



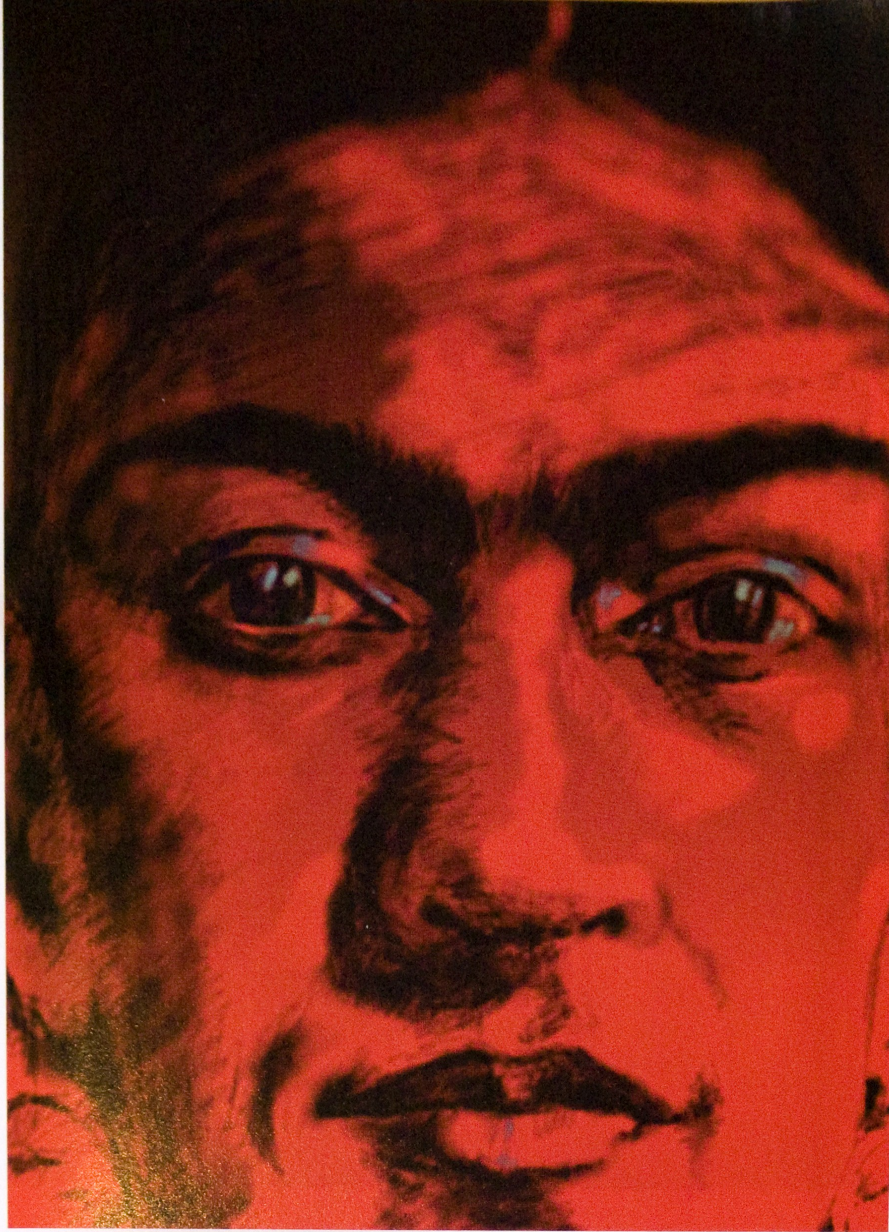
# Portraits of Painters

Four Paint Programs Compared

by

*Jeremy D. Sutton*



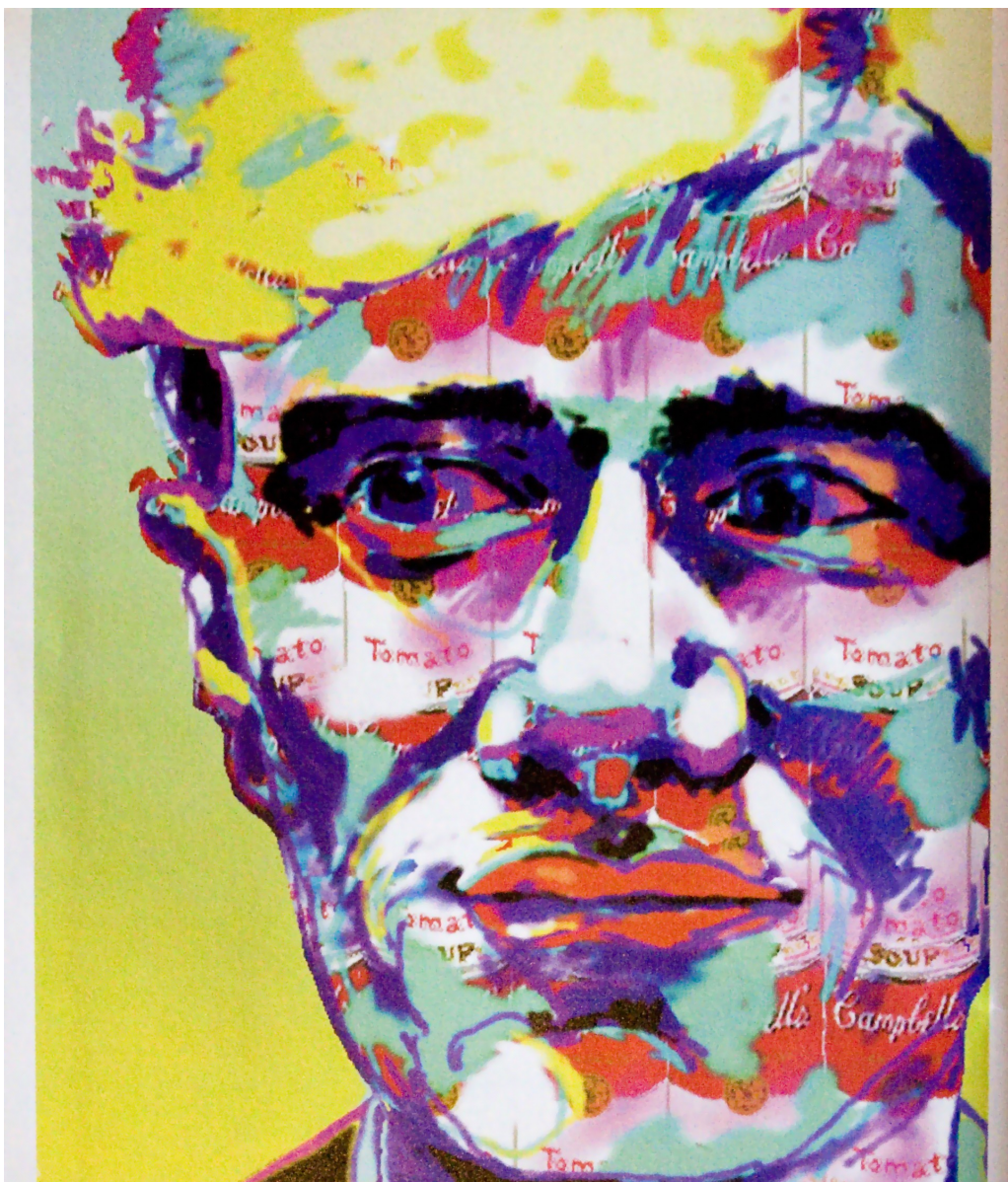


*While beauty may be in the eye of the beholder, the worth of a paint program is in the hands of an artist. So, we asked artist Jeremy Sutton of Palo Alto, CA, to try his hand at a variety of paint programs. The results are four astounding portraits created on the desktop. While one entry—Adobe Photoshop—was a surprise to us, it became a “brush” for the artist.*

*—Ed.*

Warhol, Dali, Picasso and Kahlo—four artists with larger than life personas who themselves experimented with the media—seem the ideal subjects to use when exploring digital painting.

