

About Artistry

Artistry, the newsletter, is a four-color print publication that features recent Painter and Ray Dream images by working artists, along with steps explaining how the artwork was created. The digital version on the CD is only a sample. The actual newsletter is printed, not digital, so that you can see how images look when output. Just about all the images in Artistry are both color corrected and saved as EPS files in Painter. Also, all of the graphic elements including page backgrounds and the logo are created in Painter, making Artistry not just a useful reference source for Painter and Ray Dream illustrations, but also a terrific real-world example of Painter's versatility as a graphic design tool.

Currently in its second year of publication, Artistry is published by Karen Sperling, author of Fractal Design Painter 3 and Painter 4 Complete, the Painter manuals versions 1.0 through X2, the Painter 2.0 Companion and the manuals for Sketcher and the Shapes Annex of ColorStudio.

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Artistry

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Framing with Painter's Floaters and Paths

Florida-based artist Beverly Parker-Levi was a sculptor and designed dolls and toys for 20 years. She was featured in several publications, wrote instruction books and taught seminars. About four years ago she changed careers to pursue computer art, designing graphics for software, greeting cards and stationery. And her favorite pastime is "doing my own personal projects via Painter and the Mac." Says Beverly of her artwork, "There's nothing artistically deep or profound about me or my work. I'm just someone who has a



passion for my family, children, color and drawing. I love the busy colorful art of the Victorian era; lots of flowers, borders, etc. When I look at it the only message I get is that somebody enjoyed creating it. That's what I try to convey in my work."

Beverly notes, "I love creating fairies. I will often use children as my subjects. For me, the fairy represents the child's free spirit. When I was designing dolls I would always use a family member or friend as my inspiration, and I often do the same when creating a painting." She adds that her granddaughter was the inspiration for "Brittany's Dream" (r.), which Beverly plans to use for a decoupage.

Occasionally Beverly scans in photos of some of the people she portrays in the paintings, and uses the scan as a reference for the drawings. For the "Brittany's Dream" pencil rendering (top, r.), she scanned a photo of her granddaughter, Brittany, into Photoshop in grayscale and used Image: Adjust: Levels for "lots of light and dark contrast to bring out the detail more." She printed the image, placed it on a light box and did a rough tracing to get the placement of the features. She filled in the details and then scanned the sketch into Photoshop.

Beverly brought this sketch into Painter as a floater and painted it with the Chalk.



The leaves and flowers in "Brittany's Dream" are Image Hose nozzles that Beverly created from nature sketches, seen above. Beverly sketched the roses from a rosebush in her garden and drew the daisies while on vacation in the Appalachian mountains.

Beverly estimates that she has close to 600 nozzle files, "and that's still not enough" (see the article on p. 5 for information on setting up a simple image hose nozzle and painting with it).

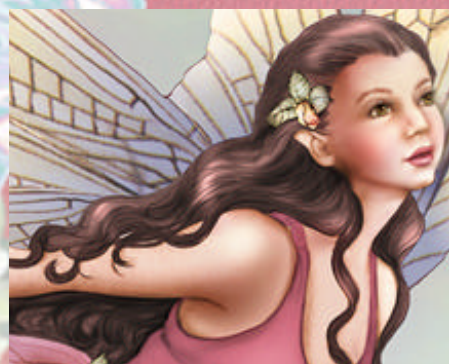
Beverly constructed the frame in "Brittany's Dream" by creating paths and then stroking them.

The first step for "Brittany's Dream," then, was to bring in the figure pencil sketch as a floater by copying and pasting.

1. Start a new image (File: New) and name it (File: Save As). This file is your main image.

2. Open an image (File: Open) that you will copy and paste into the main image as a floater.

3. Select all (Command+A Mac; Ctrl+A, Windows) and copy (Edit: Copy). Choose the main image in the Window menu and paste (Edit: Paste: Normal). The selected image comes into the main image as a floater.



Details (above) of "Flying Fairie" (top) and "Brittany's Dream" (r.) by Beverly Parker-Levi.

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Framing

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Next was the frame, starting with a path.

1. Using the oval (click and hold on the Tools palette: middle rectangle to access the oval), click and drag an oval path around the floater. Paths go behind floaters and into the background. You can't select within a floater.
2. Name the path by choosing Objects: P. List palette, double-clicking on the path's name, typing "inside frame" and clicking OK. The new name appears in the P. List.

Next you'll set up a brush and select a color to stroke the path with.

1. Choose the Airbrush's Feather Tip variant. Choose Method Subcategory: Flat Cover for a rougher stroke. Set Controls: Opacity to 100%. In the Brushes palette: Controls: Size palette, click the bottom, right silhouette for a hard-edged brush stroke. Move the Size slider to the right. Beverly set it at 100 because she was working at 300 dpi. If you're working at a lower resolution, set the Size slider lower. Click Build.
2. In Art Materials: Color palette, choose a "medium gold" (H=45, S=50, V=55). This will be your frame's base color.

Next you'll stroke the selection with these new brush settings.

1. In the Objects: P. List, choose the far-right Drawing button (the one next to the pencil) and the far-right Visibility button (next to the eye) if they aren't already selected.
2. Choose Objects: P. List: Stroke Selection. You now have an oval-shaped gold stroke. Deselect the path by clicking the dotted circle next to its name in the Objects: P. List.

Next you'll select this brush stroke with the Magic Wand so that you can apply an effect.

1. Choose Edit: Magic Wand. The Magic Wand dialog box appears.
2. Click on the gold brush stroke in the image. A red mask covers the stroke. Click OK. The red mask becomes marching ants.

Now apply paper texture to the frame.

1. Choose a paper texture in the Art Materials: Paper palette.
2. Choose Effects: Surface Control: Apply Surface Texture: Paper Grain. Click OK.

Next, you'll darken the outer edges using the Airbrush and then doing Stroke Selection.

First adjust the brush to create dark strokes.

1. You should still have the Airbrush selected. Change the Method Category to Buildup, which makes the strokes darken to black.



"Moon Fairie" by Beverly Parker-Levi ©1997
Dogbyte Development.

2. In the Brushes palette: Controls: Size palette, click the top, left silhouette, for a soft-edged brush stroke. Move the Size slider to the

left. Beverly chose 53 at 300 dpi. Click Build. In the Art Materials: Color palette, choose a "dark medium gold" (H=45, S=53, V=28). Set Controls: Opacity to 50%.

Then stroke the selection.

1. In the Objects: P. List palette, choose the middle Drawing button (the one next to the pencil) and the far-right Visibility button (next to the eye).
2. Choose Objects: P. List: Stroke Selection.

If the stroke is too narrow or wide, choose Edit: Undo, adjust the Brushes palette: Controls: Size slider and choose Stroke Selection again.

Last, Beverly added the frame's highlights and shadows.

1. Click the far-right Objects: P. List palette: Drawing button.
2. Paint with the Brushes palette: Dodge and Burn tools.

