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Creating Purpose and Focus

When we look at a presentation screen, we look for patterns, differences, and similarities to interpret the speaker's meaning. We do this naturally, without ever really thinking about it. Why is this? Perhaps this is just how our species evolved. There certainly seems to have been an evolutionary advantage for those who were skilled at noticing danger, spotting food, and locating a mate. Seeing differences, and being able to quickly act on them, was as important for survival in our evolutionary history as it is today. We are visual beings and taking note of contrast and affinity—that is, differences and similarities—plays a large role in how we make sense of the world.

The typical bullet point–filled slide fails to take advantage of an audience's great capacity to understand visuals while also listening to a presenter's words. People cannot read loads of text and listen to someone speak at the same time. They can, however, listen to a presenter and look at quantitative and supportive visuals. In this way, the visual amplifies the narration.

Many ineffective slides can be improved by simply making it clear to the viewer what is important and what is less important. Guiding viewers with purposeful choices in the design and leading the viewers' eyes with clear focal points in a slide presentation takes better advantage of the audience's natural ability to process visual information quickly.

The photo on the opposite page is of *Agalychnis callidryas* or the red-eyed tree frog. This cute little reptile really jumps out at you, doesn't he? Paradoxically, his colors act as a defense, allowing him to blend into his natural environment rather than stand out. But I think he makes a good little mascot for this chapter. His large eyes remind us that vision is our most powerful sense. His remarkable coloring and shapes remind us that we're really good at noticing patterns and differences, especially in things that are unusual to us like the red-eyed tree frog.

Differences Provide Context and Meaning

We naturally pay attention to—and in many cases are stimulated by—things that change due to differences created. Change is essential to life and to good stories, art, and design. In music, for example, you'll find that in just one song, numerous changes may occur that engage you and take you on a journey. Sometimes the music can be fast and lively (allegro), at other times slower (adagio). Sometimes the notes are short and detached from each other (staccato), and at other times the notes are played more smoothly (legato). And a single piece of music may have key changes, time-signature changes, and so on. When these differences occur in the music, a story is unfolding in much the same way that a well-designed presentation unfolds.

The art of storytelling

Life is about conflict and resolution, about problems and obstacles, and then overcoming those problems. In the real world, if you have no contrast or no change—if there are no "highs" or "lows"—you have about the dullest life imaginable. Likewise, in design, if everything is the same, then where is the story in that? Unless your intention is to produce a presentation that goes unnoticed, creating changes and clear differences is essential.

Yet similarity is important, too. If everything is different, then contrast is weakened. If everything is important, then nothing is important. If everything stands out, then nothing stands out. As with all things, balance must be maintained. People may be naturally inclined to scan and look for contrast, patterns, and meaning—but they will give up pretty quickly if our designs confuse the eye. Our job is to know what the key points are and to create the differences that makes it easy for viewers to naturally discover them. Remember, the design gives our stories focus and order.
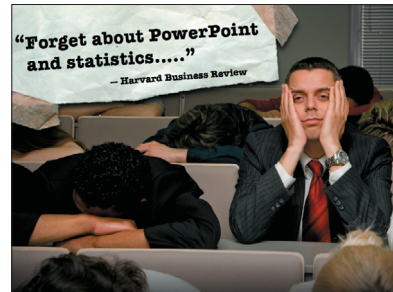
Images in slides from iStockphoto.com.

What does story have to do with change and contrast? At its core, story is about a "…fundamental conflict between subjective expectation and cruel reality," says legendary screenwriter Robert McKee. Story is about imbalance and opposing forces, or a problem that must be worked out. A good storyteller describes what it's like to deal with these opposing forces "…calling on the protagonist to dig deeper, work with scarce resources, make difficult decisions…and ultimately discover the truth," says McKee.

Why can't a presentation on a technical or scientific topic be a story about a long journey of discovery, of trial and error, and so on? (A story with plenty of data and information presented along the way, of course.) Creating change and contrasts is fundamental to good storytelling, and this goes for visual storytelling as well.

Perceiving differences in nature

If you really pay attention, you'll see that our visual world is full of contrasts. This black-and-white photograph is a wonderful example of the contrasting elements we can see in nature. In this composition of Mt. Fuji, you can see that the hills and mountains in the foreground are darker and the mountains get progressively lighter in the distance. This gradient from dark to light is something artists and designers use to add depth to their compositions.

When you looked at this image for the first time, you probably noticed Mt. Fuji first. Although it is a lighter shade, it is also much larger and higher than the other elements. As you notice the dark gray foreground elements, your eye is naturally taken back to the base and then up Mt. Fuji.

