Hummam Houara

October 18th

Experiential Data Visualization

After extensive research on a project that interests me in visualizing data in an interesting experimental way, to compare it with we feel fine; I found "Biocontrol" simulation. The purpose of this comic was to "invisibilize" the data so that the audience wouldn't even be aware that it was being displayed to them. Many lines of code work behind the scenes to determine how likely it is that a component of the digital plant will be attacked by the digital wasps. These calculations are based only on the data, taking into account the age, species, and number of galls that were developed on the plant throughout the experiment.

With this type of data visualization, the viewer is effectively introduced to a manageable amount of data while also having the opportunity to formulate their own questions about what they are seeing and (hopefully) seek to have them answered through careful observation or by speaking with a subject matter expert.

Video link: https://thumbs.gfycat.com/BadCompassionateBooby-mobile.mp4
Research link: https://www.datavizexperiments.org/experiments/2014-2/

The project is part of a bigger research by fine arts students in 2014. The question that was being tried to answer is: How do Differences in Growth Between Two Weed Species Affect Interactions with a Plant-Feeding Insect Used in their Biocontrol? The study's director, Doctor Rose, gave the students the raw data from an experiment conducted in a greenhouse to examine the interactions between two host weed species of this biocontrol insect, "mouse ear" and "whiplash" hawkweeds, and a gall-forming, plant-feeding wasp (Aulacidea subterminalis). The objectives of the experiment were to:

Is there a difference in how the two hawkweed species grow and develop as plants age?

- · If yes, do species-based differences in growth and development affect plant-gall wasp interactions?
- What do the differences tell us about the potential efficacy of the gall wasp as a biocontrol agent of these weed species?

These questions came from data visiulasation. Which kinds of similar to the questions that came up to me when i used we feel fine.