


Teachers/ Adults Side (1)

# Liverpool Biennial



Curating the Code - KS3 IT

The Learner will find out about how artists use code, understand how internet images are made from code and how to disrupt the code.

Estimated time = 1 hour

## Curriculum Extract


Pupils should be taught:

- understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits.

## Material List:

Laptop or Computer

This is a desktop only activity




Children / Learner's Side (2)

Curating the Code - KS3 IT



Liverpool  
Biennial



**Artist:** UBERMORGEN, Leonardo Impett, Joasia Krysa

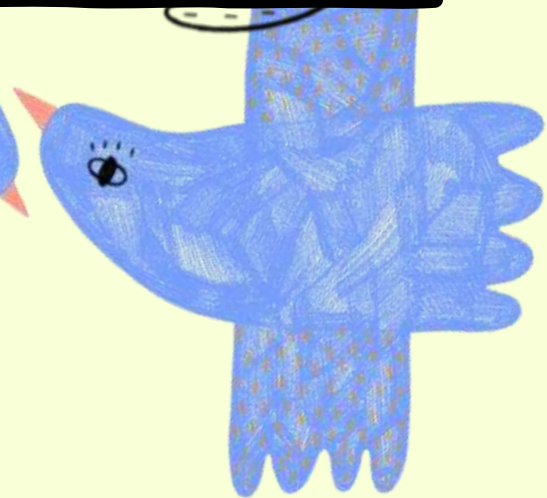
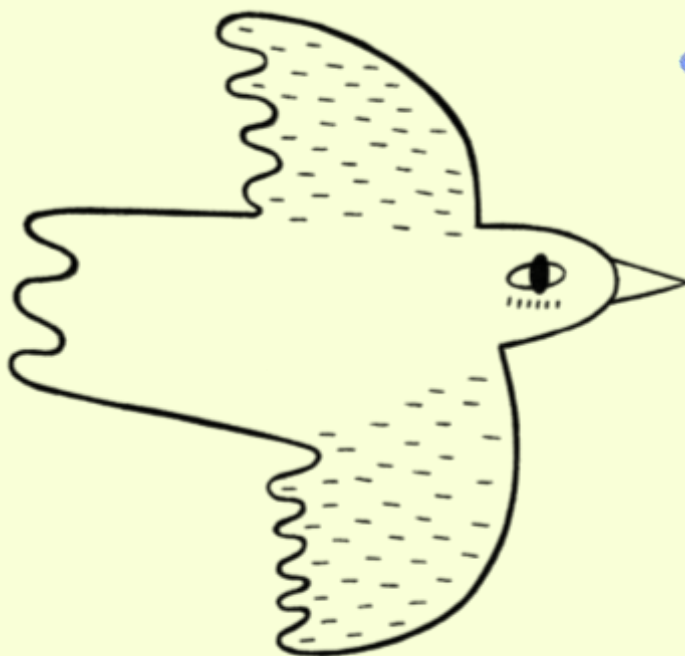
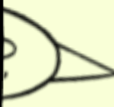
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**Liverpool Biennial project:**

*The Next Biennial Should Be Curated by a Machine* (2021). A new commission for Liverpool Biennial 2021

Using a computing programme, big data and algorithms to create a curating machine. The machine will gather images, files and other forms of data from Liverpool and Whitney Biennial's archive to formulate and draw conclusions for what the next Biennial would look like based on past exhibitions. As technology progresses drawing closer and closer together the similarities between human and machine, this project asks how curating as a field can open up to digital and alien perspectives on conventional curatorial practices and curatorial knowledge.

What would the next Biennial, or any large scale exhibition, be like if machines were asked to take over the curatorial process and make sense of a vast amount of art world data that far exceeds the capacity of the human curator alone?



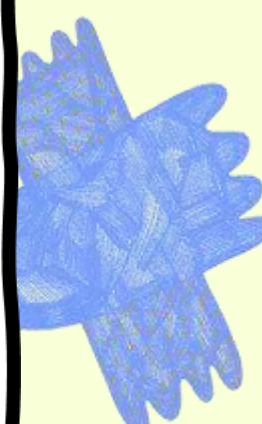




## Key Terms



## Liverpool Biennial

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- Curator – Someone who works in a museum or gallery to look after and work with art and objects in the collection.
  - Exhibition – An exhibition is a show of pictures, paintings, sculptures or other interesting objects, usually shown in museums or galleries.
  - Curate – To choose, look after and display art or objects, usually with a special understanding.
  - Biennials – A Biennial is a large art exhibition that happens in different countries all around the world. Usually in large cities, they happen every two years and can include events like talks, dances, music and films like the art work.
  - Artificial Intelligence – Computers or computer robots being taught to use instructions the same way humans and animals use their brains to. They can be instructed to learn from the past, find meaning and other very human ways of thinking.
  - Machine Learning Technology – Using artificial intelligence to teach a machine to learn from mistakes or lessons and get better every time it is shown something new or repeats something. Eventually it will learn new things without being instructed to by humans.
  - Algorithm – A set of rules followed by computers to solve problems or achieve a task.
  - Computer Program – A collection of instructions followed to do a task. It is written in programming language that the computer understands.
  - Internet/ Net Art – Art made on the internet and for the internet. Using computers, browsers and program to make the art.
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# Liverpool Biennial



Turn this

Into this



To this!

We invite the user to understand how images are presented to us, and how our brain is also a computer, decoding visuals through light refractions and flipping images.

Use the technique and instructions of decoding JPEGs to re-present images of artworks in Liverpool Biennial's digital archive. Share your creations and distortions with us online using the hashtag #Lb2021.

Decoding a JPEG - set of instructions and a series of LB images to decode, interrupt, collage and reupload either through social media hashtags or web site.

### CURATING THE CODE: HOW TO DECODE A JPEG

1. First, look through the Liverpool Biennial archive, (<https://www.biennial.com/archive>) click on the artists' name to see the image then save to your desktop.
2. If the image is not a JPEG already, change the file type by renaming it.
3. Once you have your image, change the file type again into its code form by renaming the file's ending from .JPEG to .txt.
4. Open up the .txt file, either in a word processor or text reader such as TextEdit.
5. There will be lots of code displayed, you do not need to understand it for this exercise. Scroll down at least an  $1/8^{\text{th}}$  of the text page, leave the top part of the code alone.
6. Start to cut out, change around, add in letters, numbers etc. This will change the code and therefore change the image in unexpected ways. A simple rule is the more code that you highlight, the bigger the area of distortion in the final image. The same goes for smaller highlighted sections, producing smaller areas of distortion.
7. Once you have cut a section of code, scroll down the document and paste it back into any random place. The further away you scroll from the original selection, the larger the gap will be between each distorted piece in the final image.
8. Once you have completed all your edits, save the file and change it back to a JPEG file type by renaming it from .txt. To jpg.
9. Reopen the image to see the changes and distortions your interruptions of the code have made. If your image does not reopen, you may have cut out from the top of the code, try again, focusing on just the middle section.
10. Share your image with us, using the #LB2021.

(Source: <https://www.creativebloq.com/computer-arts/break-jpeg-code-8127893>)

Want to do more like this? Have a look at our website: [www.liverpoolbiennial2021.com/learn](http://www.liverpoolbiennial2021.com/learn)