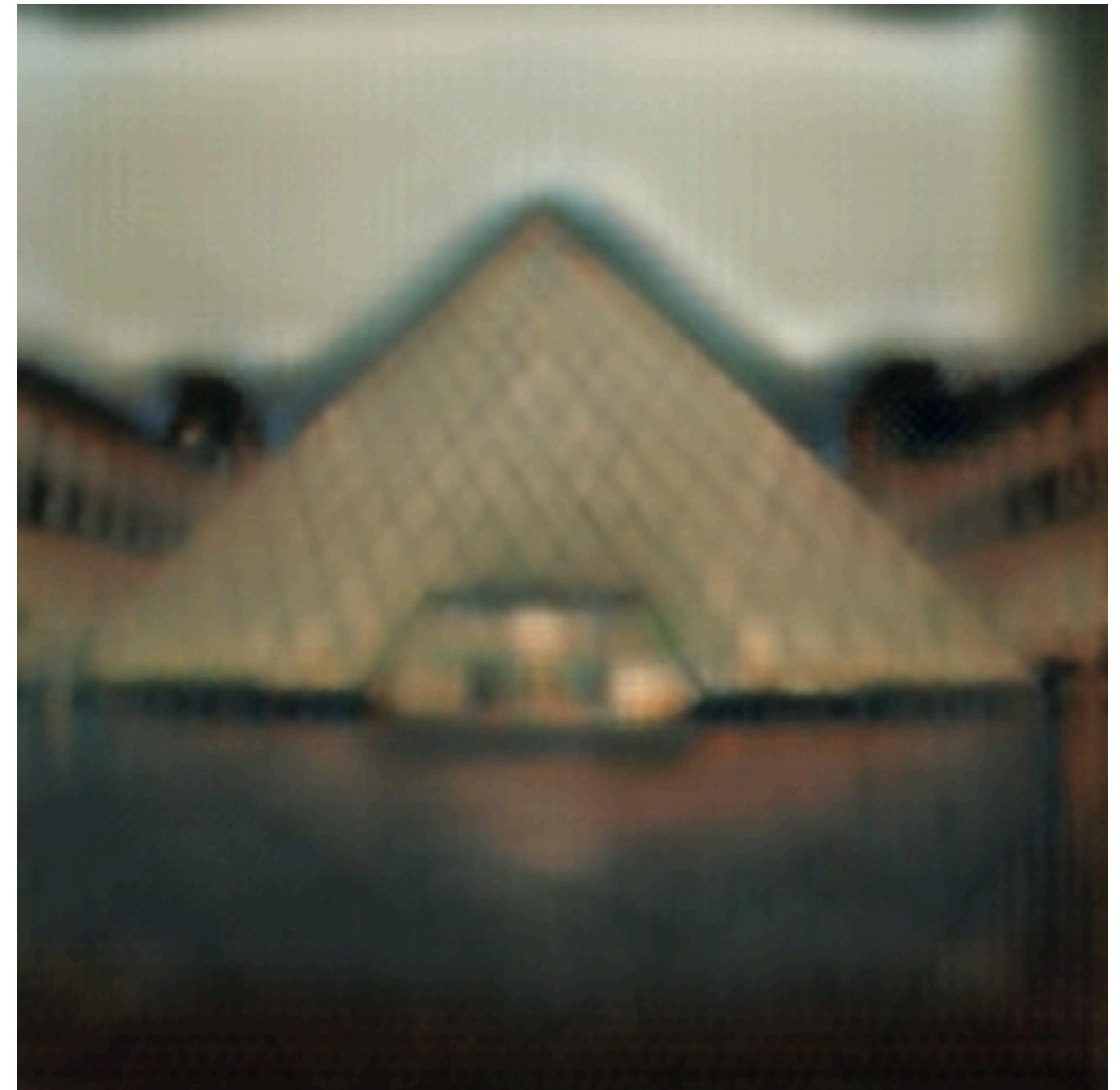
**Veera Jussila / CTL / 18 May 2022**

# From text to text

- “Tweet like Trump”
- Train with tweet texts
- Model (RNN) generates text
- [https://www.tensorflow.org/text/tutorials/text\\_generation](https://www.tensorflow.org/text/tutorials/text_generation)