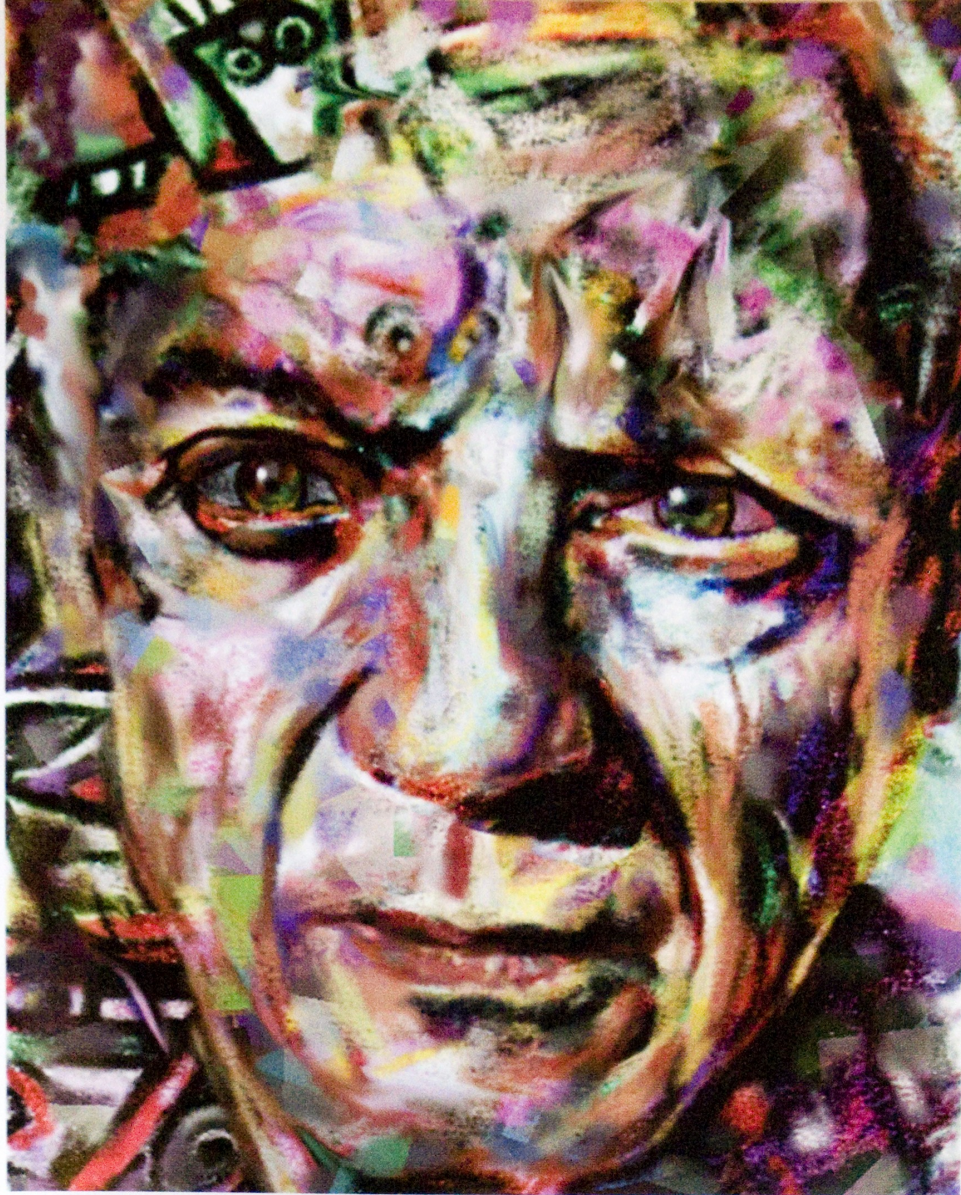




A portrait of each artist was created directly on the computer—each with a different paint program. No scanned or traced images were used. In all cases I simply looked back and forth between my photographic source material and the monitor while using a stylus on a digitizing tablet.