Beverly then painted the area inside the frame. First you have to resize the inner path to protect the frame's edge.

1. Click the triangle next to the Wand Group in the Objects: P. List.
2. Click the dotted circle next to the positive path to deselect it. Click on the negative path's name to highlight it.
3. Choose the Tools palette: Path Adjuster tool by clicking and holding on the Floaters tool (the left-pointing hand). The negative path's control points appear. Click and drag on control points to resize the oval path to be inside the frame's center.
4. Click the dotted circle next to the positive path to reselect it. Click the middle Drawing button to paint inside the oval.
5. Choose the Chalk, move up the Brushes palette: Controls: Size slider and reduce the Controls: Opacity slider and paint.

Next Beverly painted the roses, leaves and

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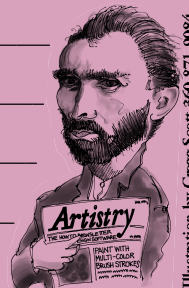


Illustration by Gregg Scott 360-871-9084

Framing

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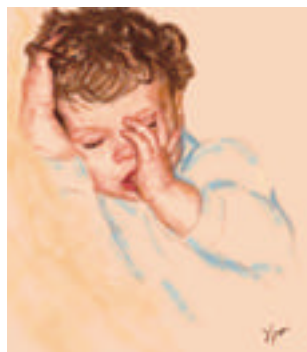
daisies with her Image Hose nozzles. She lightened the nozzle elements "for a misty, distant effect" by clicking the rear overlapping rectangle in the Art Materials: Color palette, choosing a "light grayish blue," clicking the front rectangle and setting the Controls: Grain slider at 40%. As she painted the elements closer to the foreground she moved the Controls: Grain slider to the right to make them clearer.

Next Beverly painted color on the fairy floater, which she selected by clicking on it with the Tools palette: Floaters tool. She filled in the fairy with Chalk, alternating between Soft Cover and Soft Buildup in the Brushes palette: Method Category and Method Subcategory menus. By selecting a method that didn't have the word grainy in it, the Chalk strokes were smooth, without texture. "I didn't use textures because I wanted the pencil detail to show," Beverly says. She alternated between painting the background and the floater "to match and blend colors." To paint in the background, deselect the floater by clicking outside of it with the Floaters tool and then paint.

Next, she dropped the floater by first selecting it with the Tools palette: Floaters tool (the left-pointing hand) and then clicking Objects: F. List: Drop. She loaded a nozzle, moved the Controls: Grain slider to the right for more opacity, and painted the foreground leaves and flowers in front of Brittany.

My husband, Gerry Beane, prints my Painter art on our LaserMaster® DesignWinder.™ He can print your art too, in continuous tone on canvas or watercolor paper.

Nomi



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Beverly created "Flying Fairie," (p. 1, top, l.) much the same way except that as her last step she created a vignette effect by inverting a path, feathering it and then deleting the color at the image's edges, creating a white border.

With an image open that has any color but white going out to its edges, create a shape and convert it to a selection.

1. Click on the shapes rectangle tool in the Tools palette's upper right-hand corner (the



Beverly Parker-Levi took an image (top, l.), turned it blue (bottom, l.) and then cloned in parts of the original (detail, above).

- middle selection rectangle won't work).
2. Click and drag a rectangle in the image. This will be the inside of the vignette so leave room where the white border will be.
3. Choose Shapes: Convert To Selection. The rectangle becomes a selection marquee.

Next you'll invert the selection and feather it.

1. Choose Edit: Mask: Invert Mask.
2. Choose Edit: Mask: Feather Mask. The Feather Mask dialog box appears. Type 50 and click OK.
3. Press delete, Mac;backspace, Windows. The image now has a white feathered border.

Beverly created "Moon Fairie" (opposite page and above) from an image called "Climbing Fairie" (above), which she had painted for a greeting card design. The setting was in the daylight with the fairy against a plain background with bright, saturated colors. She wanted to depict the same fairy in a new image secretly gathering her berries by moonlight with just a hint of the color from the original, leaving a blue cast and blue shadows. To do so, she used the fairy floater from the original, turned it blue and cloned back some of the original color.

The original image, "Climbing Fairie," had been saved as a RIFF file with the fairy and berries as a floater. She opened the original image, saved it as a new image (File: Save As) and named it "Moon Fairie."

To create the moonlit background, Beverly deselected the fairy floater by clicking outside of it with the Tools palette: Floaters tool (the left-pointing hand) and then she filled the background with a deep blue (Effects: Fill).

Next Beverly used the Chalk's Large Chalk to paint clouds in the image's top left and bottom right corners. She set the Method Subcategory to Grainy Soft Cover; the Brushes palette: Controls: Size palette to the top, left silhouette she lowered the Controls: Opacity slider; and chose white in the Color palette.

For the moonlight in the image's upper left-hand corner, Beverly used the oval selection tool (click and hold on the Tools palette: mid-

dle rectangle and you'll find the oval). She selected an area, feathered it by 40 pixels (Edit Mask: Feather Mask), then used Effects: Tonal Control: Equalize, which created the moon and allowed some clouds to show through.

Beverly painted the stars with the Eraser and a captured brush tip.

1. Start a new image (File: New).
2. From the Objects: P. List: Paths palette, click and drag a star path into the image.
3. Choose black in the Art Materials: Color palette and choose Effects: Fill, click next to Current Color and click OK.

Next you'll make the star a brush tip.

1. Choose the Brushes palette: Eraser's Medium Bleach variant
2. Choose the Tools palette: middle rectangle (click and hold the oval to get the rectangle back) and click and drag a selection marquee around the star.
3. Choose Brushes palette: Brushes: Capture Brush. The star is now the brush tip. Choose the Brushes palette: Controls: Size palette to see the star.

Then Beverly chose the "Moon Fairie" image from the Window menu, chose the Tools palette: brush and painted with her captured brush to create the stars. Change the star's size by changing brush size (Brushes palette: Controls: Size slider or Command+ Option+click and drag, Mac; Ctrl+Alt+click and drag, Windows). Change the stars' opacity by moving the Controls: Opacity slider.

Next Beverly turned the fairy blue.

1. Select the floater by clicking on it with the

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Drawing on Emotions with Painter's Pastels

By Diana Belenky

When I think about an idea for a drawing, I like to use images that can create a flow of energy and depth of emotion. Art must make people react and take them to another place. I have always been interested in figurative art because so much can be expressed with the human body and face. With a tilt of a head, or a twist in the body a painting can begin to communicate. Whether it is emotional, psychological, spiritual, or intellectual, I want my art to express both a mystery and a truth. I want the viewer to stop, be still,

be drawn into the art. Once his imagination is captured, he is free to discover something new, unusual, or beautiful. I hope to make him feel joy or despair and make him wonder or realize something. Art has the power to create the moment of silence and discovery.

