

Comparisons Between “Interactive Motion Photography From a Single Image” and

“Self-animating Images: Illusory Motion Using Repeated Asymmetric Patterns”

Pictures have been static by definition throughout history. The action of taking a picture, whether it was done by a digital or conventional camera, has always been that a shutter allows in light for a fixed period of time in which a canvas is illuminated that is light sensitive. While that still remains the same, what we can do with the picture after has come into a new era. The authors behind the “Interactive Motion Photography From a Single Image” article have found complex algorithms that allow users to bring motion to a static image by blurring an image in a place that there would be motion in real life in a way that allows us to see where there would be motion, giving us a different aspect on the picture. Taking this a step further, the authors of “Self-animating Images: Illusory Motion Using Repeated Asymmetric Patterns” have found that certain patterns can trick our eyes into thinking that there is movement in a picture, as the “Rotating Snakes” example shows.

The first article, “Interactive Motion Photography From a Single Image”, talks in detail about the different strategies that can be used to give a picture motion. What I find fascinating about this is that the images are just regular pictures, and not predesigned pictures that were chosen for this project. A user can upload any picture into the program, and depending on what kind of motion he or she is looking for, use different algorithms to achieve the desired result. Which algorithm is needed depends on what kind of motion there is in the picture; whether the object in motion has static dimensions or whether it needs to be scaled. The type of speed lines,

or blurs behind the object in motion, can be chosen as well. For a rigid object for example, the linear speed lines are a better fit, where as the curved ones are better suited for rotational or scaling objects. From the description given as to how to use the actual program, I am rather surprised how easy it sounds to use. Given the complexity of what is actually going on in a picture in terms of what a computer sees I would have expected it to be a lot harder, but it seems very user friendly.

“Self-animating Images: Illusory Motion Using Repeated Asymmetric Patterns” is kind of an add on to this idea. While they don’t talk about a program that they built, they do talk about the idea of moving pictures, but this time in a much more literal sense. They found out that if a picture is made in a certain way and with certain colors, our eyes can be fooled into thinking that the picture is moving. Since this is still a relatively new concept that they figured out, there isn’t much known about it yet, but it looks like a promising start to getting pictures to actually move, and not just show us where movement should be like the authors behind the first article were doing,

I found reading these articles to be very fascinating. The idea that we are able to capture motion in a static image now is amazing. While the thought process that went behind the interactive motion photography seems rather simple, it does show that we are still learning. And if the self-animating images continues to be studied and evolved, I hope to be able to look at a fully motional picture at some point in the future.

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