The Art of Transparency

The first thing to be said about this topic is that it's a fake. Software programs that can create transparent effects are doing something that is fundamentally impossible in the two-dimensional world of computing. Only in the real world can you see through objects; anytime it happens on a computer screen, it's an illusion.

But oh, what a clever lie these programs tell when they provide the means to create transparent effects. And oh, how useful it can be toward creating dramatic designs and solving problems. In this chapter, we'll explore both the pragmatic and dramatic elements of transparency. And in the process, we'll take a few journeys outside the software.

We will also speak substantively about the increased capabilities that modern versions of PowerPoint bring to this topic. It is nothing short of dramatic, but with that drama comes implications for you.

Through the Looking Glass

PowerPoint versions 2003 and earlier have simple transparency built into the program, as all of its vector shapes (rectangles, ellipses, triangles, etc., but not standard text) can be made to be see-through, provided they are closed shapes. Again, this is just a clever fake: PowerPoint studies the object underneath the transparent shape and whips up an on-the-fly bitmap representation of what the object would look like were there really a shape atop it of a certain color and percentage of transparency.

Unlike with drawing programs, where it's only a worthwhile effect if it can print properly, your burden as a presentation designer is friendlier: if it looks good on screen, you're golden.

Rescuing background images

Figure 12.1 revisits the dilemma we spelled out in Chapter 4, Bitter Backgrounds, of using photos that are too bright, too big, too colorful, too full of contrast. Those are normally good qualities for a photo to have, but not when you are trying to use it as a background. Then you want it to be more subdued.

The simplest of maneuvers can do wonders for this slide. Watch:

1. Draw a rectangle over the entire slide and color it a dark blue.
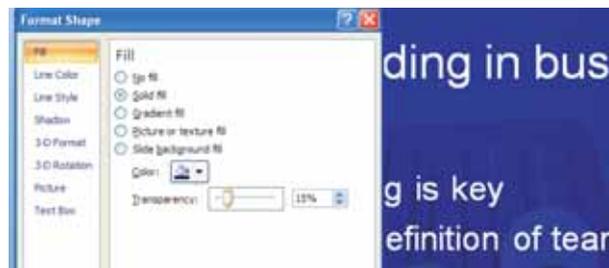
Figure 12.1
This photo is too strong to serve as a background. It overpowers the text placed on top of it.

2. Using the layering commands, place the rectangle behind the text but in front of the photo. The slide should look like it has white text on a dark blue background.

3. Right-click the rectangle and choose Format Shape.

4. Drag the Transparency slider to the right, watching the interactive preview to survey various values. At 10-15%, you can just barely see the photo:
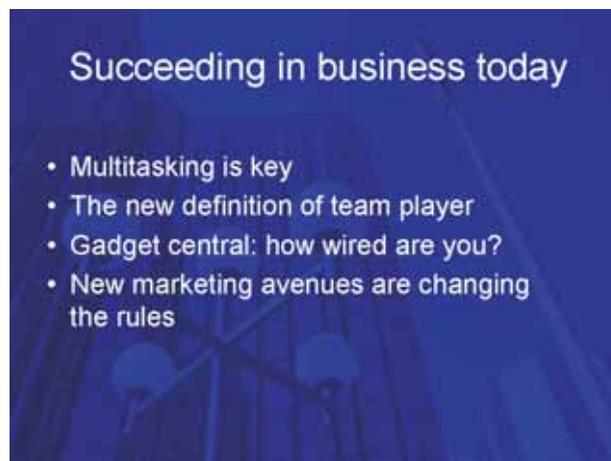

5. Click OK when you have found a satisfactory value. Figure 12.3 shows how a 15% transparency makes the text on the slide perfectly readable.

Figure 12.3
A transparent rectangle draped over the photo reduces its contrast and makes it more suitable as a background.

Download 12-03.pptx to see how this effect is created.

This simple technique of the semi-transparent rectangle has broad implications so I want us to stay here for a couple of paragraphs. Once you know how to tint back a photo, you make it possible to use practically any photo as a background. As we discussed in Chapter 4, overly loud backgrounds are among the most annoying qualities in all of PowerPointdom. With one rectangle, you can eliminate this source of annoyance.

