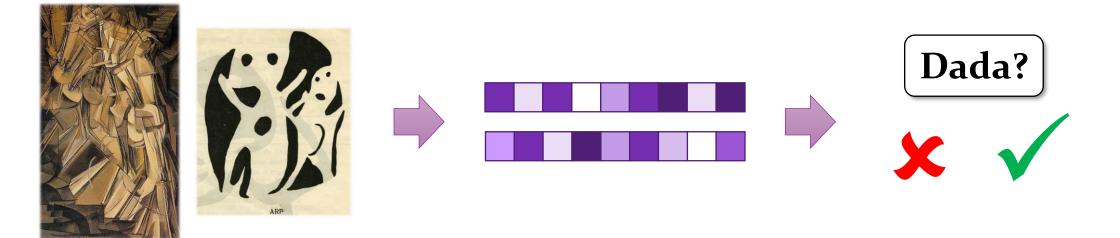
Computational Cut-Ups: A deformative "reading" of Dada

Laure Thompson & David Mimno Cornell University



To make a Dadaist poem:

Take a newspaper.

Take a pair of scissors.

Choose an article from the newspaper about the same length as you want your poem.

Cut out the article.

Then carefully cut out each word of the article and put them in a bag.

Shake gently.

Then take out each word, one after another.

Copy them conscientiously in the order drawn.

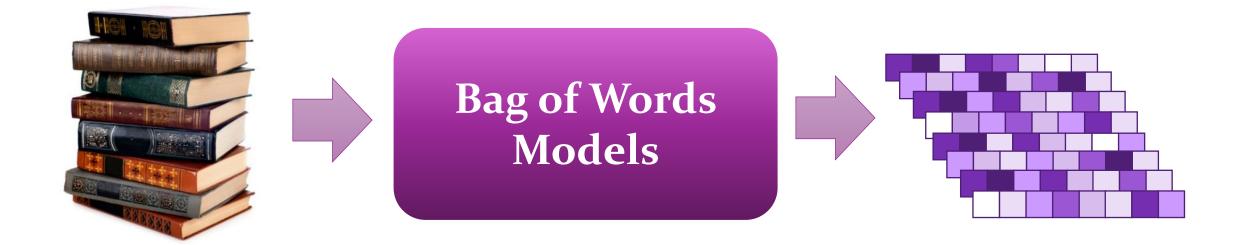
The poem will be like you.

And look! You are an infinitely original writer with a charming sensibility, yet beyond the understanding of the vulgar.



Tristan Tzara

Sounds familiar...

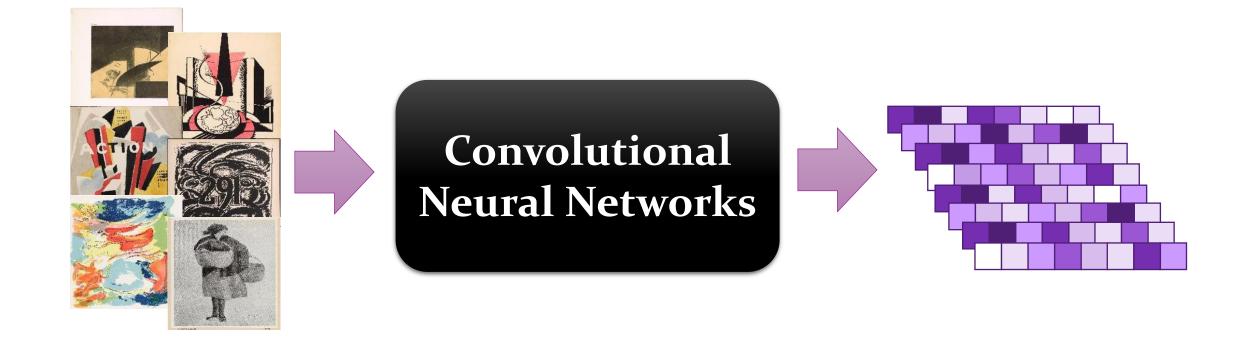


Feature Vectors Computational Cut-ups

What about images?