The lesson here is that size and value (lightness and darkness) can be used to achieve depth or create a feeling of perspective. On a light background, darker items appear as foreground elements. When elements have less contrast and get lighter, they recede and appear further away. On a dark background, the lighter elements will have higher contrast, and it is the darker elements that appear to recede as they approach a tonal quality closer to the background color.

Presenting with variety and depth

As mentioned earlier when discussing text, color, images, and graphs, there are endless ways to combine the elements in a design. Not only that, elements can vary in terms of size, location, color, value, texture, shape, position, alignment, implied movement, and on and on. The only real limitation is your own imagination. The key point, however, is to be aware of your intention and use the elements in a way that gets your point across the best. Below are a few sample slides that illustrate contrast using only simple shapes and changes.
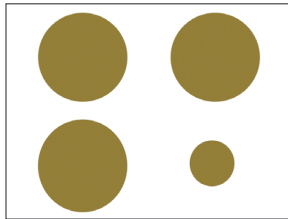
Contrast in size.
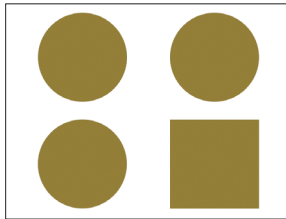
Contrast in shape.
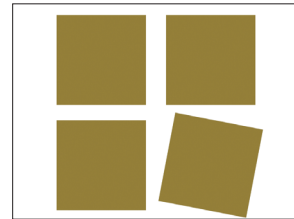

Contrast in orientation.
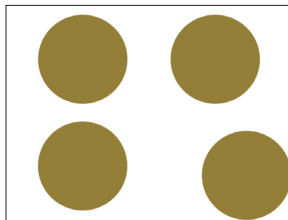
Contrast in position.
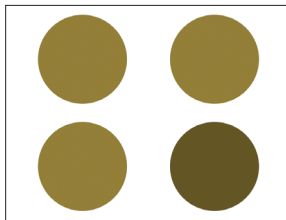
Contrast in tone (value).
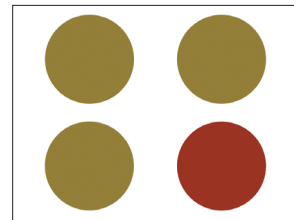
Contrast in hue (color).

Contrast elements with purpose

Most people place elements without devoting much thought to which will be noticed first, second, and so on. It's important to think about what messages you want audiences to understand loud and clear and then to make those points by adding contrast to your elements and establishing meaning. Contrast can be very obvious and sometimes it can be more subtle, but it should never be confusing or weak.
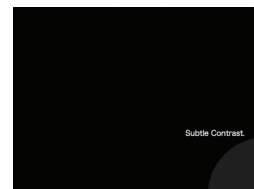
Large foreground elements can create depth

Hiroshige, a popular Japanese artist of the Edo period, was known for his colorful wood block prints, including a series called "One Hundred Famous Views of Edo." In some of his compositions, Hiroshige brought in large foreground elements that were cut off as they extended far outside the frame. You can see this in the large, drooping branches in the *Yatsumi no hashi* composition pictured here.

Introducing such a large foreground element establishes depth by creating a big difference in size between the foreground, middle ground, and background elements. We can apply something similar to elements in slides, too.

Images in slides from iStockphoto.com.

Tokonoma and the Art of the Focal Point

Every good design needs a focal point—including interior living spaces. In many Western homes, the mantelpiece in the living room is a focal point from which other interior design elements are added in a more or less symmetrical fashion. In traditional Japanese homes or modern homes containing a washitsu (Japanese-style room), the tokonoma (床の間) serves as the subtle focal point for the interior. The tokonoma (floor/bed + space) is a raised alcove in which Japanese art such as a hanging scroll (kakemono) or a flower arrangement is displayed.

The custom of having this built-in recessed space in a Japanese room goes back more than 500 years. While the tokonoma has lost much of its early religious nature, it's still very much an honored part of the Japanese room. Standing inside the tokonoma is not allowed. When you gather in a traditional Japanese room, the most honored guest is seated in front of the tokonoma. However, in another example of traditional Japanese refinement and humility, the guest is traditionally seated facing away from the tokonoma, so the homeowner does not appear to be showing off the artistic content of the tokonoma. In the West, the mantel often has a large picture or other artifact hanging above it that remains for years. By contrast, the artwork in the tokonoma changes throughout the year based on the season or the occasion.