# From images to images

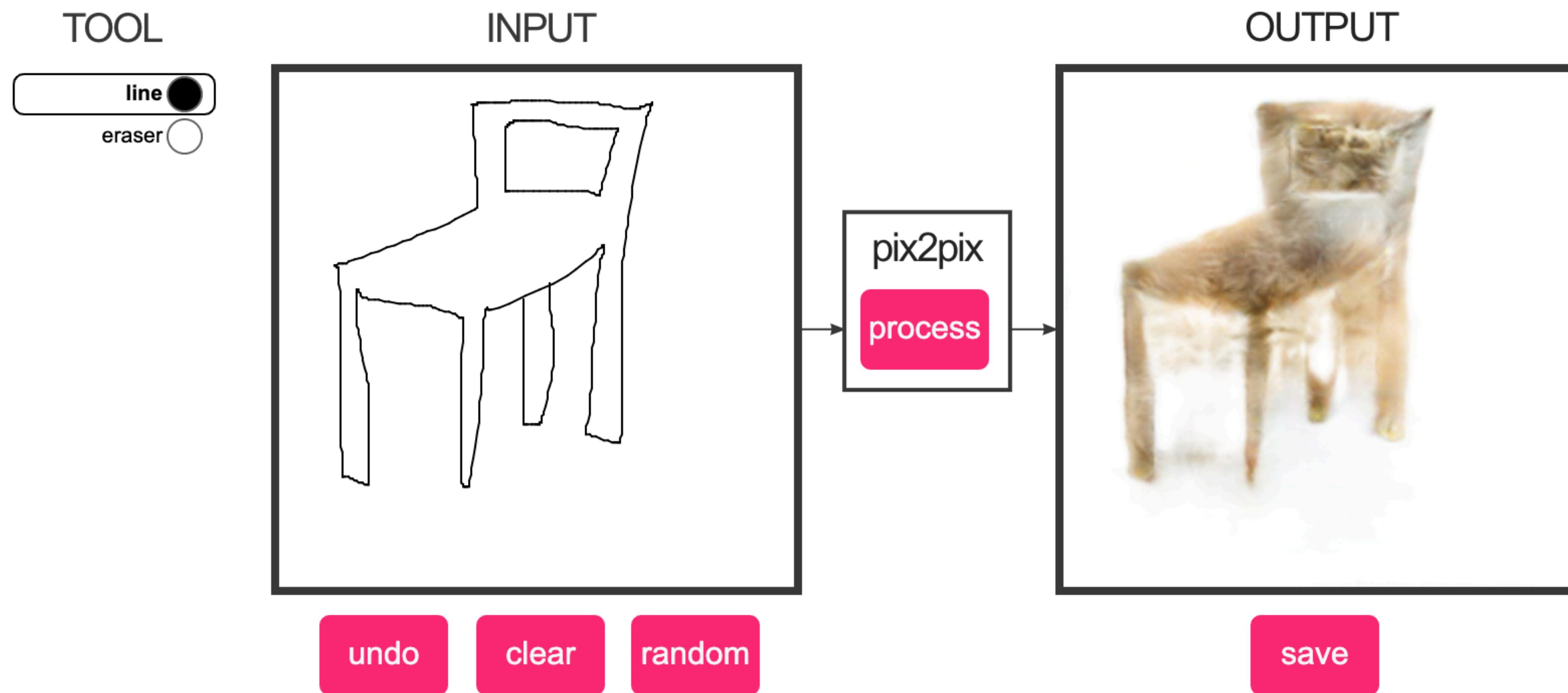
- Imaginary cities
- Train with images of cities
- Model (GAN) produces images
- DCGAN, StyleGAN



Veera Jussila: Postcards From Lost Cities (2020)

