

Paint a Mental Picture with Multisensory Experiences

It is better to present an explanation in words and pictures than solely in words.

**—DR. RICHARD MAYER, PSYCHOLOGIST, UNIVERSITY OF CALIFORNIA,
SANTA BARBARA**

WATER ISN'T EMOTIONALLY VIVID UNLESS you don't have it. Then it becomes the only thing you ever think about. Michael Pritchard was inspired to invent a portable water-filtration system after the events of the Indian Ocean tsunami of 2004 and Hurricane Katrina in 2005. In those events, people died or became seriously ill because they lacked safe drinking water. Pritchard invented the portable LIFESAVER filter, which turns filthy water into drinkable water. In 2009 Pritchard delivered a TED presentation about his invention. It's been viewed more than three million times, garnering attention any entrepreneur would envy. Pritchard opens the presentation with a photograph of a little

boy, dressed in rags, scooping up rancid, dirty water from a muddy field. “Now I see you’ve all been enjoying the water that’s been provided for you here at the conference over the past couple of days. And I’m sure you’ll feel that it’s from a safe source,”¹ he begins telling the audience. “But what if it wasn’t? What if it was from a source like this? Then statistics would actually say that half of you would now be suffering with diarrhea.” Pritchard had grabbed the attention of the audience right out of the gate (a jaw-dropping moment) with a simple yet evocative photograph and a statistic that made the audience squirm. And he was just getting started.

Three minutes into Pritchard’s presentation, he walks up to a fish tank filled to about three-quarters with water he took from the nearby river Thames. It’s mostly clear, and only slightly murky. “I got to thinking, you know, if we were in the middle of a flood zone in Bangladesh, the water wouldn’t look like this. So I’ve gone and got some stuff to add into it.” And with that Pritchard begins adding more water—water from his pond, sewage runoff, and, in an act that really turned up the emotional vividness of the demonstration, a “gift from a friend of mine’s rabbit.”

Pritchard scooped up some of the water with his device, gave it a few pumps, and poured clean, safe drinking water into a glass. He drank it, as did curator Chris Anderson, who was seated near the stage. The entire demonstration lasted no more than three minutes.

Pritchard’s presentation consisted of photographs, statistics, and demonstrations. It wasn’t *one* thing that made his presentation especially memorable—it was all three.

Secret #8: Paint a Mental Picture with Multisensory Experiences

Deliver presentations with components that touch more than one of the senses: sight, sound, touch, taste, and smell.

Why it works: Remember, the brain does not pay attention to boring things. It’s nearly impossible to be bored if you’re

exposed to mesmerizing images, captivating videos, intriguing props, beautiful words, and more than one voice bringing the story to life. Nobody is going to ask you to build multisensory elements into your presentation, but once they experience it, they'll love every minute of it. The brain craves multisensory experiences. Your audience might not be able to explain why they love your presentation; it will be your little secret.

MULTIMEDIA EXPERIENCES ENHANCE LEARNING

Several years ago I had a conversation with Dr. Richard Mayer, a professor of psychology at UC Santa Barbara and the principal proponent of multimedia learning. In a study titled "A Cognitive Theory of Multimedia Learning," Mayer suggests that it's far more effective to explain concepts using multiple methods of sensory inputs—such as auditory, visual, and kinesthetic. Mayer is convinced that one of the most important areas of study in cognitive psychology is the understanding of how multimedia can foster student learning.

In Mayer's experiments, students who were exposed to multisensory environments—text, pictures, animation, and video—always, not sometimes, *always* had much more accurate recall of the information than those students who only heard or read the information. Mayer said the principle should not be surprising. When the brain is allowed to build two mental representations of an explanation—a verbal model and a visual model—the mental connections are not just a little stronger. They are much, much stronger. Add touch and you've got a winner!

The differences between two types of learning (auditory and visual) were even more striking when the "audience," the people learning the information, lacked prior knowledge of the material. Students with high prior knowledge of the content can generate their own mental images while simply listening or reading.²

Think about the most important presentations you deliver—they are probably given to people with “low” prior knowledge of the information:

- **pitching a new idea, product, company, or campaign**
- **explaining new rules, processes, or guidelines**
- **teaching students on the first day of class**
- **training employees or salespeople on new tools or customer-service initiatives**
- **selling a product to a customer who's never used or heard of it**
- **launching a unique, revolutionary product or service**
- **asking an investor for money to grow your company**

In each of these cases, a multisensory experience often leads to the best results. These audiences are made up of human beings who might be skeptical and hard to persuade, but they are not immune to the psychology that drives our behavior. We respond to visual, auditory, and tactile stimulation.

Great public speakers know this and build presentations around one of the senses predominantly, but they incorporate at least one or two others: sight, sound, touch, smell, and taste. Smell and taste are harder to incorporate in a presentation, but Pritchard offered an example of how to stimulate both senses without physically touching the audience (if a person imagines how water smells or tastes, it triggers the same areas of the brain as if the person has actually ingested the water). So, with smell and taste out of the way, let's focus on sight, sound, and touch.

See It

In presentation slides, use pictures instead of text whenever possible. Your audience is far more likely to recall information

when it's delivered in a combination of pictures and text rather than text alone. Because vision trumps all other senses, I devote a large portion of this chapter to the technique of making your presentation visual. Taking your audience on a journey with the pictures you paint is part art and part science. You must think creatively about transferring your ideas to visually engaging images. For 30 years the world's best minds have captivated TED audiences around the world with powerful, captivating, inspiring, and memorable images. That's how they get ideas to spread.

