READING 9 - THE ILLUSION OF LIFE,
PAD++ A ZOOMABLE GRAPHICAL SKETCHPAD FOR EXPLORING
ALTERNATE INTERFACE PHYSICS

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Pad++ A Zoomable Graphical Sketchpad for Exploring Alternate Interface Physics

by Bederson et al

Critiqued by: Mani Golparvar-Fard [-mgolpar2], CS498kgk

This paper addressed Pad++ as a zoomable graphical sketchpad that could be used instead of using traditional windows based or icon-based interfaces. Pad is presented as a system for building interfacing that somewhat could be categorized as being based off of 2.5D zooming. The concept is basically being able to extract more information by zooming in (Semantic zooming). May datasets are too large to be visualized in one screen (Screen size no more how large will be bounded), The situation may be due to many cases that need to be visualized, it may be due to existence of many variables or it may need the ability of highlighting particular case.

The motivation behind generation of Pad+ was to be able to show and view a large amount of information without having to hide some or any of it. The implemented Pad+ provides structure to data and basically compliments the filter approached without limitation that are usually associated with unused metaphors. Of course a very interesting and easy to use concept can help in many real world applications such as zooming into (inside) dictionaries. It easily allows visual as well as content based searching to be performed. Based on the concept of multiple resolution spaces as opposed to fixed-resolution spaces, there is always a lot of room to place in more information. Within such a semantic zooming, objects fundamentally change their appearance/presence at different zooming levels. Therefore zooming in this case is not just a change in size or scale. This kind of prototype easily fits into suitable applications for visualization of any sort of hierarchical data (the deeper the hierarchy, the smaller the size will be). In my opinion this paper introduces a lot of interesting yet important ideas that are nowadays still research topics. It basically proves the zooming interface as a concept. Yet there is not direct trail by the authors on measuring the success of their implemented prototype.

As stated in the paper, it can be inferred that physical based strategies for design of interfaces complement traditional metaphor-based approached effectively and efficiently. Unfortunately a weakness of this paper is the regarding usability testing/ performance analysis of the prototype. Though given the timing of my comments and the time the idea was originally proposed and prototypes I guess this can be skipped. Especially now that the Microsoft DeepZoom technology is in hand, we can easily see a similar space-scale environment where in changes are within low resolutions image to high resolution images.
The Illusion of Life (Ch. 3)

by Ollie Johnston and Frank Thomas

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This book chapter refers to a very interesting topic on the principles of animation. It starts with the evolution of words in the animation industry and how the way search for better drawings and animations, worked its way around these principles.

Within the topic of animation principles, the book chapter starts with a very interesting discussion on Squash and Stretch as one of the early principles found in animations and speaks about the concept of rigidity. In my opinion, this was a very innovative step which variations was applied and made it easier to create animations. Without these easy concepts, anticipated moves within animations may not show why something is happening, but at least the audience of the animation will enjoy the way thing are done.

Another interesting concept yet more difficult is staging. In staging an action, the animator must assure that only one action needs to be seen and the audience will not be confused by the angle or the perspective on what is actually being represented. But unfortunately at the time this principle was coming into the play, animations were in black and white and therefore animators had to use silhouette. In my opinion, this discovery was critical since it leads to visualization of emotions, yet it made the process of generating animations harder since more work had to be done to keep a clear silhouette image within the animations.

In another part of this chapter, existing methods of animation being straight ahead action and pose to pose are discussed and it is mentioned that both of these methodologies are still being frequently used by the animators. However in my opinion and as it is stated in the chapter, straight ahead animations that are not rendered by computers make the animation work more difficult for the animator since the strong perspective within the scene make its hard for the animator to keep the background or the layout matched at all times. Pose to Pose animation while accompanied with strong secondary actions can emphasize on the expression and this creates an outstanding animation which in my opinion was a great discovery.