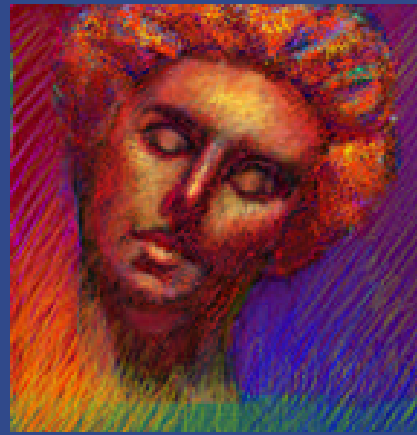
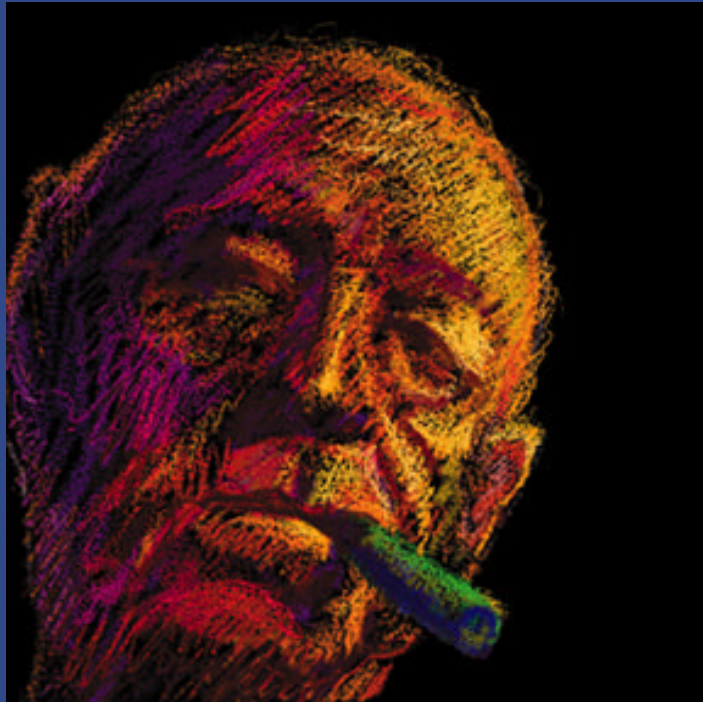
An advantage of digital painting over traditional media is its unlimited amount of colors and values. It is very easy to change colors and correct mistakes. This gives me greater creative options and more freedom to express myself.

I use the Chalk's Artist Pastel Chalk in my Painter drawings. In "Man with Cigar" I wanted to create the greatest contrast of color between the face and the cigar. The face's colors flow into each other to create a gradual turning of the form.

In the cigar I used the opposite colors of the face for contrast. I chose pure, intense colors because I wanted to express an energy and attitude in the painting. For one person "Man with Cigar" can communicate arrogance, cynicism, detachment and for another it can represent something else. On the left side of the cigar, we can probe the secret depths of the human psyche, that lurid heart of darkness that is unavailable to the light of day. Separated by the luminous green cigar, we enter, on the right side, into the world of light, openness, commerce, even world weariness. Here's a man who comfortably inhabits both worlds. The arrogant cigar speaks to his total confidence.

Art is about rhythm in color; light and shadow; and movement. Emotions are created through movement and contrast of color. In "Closed Eyes" the intense colors in the background relate to the colors in the face,

pushing the drawing's diagonal movement created by the tilt of the head, producing power, energy and beauty. Most of the background colors relate to purple (red violet, purple, blue violet) and the shadows in the face are reddish purple. Yellow (purple's complement) moves in and out of the purple to create the contrast and the diagonal rhythm. The most intense color contrast happens from the painting's



"Man with Cigar" (l.) and "Closed Eyes" (above) by Diana Belenky.

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Leap into Creating Frogs in Ray Dream

By D.R. Greenlaw

When you hear the terms 3D modeling or 3D animation, what do you think of? To some, it means talking toys or fierce dinosaurs; to others, it's a practical visualization tool used by engineers or designing automobiles and aircraft, or physicians for high-tech medical analysis. Whatever people think it's for, very few understand the process involved in creating it. That's because the technology has been so complicated and expensive, only a select few had access to it.

All that changed after Ray Dream. Like Prometheus bearing fire from the mountain,

Ray Dream made it possible for anybody with a modest desktop computer to unlock the mysteries of 3D.

What makes Ray Dream especially interesting to desktop artists is its unique, non-technical interface. Unlike most 3D programs, Ray Dream's working environment resembles a photographer's studio instead of an engineer's drafting board.

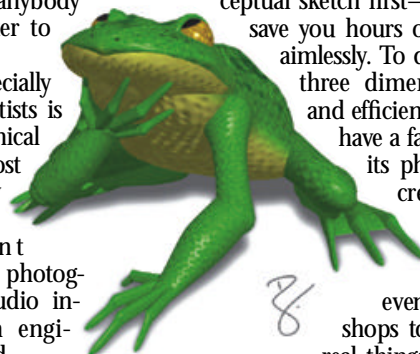
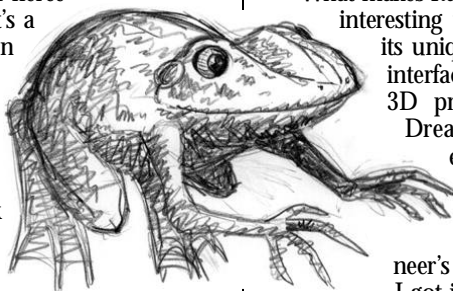
I got into 3D modeling to build poseable characters, and one of the first models I created was a fairly realistic frog. Before diving in with the modeling tools, I did several sketches of the subject (above, l.). As with any important art project, it helps to do a con-

ceptual sketch first—a good sketch can save you hours of fumbling around aimlessly. To develop a subject in three dimensions successfully and efficiently, the artist should have a fair understanding of its physical structure. In creating the sketches, I looked at dozens of photographs of various frogs, and even visited a few pet shops to take notes on the real things. Next, I broke the

frog down into smaller components—this not only made the model easier to build, but made it more poseable.

Now, I had to decide which part of the model to build first, and which tool I'd be using.

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Framing

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- Tools palette: Floaters tool.
2. Choose Effects: Tonal Control: Adjust Colors. Move the Saturation slider to the left to remove all color. Click OK.
 3. Chose a medium blue color in the Art Materials: Color palette.
 4. Choose Effects: Surface Control: Color Overlay using Image Luminance. Click OK. Choose Effects: Tonal Control: Equalize for contrast. Adjust the triangles to taste and click OK. Beverly now had a blue fairy against a blue moonlit sky.