Al Gore's Multimedia Presentation Ignites the Climate Change Movement

Former U.S. vice president Al Gore won the Nobel Peace Prize in 2007 for his work on global warming. Gore was the highlight of the TED conference in Monterey the preceding year, where he displayed some of the same slides he made famous in the Academy Award-winning documentary *An Inconvenient Truth*. When Al Gore won the Nobel Peace Prize, the TED online community asked TEDsters who had seen Gore's presentation at the conference how it had impacted them or changed their lives. Among the responses:

Al Gore's talk at TED opened my eyes to what I needed to do for my grandchildren's generation, and I now consider the impact we have on our earth in every venture we undertake.

—Howard Morgan, venture capitalist

Gore's TED presentation on the climate crisis was at once riveting and inspiring—his passion was so evident—it prompted me to share the talk with our children, and our eldest, Charlie, now 11, has become a one-man global warming marketing machine. Charlie has

created his own PowerPoint presentation, which he shares with virtually everyone he meets. — Jeff Levy, CEO

Al Gore's talk at TED 2006 was a turning point in my life.
—David S. Rose, angel investor³

THESE ARE JUST A FEW of the remarks from people who have been inspired after watching Gore's presentation on the threat of global warming, its causes, and what people can do about it.

Al Gore's slide show, designed with Keynote presentation software, is an astonishing example of how the visual display of information has the power to inspire action. The TED audience assembled in Monterey in February 2006 got a preview of the slides that would appear in the movie a few months later.

The story behind *An Inconvenient Truth* begins two years earlier. On May 27, 2004, during a New York City appearance after the premier of the film *The Day After Tomorrow*, Gore gave an abbreviated, 10-minute version of his presentation at a town-hall meeting about climate change. Producer Laurie David was in the audience. "I had never seen it before, and I was floored,"⁴ she said. "As soon as the evening's program concluded, I asked him to let me present his full briefing to leaders and friends in New York and Los Angeles. I would do all the organizing if he would commit to the dates. Gore's presentation was the most powerful and clear explanation of global warming I had ever seen. And it became my mission to get everyone I knew to see it too."

Think about Laurie David's observation—the most powerful and clear explanation she had ever *seen*. If Gore had not used slides to visualize the topic of global warming, he would have stood little chance to inspire David to make a movie based on it.

David was inspired because she experienced a multimedia event that looked more like a movie than a typical presentation.

I had an opportunity to interview Sir Richard Branson for my Forbes.com column on leadership and communication. I asked Branson if he had ever seen a presentation that blew him away. His answer: Al Gore's global-warming presentation.

He [Al Gore] presented the irreversible effects of doing business as usual on our fragile planet. We had a constructive discussion about how a businessman in dirty fuels businesses [airlines, trains] can open up clean tech markets and start new ways of doing better business. It led me to pledge 100% of Virgin's transportation profits to clean energy and to encourage more businesses to equally prioritize people, planet, and profits.”⁵

—Sir Richard Branson, founder, Virgin Group

If Gore had simply read the text with no supporting visuals, few people would have been inspired or intrigued. His ideas would have been lost or, at best, relegated to a very small group of individuals who were exceptionally engaged in the topic. The visual display of complex information made the topic clear and easy to grasp. In table 8.1 you can see how Gore explains the basic science of global warming. The left column shows his words; the right column explains the image on the corresponding slides and the visual animation that made the visuals so impactful.

Gore understands that complex material requires a simple explanation and more pictures to help the audience understand the

AL GORE'S WORDS WITH CORRESPONDING SLIDE DESCRIPTIONS

GORE'S WORDS	GORE'S SLIDES
The most vulnerable part of the earth's ecological system is the atmosphere; vulnerable because it's so thin . . . it's thin enough that we are capable of changing its composition. That brings up the basic science of global warming. The sun's radiation comes in the form of light waves that heat up the earth. ⁶	Image of earth, sun, and animated yellow rays emanating from sun
Some of the radiation that is absorbed and warms the earth is then re-radiated back into space in the form of infrared radiation.	Animation showing red lines—representing infrared radiation—leaving earth's atmosphere
Some of the outgoing infrared radiation is trapped by this layer of atmosphere and held inside the atmosphere.	Some red lines get trapped under thin line of atmosphere instead of leaving for space.
That's a good thing because it keeps the temperature of the earth within certain boundaries, relatively constant and livable. The problem is this thin layer of atmosphere is being thickened by all the global warming pollution that's being put up there. What that does is thicken this layer of atmosphere so more of the outgoing infrared is trapped and the atmosphere heats up worldwide.	Photos of factories spewing smoke

Table 8.1. Al Gore's words with corresponding slide descriptions from his *Inconvenient Truth* presentation.

concepts. Remember *Titanic* explorer Robert Ballard in chapter 4? His 2008 TED presentation contained 57 slides. There were no words on any slide! He showed photographs and artists' renderings of the fascinating undersea worlds he's discovered, but no text. Why? "I'm storytelling, not lecturing," Ballard told me.

presentation-design expert and author of *Resonate*, Nancy Duarte, created the slides for Al Gore's global-warming presentation. I know Nancy very well and we share an aesthetic for slide design and a philosophy of how presentations can truly transform the world. According to Duarte in a TEDx talk, "A single idea can start a groundswell, be a flashpoint for a movement, and it can actually rewrite our future,"⁷ said Duarte. "But an idea is powerless if it stays inside of you . . . if you communicate an idea in a way that resonates, change will happen."

