Ben Fry - CART 263 Reflection 1, Jack McDonald

Ben Fry is a designer, programmer and artist who heads a graphics consultancy called Fathom based in Boston. He graduated with a computer science degree from Carnegie Mellon University and his work has been featured in galleries across the country, notably the Museum of Modern Art in New York City and the Cooper-Hewitt Design Triennial. Currently, Fry is the co-developer of Processing, an open-source language and standalone IDE. It is used primarily for graphics programming and artistic programming, and specifically for teaching those new or inexperienced with programming. It is very similar to p5.js, in its execution and many of its syntax. I personally have used Processing in my portfolio to create multiple graphic art programs to demonstrate design principles of art, such as line and contrast. It's a very intuitive system and I was happy to essentially continue my experience with it when learning p5.js. Processing, co-developed with Casey Reas at UCLA won a Golden Nica at the Prix Ars Electronica in 2005, a prize awarded yearly to astounding interactive art and computer animation innovators such as Fry. Fry also wrote a book titled *Visualizing Data*, a book on exactly what it sounds like. He specializes in interactive pieces that use graphics programs to display data and statistics, in an artistic manner.

My favorite piece of his is *Valence*, a short visual data animation depicting a web of scientific notes and keywords connected by lines in a large net, similarly to that of electron paths around an atom. Although silent, his work exudes a sense of high understanding of data and analytics, passed through a lens of general understanding and exploratory interactive models. He used Processing to create this visual, a testament to its power and usefulness in its field of graphics programming. Because the *Valence* piece is depicted in 3d space, using flat images manipulated with depth, size, and distance, it shows an incredible feat for an indie-developed language. The work is fully interactive, allowing for moving of the model and deformation of the shape by adding and removing keywords. I imagine this data structure could also be used for more than just an artistic purpose, serving as a storage for abstract ideas and notes in an interactive setting. *Valence* ultimately exemplifies the potential of Fry's ideas, but what he does with them by leaving interpretation up to the user, is what makes it truly genius. Overall, Ben Fry is an innovator whose work has helped many ease into the world of interactive and graphical programming.

[Recording of *Valence*](#)