It was time to bring back color from the original to add highlights to the blue fairy floater. Beverly did so by cloning parts of the original into the new fairy image. Beverly opened the "Climbing Fairie" image and dropped the fairy floater (Objects: F. List: Drop) so that the cloner brush would work. She chose "Moon Fairie" in the Window menu and made the "Climbing Fairie" the clone source (File: Clone Source). She chose the Cloners' Soft Cloner and painted in areas, adding highlights to the blue tones. She painted the finishing touches using the Brushes palette: Dodge and Burn tools. She then used the Water's Just Add Water and the Chalk to enhance colors and shadows. -K.S.

How to Make a Nozzle

You can hand-paint objects like flowers and then spray them as Image Hose nozzle elements as Beverly Parker-Levi did with the flowers in her fairy images.

To do so, you would paint roses, for instance, in various positions in an image, save the image as a RIFF, Mac; .RIF, Windows, and then load it as an Image Hose nozzle. Then when you paint with the Image Hose it sprays roses.

First set up an image and paint and float the rose nozzle elements.

1. Start a new image (File: New). Click OK.
2. Paint a small rose.
3. Select the Tools palette: Lasso tool and click and drag around the rose to select it. When you're done, the path should turn into a selection marquee. If it doesn't, it isn't closed. Press Return, Mac; Enter, Windows to close the open path.
4. Click on the Tools palette: Floaters tool (the left-pointing hand). Click on the rose. It becomes a floater.

Paint, select and float three more roses. You should now have four rose floaters. Four is just an arbitrary number, by the way. You can have any number of floaters in your Image Hose nozzle. To see examples, open the nozzle files in your Painter 4 folder.

Next you'll group the roses and turn them into a nozzle.

1. With the Tools palette: Floaters tool (the left-pointing hand) selected, press Command+A, Mac; Ctrl+A, Windows. All the floaters are selected.
2. Click Objects: F. List: Group to group the floaters. A bounding box now surrounds all the floaters.
3. Select Brushes palette: Nozzle: Make Nozzle From Group. A new document appears with the floaters. This is the Image Hose nozzle file.
4. Save this new image (File: Save As) as a RIFF, Mac; .RIF, Windows, called Roses.

Now paint with your new Roses nozzle.

1. Start a new image (File: New).
2. Select the Brushes palette: Image Hose.
3. Choose Brushes palette: Nozzle: Load Nozzle. A dialog box appears. Double-click on the Roses nozzle you just created and paint. Everything's coming up roses!

That's how you create a simple Image Hose nozzle. You can set up more complex nozzles whose elements you can control based on various characteristics such as size or color. Check the Painter manual or my Painter Complete books for details about creating complex nozzles. -K.S.

Ray Dream

continued from previous page

I decided to begin with the frog's main body section (Fig. 2, p. 10). Because of its organic shape, this object was a perfect candidate for the Free Form modeler. Based on my frog sketches, I decided that the object's geometry would require five cross sections. Because the body's geometry is very irregular, I found it easier to draft it on a sheet of grid paper first. I drew the top, front, and side profiles, then I marked off the cross sections in the side view,



and drew the cross section shapes in the front view. Next, I scanned in the front profile drawing and opened it as a template in Adobe Illustrator. I traced the cross section shapes using Illustrator's pen tool, and then saved each shape in a separate file (Fig. 1, p. 10).

Now, it was time to place a free form object into the Perspective window in Ray Dream.

1. Start a new image (File: New).
2. Select the Toolbar: Free Form tool and drag it into the Perspective window. The Set Name dialog box appears.
3. Type Frog Body and click OK. You now have an empty cross section plane at the sweep path's far end and Frog Body is in the Hierarchy window.

I imported the first cross section path drawn earlier in Illustrator.

1. Select File: Import.
2. Click on the desired file, click Open (Mac and Windows). The imported path appears in the model's cross section.

I created four additional cross sections. First I added a second cross section by choosing Sections: Create. Ray Dream creates a new cross section at the near

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Cartooning Using Painter's Paths and Floaters

By Rick Kirkman

Ed. note. Rick Kirkman painted "Barker" as his monthly illustration for "Professional Speaker," a trade magazine. After scanning a pencil sketch, he selected, floated and colored the illustration in pieces, as you can see in the screen shots on the opposite page. What follows are Rick's steps for creating "Barker" in Painter.

I scanned a pencil sketch at 300 dpi and saved it as a TIFF in Photoshop. I opened it in Painter (File: Open) and chose File: Clone. I turned on Tracing Paper. (Choose Edit: Select All [Command+A, Mac; Ctrl+A, Windows]. Press delete, Mac; Backspace, Windows. The image disappears. Choose Canvas: Tracing Paper [Command+T, Mac; Ctrl+T, Windows]). I chose a color in the Art Materials: Color palette, and using the Tools palette: Pen Tool, I drew outlines around each shape in the sketch, working from the smallest shapes to the largest to avoid problems with selecting larger shapes in the background when trying to select points on the paths. I used the Command key (Ctrl, Windows) while drawing to switch to the hollow arrow or editing the path as needed (click and drag on a point or bézier handle). Most of the shapes were the same color for the section I was working in. I set the actual colors later. After I drew each shape, I double-clicked on the shape in the Objects: F. List and named it for the shape, e.g. Nose, Left Eye, Lips.

Going down the F. List, I clicked on each shape to select it and used Command+3, Mac;

Ctrl+F, Windows, to fill with the current color, selecting a color first from the Art Materials: Color palette or a custom Color set. Filling automatically made each shape a floater.

I started the process of layering by clicking and dragging each Floater up or down in the Objects: F. List as needed. I painted in shadows

underneath objects (such as a shadow on the face under the nose) by clicking with the Tools palette: Floaters tool (the left-pointing hand) on the object on which the shadow was cast and painting. The object above it, casting the shadow, masked out the shadow below it, giving it a dimensional look. I painted in shadows using the Airbrush's Spatter Airbrush variant and the Art Materials: Paper palette: Basic Paper to give it the look of a paper with some tooth. I grouped floaters so that they could be moved and layered together by shift-clicking their names in the Objects: F. List then clicking F. List: Group.

I painted the bow tie using Effects: Surface Control: Color Overlay and a spot texture from the Simple Patterns library (click the Library button within the Art Materials: Paper palette drawer to access Simple Patterns in the Painter folder). I applied one color, then inverted the texture (Art Materials: Paper palette: Invert Grain) and applied the other color. I used the same method to color the woman's dress.

The plaid design on the suit came from the Art Materials: Weave palette. I used the Buchanan 14 plaid from the Scottish Tartans library, which is in the Colors, Weaves and Grads folder in the Painter 4 folder. Access it by clicking the Library button within the Weave palette drawer. I altered the colors of some of the threads in the weaves.

To change the weave's colors:

1. Click Art Materials: Weave palette: Get Color. A Color Set containing the plaid's

continued on next page



"Barker" (top) and interim steps (above) by Rick Kirkman. Rick scans a sketch, selects and floats sections of it and then adds colors and textures.