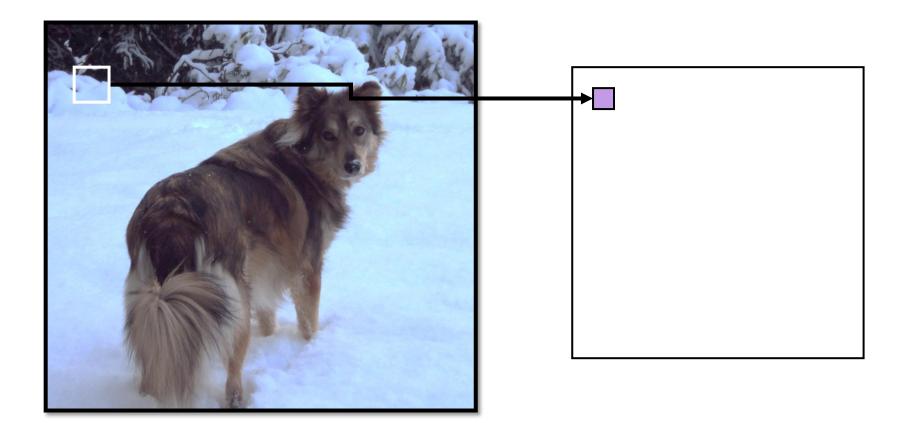


Computational cut-ups via CNNs

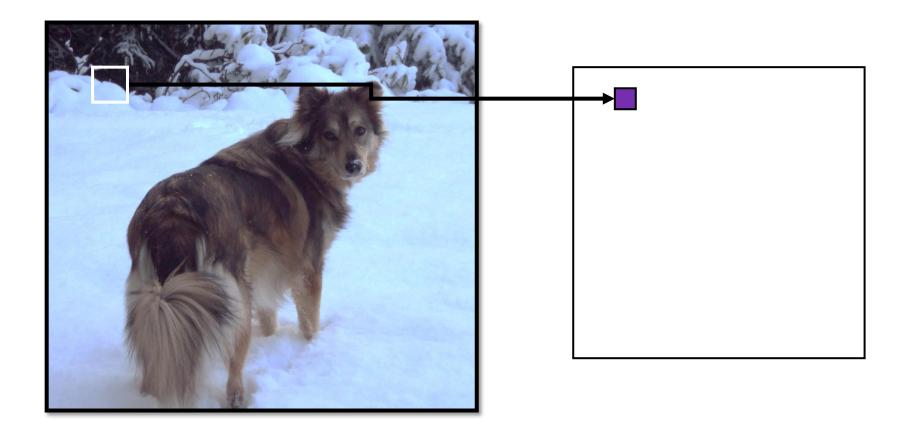




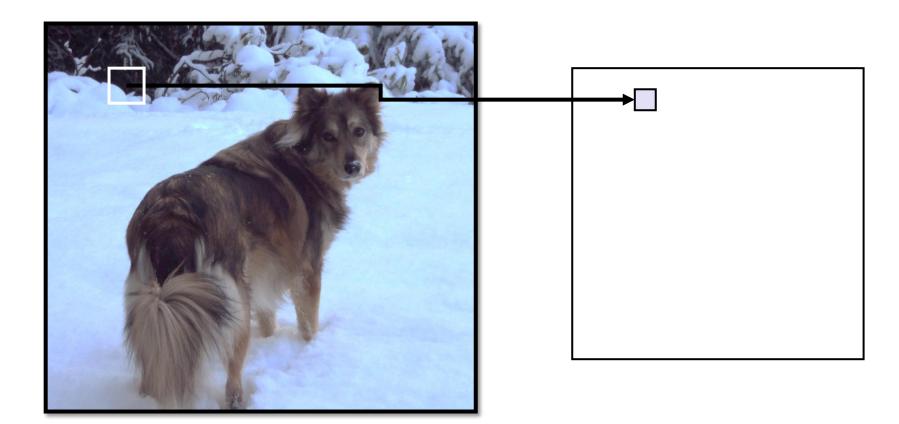






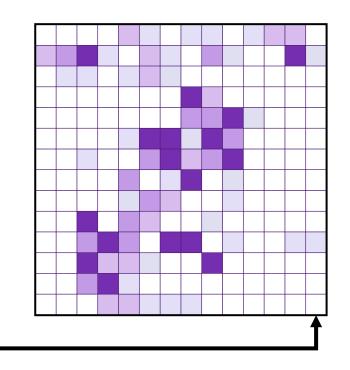




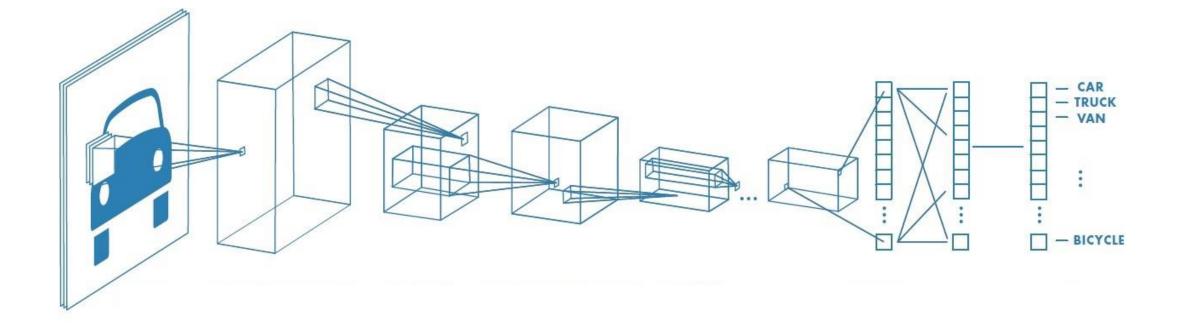




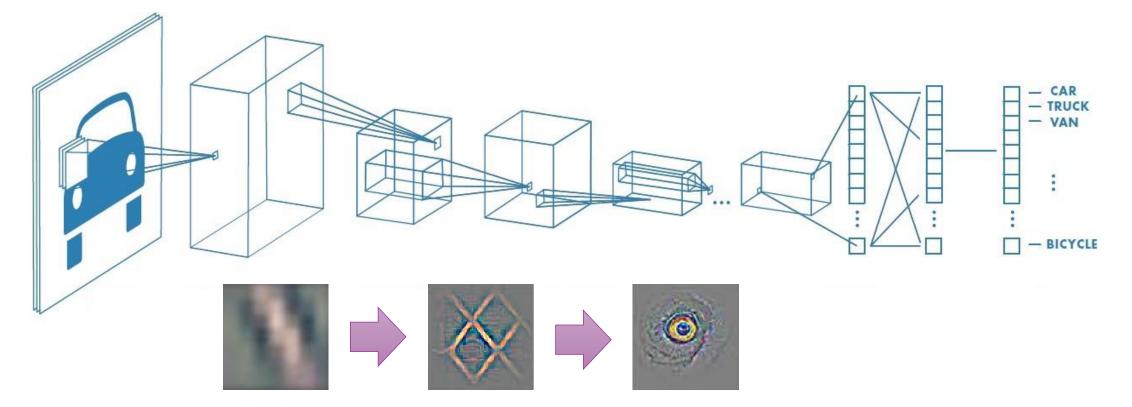