The painting software used for the portraits includes Adobe Photoshop 2.5 for Salvador Dali, Aldus SuperPaint 3.5 for Frida Kahlo, MicroFrontier/Timeworks Paint-It! for Andy Warhol and Fractal Design Painter/X2 for Pablo Picasso.





All four portraits were created on a Macintosh IIx equipped with a SuperMac Series III 24-bit color graphics card, SuperMac 19" Trinitron monitor, a 160Mb hard drive and 20Mb RAM. The input device was a Wacom SD-420E 12" x 12" digitizing tablet with SP-310 pressure-sensitive, cordless stylus.

In each case, decisions were made prior to putting stylus to tablet, such as choice of source material, memory allocation, tool and color selection. The screen capture illustrations were recorded with Mainstay Capture 4.0.



## Salvador Dali Adobe Photoshop 2.5

"The Christ of St. John of the Cross" is a powerful painting by Dali that depicts a dramatic view of Christ on the cross, viewed from above, with a small boat in a landscape far below. I decided to use this as a basis for the background of my Dali portrait, together with a detail from another Dali painting, "Metamorphosis of Narcissus," showing a decaying hand holding an egg with a flower breaking out of it. The two images symbolized for me the breadth of Dali's inspiring vision: stretching from the spiritual and eternal through to the ephemeral—the processes of creation and decay.

I found the smoothness and flowing feel of Photoshop painting tools well-suited to the immaculate detail and soft surfaces of Dali's own images. By double-clicking on either main color square (foreground and background colors) in the floating color palette, I could use the *Color Picker* to define and select colors. I liked the ability to just move around the large color square and easily adjust the spectrum slider.

I started with a vertical gradient fill using the *Gradient Tool* and then set my Paintbrush parameters, selecting the options where both color and opacity are controlled with my stylus pressure. I also selected brush size from a choice of 16 pre-set options (although, I prefer a continuously variable slider of some kind).

As I drew the figure on the cross floating in space, I used the zoom function to enlarge specific areas of the image for finer detail ❶. There are two aspects of the color palette that I particularly liked. There is a small square in the top left that you can paint in colors and select later. You can also add small color squares containing the currently selected color to the main palette. Unfortunately, you cannot save these personalized palettes when you quit the program.

For the second background image, I initially created a double gradient fill. As I drew the mysterious hand, I used an alternative brush mode called *darken* ❷ to add contrast to some regions and a very fine brush for details in the flower.

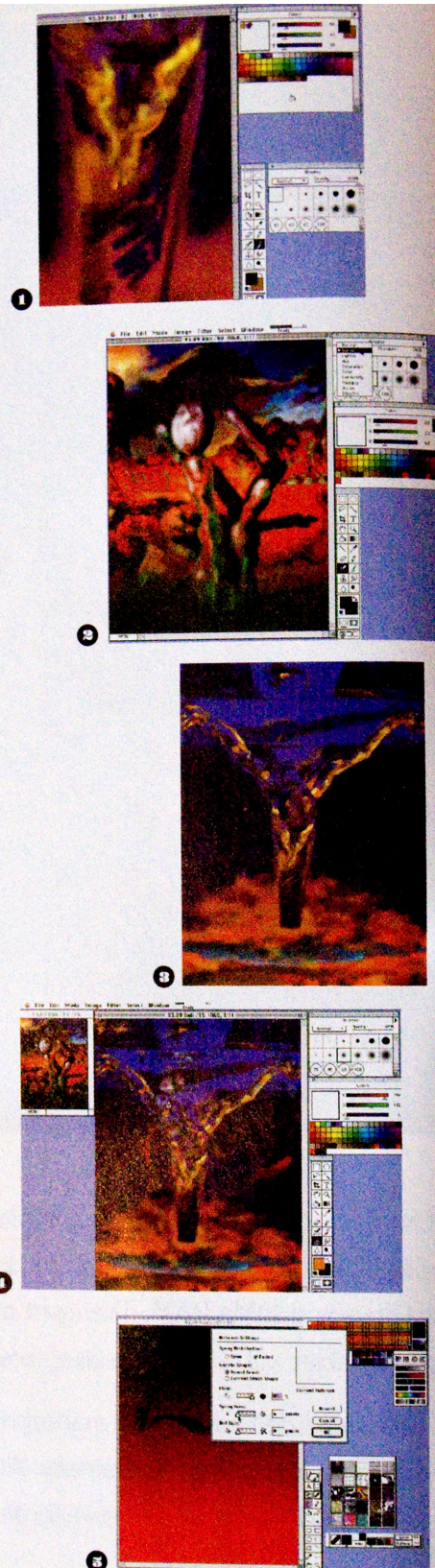
Once the two background images were completed ❸ I used the *Rubber Stamp* tool to clone the "Metamorphosis" picture into the "Cross" picture ❶. As I cloned, there was a handy crosshair in my source image that indicated where I was. I selected the *Rubber Stamp* size and opacity to be controlled by stylus pressure.