In the steps above, I used navy blue for the rectangle's fill because it matched the predominant color of the photo. I could also have used black (dramatic), white (for a washout effect, to be used with dark text), brown (urban), or green (environmental). In each case when you drape a color over the photo you mute all of its colors and reduce its contrast, making it a suitable candidate for a background image.

Native solutions

With the modern versions come improved graphic support, including effects previously possible only with the use of another shape or an image-editing program like Adobe Photoshop or Corel PhotoPaint or PaintShop Pro.

For instance, instead of draping a photo with a semi-transparent shape, you can apply a tint to the photo itself to create a low-contrast version of it. Figure 12.4 shows the result of 15 seconds spent with the Recolor command within the Format Picture dialog (accessible from the Format ribbon or the right-click menu).

It's worth spending a few minutes with that gallery, as the amount of creative control you can wield over photos is impressive, almost daunting.

Figure 12.4
Modern versions can tint a photo without needing any help from transparent shapes.

Figure 12.5
A few of the many built-in PowerPoint effects that can be applied to imported photos. Each of these photos was imported as a conventional rectangular image.
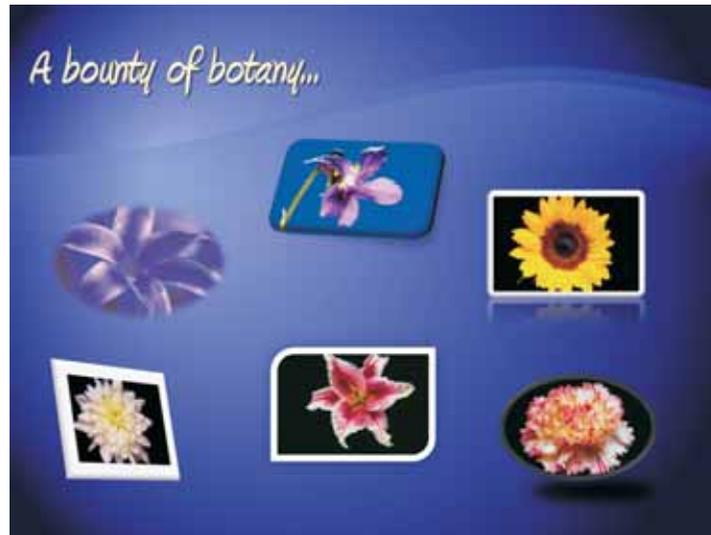
From soft shadows to glows, bevels to extrusions, you might feel like the kid in the candy store. The Format ribbon offers numerous presets in addition to the more sophisticated Picture Tools dialog.

Witness Figure 12.5—a slide of imported images. The original photos are all rectangular and unadorned; nothing was done to any of them with outside software. All of the perspective shifts, shadows, cropping, and framing are one-click options from the Format ribbon.

♦

As impressive as this is, for basic photo tinting, we actually prefer our transparent rectangle technique. Yes, it is a bit of extra work, but it is more flexible. You have more control over the color and adjusting the transparency slider is easier to understand than playing footsie with Brightness and Contrast. Furthermore, you can set a gradient transparency that changes the degree of transparency across the span of the rectangle. You can't do that with the photo effect controls.

At the end of the day, PowerPoint's built-in image controls provide more choices for creativity, and that can only be a good thing.