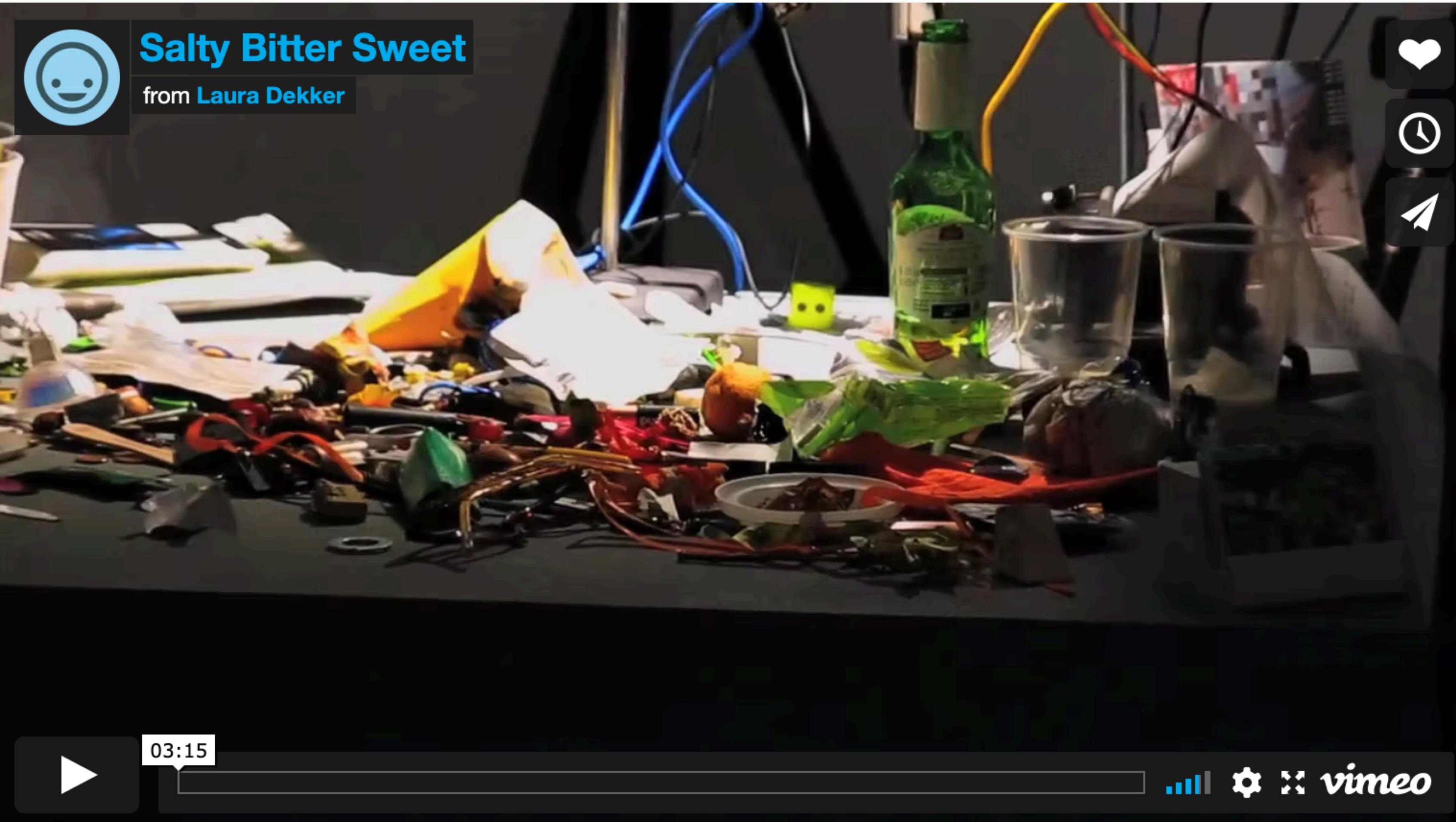
# But switching mediums = new palette of expression

edges2cats



- <https://affinelayer.com/pixsrv/>

# Laura Dekker: Salty Bitter Sweet (2017)



<http://doc.gold.ac.uk/compartsblog/index.php/work/salty-bitter-sweet/>

# Rebecca Fiebrink: ML as (Meta-) instrument

- Currently at CCI
- How can ML and AI change creative practices?
- Dataset not necessarily “ground truth” but a used to **communicate ideas and embodied practices** (see video on the next slide)
- Human-computer interaction can be made smoother with interactive ML



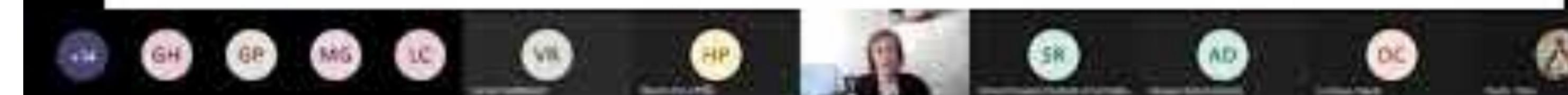
## My research

How might people use ML **within their existing creative practices?**

How might ML **expand** people's creative capabilities?