I used the clone image to lay down the foundation of Dali's face emerging from the background and finished using the Paintbrush to bring the portrait into stronger relief.

## Frida Kahlo Aldus SuperPaint 3.5

The intensity and sadness of her eyes struck me immediately. In her own words, "I knew that a battlefield of suffering was in my eyes. From then on, I started looking at the lens, unflinching, unsmiling, determined to show that I was a good fighter to the end."

I chose as my source photograph an image of Kahlo taken five years after the terrible accident that was the source of her pain. I considered using one of her own paintings for background—maybe one depicting her husband Diego Rivera, a renowned muralist. In the end, I decided on a very simple, stark image.





Using the *Paint* layer in SuperPaint 3.5, I began by filling the image with a gradient: black at the top like an ominous cloud, merging into blood red at the bottom, like the blood in her paintings.

SuperPaint is a versatile program that includes both object-oriented page layout/drawing features in the *Draw* layer and bitmapped painting features in the *Paint* layer. You can convert bitmapped images to *Draw* objects using SuperBits and edit them at any resolution. The *Paint* layer is restricted to 72 dpi. Initially, to open a large enough image in the *Paint* layer, I had to increase the memory allocation from 2.5Mb to 15Mb.

Aldus has added pressure sensitivity to quite a few of their painting tools, available with the brushes palette which pops out of the tools palette. For this particular painting, I used the *Airbrush* ⑤. Colors are selected by clicking on a pull-out floating palette. There are 16 pre-set palettes to choose from, as well as the ability to define any color in terms of different color systems such as RGB, HSV or CMYK. There is also a useful floating palette that continuously records the last 12 colors used ⑥.

## Andy Warhol

### MicroFrontier/Timeworks Paint-It!

For the portrait of Andy Warhol, I wanted to create a simple, bright, graphical image reminiscent of Warhol's early screen-print portraits. It seemed appropriate to build on a background formed by a 1960's pop art icon that epitomizes Warhol in many people's minds—namely, the Campbell's soup can.

The Paint-It! box says, "You don't have to be an artist to paint like one," a quote which Warhol himself would surely have approved. This software seemed appropriate for this portrait.

After choosing a photograph of a young-looking Warhol from 1965 and purchasing an authentic Campbell's Tomato Soup can, I selected my initial painting tool and experimented with the options. I chose the *Spray Can* with fuzzy edge and maximum flow ⑦. Although the program lacks pressure-sensitive control via stylus pressure, I could still achieve relatively fine detail simply by creating a small brush/spray size. I liked the continuous size adjustment and the *Test Area* in the Spray Can options window.