Historically, the Japanese people did not use

furniture; they sat on warm and comfortable tatami mats. Therefore, washitsu rooms felt spacious regardless of size—there was virtually nothing else in the room to distract your attention. The emptiness or exclusion of nonessential decoration allows even the smallest rooms to feel more spacious and guides the eyes to the focal point of the room.

iStockphoto.com

Because the room is not cluttered with myriad furnishings, souvenirs, and other possessions, it is easier to notice and then linger on the art contained in the tokonoma.

A bare washitsu, built with natural elements, is a design with a close connection to nature. This harmonious balance with nature, and the garden just outside the walls of the room, is reflected in the seasonal contents of the tokonoma itself. In a way, the spaciousness of the room extends beyond the room to the vastness of the outside world.

You can also learn about focal points through traditional-style tearooms (chashitsu), which come in many sizes (but are typically 4.5 tatami mats in size). The materials to build the tearoom (or a tea house) are simple and rustic in the wabi style. The tokonoma in a Japanese tearoom is carefully situated to be the focal point of the room. In most cases, you enter the tearoom directly across from the tokonoma, so the artistic content is the first thing in the room you notice. As Okakura Kakuzo notes in *The Book of Tea* (Dover, 1964), as guests quietly enter the tearoom, they first make "obeisance to the picture or flower arrangement on the tokonoma." The walls of a chashitsu, and the traditional Japanese-style rooms in general, are kept bare and simple.

Lessons from the tokonoma

Lessons from the tokonoma that you can apply to presentation design and other forms of design include:

• A powerful focal point need not be overbearing or fancy.

• Emptiness creates spaciousness that assists the viewer in discovering the focal point.

• Subtle contrasts consisting of fewer elements create interest.

• Excluding the decorative and nonessential from other areas allows a focal point to be created using only simple elements (or a single element).

• If you intentionally create an area of contrast, it brings the viewer into the primary focal point and guides their eyes to the secondary focal point, the third, and so on without confusion.

• Eschew symmetry in favor of asymmetrical balance where possible.

Establishing a Strong Design Priority

For years I have asked designers in Japan what they believe to be the most common causes of poor, ineffective designs. One of the most common answers is the problem of a weak design priority. Design priority, another way of saying focal point, is based on a determined assignment of value or importance to different elements.

When a viewer sees a design for the first time—a slide, poster, page, and so on—he or she is naturally and instantly attracted to whatever stands out. Problems arise for communication when (1) nothing really pops out, (2) too many things pop out, or (3) superfluous elements pop out unintentionally and become a distraction. Any of these problems can clutter the visual design and confuse the viewer.

The presenter must be consciously aware of what he or she wants the viewer to notice first, second, third, and so on. Nothing can be by accident. Visuals with a strong design priority often use contrast to get attention and guide the viewer's eye through a design.

Good slide designs have many things in common with good designs found in billboards and posters. What's important for a billboard to be effective? At the very least, a poster or billboard must (1) get noticed, (2) be understood, and (3) be remembered. Slides are a bit like this: we want the visual elements on the screen to get attention and draw the viewer in. Once drawn in by the element that pops out the most, the viewer is guided by design priority and the various contrasts among the elements to illuminate the points you are making. In the end, this hierarchy helps create messages that are more meaningful— messages that target the viewer's visual and verbal channel.
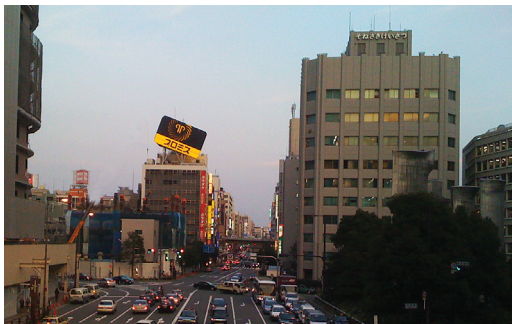
This sign in downtown Osaka, Japan, really pops out, mostly because of its unusual orientation.

Dominance and structure

Another way of looking at a design's effectiveness is in terms of dominance, which is related to design priority or creating a focal point. Every good visual has a clearly dominant element that lets the viewer know where to begin.

The larger or more dominant elements are generally going to rank higher in the structure in most designs, but this is not always the case. For example, a very large type size used in a declarative sentence across the top would usually be highest in the ranking, but if a large photograph is used in the slide, the text may attract the eyes second.