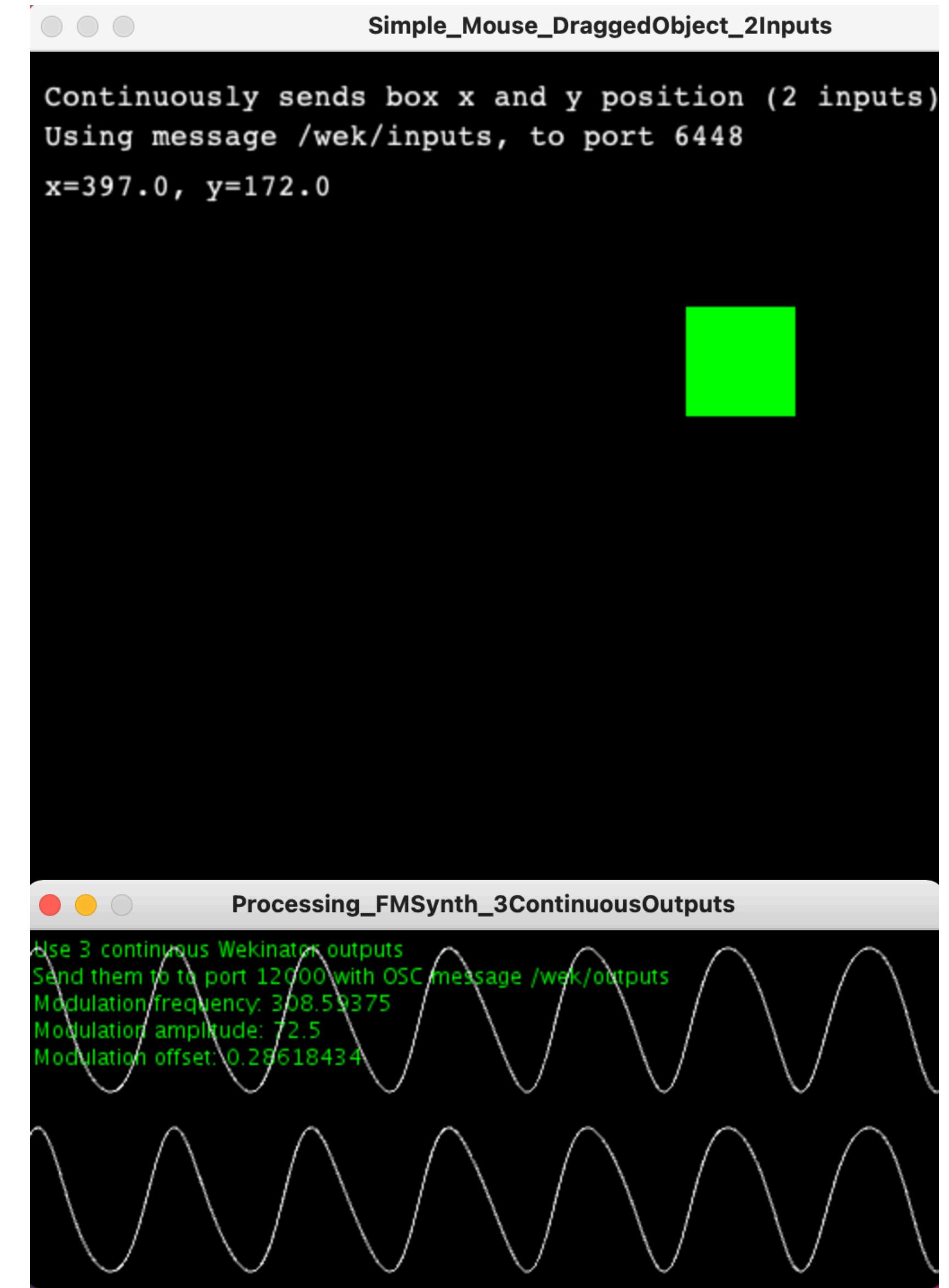
When and why is it **creatively useful** to find patterns, make predictions, generate new data?