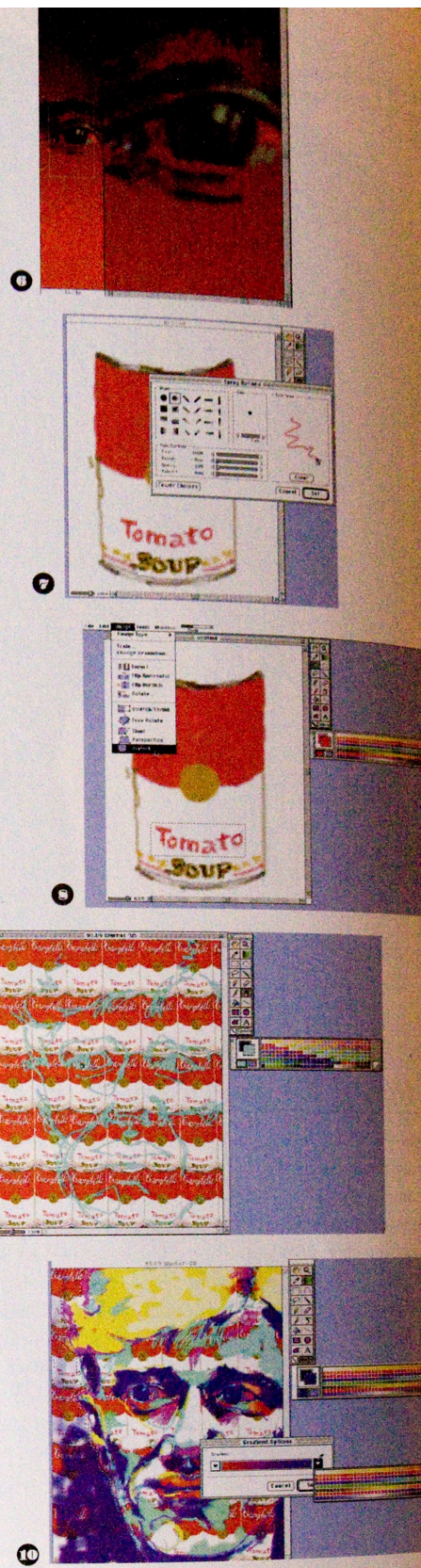
Color selection is achieved by clicking on the appropriate segment in the built-in palettes, with 10 palette selections from which to choose. Under *Image* on the menu bar, I was surprised by the small graphical icons illustrating various image manipulations ⑧. I used the *Distort* option to distort the "Tomato" above the "Soup."

When I'd finished the soup can, I used the *Lasso* selection tool to copy and paste it repeatedly, until I'd filled the entire image with cans. Then I began drawing Warhol's face over the cans ⑨ using color combinations based on the way Warhol used complementary and clashing colors playing off one another. Next I defined a gradient fill ⑩ and applied it to the background to produce the final.

## Pablo Picasso

### Fractal Design Painter/X2

When I look at Picasso's face, I see a dynamic combination of playfulness, aggression and passion. It was this fiery mix of qualities—his vibrant zest for life—that I wanted to capture in this portrait.





I chose "The Dream," a painting that depicts a dreaming lady, to represent the sensual side of Picasso. His aggression and anger seemed well-expressed in the screaming horse of his "Bullfight," so I chose this for a second image.

I wanted to use a painting program that offered a lot of versatility, and Painter—the original software-in-the-paint-can—fit the bill. I used the most recent upgrade, Painter/X2, which is Painter 2.0 with "expert extensions."