Juxtapositions among the elements guide the viewer along invisible lines to other elements. Contrasts between light and dark or emptiness and content, and so on create interest and energy and help the viewer navigate without having to figure out what is important and what is subordinate.
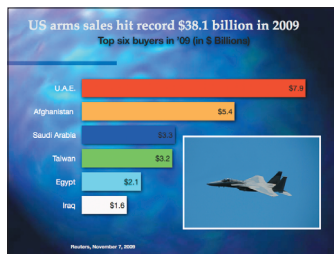
In the first example (left) it's not clear where our eyes should go first. The type at top is weak and every bar is a different color, emphasizing nothing. We may notice the photo first, but it leads us nowhere. The slides below do a better job of leading the eyes, have a clear hierarchy, and are easy to understand quickly. (Images in slides from iStockphoto.com.)
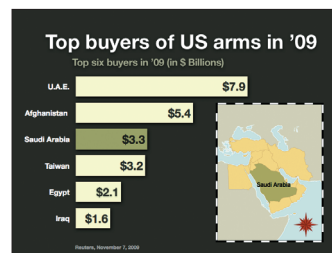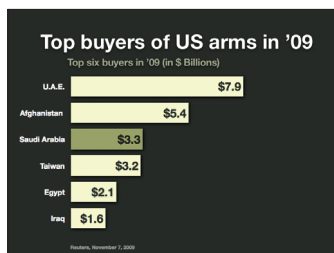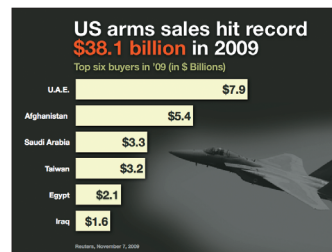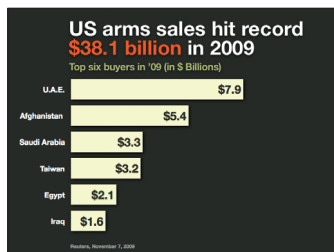
Low background salience

Salience is an important concept to consider when drawing attention to your message. According to Harvard professor Stephen Kosslyn, author of *Clear and to the Point* (Oxford University Press, 2007), understanding the principle of salience is one key to designing visuals that direct and hold attention. Salience suggests that "attention is drawn to large perceptible differences." The most important element of your design should also be the most salient, says Kosslyn.

You can do this in many ways, such as with larger or bold type, color choices, positioning, and myriad other techniques that help guide the viewer's eyes.

Generally, the slide backgrounds themselves should have relatively low salience. That is, backgrounds should be simple without lots of perceptible differences in the background image itself since this would interfere with the foreground elements. (And if you use a photo for a background image, use a photo that supports your message instead of undermining it. A good background, Kosslyn says, can "allow you to underline your message effectively, or it can create confusion. The background image should not conflict with the message of the display.")

Ambiguity between foreground and background elements often leads to weak visuals, confusion, and possibly even eyestrain. Backgrounds with patterns should be avoided as they have too much salience.

You can use images as background, but there must be clear contrast with the elements on top. The examples here show better contrast as you move from left to right. (Images in slides on this page and opposite page from iStockphoto.com.)

The preference for people

We are naturally drawn to images of people, and we're especially drawn to images of faces. We even have a tendency to see a face where a face does not actually exist, such as in an unusual pattern on the surface of a cheese sandwich or cinnamon bun or in a low-resolution photo of the surface of Mars. Images of people get our attention like few other images can.

The important thing to know is that if you use images of people—whether or not you intend for the image to be a focal point—you must know that this is where people are going to look first. If other elements are of greater importance, then make sure you place those elements so that the viewer's eye will naturally flow from the image to those elements.

In the first slide, you probably find yourself continually drawn to the woman's face, even though the speaker's key points appear in the upper-left corner. In the slide on the right, the image also gets your attention first, but it is easy for your eyes to flow off the image and up to the key point of the slide. The image is pointing in the direction of the data and we are not continually drawn to the image (unless you are really hungry, I suppose).
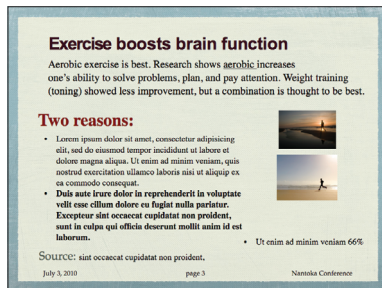
The burger and the face get your attention, but the text is nearly impossible to read in the first slide. Even if you could read the text better, you may still find your eyes drawn to the face. The second version here is a slight improvement, but I'm not crazy about covering up faces in this way and the burger is still a bit distracting and doesn't lead the eyes.