How might these interactions be structured?  
How can we **enable creators to use ML effectively?**



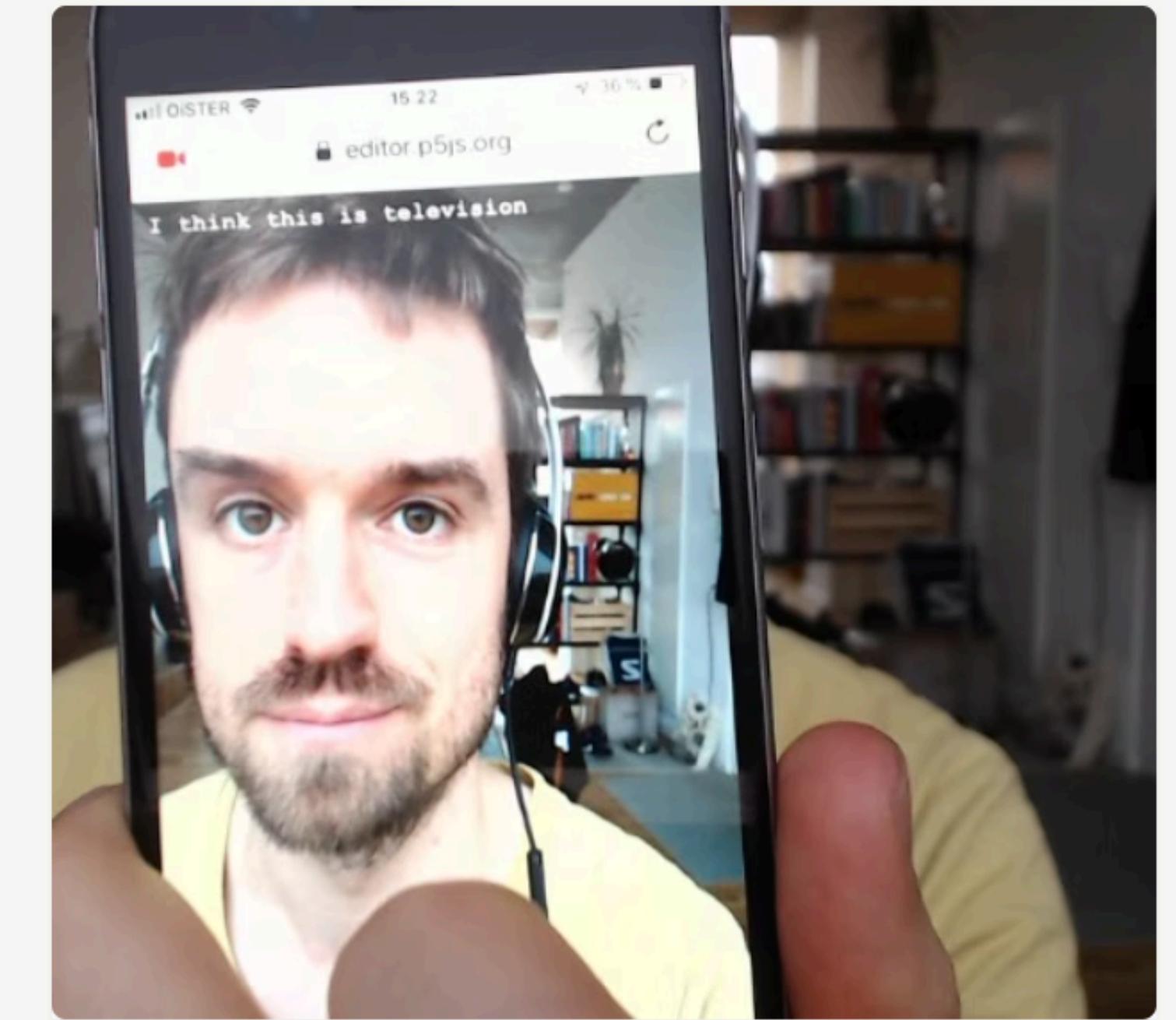
# Wekinator demo

- You can follow along with your downloaded files :)