Half transparent, half opaque

There are times when sinking a photo into the background is exactly what you want and other times when a strong photo needs to remain prominent. In the latter case, you can solve major design challenges by applying a twist to the transparent shape strategy.
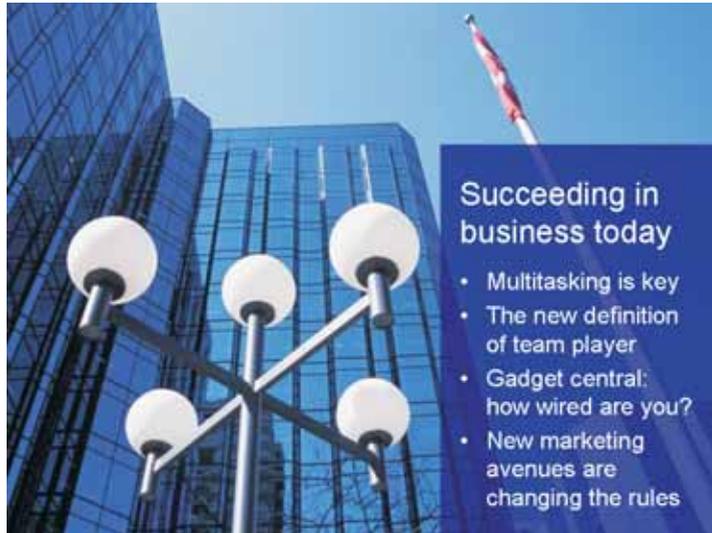
Figure 12.6 shows one possible implementation, as the text has been con-
fined to one corner and the transparent rectangle shrunk down to fit in that
space.

All of Figure 12.6 can be programmed from a layout: the full-screen photo,
the transparent rectangle, the title contained within that small space, and
the bullets underneath them. You'll need to be heavy-handed with content
editing, as many standard-length titles would be too long and you'd be
hard-pressed to fit more than four bullets into that space. Hmm, another
benefit to this design...

Figure 12.7 shows the use of a gradient transparency, where the level of transparency gradually changes. There are two things worth noting:

- You create a gradient transparency by choosing to blend from one color to the same color, varying the transparency value for each.

- I did not create a rectangle behind the text; instead, I used the text placeholder itself. It can accept a fill pattern and be fitted with transparency, just like any other shape. From the Format Shape dialog, you can set margins and determine where the text resides within the space. Perhaps most important, it means that it can all be programmed onto a layout, which you could see for yourself by downloading the file.

Figure 12.8
This nice effect was created entirely within PowerPoint.

Applying Transparency to Photos

So far, this chapter has focused on applying transparency to simple shapes and placing them atop photos and images. The ante gets upped when we talk about applying transparency directly to the photo. This is not simple stuff, but it's worth the effort as the effects you can create are potentially breathtaking.

Figure 12.8 shows two transparent effects—the basic text and the more elaborate photo—and while the golfer looks like it needs the help of outside software, both of these effects are in fact native to PowerPoint. In older versions, you would have to turn to WordArt to create transparent text; in modern versions, you can apply transparency to any string of text.

But the photo, with its elliptical boundary and semi-transparent quality—the fact that its native address is PowerPoint might be more surprising to you, and it presents an interesting cognitive challenge. PowerPoint can change the shape of an imported photo but it cannot apply transparency to it. You earn brownie points for even trying to solve this puzzle. Let's review a few facts that we know:

- PowerPoint can apply transparency to vector shapes, provided they are closed.

- An ellipse is a closed shape.

- Of the many fill patterns available, one of the options is to fill a shape with a photo.

- Irrespective of what's inside the ellipse, it can still be made transparent. Here's how you would do it:

  1. Create an ellipse large enough so that half of it is hanging off the right side of the slide.

  2. From the Home or Format ribbon, click Shape Fill to invoke its drop-down menu.

  3. Choose Picture and find the photo you want inside the shape.

▼ Download 12-08.pptx to see how we did this.

In this case, you are simply instructing PowerPoint to apply transparency to the ellipse. If the ellipse were filled with the color blue, you would see through to the photo underneath, which would be cast in a blue tint. In this case, we suppose you could say that the photo underneath is cast in a golfer tint. And again, you're only seeing half of the ellipse because the other half is being hung off of the slide. Open the file and you can see this treatment for yourself.

Working with graphics software
As impressive as this is, the real power in these types of effects lies in your intelligent use of an external image-editing or graphic-drawing program. In the age of digital photography, fewer people understand the distinction between the two main types of graphics programs, vector and bitmap. They buy a camera and go on auto-pilot with whatever software is found on the accompanying CD. They tend to gloss over the fundamentals:

- Graphic-drawing software creates high-quality shapes based on mathematics (vectors). The most common programs in this space are Adobe Illustrator and CorelDraw.