The End of PowerPoint As We Know It

TED represents the end of PowerPoint as we know it. Since we're all sick of "Death by PowerPoint," it's time to kill it permanently. Let me be clear—I'm not advocating the end of PowerPoint as a tool, but the end of traditional PowerPoint design cluttered with text and bullet points. The average PowerPoint slide has 40 words. It's nearly impossible to find one slide in a TED presentation that contains anywhere near 40 words, and these presentations are considered among the best in the world.

Brené Brown is a research professor at the University of Houston Graduate College of Social Work. Her presentation that I introduced earlier, "The Power of Vulnerability," has been viewed more than seven million times. Brown did not get the memo that the average PowerPoint has 40 words, and it's a good thing she didn't. Cluttered slides detract from the message; Brown's slides complemented the narrative. How? She used images to replace words whenever possible. As a result, it took Brown 25 slides before she hit 40 words, the number of words on a single PowerPoint slide in most presentations.

For example, Brown started her presentation with a personal history of her experience as a doctoral student. Her first research professor would tell her, "If you can't measure it, it doesn't exist."



8.1: Brené BROWN speaking at TED 2012. Courtesy of James Duncan Davidson/TED (<http://duncandavidson.com>).

For the next two minutes, as she spoke, Brown's audience saw only that sentence—the quote from her professor—on the screen. She followed the slide with a picture of a baby's fingers in the hand of her mother as she spoke about her study into interpersonal “connections.” Brown scored points with the audience by using her slides as a backdrop to her story and not as a replacement for the story she delivered verbally.

Some of the comments on Brown's TED.com page include the following:

Exceptional, power-packed presentation. Leaned into every word.
—Melanie

A powerful message. —Bill

Genuine content. No fillers. —Juliette

These viewers were captivated by Brown's message, content, and

story structure. If Brown had forced them to read wordy slides as she spoke, the message would have been lost. Why? Because the brain cannot multitask as well as you may think it can.

Multitasking Is a Myth

“Multitasking, when it comes to paying attention, is a myth,”⁸ according to John Medina, a molecular biologist at the University of Washington School of Medicine. Medina acknowledges that the brain does multitask at some level—you can walk and talk at the same time. But when it comes to the brain’s ability to *pay attention* to a lecture, conversation, or presentation, it is simply incapable of paying equal attention to multiple items. “To put it bluntly, research shows that *we can’t multitask*. We are biologically incapable of processing attention-rich inputs simultaneously.”

Think about it. Aren’t we adding an impossible load on our audience when we ask them to listen intently to our words and read a lengthy PowerPoint slide at the same time? They can’t do both! So how do you engage the audience, make an emotional connection with them, and get them to pay attention without being distracted? Once again, neuroscience gives us the answer: Picture Superiority Effect (PSE).

Pictures Are Superior

Scientists have produced a mountain of evidence showing that concepts presented as pictures instead of words are more likely to be recalled. Put simply, visuals matter—a lot. If you hear information, you are likely to remember about 10 percent of that information three days later. Add a picture, however, and your recall rate will soar to 65 percent. To put that into context, a picture will help you remember six times more information than listening to the words alone.

“Human PSE is truly Olympian,”⁹ writes Medina. “Tests performed years ago showed that people could remember more

than 2,500 pictures with at least 90 percent accuracy several days post-exposure, even though subjects saw each picture for about 10 seconds. Accuracy rates a year later still hovered around 63 percent . . . sprinkled throughout these experiments were comparisons with other forms of communication, usually text or oral presentations. The usual result was PSE demolishes them both. It still does.”

Our brains are wired to process visual information—pictures—very differently than text and sound. Scientists call the effect “multimodal” learning: pictures are processed in several channels instead of one, giving the brain a far deeper and meaningful encoding experience.

The University of Western Ontario psychology professor Allan Paivio was the first to introduce a “dual-coding” theory. According to his theory, visual and verbal information are stored separately in our memory; they can be stored as images, words, or both. Concepts that are learned in picture form are encoded as both visual and verbal. Words are encoded only verbally. In other words, pictures are more richly stamped in our brains and easier to recall. For example, if I ask you to remember the word *dog*, your brain will register it as a verbal code. If I show you a picture of a dog and ask you to remember the word—*dog*—the concept will be recorded visually and verbally, significantly increasing the chance that you will recall the concept. Now, dogs are familiar, and if you’re familiar with the concept, it increases your ability to recall it. If, however, you are unfamiliar with the material, much like the presentation of new information as you would hear in a TED presentation, storing the concept as pictures and words is much more effective.

fMRI studies have confirmed Paivio’s theory. Today we know that students who learn through pictures and words recall the information more vividly than those students who learned only through text. Researchers also use the term *multimedia principle*: retention is improved through words and pictures rather

