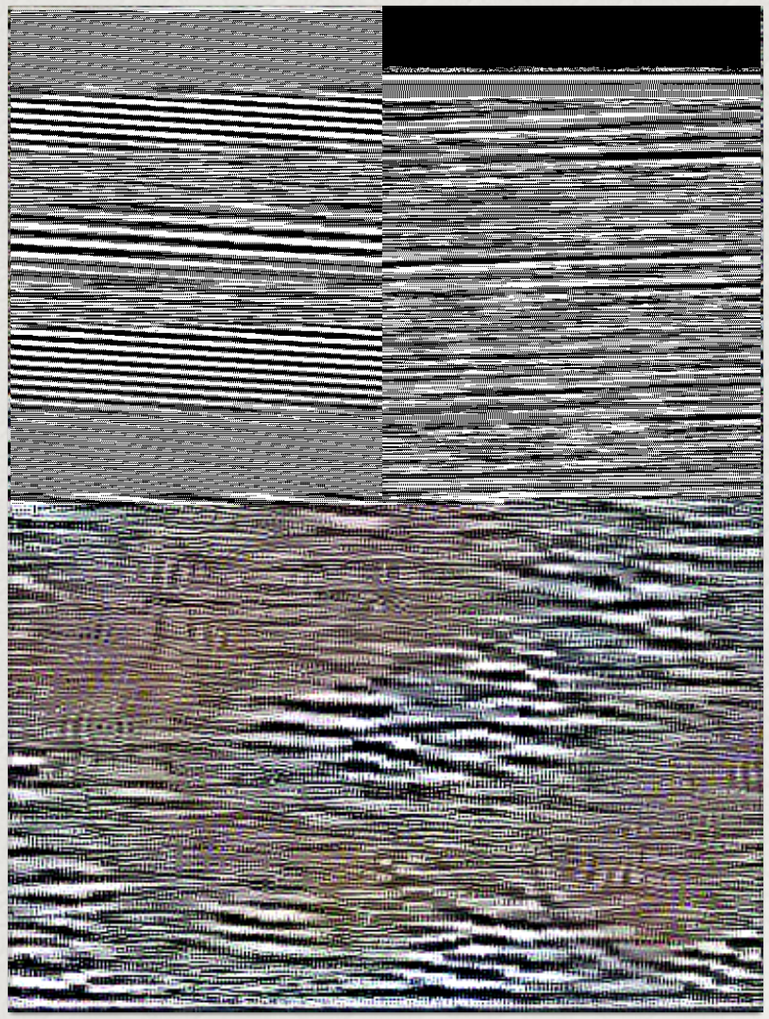
Teaching Computers to Create Art

- *Modern-day computers not very good at finding creative solutions.*
- *Gatys, Ecker, Bethge created an algorithm to identify content and style of images.*
- *Recombine the content of one image with the style of another.*
- *Mimics how humans create derivative works of art.*
- *But what about derivative pieces of music?*

Extending the Algorithm to Music

- *Try identifying musical content and style with a similar algorithm.*
- *Define what musical style and content are.*
- *Recombine two pieces of music to create a new track.*
- *Adapting the same deep neural network used for images.*
- *Encoding music into a visual form is challenging.*



Progress To Date

- *Recreated the neural network used to identify images.*
- *Begun testing various types of graphical music representations. (Raw data, Fourier Transform, Winamp Visualization.)*
- *So far no static representation has yielded great results.*
- *Extend the algorithm to process large sets of images. (A song a few minutes long takes > 16GB RAM)*
- *Try running a three-dimensional (x, y, time) representation of music through the algorithm.*