Cartooning

continued from previous page

colors appears.

2. Choose the desired new color in the Art Materials: Color palette.

3. Press Option+click, Mac; Alt+click, Windows, in a square in the Color Set. The square turns the selected color.

4. Click Art Materials: Weave palette: Put Color. The threads change to the newly selected color.

Then I filled each Floater with the new weave (Command+ F, Mac; Ctrl+F, Windows).

I created the shadows in the weave area using the Airbrush's Thin Stroke variant with the Brushes palette: Method Category set to Buildup instead of Cover in order to preserve the weave pattern underlying the shadow.

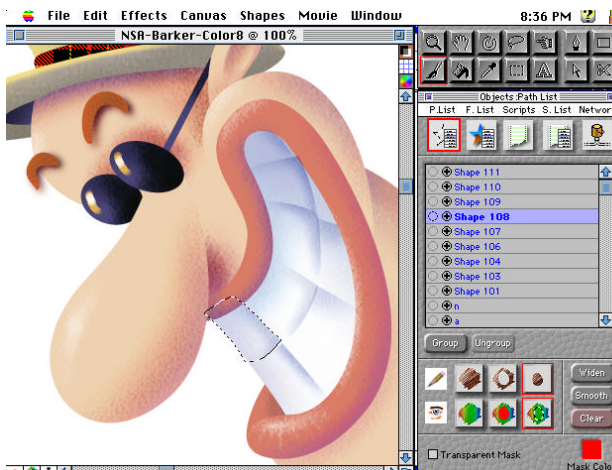
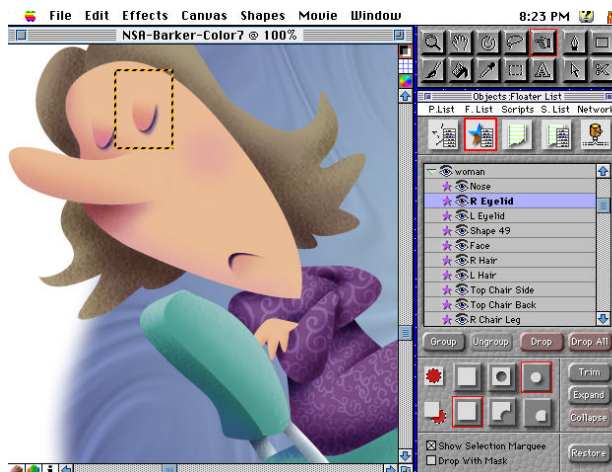
After adding the weaves, I started adding textures. I textured the box with wood grains from Fractal Design's Sensational Surfaces CD using the Airbrush's Spatter Airbrush variant. I had added the lines separating the boards using the Controls palette: Straight Lines drawing style.

I textured the boots by selecting the Small Crackle texture from Fractal's Nature library from the Really Cool Textures CD. Then I chose Effects: Surface Control: Apply Surface Texture using Paper Grain.

I added surface shadows on the box and below the chair by drawing a shape with the Quick Curve Tool (click and hold on the Tools palette: Pen tool and you'll find the Quick Curve Tool), filling it (Command+F, Mac; Ctrl+F, Windows), feathering it (Edit: Mask: Feather Mask) and layering it appropriately (click and drag it into the desired position in the Objects: F. List). To get the shadow on the box to end right at the edge of the box I used the Mask Edit mode (click the circle in the image window's upper right-hand corner) to see the shadow mask and painted out the part of the shadow that extended

beyond the box (when done, click back on the circle to turn off Mask Edit mode).

I added the type to the book by typing the letters one at a time (click the Tools palette: letter A, click in the image and type), and manually spacing the letters (click and drag each let-



Each piece of Rick Kirkman's cartoon is a floater (top). He drops all the floaters, selects new areas and paints final touches (above).

ter using the Tools palette: Floaters tool [the left-pointing hand]], then grouping them (Objects: F. List: shift+click to highlight, then click F. List: Group) and moving them into place (click and drag with the Floaters tool).

I created the background by drawing a shape

with the Pen tool. I created a radial gradient (Art Materials: Grad: Edit Gradation, then click on the lower-left icon under Types in the Grad palette) and filled the shape (Command+F, Mac; Ctrl+F, Windows). I feathered the floater of the background (Edit:

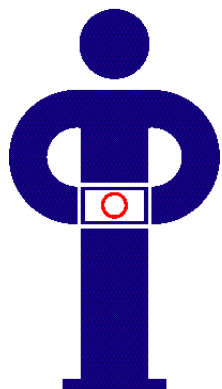
Mask: Feather Mask) and used Effects: Surface Control: Apply Surface Texture using Paper Grain with the Swirly paper grain from the Nature Library. Then I sent the floater behind the others (with the Floaters tool selected, click Controls palette: Back).

After all of the work was done that involved Floaters, I dropped all of them (Objects: F. List: Drop All).

For the shadows on the teeth, the woman's hair and the movement lines of the cane, I created a shape with the Quick Curve Tool and converted it into a selection (Shapes: Convert To Selection). This had to be done *after* the floaters were dropped since you cannot use selections to paint on a floater. I positioned each selection over the area that I wanted to paint (use the Path Adjuster, accessed by clicking and holding on the Tools palette: Floaters tool). I set the mask to view outline (Objects: P. List palette: third Visibility button [next to the eyeball]) and paint inside mask (Objects: P. List palette: third Drawing button [next to the pencil]). After painting each selection, I deleted it (highlight its name in the Objects: P. List palette and then click P. List: Clear) and drew the next one.

I converted the image to CMYK in Photoshop and eventually increased the contrast before sending it to the client because I thought it was too flat.

Rick Kirkman draws the "Baby Blues" comic strip seen in newspapers around the country and in several books. He has been a freelance artist for 15 years and has done "Baby Blues" for almost eight years. He still does "Baby Blues" using traditional tools. "It's easier to get the effect in the cartoons that I want by doing them by hand. Anyway, I don't want to give up what it feels like to draw with pencil and paper," says Rick.



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Building up Paint Layers in Painter with Floaters

Indiana-based fine artist Patrick Kluesner painted "Heron" after observing and photographing herons every weekend for several months. He pitched a blind—or tent—and spent as many as eight hours at a stretch watching herons mostly hang out.

"There was a muskrat hut of sorts there," says Patrick, "and the herons would land there and they would sit there loafing. I observed their behavior and their rituals and things."

The heron has "deep personal meaning" for

Patrick in that the bird is "so patient, giving it an almost spiritual quality."

For Patrick the heron is a metaphor of sorts in that, as an artist, creating paintings also takes a lot of patience.

"The bird's patience and the patience I need to paint layer upon layer to create my paintings all kind of tie together for me. I was really taken by these birds. It all kinda clicked for me."