- Image-editing software deals in pixels and turns its attention to photos, where you could literally change any one dot of an image. The most

A Gallery of Transparency

Applying transparency to elements on a PowerPoint slide can serve three important purposes:

1. It helps with contrast issues.

2. It helps integrate photos and images into a single visual message.

3. It softens elements and provides elegance.

At its simplest level, a semi-transparent placeholder for text provides integration with text and photos. Compared with the standard treatment of a solid colored boundary for the text, everything about this simple technique says that you gave a moment of thought to how best to drive home the point visually that all forms of travel constitute a significant financial investment (Figure 1) or that a prime piece of real estate could be tastefully developed (Figure 2).

The next two images give away one of our lead author's favorite techniques: the graduated transparency. It can be used to provide a soft border between the text and the photo as in Figure 3 or to eliminate the border altogether as in Figure 4. In Figure 3, it was easiest to create a thin black rectangle over the transition area, traversing from 100% opaque to 100% transparent. With Figure 4, one long rectangle can take care of the entire effect. Few things are more evocative

to an audience than when you blend meaningful imagery with simple text messages, and the use of semi-transparency helps you create that blend.

Modern versions support soft edges to photos which makes easier the task in Figure 5. In order to show only two of the edges as soft, we have to nudge the photo off the right edge of the slide and slip it under the footer below it. In older versions, you could only soften one side, using the gradient rectangle technique.

Figure 6 has a lot going on. The vertical text is tinted deep into the ocean and the text box is set with 50% transparency. The soft shadow behind the text box is simple work for PowerPoint, but the soft transition between the two photos needs the deft virtual hand of a dedicated image-editing program.
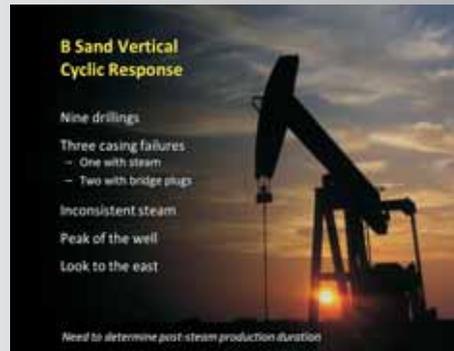
common program in this category is Adobe Photoshop, with Corel offering PhotoPaint and Paint Shop Pro.

Both categories of software have applications capable of creating transparent images that can be understood by PowerPoint. To get technical on you, these advanced programs create an *alpha channel*—an area of data reserved for transparent information.

To get downright geeky, computer monitors display color using the RGB model: all color is divided into percentages of red, green, and blue, and any software program that deals even in rudimentary color reserves three 8-bit channels for describing these three colors.

Professional-grade graphics and image-editing applications work with a fourth channel, the so-called alpha channel, which specifies how a pixel's color is to be merged with another pixel when the two are placed one atop the other. This is also referred to as a mask.

Before your eyes roll into the back of your head, know this: however these programs go about creating this magic, PowerPoint understands it. There aren't many file formats capable of delivering alpha channel information, and most of them are the formats native to the programs that deal in them:

- Adobe Photoshop (.psd)

- Adobe Illustrator (.ai)

- CorelDraw (.cdr)

- Corel PhotoPaint (.cpt)

- Corel Paint Shop Pro (.psp)

PowerPoint cannot read any of these formats, but it does just fine with the PNG (Portable Network Graphics) format (pronounced *ping*). This is the one generic bitmap format capable of containing alpha channel information and all of the programs listed above can export to this format. PowerPoint will also follow alpha channel instructions in transparent TIFF files, but they are not as easy to create and fewer applications offer that export choice.