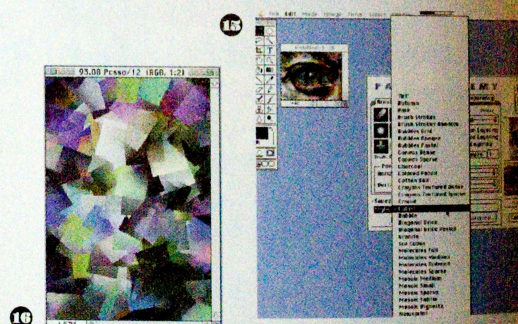
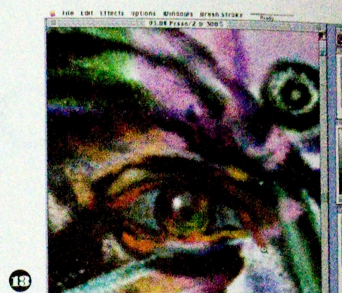
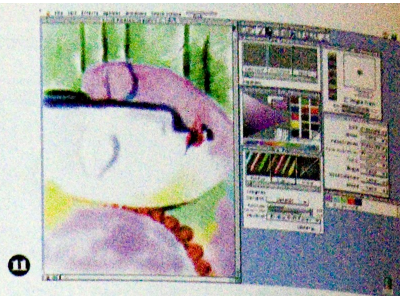
One immediately striking aspect of Painter is the almost overwhelming myriad of parameters that you can customize to produce your own individualized painting tools **11**. The *Brush Palette* allows you to select a basic type of brush, imitating "traditional" art media, by scrolling through labeled icons (which can also be pulled out as free-floating icons). Within each type of brush, you can choose from a number of pre-set variants or recall your own previously saved variant. Besides controlling the paint *Penetration/Concentration*, you also determine a *Method*. I normally use either *Grainy Soft Cover* or *Grainy Soft Buildup* for straightforward painting. And that is just to begin with! You can set which parameters will be controlled by stylus velocity, direction, pressure, tilt and so on. I like to control brush size, penetration and concentration via pressure. This allows convenient control of subtle effects and detail. The grainy methods allow you to introduce different paper textures, grouped in a palette of their own. The brush size has to be "built" every time it's changed, unless you utilize your own pre-built floating variants. This building time typically takes 10 to 20 seconds and becomes somewhat annoying if you want to make frequent adjustments.

The color palette is conveniently arranged with a variety of graphical interfaces for picking colors. The X2 version also allows you to save any colors you select into Color Sets that can be recalled later. At present they are not easily edited after they've been saved, except for adding new colors.

Using the *Set Clone Source* under the menu bar *Options*, I set the "Dream" image as a clone source and used a *Grainy Soft Cover Clone* brush to introduce portions of the "Dream" image into the "Bullfight" image.

One of the features I most appreciate in Painter is the ability to record a session and then play it back at any time in the future **12**. I find this very valuable for documenting the process and being able to share with others how the portrait develops. Playing back over different backgrounds can also produce interesting results, such as Picasso's face gradually emerging from the background with an emphasis on the eyes, through use of the *Liquid Distort* brush **13**, **14**.

As a final touch, I decided to clone in some cubism using one of the many third party plug-ins supported by Painter. I applied Xaos Tools Paint Alchemy, a Photoshop plug-in selecting the *Cubism* style—out of a choice of 70—and customizing the filter brush, color, size, angle and transparency with convenient sliders **15**. The little *Preview* window gives you an opportunity to quickly see the results of the effect. Applying this effect to large files can take a few minutes. I wanted to distort the image so that it ended up like a cubist abstract. I cloned in certain edges and blocks to provide an underlying hint of cubist forms **16**.





## Summing Up

When I compare these four programs purely from the point of view of the way I paint portraits, Painter/X2 stands out as offering the most versatility. In particular, I appreciate the variety of brushes, the paper textures and the record session feature. There is room for improvement in the awkwardness of brush size adjustments and the difficulty in editing Color Sets.

Photoshop 2.5 surprised me in its ease of use and quality of painting tools. I had previously thought of Photoshop primarily as an image manipulation and photo retouching program and had found earlier versions clumsy and slow to paint with. I found the ability to adjust brush color, size, opacity and airbrush size/pressure with stylus pressure makes Photoshop 2.5 a good painting program. I still find it a bit slow and wish I could save personalized color palettes for later use. I also miss paper textures. Adding texture later is not the same.

Although SuperPaint 3.5 was not as versatile a painting program as Painter/X2, it certainly was simple to use and had convenient floating palettes for color, texture and gradient selection. It also offers a useful combination of object-oriented drawing with bitmapped painting.