In his paintings' early stages, Patrick floats an image, fills it with color and paints in it with Gel chosen in the Controls palette. This way, he can see his underlying image and add colors gradually. He drops this floater and then floats the image again, painting in more colors, creating his artwork in progressive stages. In these stages, Patrick layers "strong contrasting colors on top of each other, each successive layer toning down the one before, until a colorful gray was achieved."

Patrick began "Heron" by sketching the bird using as reference photographs from 15 rolls of film he shot in the blind (Fig. 1). He chose Art Materials: Paper palette: Rougher, the Chalk's Artist Pastel Chalk and "a sienna color" in the Art Materials: Color palette and "sketched in the drawing and indicated some tones."

Next, Patrick "created a floater of the entire image, filled it with white, added a wash of color, then erased out the highlights." Fig. 2 shows the original drawing with the first layer of color added and highlights erased.

The first step, then, is to float a drawing.

1. With a drawing open, choose Edit: Select All (Command+A, Mac; Ctrl+A, Windows).
2. Choose the Floaters tool (the left-pointing hand in the Tools palette).
3. Hold Option, Mac; Alt, Windows, and click in the image. The image is copied as a floater.

Next you'll fill the floater and paint in a wash.

1. Choose white in the Art Materials: Color palette. Select Effects: Fill, click next to Current Color, click OK. The floater fills with white and the illustration underneath the floater remains untouched.
2. With the Floaters tool still chosen, select Controls palette: Composite Method: Gel.

"This makes the floater basically transparent, and you can see the original drawing underneath," Patrick notes.

"Now you're ready for a layer of color. Using



the Airbrush's Fat Stroke with the Brushes palette: Method Subcategory set to Grainy Soft Cover, a rough texture selected in the Art Materials: Paper palette and an umber color selected in the Art Materials: Color palette, I paint a wash. The texture is important because I'm trying to create the effect of airbrush on board. I then erase highlights into the umber color with the Brushes palette: Eraser. Since the umber wash is on a floater, I can paint back color or erase highlights at any time, making the color darker or lighter as desired. As long as the floater is selected in the Objects: F. List, any changes I make apply to the top layer of color only, without erasing the drawing underneath. This comes in especially handy in later stages when additional washes of color are applied and selectively removed without disturbing the colors underneath."

Patrick checks his progress periodically. "It's easy to see the color added to the floater by switching from Controls: Composite Method: Gel to Controls: Composite Method: Default. Then I switch again to Controls: Composite Method: Gel and continue painting."

Once Patrick is "satisfied with the tones," he drops the floater by clicking Objects: F. List:

continued on next page



Paint Layers

continued from previous page

Drop, making "the color layer a permanent part of the painting."

Next Patrick repeats the above steps, that is, he floats another copy of the image, fills it with white, turns on Gel and paints. This time, using the Airbrush, Patrick "adds shadow and tone using a variety of colors." He again creates highlights with the Eraser. Next he drops this floater (Objects: F List: Drop). Then Patrick uses "the Brush's Oil Paint variant and white paint to loosely cover the background sky with brush stroke texture."

Patrick floats a new copy of the image, adds new details and drops the floater, building up the image as he goes along. He added "local sky color selectively but loosely with the Airbrush." Adds Patrick, "overspray is easily erased around the bird in the floater without disturbing the painting underneath."

In Fig. 3 Patrick "created the maple trees' silhouette against the sky. Wiping out the leaves' shadow helps give this technique a more traditional look." With the Floaters tool selected, Patrick adjusts the floater's opacity (Controls: Opacity) "to make the shadows darker or lighter until I'm satisfied."

The final image (opposite page) shows "the addition of texture to the background sky," Patrick says. "I wanted the sky to have a thickly painted look, and the only way to do this was to create a texture of my own. I opened in Photoshop a previous traditional painting that had been drum scanned. I selected a piece of the background with an appropriate texture, cropped it and converted it to grayscale. I manipulated the image to even out the tones and eliminated dark corners. Then I opened the file in Painter and made it a paper texture."



To make an image a paper texture:

1. Choose Edit: Select All (Command+A, Mac; Ctrl+A, Windows).

2. Select Art Materials: Paper: Capture Texture. The Save Texture dialog box appears. Type a texture name. Patrick named his texture Impast2. Click OK. The texture then appears in the Paper palette.

Then, with the new texture selected in the Art Materials: Paper palette, Patrick used the Airbrush's Fat Stroke with the Brushes palette: Method Subcategory again set to Grainy Soft Cover, a low opacity (Controls: Opacity) and the Controls: Grain slider set at 100%, chose a "sky blue color" in the Art Materials: Color palette and applied paint "all over the sky and



water areas. The impast2 texture showed up as blue shadows."

At this point, with the latest floater dropped, Patrick added highlights on the image itself, not a floater. To do so, he checked Art Materials: Paper palette: Invert Grain, chose a light color in the Art Materials: Color palette and painted using the Airbrush's Fat Stroke with the Brushes palette: Method Subcategory still set to Grainy Soft Cover and the same opacity and grain settings. "Since I am working in the final image, I proceed slowly and Edit: Undo any stroke I don't like," Patrick notes. "I paint in additional details using additional layers of color, deepening the shadows and intensifying the highlights until a desirable contrast is achieved." -K.S.

Pastels

continued from page 4

bottom left, which starts out with yellow, and moves up toward the top right, into a red violet in the shadows of the neck and face, which then plays against a deep purple background at the top right. This contrasts with a yellowish light side of the face and intense yellow oranges in the hair. "Closed Eyes" expresses both an intensity of color and at the same time a peaceful softness in the face. It suggests dreaming, contemplation and a mystery. Because eyes express so much, when they are closed there is not the same clarity in the expression. There is a mystery and we are forced to bring our own emotions into the painting.

I have really enjoyed using Painter. When using a pressure sensitive stylus, I feel as though I have a paint brush in my hand. In a

lot of ways it is actually better than a brush because at any time it can be changed into a marker, crayon, pastel etc. I can have any brush, any size, any shape that I want. Because of the almost limitless amount of choices of materials, my creative options are completely open. The only thing that Painter can't give me is imagination and skill. The computer is an amazing tool but my traditional skills are also very important. Without them I would have a great toolbox and not know what to do with it. By combining my traditional skills and the computer, I am able to generate the power and magic of creation.

San Francisco-based artist Diana Belenky was born in Russia and moved to America when she was six years old. At 16 she began taking private art lessons in classical European realism from a Russian artist. She has a degree in literature and illustration from the University of San Francisco and took drawing and painting classes at the Academy of Art.

Ray Dream

continued from page 5

end of the sweep path. This new cross section is deselected, and therefore not visible.

I then created three more cross sections in between the two current cross sections.

1. Choose Sections: Create Multiple. The Create Multiple Cross-Sections dialog box appears.

2. Type 3, which, added to the existing two, gives you a total of five cross sections. Click OK. Five points now appear along the object, representing cross sections.