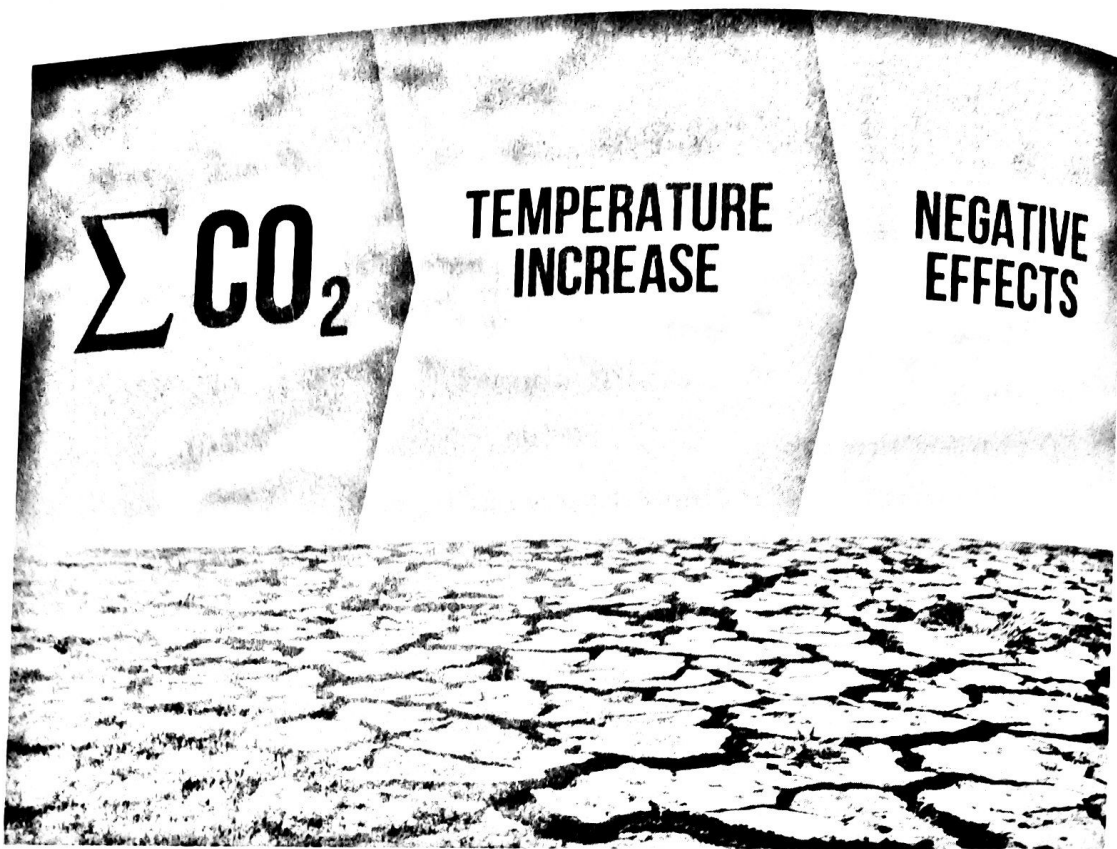
than through words alone. This has enormous implications on how best to design and deliver presentations that are intended to inspire or persuade people to take action.

Bill Gates Becomes a Fan of Visuals

Since Bill Gates left Microsoft to dedicate his efforts to philanthropy, he has been thinking about how to communicate complex topics simply. Gates tackles topics ranging from cutting carbon emissions to reforming education to helping the poorest two billion people, mostly children, live better lives. These are complex problems with complex solutions. What's not complex are Gates's slides. They are models of clarity and picture superiority.

At TED 2010, Gates gave the very popular presentation "Innovating to Zero!" U2 lead singer Bono said the presentation "gives me hope," and he ranks it among his all-time favorite TED talks. Remember when I said the average PowerPoint slide has 40 words? It took Gates 15 slides to reach 40 words. Instead of words, he showed photos and images. Gates's first slide showed a photograph of poor children in a small African village. "Energy and climate are extremely important to these people. In fact, more important than to anyone else on the planet,"¹⁰ he began. "The climate getting worse means that many years, their crops won't grow. There will be too much rain, not enough rain, things will change in ways that their fragile environment simply can't support. And that leads to starvation, it leads to uncertainty, it leads to unrest. So, the climate changes will be terrible for them."

Gates is remarkable at making complex content easy to grasp. He explained global warming in seven seconds and used a "straight-forward" visual formula to do it. According to Gates, "CO₂ gets emitted. That leads to a temperature increase and that temperature increase leads to some very negative effects." Gates's slide displayed a formula over a photo of a sky. Figure 8.2 shows a re-creation of Gates's slide.



8.2: Re-creation of Bill Gates's CO2 formula slide from his TED 2010 presentation. Created by Empowered Presentations @empoweredpres.

The Scrambled Egg Video That Launched a Global Movement

You'll recall that one of Bill Gates's favorite presentations on TED.com is David Christian's "The History of Our World in 18 Minutes." Christian's presentation plays on the senses, especially the visual sense. In the first two and a half minutes of Christian's presentation, there is no text on any of his slides.

Christian walked out onstage and said, "First, a video."¹¹ The audience then saw a video of what appeared to be an egg being scrambled. It soon became clear that the video was in reverse, showing the egg being unscrambled, the yolk and the white coming back together and heading upward into the eggshell.

Christian told the audience that the video should make them uneasy because it's not natural. The universe doesn't work that way.

A scrambled egg is mush. An egg is a beautiful, sophisticated thing that can create even more sophisticated things, such as chickens. And we know in our heart of hearts that the universe does not travel from mush to complexity. In fact, this gut instinct is reflected in one of the most fundamental laws of physics, the second law of thermodynamics, or the law of entropy. What that says basically is that the general tendency of the universe is to move from order and structure to lack of order, lack of structure—in fact, to mush. And that's why that video feels a bit strange.