▶ There is another format that supports transparency, the GIF format, but we recommend against its use. Its limited color palette (just 256 colors) and inability to make more than one color transparent makes it ill-suited for this type of work. Use it if you want to import an animated GIF file.
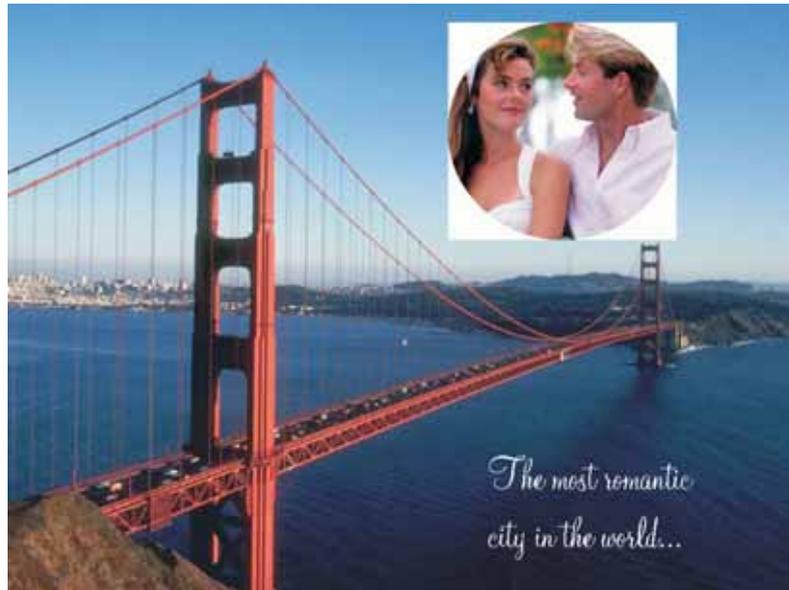
Going non-rectangular

When you import a standard image or graphic to PowerPoint, it comes in as a rectangle. A graphic has a *bounding box* that defines its size, and PowerPoint allocates that size and shape for the graphic, irrespective of whether it fills that size. This is why you might have been tripped up by the likes of Figure 12.9, where non-rectangular images import to PowerPoint with white space.

At the core of your challenge is the export of your non-rectangular and/or transparent images with the alpha channel information. This involves telling your software to pay attention to a portion of the photo, not the entire one, and each program will differ in the terminology that it uses:

- In Adobe Photoshop, you use the Marquee tool to define the shape and create a layer from the marquee (right-click | Layer via Cut). Then you use the Save As or Save As Web command, choosing PNG as the format.

- In Corel PhotoPaint, you use the Mask tools to define the shape and then export to PNG, choosing Masked Area when prompted for Transparency.
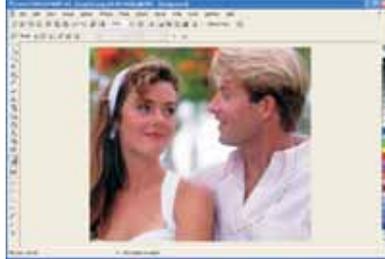
- In CorelDraw, you would either crop the photo to a certain shape or use the PowerClip command to place the photo within a closed shape. Then export to PNG, choosing Masked Area when prompted for Transparency.

▶ Even though CorelDraw is a graphic drawing (vector) program, it is unusually adept at working with bitmap images, such as these photos.

From any of these programs (and from others), Figure 12.11 shows the happy result of importing that PNG file. All three programs were able to instruct PowerPoint to read the alpha channel information describing the shape of the image. No more bounding box!

This isn't exactly the Holy Grail here—you can produce the same effect by loading a photo into an ellipse as shown in Figure 12.11, and Figure 12.12 shows the result of picking a more creative shape than an ellipse. Modern versions perform tricks like this more ably than earlier versions, and version 2010 has a Remove Background tool that allows you to select what goes and what stays. Nonetheless, you can do this all the way back to XP.

That said, producing graphics without backgrounds is an important skill to have. Even though it requires a second application to make the PNG file,

Figure 12.11
When you tell an
image to leave its
background
behind, PowerPoint
listens.

many veteran users prefer doing that than wrestling with filled autoshapes,
where setting the size and dimension can be frustrating.

Transparency on steroids

Understanding how the alpha channel works is not a requirement for taking
advantage of it. In fact, I had to go to Wikipedia for the definition I gave ear-
lier and I've been creating PNG files for over 15 years. But as you get some
mileage under your belt, a new horizon of possibilities opens to you.

Figure 12.12
Filling shapes with
photos is useful to
know, but creating
PNGs with graphic
software will take
you further.