Simple slides that guide the eyes

Take a look at a few before-and-after slides. The "after" slides are the kind used in support of live talks where all of the words are coming from the speaker. The slides on the left show a rather arbitrary placement of elements and have poor hierarchy and dominance. While the slides at left have contrast, it is not clear why some things stand out and others do not. What are we supposed to look at first, second, third? The eye tends to wander.

The slides on the right have better design priority or focal point. First, removing extraneous information from the slides improves the clarity. The samples here are very simple, but you can apply the general idea to more complex slides as well. Just be clear in your own mind where you want people to go first (second, third, etc.) when the visual is shown.

BEFORE ▼   AFTER ▼

Not only does the slide at left have too much text for a live talk, it's not clear where the eye is supposed to go first. We may notice the pictures, but they are very small. Should we look at the graph first? Usually, the text at the top is the most important, but why is it so weak? In the text on the right, our eyes go to the jogger and then quickly to the key point in text.
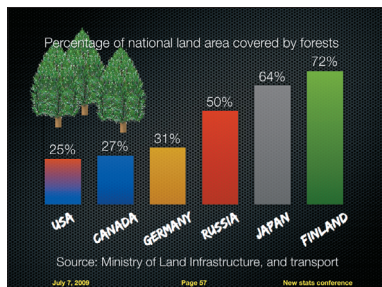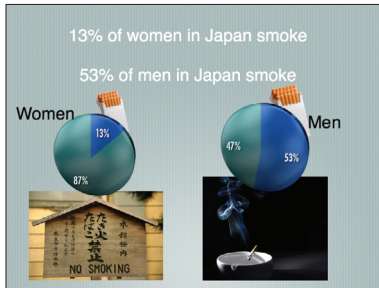
BEFORE ▼   AFTER ▼
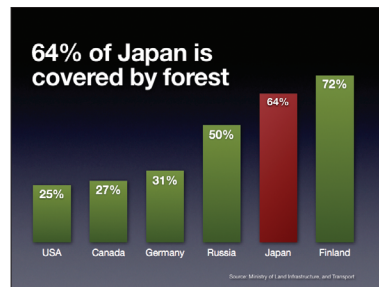
The slide at left has too many colors—our eyes bounce around from one colorful column to the next. What's the key point of the slide? Hard to tell. In the slide at right, our eyes go to the large text first and then the red column (or vice versa) and then we look at the other columns.

The key point is that a lot of Japanese men smoke—and more men than women smoke by a large margin. In the slide at left, it takes a while to figure that out. Our eyes roam from the pictures to the pie charts to the cigarettes and then to the light text. In the slide at right, the key point stands out. You may notice the photo first, but you are quickly moved up through the smoke to the large text, which is the key point.

Sometimes, you may want to review key points or definitions by placing those definitions in text form in your slide. The background image in the slide at left has too much salience. The contrast with the text is weak and the information is very hard to read. It's difficult to tell what is the subhead and what is the definition since the text is the same weight. The slide at right is very easy to scan from top to bottom.

Images in slides from iStockphoto.com.

Adding Motion to Make a Point

When you look at a slide, the first thing you probably notice is the element with the largest size or most vivid color. The elements we cannot ignore, however, are the elements that move. We humans—and virtually all other animals—are wired to notice movement above all else. Because we are so quick to notice it, you must use animation and transitions with great reserve.

There is no reason to animate every item that appears on your slide. You add motion to your slides essentially for these reasons: (1) to emphasize part of a visual, (2) to draw attention to a single element, (3) to bring in elements as you build your point visually, or (4) to create a change to propel your point forward. Simple graphs like most of those shown in this book do not need to be animated. Yet, more complex charts or diagrams may be more easily understood if you can build the components in a step-by-step fashion.
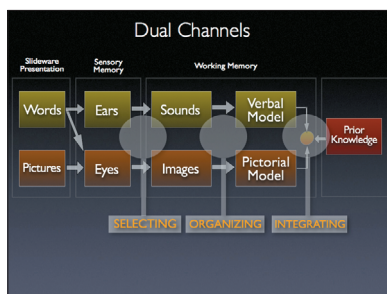