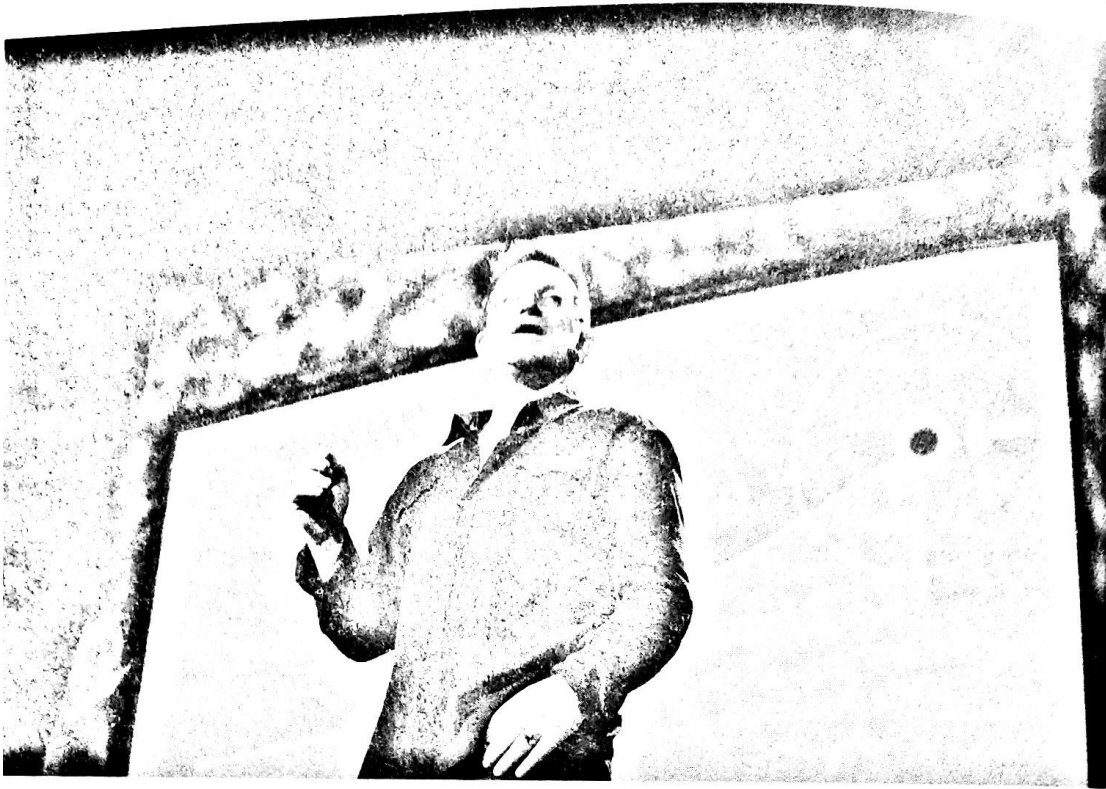
Viewers on TED.com call Christian's presentation "engaging," "amazing," and "stunning." The presentation, however, would have been very difficult to follow without the slides, images, and animations. The slides did not replace the narrative; the slides complemented the story.

"Use visuals to enhance words, not duplicate."

—TED Commandment

Bono Gets a Rise out of Data

Leave it to a rock star to introduce a sexual innuendo in a TED presentation. That's exactly what U2 lead singer Bono did when he delivered the data showing the progress that mankind has made in reducing extreme poverty (defined as \$1.25 a day). "The number of people living in back-breaking, soul-crushing extreme poverty has declined from 43 percent of the world's population in 1990 to 33 percent by 2000 and 21 percent by 2010,"¹² Bono said as the statistics appeared on the slides behind him. "If you live on less than \$1.25 a day, this is not just data. It's everything. This rapid transition is a road out of despair and into hope . . .



8.3: Bono speaking at TED 2013. Courtesy of James Duncan Davidson/TED (<http://duncandavidson.com>).

If current trends continue, the amount of people living on \$1.25 a day gets to zero by 2030. For number crunchers, the zero zone is the erogenous zone,” Bono said as the audience laughed and applauded.

Bono’s slides were professionally designed, which I recommend for anyone who has a mission-critical presentation intended to be delivered to several audiences or important enough to attract new customers or investments.

Watch Bono’s performance on TED.com and pay attention to the one technique that is common to all good presentation design: one theme per slide. When most presenters deliver data, they bombard the audience with an avalanche of numbers and charts, all in one view. Every time Bono delivered a statistic, the number—and that number only—appeared on the slide. Bono advanced one slide per data point. When he said that extreme poverty had been halved since the year 2000, the slide simply read: “Extreme Poverty Halved.” The technique of making numbers and data visually appealing is effective at getting your listeners

to notice and care about the impressive statistics behind your content.

Bono continued with a litany of numbers that show life is getting better for many of the world's poor people:

Since the year 2000 there are eight million more AIDS patients getting life saving drugs. Malaria. There are eight countries in sub-Saharan Africa that have their death rates cut by 75 percent. For kids under five, child mortality is down by 2.85 million deaths a year. That's a rate of 7,256 children's lives saved each day. Wow. Have you read anything, anywhere, in the last week that is remotely as important as that number?

If you read the paragraph and do nothing more, neuroscience tells us you'll remember about 10 percent of the information if I ask you to recall it three days from now. Add a picture, however, and your retention will go up to 65 percent of the information. That's exactly what Bono did. He verbally communicated the content and used multimedia, mostly in the form of visuals, to reinforce the data.

