



2011 is Painter's 20<sup>th</sup> Birthday year. In honor of this significant anniversary I asked Mark Zimmer to share some stories about the origins of Painter. Mark, together with the late Tom Hedges and subsequently joined by John Derry, co-invented Painter, the phenomenal digital painting program that emulates Natural Media like none other and has transformed the lives of thousands, if not millions, of artists around the world. ~ Jeremy Sutton

## The Origins of Painter

By Mark Zimmer, co-inventor of Painter



Portrait of Mark Zimmer created by Jeremy Sutton in 1994 using Fractal Design Painter 3

### ImageStudio, ColorStudio and Letraset

Between 1985 and 1990, Tom Hedges and myself were developers of Mac software (and hardware) that usually went through a marketer. Our initial product, SoundCap and the Fractal Sound Digitizer were for capturing sound on the early MacPlus. Early on, I made the move into graphics with a toy product I called GrayPaint. It used dither (!) to display gray scales on the then-black-and-white Macs. It featured a charcoal tool that could build up and also a smudge tool that was functional. Letraset's Marla Milne caught wind of this at some MacWorld show in 1986 and she got us to sign. The product was code named "The Realist" and Tom started working on scanner drivers for image capture. Eventually that product became Letraset's ImageStudio, which shipped in 1987.

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The royalties for ImageStudio were a windfall for us and it bought us a few cars and even some houses. We started work on ColorStudio as soon as 24-bit color cards started to appear from Radius and SuperMac. ColorStudio shipped in 1988 or 1989 and the royalties went up considerably. We were cemented as part of the desktop publishing revolution. Of course, all that did was encourage others to copy our work. Digital Darkroom was the first competitor to ImageStudio. Later, Photoshop became the bane of our existence as their marketing totally trounced ours.

That's when we began to think that WE should be doing the marketing. It would appear that Letraset was operating cross-purposes.

### **Secret Project**

I first started working on Painter in my home (unknown to Tom) in September 1990, while my home was still being repaired for the damage it took in the quake of 1989. Why did I start working on Painter? For years I had been an incessant sketcher, using felt pens, ebony pencils, pens, and other media. I realized that there just wasn't a program anywhere that could allow me to draw, and have the results look anywhere close to traditional results. This was particularly true since I had a Wacom tablet at home that I wanted to use. So I literally put a microscope to pencil sketches and measured the colors of felt pen combinations. I still have my original notes! I formed theories for how I could create a digital analog of a paper texture. Making them repeat as a tile was a very complex problem I had to solve at that time. Initially, I used something that resembles border cross-fading, but quickly I replaced that with cleaner Fourier methods.

### **Outed**

I didn't even show Painter to Tom Hedges for a few months. This was because I was responsible for working on ColorStudio Shapes 1.5, while he was responsible for version 2.0 ColorStudio. We both worked like dogs. So when I was in the office with Tom, I'd laboriously work on Shapes undo code, but once home I'd quickly get back to Painter. So much to do! Eventually I showed it to him (to his initial utter consternation), and then to Steve Manousos (to his thoughtful "I like it" response), and then to other friends (like Lee Lorenzen, who provided the cross-platform framework that got us to Windows). The demo was on a Mac II fx with a 24-bit color screen (Radius?) and, of course, the Wacom tablet. Their gut response was quite positive, and Fractal Design was incorporated in January of 1990, a couple of months later. This happened about the same time that Letraset decided to stop marketing ColorStudio. So it was really fortuitous that I had something else cooking.



## **Fractal Design Corporation**

In the meanwhile Tom and I worked on Painter. Eventually, Tom would contribute a tiled virtual page-swapping mechanism for images that would become common for image programs, but that was on version 1.5. For version 1.0, I worked on the brushes and the interface. We had pencils, felt pens, pens, chalk, erasers, and other utility brushes. We had 7 or 8 paper textures, including smooth and rough paper, canvas, and others. I think my technique was to rub the paper with the edge of a soft piece of charcoal and then scan the result! Really dumb, but at least we got the process started.

We knew this was a special project. And so did the designers that we worked with. Rucker/Huggins was the design firm that came up with the paint can. We came up with the poster idea. I still have several vertical-form-factor Painter posters hanging in my office. It was kind of viral (before there was viral) with designers to show the Painter poster on the door, in the cubicle, or in the design office. For some reason, many of our users proudly displayed them. So we just kept them coming year after year.

## **The Première**

By August 1991, at the Boston Macworld, we were at the ship date. We actually FedEx'ed the golden master floppies from Boston back to Aptos. This was done because I saw that TimeArts Oasis had implemented tracing paper (though it was ungainly and slow) and I had to get that feature into Painter. As the story goes, John Derry was demoing Oasis as a TimeArts employee at that point. I was quite impressed with his demo talents. I craftily implemented tracing paper using a very efficient technique in my hotel room at the Collonade and handed the GM disk to Steve Manousos. He managed to get it sent back to Steve Rathmann in Aptos and it was thus that Painter was officially being duplicated and shipped (in a paint can).

## **Stealing an Employee!**

On my way back to Aptos, at Logan Airport, I ran into John Derry. It was there that I pressed to hire him. And, of course, I was successful. We got along well.

The actual ship date for Painter 1.0 was probably August 8 or 9, 1991. So Painter 1.0 only took about 11 months from initial coding to first shipping.

--Mark