Figure 12.13
Complex transparency like this can be accurately described by the alpha channel.
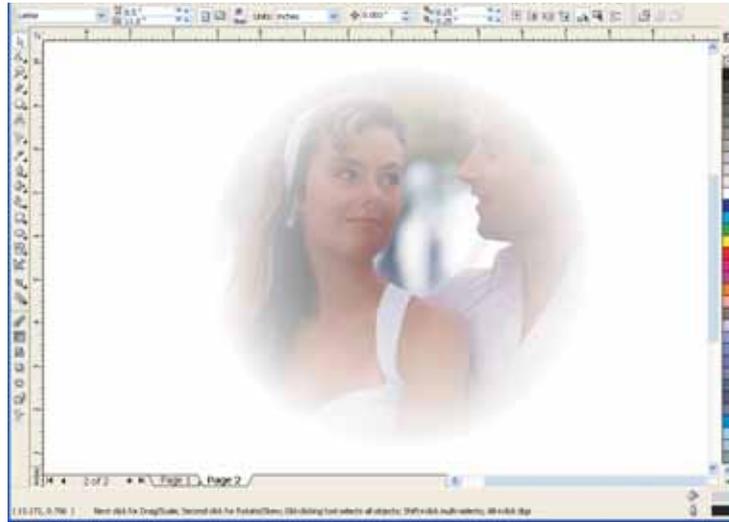
▼ Download couples.zip to see the PNG files created from each program.

Programs that manipulate the alpha channel have developed inventive tools for controlling the function. Our favorite is CorelDraw for its blended support for both vector graphics and bitmap images and its ease of use. Figure 12.13 shows one of the choices in Draw's suite of interactive transparency tools, which can be applied to any object. This one is called "radial transparency," where a ring is defined from the inside (completely opaque) to the outside (completely transparent).

This is a complicated effect, in which the degree of transparency is constantly changing across the face of the image. Nonetheless, a PNG file can

Figure 12.14
When PowerPoint imports a complex PNG file, it figures it all out.

But Will It Print??

Transparent shapes and images are wonderful for slide shows, but they are hell on printers. Many printers freak out with all of that alpha channel hocus pocus, providing results far below any professional standard you would set. Look at the mess that Adobe Acrobat made over our golfer in the top image. And this is the printing standard of the industry!
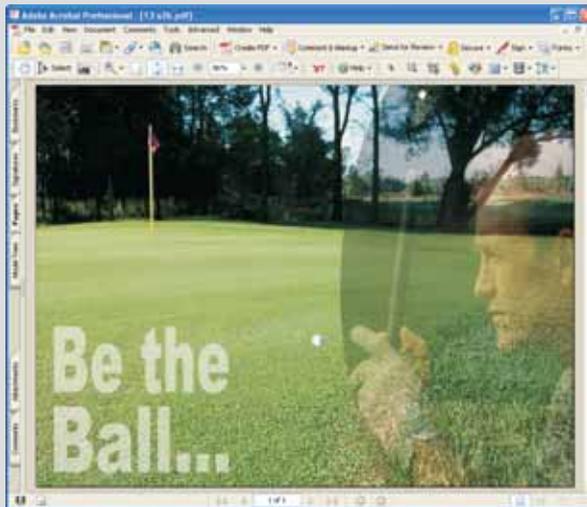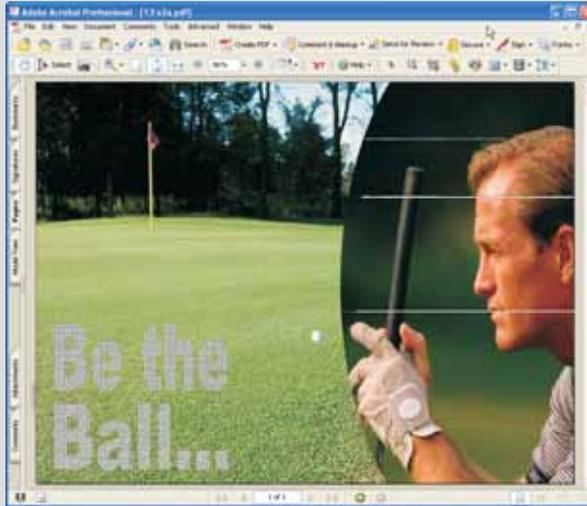
Reason No. 72b to thank our lucky stars that the presentation medium is so forgiving. No stars, however, will be of any help or solace if you need to get a clean print of a complex slide. You have two viable options:

1. Save the slide as a TIFF file and print it. By saving the slide as a bitmap, you essentially instruct PowerPoint to depict the image as it looks, not as it was created. This strategy is great for a few slides, terrible for 100.