I used this slide years ago to explain (in Japanese) the Dual Channels of cognition as explained in Richard Mayer's *Multimedia Learning* (Cambridge University Press, 2001). Components faded in from left to right as I explained the process. Below is the Japanese version of the slides showing the progression. This is not overly complex information, but the idea is easier to understand if the presenter takes the time to build the components slowly as he speaks, adding examples along the way.
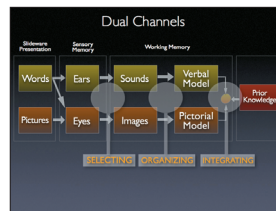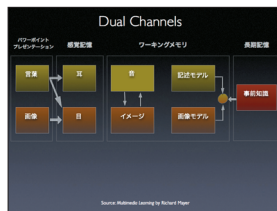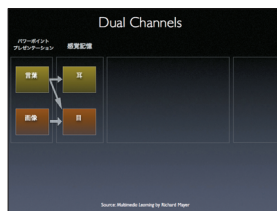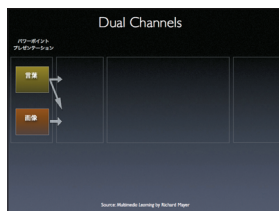
Using subtle transitions to show change

To present statistics on labor issues in Japan, I first show images of farmers and then highlight their challenges. The first slide shows a woman planting rice. This image dissolves to a version of the same photo with a Gaussian blur effect applied to add depth and make the type and simple line chart stand out more from the photo, which has now become the background. The colored text boxes are a darker shade of the blue from the field. The lines of the text boxes are imperfect for a more organic "earthy" feel. (Images in slides from iStockphoto.com.)
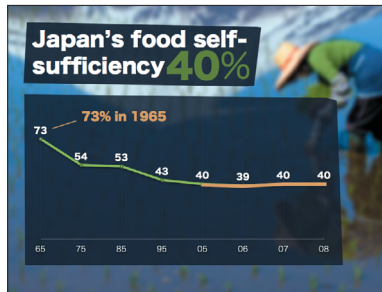
Here I am discussing the low birthrate in Japan. I begin with a photo I took of children at one of the fall festivals near my home in Nara. As I ask the question concerning the current birthrate, the photo dissolves to a blurred version of the same image, which pushes the image back and makes the type pop out more. Finally, the answer and the line chart fade in to reveal the trend. The orange used for the line and highlighted type matches the orange of the children's *obis* (belts) and the banner.
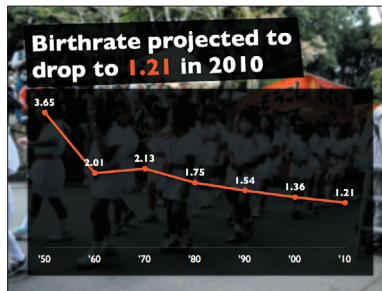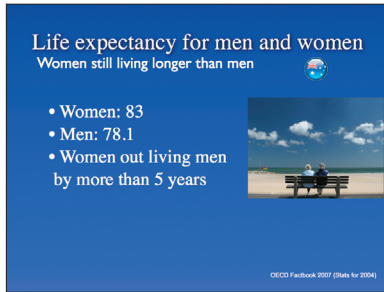
This is the original slide, with no animation, about life expectancy in Australia in 2007. A static, rather typical slide. How could you show the difference in life expectancy in a more emotional way? One way is to take one slide and break it up into four slides that subtly animate via smooth dissolves (transitions) to tell a story. It is impossible to replicate the emotional effect of these animated slides in a book, but the four slides below should give you an idea.

You can add a transition (dissolve) to smoothly change the text in sync with the narration. As the last slide dissolves in, it appears that the man fades out from the scene, creating a very emotional statement visually. (Image in slides from iStockphoto.com.)

In Sum

• People are naturally inclined to scan and look for contrast, patterns, and meaning. Our job as presenters is to know what the key points are and create the differences that make it easy for the viewer to naturally discover these points. Meaningful contrasts give our stories focus and order.

• Slides are similar to posters or billboards in that they must (1) get noticed, (2) be understood, and (3) be remembered. The visual elements onscreen serve to get attention and draw the viewer in. Once drawn into the element that pops out the most, the viewer is guided by design priority and various contrasts among the elements to an understanding of the points you are trying to make.

• Every good visual has a clearly dominant element that attracts attention and lets the viewer know where to begin. The presenter must be consciously aware of what he or she wants the viewer to notice first, second, third, and so on. Viewers tend to focus on images of people first. If you're using images of people, make sure this is where you want the eye to be drawn to first.

• Add movement to your slides to emphasize part of a visual or draw attention to a single element. Bring in elements as you build your point visually and create a change to propel your point forward.