**Re: The Illusion of Life**

Body language is a basic form of communication, and its expressive power alone was likely relied upon before the advent of spoken language. Most are aware of its presence when it is used to supplement speech. As an example, take drawing one’s arms horizontally away from one’s body with open palms while imploring: “You’ve gotta believe me!”. More subtly, many student’s feet point towards the exit when the end of a dry lecture nears. Their feet betray the otherwise (possibly) attentive upper torso.

Due to the highly developed and specialized nature of spoken and written language, most people are not as aware of the signals their body sends as they might be. Truly great actors recognize this, and convey meaningful nuances with careful exaggeration. They are able to isolate and intensify appropriate signals in an entirely believable manner. Perhaps the most insightful sentiment in *The Illusion* can be paraphrased thusly; an actor is bound by his or her body, but an animator only by imagination - don’t make a drawing more real, make it more believable.

All of the core animation principles follow this believability mantra. Of the principles related to motion, critical points in each motion are identified and amplified. Much the same can be said of the principles related to emotion. Anticipation, staging, exaggeration and appeal are particularly relevant. Actions that people subconsciously absorb and react to (‘gut feelings’, perhaps) are brought out. Small things like gait - men and women walk differently - can be exaggerated to amplify a character’s gender. Minnie’s movements and poses help to build her character. Visual context is also important; close-ups lose a sense of perspective. Animation is abstraction, and consequently good animation simplifies with the intent to clarify.

**Re: Pad++**

Context sensitive interfaces have the ability to provide solace in an age where the average person encounters a torrent of information daily. Ideally, any information should be accessible in a natural manner. General information should become more specific on closer inspection, just as nearer pictures should show more detail than those viewed from a distance.

Pad++ takes this idea to heart in its implementation, showing the structure of text at a distance and the words up close. The idea of portals seems similar to the ‘viewport’ terminology used in GUI building. Lenses represent a nonstandard and arguably more useful means of presenting data and consequently more intriguing. Most conventional interfaces use modes to achieve the same effect, and lose the reinforcement redundancy provides. Some people learn best orally, others visually; knowledge transfer is maximized when all forms are available simultaneously. Lenses that partially cover data call to mind small multiples of an idea rather than an image.

Portals open side-by-side to different locations provide another interesting means of presenting data. The ability to simultaneously view the same information at different magnifications lends perspective not found elsewhere. The ability to highlight the same information at different levels is useful for building a mental model during the learning process. Visual bookmarking at any level simply adds to this, playing to a strength of most people; humans tend remember information spatially. For the same reason philosophers would map an oration to a walk through the center of town, visual bookmarks are a natural way to order information.

It would be interesting to see this sort of interface applied to something other than a map. Unfortunately, ‘dead metaphors’ (file, menu, window, desktop) seem more like zombies as of late. Brainy ideas like Pad++ have been eaten away.