2. Use PowerPoint's built-in PDF creation tool, which ironically is much better than Acrobat for this type of work. As you can see at left, PowerPoint handles the vagaries of transparency just fine when sending out to PDF.

ingest all of it and PowerPoint can digest it. Figure 12.14 shows the potential drama created with these effects. Add a medium-speed fade entrance to it and you really have something extraordinary.

Raising Your Graphic IQ

It's an annual reality check when I ask patrons at the Presentation Summit whether they use graphics software. One year, we asked for the difference between vector and bitmap graphics and the answers were eye-opening:

> **"Both are graphics; aren't they the same??"**

> **"That's too complicated—just give me something that lets me go Ctrl+C on."**

> **"When I double-click a photo, some program opens. I just use that."**

> **"What's a graphic?"**

Furthermore, we find a startlingly high number of PowerPoint users who settle for the meager tools built into versions 2003 and earlier. To them, a graphic is a star or a triangle. They take this limitation for granted and that stunts their growth as creative professionals.

Modern versions offer dramatic breakthroughs in terms of capability, but not necessarily in terms of understanding. A significant percentage of PowerPoint users are likely to continue clicking buttons to make things happen and go on not understanding the field of graphics.

This phenomenon is not limited to those in the presentation community; we see a world-wide indifference toward creative tools that were once considered *de rigeur*. We note two reasons for this:

■ Today, most people associate computer-based graphics with digital photography, where the hardware purchase is seen as tantamount. Cameras usually come with a CD of software and whatever (often flimsy) programs are present on that CD make up that person's creative suite. They just want something that can work with their digital photos.

■ The standard application, Adobe Photoshop, is expensive. Even though the cheaper Elements version, under $200, would satisfy most needs, the $699 for Photoshop CS or the $1,800 for the Creative Suite is what gets their attention in the way of severe sticker shock.

This is why I have been pleased to see Corel make an effort to appeal to the presentation professional with its CorelDraw Suite. For pricing about half of Photoshop CS, you can purchase a bundle that includes vector-drawing and bitmap-editing programs, both offering more power than you'd ever need.

♦

However you get there and with whatever program you choose, becoming proficient with graphic software is key to your development as a presentation designer. Suddenly, you have answers to questions that might have plagued you over the years:

I have a PDF file with text and photos that I want to use; how do I do separate out those elements to import them to PowerPoint?   *You open the PDF file in a graphics program like CorelDraw or Adobe Illustrator that knows how to read, recognize, and separate out its parts, and then you export the parts you need as separate files.*

I received a logo from a client and it looks terrible. What can I do to improve it?   *You can recreate it in a good vector graphic program, possibly using a tool that will automatically trace the logo for you.*

The client's logo came to me as an EPS file and my version of PowerPoint can't load it.   *Open the EPS file in your graphic program and then export it in a different format. (PowerPoint can read EPS files, but not as well as graphic software.)*

The stock photo I purchased of a race car has a terrible background, full of people working in the pits and cars strewn around. What can I do?   *You can select the race car, remove it from the scene and place it in a better scene.*

The photo of the girl blowing out her birthday candles has a snot-nosed kid next to her.   *Remove him, using the Clone tool of any image-editing program.*

The photo is way too dark.   *Adjust the exposure. Yes, you can do this in PowerPoint; we want you to be able to do it in image-editing software, too.*

I want to take the background of my main photo and (pick one) blur it, make it black and white, vignette it, duotone it, recolor it, change its perspective, apply a stained glass to it, add rain, snow, or fog, or do about a thousand other things that I can't yet even imagine.   *You get the idea…*