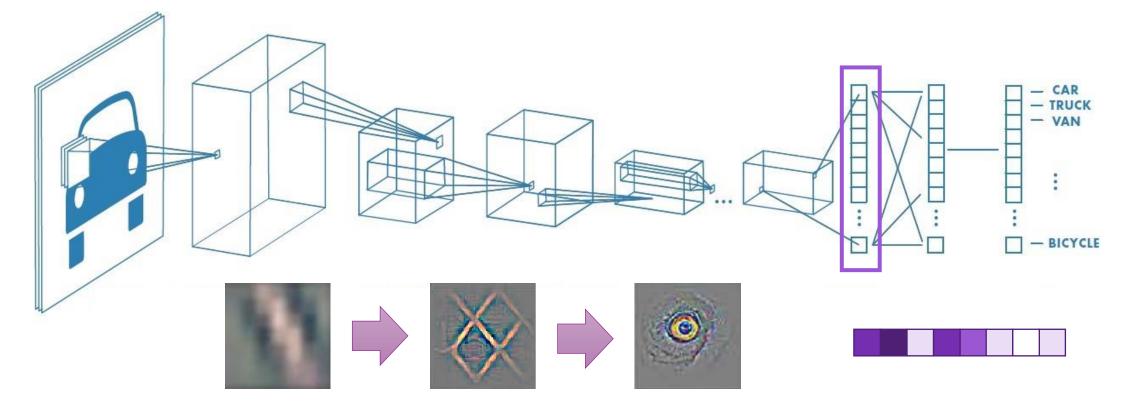




https://www.mathworks.com/solutions/deep-learning/convolutional-neural-network.html



https://www.mathworks.com/solutions/deep-learning/convolutional-neural-network.html



https://www.mathworks.com/solutions/deep-learning/convolutional-neural-network.html

Can CNNs see Dada?