Bono's multimedia presentation included animated charts, graphs, and photographs. No matter how cleanly presented your charts are, a person's eyes are going to gloss over slides that show chart after chart after chart. So, Bono added stories and photos to break up the slides and to give the eyes a rest. He also brought the data to life by including personal stories of those lives behind the data.

"Seven thousand kids a day [lives saved]. Here's two of them. Michael and Benedicta. They are alive today, thanks in large part to their nurse, Dr. Patricia Asamoah, and the Global Fund." Bono showed two slides as he delivered the preceding two sentences. The first was a close-up picture of two smiling children, Michael

and Benedicta. The second showed a photo of Dr. Asamoah in what appeared to be a small village. This is the way you want to deliver data: one statistic (or theme) per slide, followed by photographs or images to give the brain a break from the monotony of the graphs, tables, and charts. Although Bono's stories were stimulating to hear, the real impact of this presentation lies with his skillful use of visuals.

32,000 Barbie Dolls

Photographer Chris Jordan plays with Barbie dolls. In February 2008, Jordan showed the TED audience a photograph he had taken with about 50 Barbie dolls placed in circular patterns. Jordan advanced to a second photograph—a larger view of the first—that showed many thousands of Barbie dolls. If you didn't know they were Barbie dolls, you would think the photo was a beautiful floral painting. The third and final photograph of the series pulled out even farther and revealed a silhouette of a woman's breasts. "As you get all the way back, you see 32,000 Barbie dolls, which represents the number of breast augmentation surgeries that are performed in the U.S. each month. The vast majority of those are on women under the age of 21,"¹³ said Jordan. "It's rapidly becoming the most popular high school graduation gift given to young girls who are about to go off to college." Jordan is another master of packaging data in visually appealing ways.

In another sequence Jordan displayed an image of white paper cups stacked on top of one another. Jordan says we use 40 million cups a day to carry hot beverages, mostly coffee. "I couldn't fit 40 million cups on a canvas, but I was able to put 410,000. That's what 410,000 cups looks like," he said, as the audience saw a photograph of what appeared to be white lines. "That's 15 minutes of our cup consumption," he added. The final image in the sequence showed a day's worth of coffee cups. "That's as high as

a 42-story building, and I put the Statue of Liberty in there as a scale reference,” Jordan said as an image of the statue was shown and appeared dwarfed by the cups in the background.

In another art piece, Jordan wanted to visualize the number of people who die each year from cigarette smoking. The first photograph showed a close-up of cigarette boxes stacked on top of one another. As Jordan pulled back, the next photographs revealed the big picture—he had re-created Vincent van Gogh’s 1886 piece, *Skull of a Skeleton with a Burning Cigarette*, with thousands of cigarette packets.

Jordan believes that it’s difficult for the average person to make meaning out of enormous statistics, yet these statistics reveal some very troubling issues in our society, issues that can evoke a more visceral response from people when visually and creatively presented.

Very much in the way Bono gets a rise out of data, Jordan believes that by “feeling” big numbers, we can do something about it. “I have this fear that we aren’t feeling enough as a culture right now. There’s this kind of anesthesia in America at the moment. We’ve lost our sense of outrage, our anger and our grief about what’s going on in our culture right now, what’s going on in our country, the atrocities that are being committed in our names around the world. They’ve gone missing; these feelings have gone missing.”

Jordan’s presentation is a profound example of transforming dry statistics—some of which we’ve all heard numerous times—and adding a multimedia element in the form of visuals to bring the data alive. The visuals reinforce each point and help us “feel” the emotion behind the numbers. Maya Angelou once said, “People will forget what you said, people will forget what you did, but people will never forget how you made them feel.” Don’t think just about what you want people to know; think about how you want them to feel.

How LinkedIn Simplified Its Marketing PowerPoint

Nine months before LinkedIn went public, its vice president of marketing at the time invited me to give a workshop to 130 of his sales and marketing staff. He wasn't happy with his team's existing PowerPoint slides. "It overcomplicated things," he said. The executive encouraged his team to incorporate some of the concepts from my previous books into a new and more compelling slide deck to encourage enterprise-level customers to advertise and recruit on LinkedIn. They tossed out the existing PowerPoint entirely and transitioned to TED-like slides with little text, no bullet points, and plenty of photographs and visuals. If a statistic needed to be highlighted, the data point was the only number on the slide, accompanied by a photograph of the LinkedIn site or some other relevant image.

One key idea I stressed with the team was the need to paint a picture for their audience with the images they show and the words they use to describe the slide. For example, the most important slide of the deck had one statistic on it: 70 million. It was accompanied by an artist's rendering of the LinkedIn logo made up of people representing LinkedIn members. The statistic represented the number of LinkedIn members at the time (today the company has more than 200 million members). The narrative we worked on went like this: "Today LinkedIn has 70 million members and we are adding three million more every month. That's the equivalent of adding the population of San Francisco to our network every 30 days."

LinkedIn's marketing and sales professionals loved the new design and went on to use the deck for the next nine months ahead of their stunning IPO (the stock doubled on its first day, making the company worth \$9 billion). CEOs and sales and marketing executives for many of the world's most admired brands are tossing out their old PowerPoint presentations and replacing them with ones that take their audiences on a visual journey. The old adage "you wouldn't bring a sword to a gunfight" fits quite

nicely here. The old style of PowerPoint is an anachronism on the modern corporate battlefield. Don't let your competitors kill your dreams because you failed to keep up with the times.