Paint-It! is not intended to be an advanced painting and image editing/manipulation program. MicroFrontier markets Color-It! to add such capabilities. As an easy-to-use entry level paint program, it has all the necessary basic tools and a lively graphical interface. I personally miss features I take for granted in more advanced programs, such as pressure-sensitive tools that allow greater subtlety.

I have specifically not compared the programs' value for the money. There are such significant differences in the features and capabilities of these programs beyond their use simply for painting, that it would require a much more thorough review. Regarding other painting programs, Pixel Resources is releasing a long-awaited and much improved update to PixelPaint Pro called PixelPaint Pro3, which may be worth investigating.

In practice, I find I use programs in combination, depending on their particular strengths and weaknesses. For instance, I may record a painting session in Painter, apply a Photoshop plug-in filter such as Paint Alchemy and then play back the recorded painting session in Painter over the top of the resulting image.

## Source Material and Acknowledgments

Andy Warhol: Based on photograph by Ken Heyman, 1965, New York City (reproduced in *Pop Art*, author John Rublowski, publisher Basic Books Inc., 1965).

Frida Kahlo: Based on photograph by Imogen Cunningham, 1930, San Francisco (reproduced in *Frida Kahlo: The Camera Seduced*, publisher Chronicle Books, 1992).

Salvador Dali: Based on photograph by Battles Compte, Cadaques, Spain, 1948 (reproduced in *Dali: the work, the man*, author Robert Descharmes, publisher Harry N. Abrams, Inc., 1984). Also based on elements of two Dali paintings: "Metamorphosis of Narcissus," c. 1936-37, Oil on canvas, 20" x 30", The Tate Gallery, London; "Christ of St. John of the Cross," 1951, Oil on canvas, 80.75" x 45.6", Glasgow Art Gallery, Glasgow, Scotland, both reproduced in *Dali: the work, the man*.

Pablo Picasso: Based on photograph by David Douglas Duncan, Cannes, France, c. 1960 (reproduced in *Viva Picasso: a Centennial Celebration 1881-1981*, publisher The Viking Press, 1980). Also based on elements of two Picasso paintings: "The Dream," 1932, Oil on canvas, 51" x 38.5"; "Bullfight," 1934, Oil on canvas, 38" x 51". Both from collection of Mr. & Mrs. Ganz, New York. Both reproduced in *Picasso*, publisher Abrams, Inc. ■

Thanks to MicroFrontier/Timeworks, Aldus, Adobe, Fractal Design and Xaos Tools for their assistance and cooperation.

Jeremy Sutton, based in the San Francisco Bay Area, focuses primarily on portraiture, using both "traditional" and computer media. His computer portraits are often output in large scale (some 6' high) or on watercolor paper. Sutton, who also does interactive computer

portraiture at events and trade shows, has exhibited in America and Europe and has created cover illustrations for MacArtist and New Media magazines. He can be contacted at (415) 325-3493.



## Of Tablets and Pens

It's a lot easier to paint when you can work with a tablet or pressure-sensitive pen. Kurta Corp.'s XGT pressure-sensitive graphics tablet is the choice of designer Rhoda Grossman, who provided the artwork for the *Design 101* column in October. The Kurta XGT product line runs on the Mac, PC and Sun. The Kurta XGT has 256 levels of pressure and lets the user modify and lock the pen pressure level.

Author and artist Sutton uses a Wacom tablet when he paints. Wacom is bundling its digitizing tablets and pens with Fractal Design Corp. Painter 2.0. The ArtZ 6" x 8" ADB tablet comes with the Mac package and the SD-510C 6" x 9" tablet with the PC package. The SE-420E 12" x 12" tablet is available for both Mac and Windows computers.

CalComp has a thin, light-weight tablet, the DrawingSlate, that can sit on your lap or desk. They also have a series of cordless pens and pointing devices with a range of tilt, height and pressure capabilities.

—Ed.