1. Is Dada visually definable?







2. Is Dada visible to CNNs?







VS.



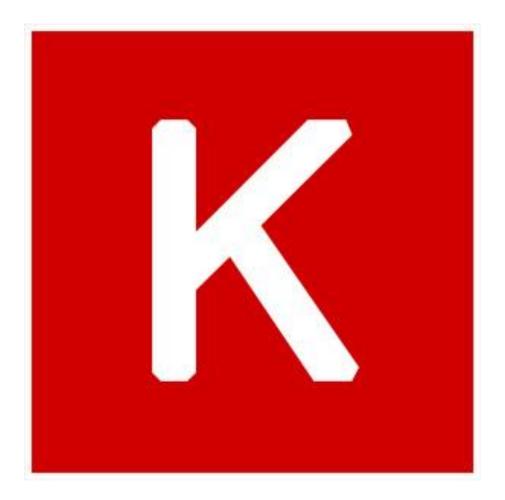
Corpora: Blue Mountain Project



36 Journals 2,500+ issues 60,000+ pages

http://bluemountain.princeton.edu/

Deep Learning Library: Keras



ResNet50 Penultimate Layer 2048-length vectors

github.com/melvinwevers/CV_tutorial

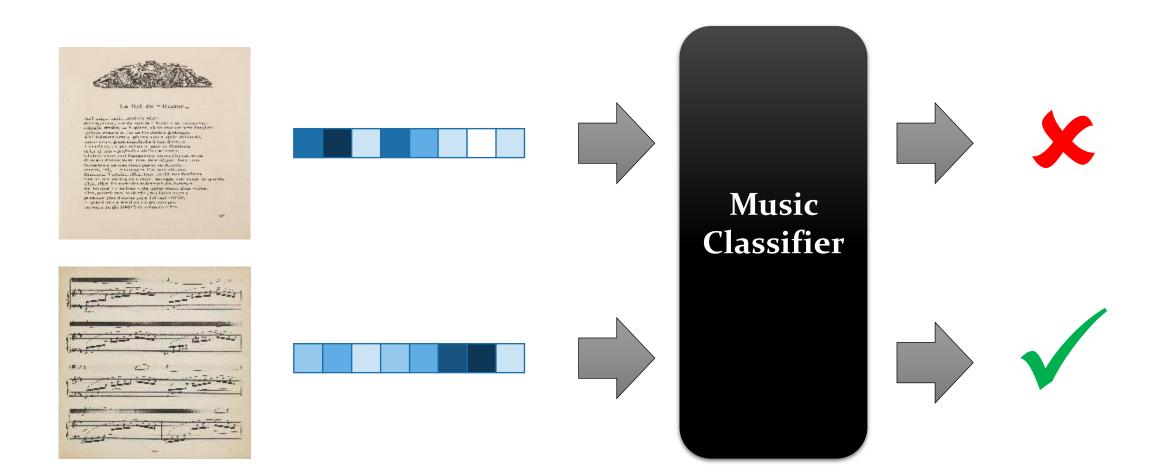
What is Dada?



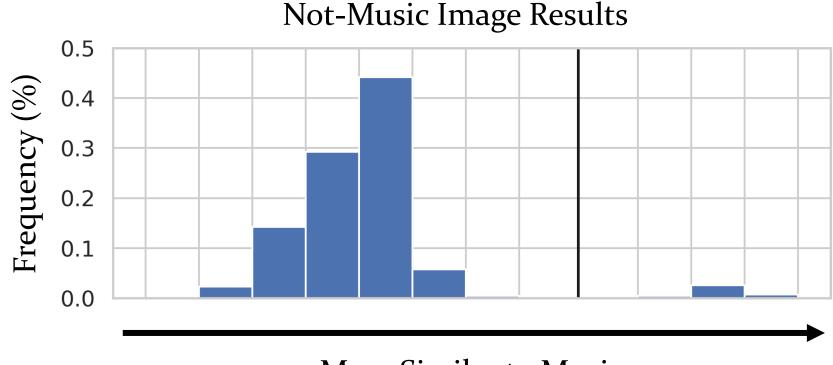
Proof-of-Concept: Can CNNs see music?