I moved into the next cross section by pressing Command+right arrow key, Mac; Ctrl+right arrow key, Windows. I deleted the path in this cross section by pressing Command+A, Mac; Ctrl+A, Windows, and then pressing delete, Mac; backspace, Windows. I then imported the second path into this cross section using File: Import again. I repeated these steps for each remaining cross section.

At this point, the frog body was close to the shape I wanted, but there were sharp edges at the cross sections.

To smooth the sharp edges:

1. Select Toolbar: arrow and click the sweep path. Points appear.

2. Select the Toolbar: Convert Point Tool.

3. Click on the second point from the left and drag. Handles appear. Drag the handles and the shape smoothes out.

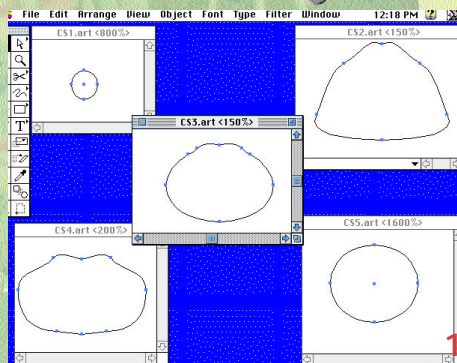
I repeated these steps to smooth out the other two inside points, but not the ones on either end.

Next I fine-tuned the object's shape by examining and adjusting it from different angles. First I checked its left side. To do so, I pressed Command+5, Mac; Ctrl+5, Windows, which shows the currently selected drawing plane. I adjusted the frog's contour by clicking and dragging points with the arrow tool. I also pressed Command+E, Mac; Ctrl+E, Windows, to call up the Camera Properties window. Using the Position pop-up menu you can view the image from different angles. I further edited the frog's contour in these different angles by clicking and dragging points with the arrow.

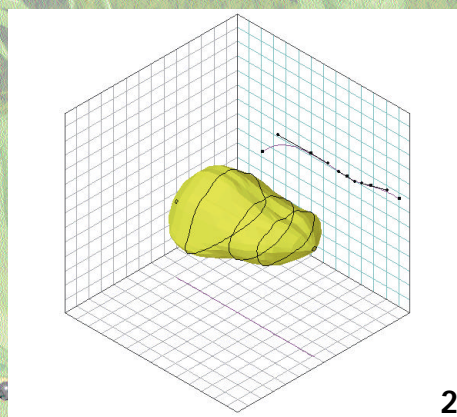
When I was done I went back to the reference view using Command+0, Mac; Ctrl+0, Windows.

When I was satisfied with the object's shape, I clicked Done to return to the Perspective window.

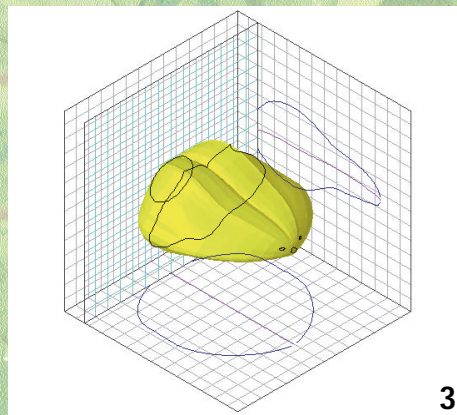
I dragged another free form object into the Perspective window and repeated the same procedure more or less for the frog's head (Fig. 3). This time I enabled Scaling Envelopes because the object's surface irregularities were considerably more extreme. To shape the top view of the frog's head, I first switched the camera to Top view (Command+E, Mac; Ctrl+E, Windows), and selected Geometry: Extrusion Envelope:



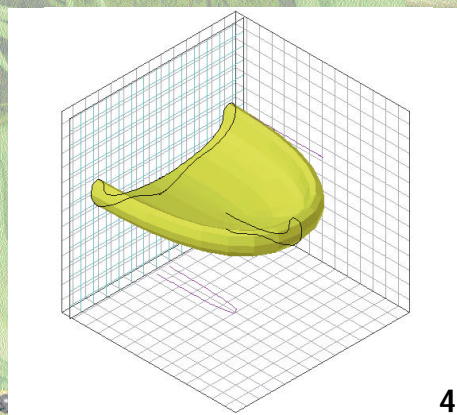
Five Illustrator paths imported into Ray Dream.



The body was created using a basic sweep path.



The head was shaped using Envelopes.



The lower jaw is swept using Pipeline mode.

Symmetrical in Plane to maintain left/right symmetry of the head. To shape the side profile, I changed the camera view to Left view (Command+E, Mac; Ctrl+E, Windows), and switched the Envelopes mode to Geometry: Extrusion Envelope: Free since the top and bottom of the head are clearly not symmetrical.

I modeled many of the frog's remaining body parts by extruding cross sections, but in some instances I switched from Geometry: Extrusion Method: Translation to Pipeline. By default, Ray Dream uses the Translation method, which extrudes a cross section from back to front, and keeps each cross section parallel to the Modeling Box's far wall. Pipeline, however, lets you change the spatial orientation of each cross section. With the Pipeline method, cross sections are always perpendicular to the sweep path no matter how you bend or twist it.

The frog's lower jaw demonstrates the Pipeline method fairly well (Fig. 4). First, using the method described earlier, I created three identical cross sections, each placed at the beginning, middle and end of the sweep path. With the arrow, I bent back the sweep path in the bottom plane so that its last point was aligned to the first point along the y-axis. With the Convert Point tool I rounded out the middle point so that the line resembled a hair pin. The resulting final object was shaped like half a bowl.

The frog's ear required a very simple modeling technique—I drew a cross section path with the Pen tool in the Free Form modeler, and then lathed it using Geometry: Extrusion Preset: Torus. The result was a button-shaped object.

We should now have all the basic techniques down for modeling the rest of the frog parts (and almost any other organic model) using the Free Form modeler. The remaining objects were three segments for the legs, two for the arms, a finger, an ear and an eyelid. I used all the same extrusion methods described for the body and head for the legs, arms and fingers. I created the eyelid object using the same lathing method I used for the ear.

The last body part was the frog's eyeball, which was simply a Sphere primitive that I dragged into the Perspective window.

Now that I built all the parts, I began assembling the frog by arranging the parts in the Perspective window using the arrow. It's usually easier to assemble a character's body in smaller groups and then link the groups to the whole.

I first worked on the frog's arm by clicking and dragging with the arrow to arrange the upper arm, forearm, and finger objects as they appear in Fig. 5, switching camera views frequently (Command+E, Mac; Ctrl+E).

Here's a useful tip. Since I was concerned

continued on next page

Ray Dream

continued from previous page

only with the arm objects at this point, I hid the other objects by selecting them in the Hierarchy window and choosing View: Object Invisible. Later, when I needed to work with these objects, I made them visible again by selecting them and choosing View: Object Visible.