# Andreas Refsgaard

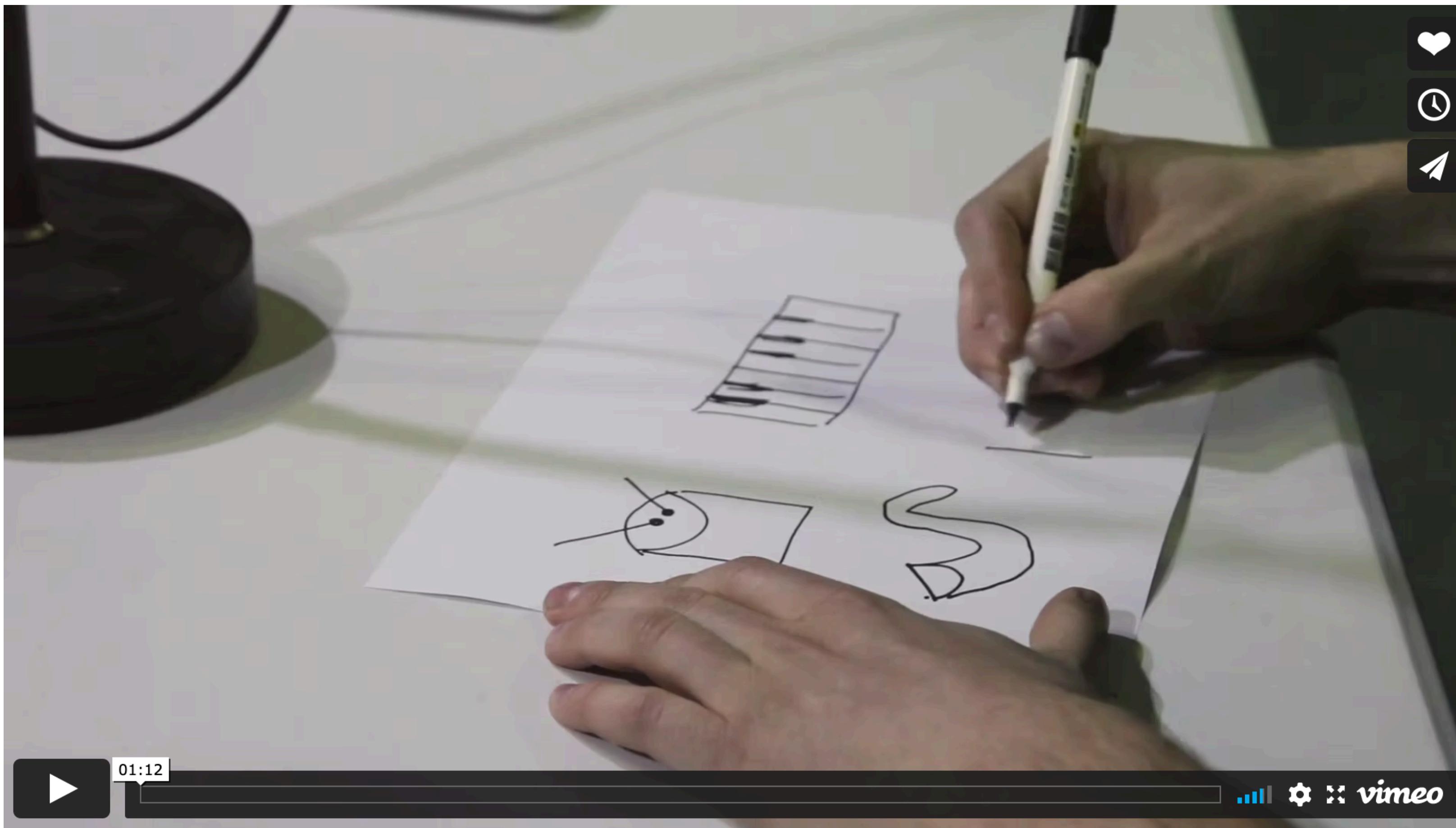
- Artist and creative coder
- Often translates between mediums: image input to text etc.
- <https://andreasrefsgaard.dk/>