Proof-of-Concept: Can CNNs see music?

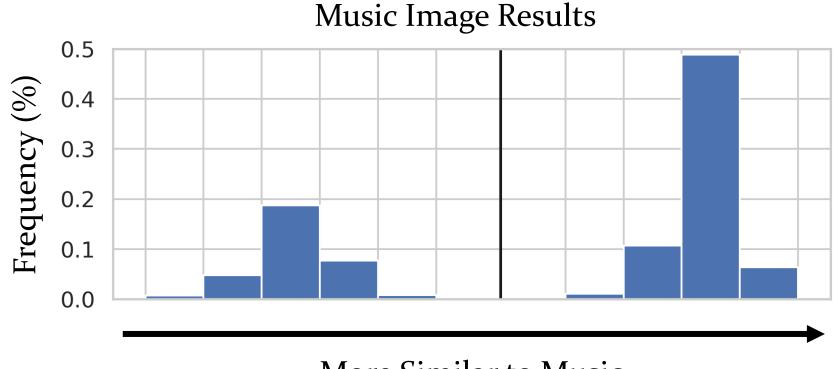


Good at recognizing what isn't music



More Similar to Music

...but recognizing music is harder



More Similar to Music

Learning from Mistakes



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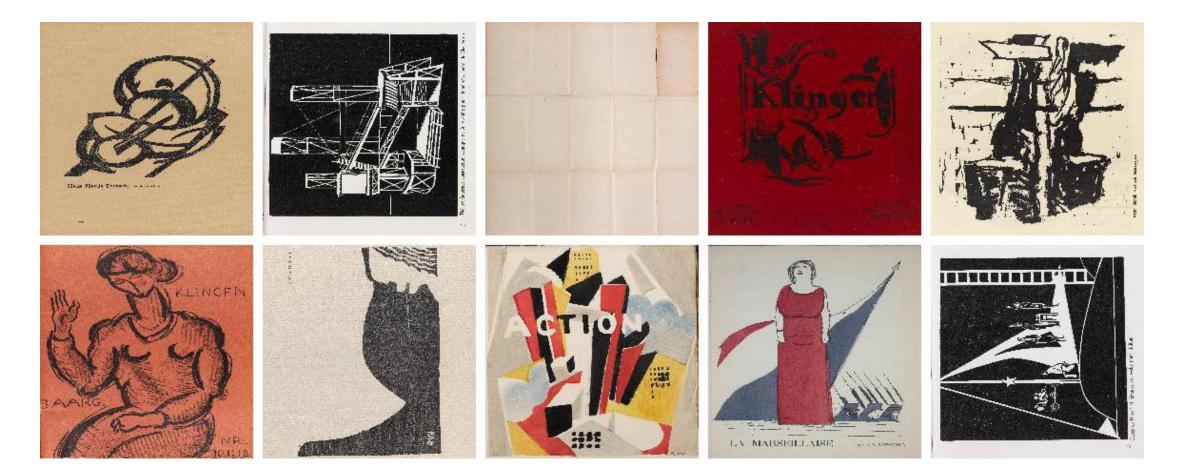
What does Dada look like?





What does Dada look like?





What *doesn't* Dada look like?





What *doesn't* Dada look like?

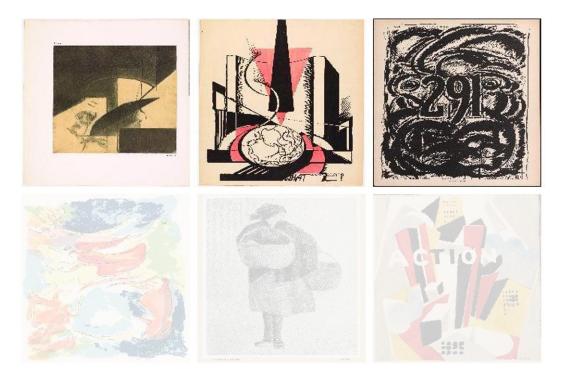




Want to learn more?

JMPS article: "Computational Cut-Ups: The Influence of Dada"

http://www.cs.cornell.edu/~laurejt/papers/dada-preprint.pdf



Yes, they can.



labeled "Not-Music" contain music



TN

FP

2,316 pages (67%)

labeled "Music" contain music

55,007 pages (96%)

labeled "Not-Music" do not contain music **2,158 pages (4%)**

labeled "Music" do not contain music