Critiques

What is exactly the “magic” that happens inside Disney Studios? Well, apparently it’s an incredible illusion brought about from techniques the animators use to help bring animation to life. These principles of animation are carefully implemented, each with its own special term. The introduction of the development of the animation lingo was a great beginning from the unfamiliar to the understood.

One of these techniques is called Squash and Stretch and personally, I think it’s probably the most important one. People and their personalities are made of flexible and often dramatic changes. That aspect about them can be captured using this technique. The comparisons of modern Disney animations to the ones of the 1920s really showed the contrast of the difference between diagraming and action and the action itself being depicted. Action can not just be done, it must be shown and understood to the audience. Also, timing is especially important in this technique and that is shown by the drawing of the bouncing ball. Even though it’s not physically accurate, but stretching and squashing the ball helps depict the action of bouncing. The timing of the ball allows us to see determines how fast the motion is.

Another technique is staging, and it’s a common principle not just found in animation. In fact, it seems that many of these ideas come from theatre. Staging involves the fact that each scene has a plan and each frame of the film must help emphasize the point of the story. The staging techniques use different angles or props, background, and placement. All of these factors determine how an audience gets it, and where they look and pay attention to. The paper’s analogy with a magician made this idea clearer. As an animator, you are like a magician who people to look at a specific spot with a specific purpose. And suddenly, like magic, the act is done and people are amazed and more impacted by the result.

The last technique I’m going to talk about is anticipation. This is specifically the change of expression or specific action that leaves the audience with no question about what is happening or going to happen next. When used in an animation, this technique almost goes hand in hand with staging. Essentially the idea is the same, somehow, you want the audience to have a specific point emphasized to them, and then allow them to reach their own conclusions.

Overall, this paper is actually useful for the audio visualization as it describes how shape and movement can capture emotion and “reality.” Animation, and thus perhaps even some visualizations, almost requires the study of anatomy because each part of the body affect movement in other parts. That’s pretty much true for all shapes or things, unless they are extremely rigid. I also especially enjoyed all the animation artwork sprinkled throughout the paper. They really helped illustrate each principle as well as helps the reader see the contrast and improvements that were made from before.
Pad++: A Zoomable Graphical Sketchpad

The paper explores Pad++, a zoomable graphical sketchpad that was created as an alternative to traditional window and icon-based interfaces. Essentially, this is similar to trying to capture the flexibility and reality of how we work in a sketchpad environment. It attempts to tap into the natural, continual process of our way of thinking. Also, exploring Pad++ helps drive thought about interface design.

Pad++ itself is a physics inspired interface that allows interaction with structured information based on a zooming feature. At first, the term “physics-based” really confused me. How can something be something so object oriented like physics but be relatable to people’s emotions and the way they interact. However, that’s exactly the reality, we do interact with objects that are under physics laws. How we interact with interfaces should be reflective of how we interact with tangible objects.

There were many aspects of Pad++ that were described. Some of these included portals, lenses, and zooming, and space-scale diagrams. Unfortunately I didn’t understand the purpose of many of them. I think something that could have been added to this paper, especially since the paper is featured online, is animation. If you’re describing a user interface and you put the paper online, naturally there are a lot of additional resources you can use to help depict the interface with the fewest words possible. In fact, use visualizations and graphics to enhance more of the paper.

It was especially interesting to me to see that every movement or action has a smooth transition associated with it. I believe that transitions have become a big part of making applications these days. One of the reasons Apple products have become so popular, in one respect, is for the notable animations that indicate movement and change when a user selects an action. This really feeds our continuous mind and works with the way we perceive this. Therefore, it will be very important to make sure transitions are smooth and also valuable in the visualizations that are presented.

For future extensions of Pad++, it would be very interesting to see how the interface will function and assist in collaboration. Also, it seems that the authors are working on completely visualizing the interface for Pad++. Since the paper was written in 1996, it would have been interesting to get other resources and follow-up on the development. When I searched for more information, it led me to the University of Maryland website stating that UMD is no longer developing or supporting Pad++. It’s final version was 0.9 and it’s fully downloadable. I definitely want to check it out to see and experience for myself the different aspects that I didn’t quite understand from reading the paper.