## Poems About Things

Generating poetry from the everyday objects around us

# Refsgaard & Kogan: Doodle Tunes



<https://andreasrefsgaard.dk/projects/doodle-tunes/>

# Andreas Refsgaard: Poems About Things

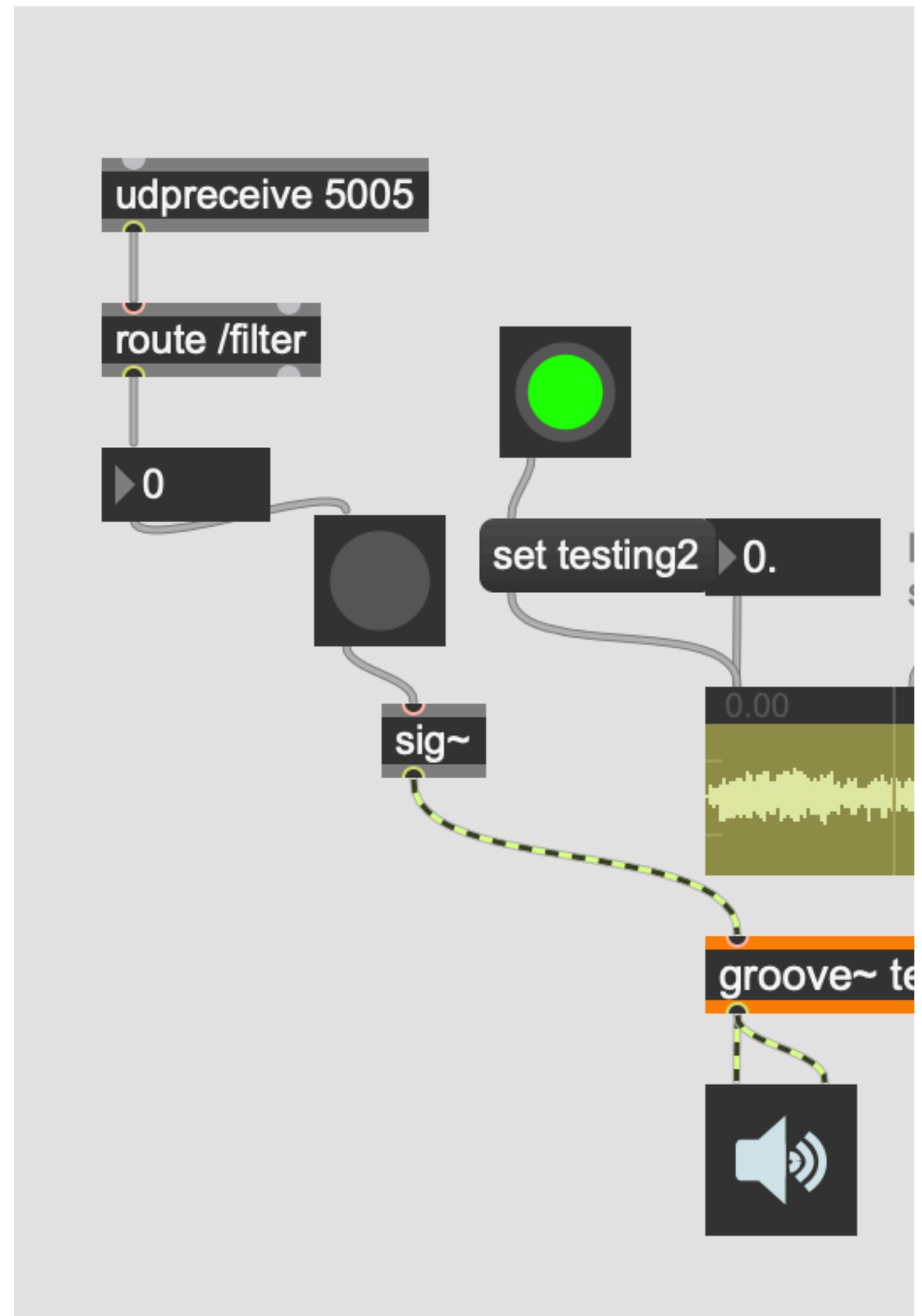
A short query is sent to Googles Suggest API, which in return sends back one or more sentences inspired by the detected object



# **Possible projects and setups**

# Image to sound

- Image classifier: **Python** or **Wekinator**
- 3 classes
- Send 1, 2 or 3 as **OSC messages**
- Trigger effect 1, 2 or 3 in **MaxMSP** or **Ableton**
- **Other way round:** [GAN visuals from music](#)



# Movement to poem

- Solution 1: Pose classification in **Python** - trigger charRNN text generation in **Python**
- Solution 2: Pose classification in **ML5.js** - trigger charRNN text generation in **ML5.js** (website project), see [this](#) for inspo
- Solution 3: Pose classification in **Wekinator** - OSC to **Python** and trigger charRNN text generation



# Text to sound

- Solution 1: Check text positivity or negativity in **ML5.js** and trigger audio with **P5.js** or **Web Audio API** (all in browser)
- Solution 2: Analyze text input in **Python** using **TextBlob** and send OSC to **MaxMSP** or **Ableton** (a bit slower, for installation soundscapes)