Once the objects were in position, I used the arrow to drag each object's hot point to locations where they would serve as joints. For example, I dragged the forearm's hot point to the elbow joint and the upper arm's hot point to the shoulder joint.

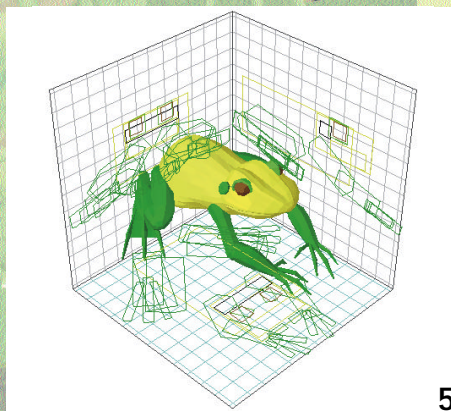
Once the objects and hot points were in position, I proceeded to link them in a logical hierarchy in the Hierarchy window. To link objects, you simply drag one object's label in the Hierarchy window on top of another's. In this case, I dragged each of the finger objects to the forearm, and then the forearm object to the upper arm object.

Now I was almost ready to group the arm into a single object. Before doing so, I made a note of the shoulder hot point's x, y, z coordinates by clicking on it once and writing down the values in the Numerical window (Command+I, Mac; Ctrl+I, Windows). Then I selected all the objects in the frog's arm and clicked once on the Toolbar: Group icon. If you have the Ask for Name option selected for the Hierarchy preferences, Ray Dream will ask you to name the group. I named the group Arm. I clicked the group's hot point and moved it to the shoulder joint's location noted earlier by typing in the exact coordinates in the Numerical window.

The frog has two arms but they're not identical of course—simply duplicating the arm would not be suitable. I needed to create a mirrored duplicate. I switched to a front view (Command+E, Mac; Ctrl+E) and then selected the arm group. Then I chose Edit: Duplicate with Symmetry. The entire object was duplicated, but also mirrored. Because the mirror is always along the z-axis, the arm is reflected up, so I selected the 2D Rotate tool and corrected the duplicate arm's orientation. Next, I aligned the mirrored arm by dragging it into position—I achieved more precise alignment using the Alignment window (Command+K, Mac; Ctrl+K, Windows).

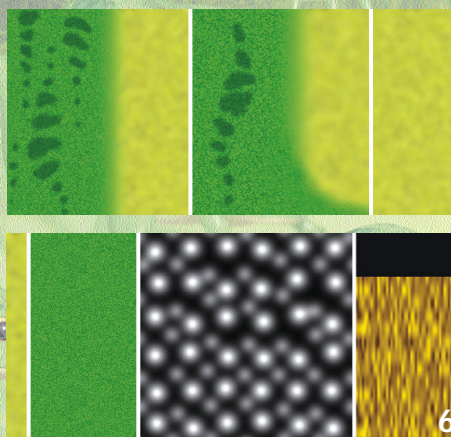
I repeated the same steps to create the rear leg groups and the head group. I then linked the groups to the body object. Next, I selected the entire frog and grouped it. Grouping organizes a complex model and makes it easier to manage in the Perspective and Hierarchy windows. To work with the individual body parts, I can open each group by clicking on the arrow in front of each group label in the Hierarchy window.

Okay, so I now had a frog-shaped model (Fig. 5), but somehow it still fell short of true



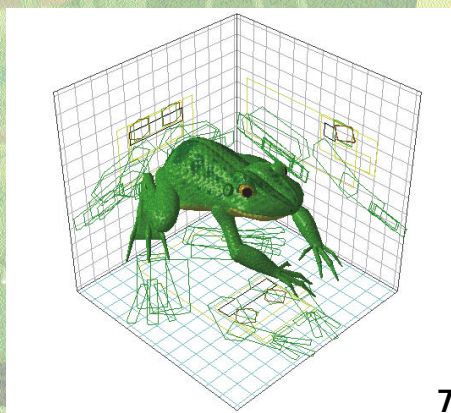
5

The frog model is ready for painting.



6

Texture maps brought in through the Shader Editor.



7

All dressed up and ready to croak!

froginess. Ahh! Enter Shaders.

Shaders are what give the surface of 3D models detail and texture. When skillfully applied, shaders can add uncanny realism to the simplest models. Ray Dream's Shader Editor lets you manage up to eight shader attributes, otherwise known as channels. These channels include Color, Highlight, Shininess, Bump, Reflection, Transparency, Refraction and Glow. Each channel can incorporate anything from a flat color to highly complex combinations of procedural functions and texture maps—the possibilities for creating surfaces are limitless.

Most of the frog's shaders required only a few basic channels—Color, Highlight, Shininess and Bump. First, I created texture maps for each shader's Color channel (Fig 6). I painted these images using Adobe Photoshop, but any application capable of saving bitmap graphics can be used to create texture maps, including Fractal Design Painter, Detailer and Expression. Because Ray Dream can tile texture maps, you can usually get away with painting smaller images to cover your objects.

In the case of the frog's body, I actually painted only half of the texture map.

Then I imported the image.

1. In the Windows: Shader Editor, choose the Color channel.
2. Choose Shader Editor: Components: Texture Map.
3. In the dialog that appears, locate the image you will use as the texture map, select it and click Open (Mac and Windows). The image appears in the Color channel.
4. Check Color channel: Tile and Seamlessly to mirror the artwork on each side of the frog. Set Horizontally to 2 and keep Vertically at 1.
5. Set the Highlight and Shininess channel Value sliders at 100 to give the frog shine and an icky wet look.

I added a tactile quality by importing a bubbly texture map into the Shader Editor: Bump channel.

The shader completed, I then applied it to the body by dragging the shader's icon from the Shader Editor directly on top of the frog body object in the Perspective window. The shader doesn't always apply itself in the orientation you expect, so you may need to make adjustments by clicking the orientation arrows in the Shader Editor.

I repeated the steps to create the head and limb shaders using different texture maps.

For the frog's eyeball shader I used the same channels. I also used the Reflection channel with its Value slider set to 8% for a subtle touch of reflectivity. Because I wanted the eyeball to have a smooth glassy surface, I set the Value slider in the Bump channel to zero.

Now, this looked more like a frog! (Fig. 7)

I then rendered the frog. To reduce rendering time, it's a good idea to enable only the rendering options you need. Since my frog shaders use only the Reflection and Bump channels, I disabled Render: Settings: Renderer: Transparency, Refraction and Lighting through transparent objects.

When the rendering was complete, our amphibian friend was brought to life—not once, but many times, in many new works of art (like the images on pp. 4-5 and the backgrounds of pp. 10-11).

D.R. Greenlaw is a freelance artist working in the Los Angeles area. If you'd like to see more of his work, visit his gallery on the World Wide Web (<http://members.aol.com/dgreenlaw>).

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