TEDnote

VISUALIZE CONTENT. Add images or include background pictures to pie charts, tables, and graphs. I recommend striving for no more than 40 words in the first 10 slides. This will force you to think creatively about telling a memorable and engaging story instead of filling the slide with needless and distracting text. Kill bullet points on most of your slides. The most popular TED presenters deliver slides with no bullet points. Text and bullet points are the least memorable way of transferring information to your audience. You might not be able to achieve this goal with every slide, but it's a good exercise. Once you force yourself to eliminate wordy slides, you'll realize how much more fun you can have with your presentation. The best part—your audience will love it!

Hear It

While vision is our predominant sense, we recall information much better when multiple senses are stimulated at the same time. Our auditory sense is very powerful. How you say something (pitch, rate, volume, intensity, articulation) can touch your listener's soul.

150 Feet down an Illegal Mine Shaft

For more than 25 years Lisa Kristine has traveled the most hidden parts of the world to capture the beauty and expose the hardships of indigenous peoples. Let's revisit her TEDx talk and focus on how she used her words to reach her audience.

The audience sat silent, transfixed, as Kristine took them on a visual journey with photographs as their guide. Her timing was impeccable and dramatic. Instead of showing the photographs as she spoke, she started reciting the story first and then displayed the photo shortly after she began the narrative. This technique

forced the audience to listen to her words carefully before seeing the photo of the characters she revealed in her story. In table 8.2 you can read what Kristine said to open her presentation, the nature of the photograph, and when it appeared.

LISA KRISTINE'S WORDS WITH CORRESPONDING PHOTO DESCRIPTIONS

LISA KRISTINE'S WORDS

I'm 150 feet down an illegal mine shaft in Ghana. The air is thick with heat and dust, and it's hard to breathe. I can feel the brush of sweaty bodies passing me in the darkness, but I can't see much else. I hear voices talking, but mostly the shaft is this cacophony of men coughing, and stone being broken with primitive tools.¹⁴

Like the others, I wear a flickering, cheap flashlight tied to my head with this elastic, tattered band . . .

and I can barely make out the slick tree limbs holding up the walls of the three-foot square hole dropping hundreds of feet into the earth.

When my hand slips, I suddenly remember a miner I had met days before who had lost his grip and fell countless feet down that shaft. As I stand talking to you today, these men are still deep in that hole, risking their lives without payment or compensation, and often dying.

I got to climb out of that hole, and I got to go home, but they likely never will, because they're trapped in slavery.

PHOTO DESCRIPTIONS

Black-and white-photo of shirtless miner holding a primitive-looking tool. Only the miner's silhouette is visible in the blackness, barely lit with a small flashlight affixed to his head.

Black-and-white photo of a miner crawling his way down the shaft

Extreme close-up of a miner's face in the blackness with only the reflection of his head-mounted flashlight showing his visage

Photo of Kristine climbing out of mine

Photo of miners helping Kristine out of mine

Table 8.2. Lisa Kristine's words with corresponding photo descriptions from her TEDx Maui 2012 presentation.

The first two minutes of Kristine's talk is the most gripping opener I've ever seen in a presentation. No text on the slides, just photographs, a compelling narrative, and a carefully crafted delivery. Although her photographs tapped in to her audience's visual sense, it was how she used her voice that sealed the deal. The impact you can make by stimulating your listener's auditory sense can be just as powerful as using visuals.

Painting Pictures with Words

Kristine's presentation was extraordinary because the power of her words matched her showstopping photographs. Read her evocative description of visiting brick kilns in India:

This strange and awesome sight was like walking into ancient Egypt or Dante's Inferno. Enveloped in temperatures of 130 degrees, men, women, children, entire families in fact, were cloaked in a heavy blanket of dust, while mechanically stacking bricks on their head, up to 18 at a time, and carrying them from the scorching kilns to trucks hundreds of yards away. Deadened by monotony and exhaustion, they work silently, doing this task over and over for 16 or 17 hours a day. There were no breaks for food, no water breaks, and the severe dehydration made urinating pretty much inconsequential. So pervasive was the heat and the dust that my camera became too hot to even touch and ceased working. Every 20 minutes, I'd have to run back to our cruiser to clean out my gear and run it under an air conditioner to revive it, and as I sat there, I thought, my camera is getting far better treatment than these people.

Kristine is doing something Dr. Pascale Michelon calls "creating a visual imprint on a person's mind." Neuroscientists have found that the visual cortex of your brain cannot tell the difference

between what's real and what's imagined. If you can think of something vividly—really imagine it—the same brain areas are activated as if you were actually seeing the event. That's why metaphors, analogies, and rich imagery are powerful ways to paint a picture in a mind's eye, in some cases even more effective than an actual image.

"To boost your memory, transform verbal information to visual information as much as possible,"¹⁵ Michelon suggests. "You can do it with visual aids or how you talk, the examples you use to paint pictures in someone's head." Pascale recommends that communicators use concrete examples as much as possible. Simply put, the brain is not designed to grasp abstractions. Even in sales pitches, use concrete examples to put your clients in a situation they can picture with their mind's eye. This is much more effective than using abstract words to describe your sales strategy. "We remember pictures better than words, so when I talk if I help you create visual images, you will remember that information much better than if I just use abstract words," says Pascale.

Painting a Mental Picture with No Pictures at All

The brain can't tell the difference between what it actually sees and what it imagines. Janine Shepherd, the injured cross-country skier you met in chapter 3, painted a picture for her TEDx audience and didn't show a single slide or photograph to do it. As she tells the story, Shepherd was a member of the Australian ski team preparing for the Winter Olympics when she took a bike ride that changed her life. By using evocative and descriptive words, she took her audience along the bike path.

