Abstract

This report details the development, results, reflections and conclusions behind my computational creativity project known as Abstract-News. Abstract-News is an attempt to realise news headlines as abstract drawings/artwork. This abstract realisation is an attempt to summarise the same sentiment of the headline, producing something creative that has a clear representation of the headline in question. At the time of writing, Abstract-News is mostly successful in producing abstract artwork that roughly represents a given headline despite issues with implementation (such as time management and some misjudgements) and the broad scope of the project and available avenues of implementation.

Introduction

The goal of Abstract-News was to represent an extract of text as a visual and abstract piece of artwork primarily by performing semantic analysis of the given extract, and then attempting to visualise the analysis. Due to time constraints and general complexity of the project, I decided to source a lot of my initial data used to perform the semantic analysis. I decided to produce my project in the form of a website as modern web languages are a stronger area of programming for me, and I understood the broad scope of libraries available to help ensure the project.

Abstract-News can produce results on a piece of text that reflect a positive, negative or neutral semantic for the text. It then uses this to produce artwork, considering several aspects of the text breakdown. The artwork produced is generated by sets of parameters for some novel brush strokes associated with the three aspects of analysis (positive, negative and neutral) and a small amount of randomness to ensure some more natural differences between the artworks. For instance, harsher angled and negative coloured shapes are used for the negative category and then more soft, curvy and bright coloured parameters are used to connote positive feelings. To realise these categories required a level of experimentation and research behind general semantics, colour semiotics and some colour theory which will be detailed more throughout this report. To daw the images, I made use of a client-side drawing library known as P5.js from the Processing Foundation, which is a well known and well used library in the computational creativity field.

Background

Due to this project’s broad scope, I spent a lot of time researching and discovering potential technologies that could help me produce this project. My initial project proposal feedback was a helpful starting point, with both pieces of feedback suggesting I start with semantic analysis and then use those results to produce an image. Initially, I was concerned with the practicality of my project and being able to produce artwork, however I chose carefully with my wording of ‘abstract’ as it enabled me to be more broad with my work and leaving It to the individual to assess how the artwork made them feel (as is the nature of abstract artwork).

To gain inspiration, I looked at examples of other creative systems that where close to my idea.

Methodology and Design

Results

Evaluation

Conclusions