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Critical Reflection Three

Valence

Ben Fry's "Valence" builds representations of very large sets of information. Its latest build titled "Genome Valence" was created in 2002 for the Whitney Biennial. The full version of Valence was created with C++, Perl and OpenGL but a simplified version was built with Processing.

Fry's example utilizes the book "The Innocents Abroad" By Mark Twain to visualize the contents of said book. The software inputs the books words and outputs them into a space, the more the book uses a word, the further the word gets pushed out of the space. As a word is less frequent, it veers towards the center of the space. Additionally, if two words are found next to each other repeatedly during the text, they are greatly attracted together and visualized in the space.

Over time, the visualization changes as the data is being inputted into the system. "The piece provides a qualitative feel for the perturbations in the data, in this case, being the different types of words and language being used throughout the book" (Fry). Fry illustrates that the words and language utilized in the book relates to the changes in the systems.

The intent of the program is to provide a demonstration of general trends or outliers within data. "The most important information comes from providing context and setting up the interrelationships between elements of the data" (Fry). After inputting the information, the user can then research further into specifics on the trends and find out other parameters about the data.

In my opinion, "Valence" provides a unique way of representing data which can be used in multiple disciplines. Fry's example using Mark Twain's book gives an interpretation of various words used within the novel and the links between certain words. This program gives an interesting way to see certain correlations between the words used within the book, and can be used to create meaningful interpretations between other pieces of data.