

In 1981, Disney published the "Illusion of Life". It was a reference for animators and became famous for its 12 principles of animation. They were recently popularized in the "Illusion of Life" video and the principles set out to provide guidelines for bringing characters to the way things moved on the screen.

As we've started bringing movement into our web designs, people have find these principles useful. Our web designs might not look like Disney animations, but many of the principles do still apply. The way our menus, models, and page elements move can convey character. We can look at some of these principles, and keep them in mind as we go about creating animation.

The principle of *squash and stretch*. When things move around, they can adjust their shape depending on how stretchy they may be. It helps give a sense of physical volume to the object being moved. This combines well with another principle, timing. In real life, things rarely move smoothly from A to B in a singular linear movement. Things slow down, speed up, or they interact with the environment in other ways.

The principle of *exaggeration*. By emphasizing movements, it can add a playful element to our on page interactions.

These two principles combine with the principle of *appeal*. Timing, referencing physical objects, and exaggerating the right movements can transform perhaps a boring model window into something remarkable.

We can use other principles to help our visitors. *Staging* is when we emphasize part of a scene. We can do this visually with font weight, font size, or maybe colors. We can also use movement to do this, in a static scene the one part that moves is the part we notice.

The principle of *slow in and/or slow out* can help too. When we select "edit" on an item in a form, we can slide in the extra content to be edited, in line perhaps or in the form of a panel or model. The movement also helps people see the change, and draws the eye to the important part people need to notice.

Lastly, *secondary action* is a great way to explain what's going on in our UI. When we add a new item to the middle of a list, making it appear suddenly might be too subtle. We can use animation to show people what has changed. Making the items above and below the new one scroll up and down to make room, for example. Coupled with a *secondary animation* on the new element, say fading it into place or sliding it, makes it really clear what has happened.

As we think about how we apply animation to our UI, it's good to keep some of these principles in mind. They can help us make sure our animations are helping our designs, and ultimately helping our visitors and customers.