As we made our way up towards the spectacular Blue Mountains west of Sydney, it was the perfect autumn day: sunshine, the smell of eucalyptus and a dream. Life was good. We'd been on our bikes for around five and half hours when we got to the part of the ride that I loved, and that

was the hills, because I loved the hills. And I got up off the seat of my bike, and I started pumping my legs, and as I sucked in the cold mountain air, I could feel it burning my lungs, and I looked up to see the sun shining in my face. And then everything went black.¹⁶

A utility truck had hit Shepherd. She was badly injured, airlifted to a spinal unit in Sydney, and was rendered a partial paraplegic. In the rest of her presentation she talked about the long road to recovery, connecting her narrative to the theme: you are not your body. Determined to prove her doctors wrong, Shepherd found a new dream to pursue—flying. She earned a pilot's license within one year of the accident and eventually became an aerobatics-flying instructor.

Shepherd's presentation has been viewed more than one million times. She has received e-mails from people who were inspired to keep fighting through their own setbacks. One person who e-mailed Shepherd said the video saved her life. The person had been fighting an ailment for 19 years. "It has become so bad that for the past few weeks I am contemplating suicide. But today after seeing and listening to Janine I got a new ray of hope. My journey begins NOW."

One Second Every Day

Cesar Kuriyama saved enough money to quit his advertising job at the age of 30 and spent the next year traveling and pursuing projects that interested him. He also recorded his daily experiences on video—only one second of video every day. He told a TED audience, "Visualization is the way to trigger memory . . . even just this one second allows me to remember everything else I did that day."¹⁷

Imagine . . . A Songwriter Has a Way with Words

The auditory sense can be stimulated by the rhetorical devices you use to deliver your words. For example, Martin Luther King's "I have a dream" speech is one of the most famous and quoted speeches in contemporary history. King didn't use PowerPoint, Prezi, or Apple Keynote. Instead, he painted images with his words—images that have stuck with us for half a century. King used a public-speaking device called anaphora, repeating the same word or words at the beginning of successive clauses or sentences. "I have a dream . . ." is repeated in eight successive sentences.

In addition to the charts, animation, and photographs in his presentation, U2's Bono used anaphora very effectively to add more stimulation to the senses. Here are two examples:

Facts, like people, want to be free. And when they're free, liberty is right around the corner, even for the poorest of the poor. **Facts** that can challenge cynicism and apathy that leads to inertia. **Facts** that tell us what's working and what's not, so we can fix it. **Facts** that if we hear them and heed them could meet the challenge that Nelson Mandela made in 2005 when he asked us to be that great generation that overcomes that most awful expense to humanity, extreme poverty.

I'm thinking of Wael Ghonim, he set up one of the Facebook groups behind Tahrir Square in Cairo. He got thrown in jail for it. I have his words tattooed on my brain. **'We are going to win** because we don't understand politics. **We are going to win** because we don't play their dirty games. **We are going to win** because we don't have a party political agenda. **We are going to win** because the tears that come from our eyes actually come from our hearts. **We are going to win** because we dream dreams and we are willing to stand up for those dreams.' Wael is right. **We are going to**

win if we stand up as one, because the power of the people is so much stronger than the people in power.¹⁸

It's important to note that when he delivered the last paragraph, Bono didn't show any slides. He wanted the audience to focus on the auditory sense—his words. Tears filled Bono's eyes as he spoke, reflecting his deep emotional attachment to the words. Powerful, well-crafted words have a way of stirring deep emotions in all of us. A slide would have detracted from the moment. Bono received thunderous applause and a standing ovation from the TED audience. It's no wonder. He aroused their senses with his words.

Three People and a Computer Amplify One Man's Voice

In March 2011, film critic Roger Ebert, who lost his voice to cancer and eventually his life in April 2013, "spoke" to a TED audience of more than 1,000 people. "These are my words, but this is not my voice. This is Alex, the best computer voice I've been able to find, which comes as standard equipment on every Macintosh,"¹⁹ the audience heard from a digitized voice as Ebert sat in a chair with a Mac on his lap.

As a film critic with decades of experience in front of the camera, as well as deep knowledge of the craft of moviemaking, Ebert knew how difficult it is to hold an audience's attention and so came prepared with a trick up his sleeve—a multisensory auditory experience.

The audience had been listening to Ebert speak through the digitized voice for about one minute when he said, "I've found that listening to a computer voice for any great length of time can be monotonous. So I've decided to recruit some of my TED friends to read my words aloud for me." Three others shared the stage with Ebert, all sitting in chairs alongside him. They included his wife, Chaz, Dean Ornish, and John Hunter. It's a very moving

18 minutes, especially as it shows the deep love and affection between Ebert and his wife.

The story of how Ebert remade his voice is interesting, but Ebert was absolutely right: listening to a digitized voice for 18 minutes gets monotonous, so he chose not one but four others (including the computer) to speak for him. “Multisensory” includes multiple voices. I find it ironic that Ebert said listening to a digitized voice is monotonous since many speakers speak in a monotonous tone and sound far less animated than Ebert’s computer-generated voice!

In chapter 7, I said an 18- or 20-minute presentation always trumps a 60-minute one. The majority of my keynote speeches last about an hour. Am I being hypocritical? Not at all. Like Ebert did, I share the stage. In my presentations I introduce multiple voices through video clips of inspiring leaders. Video gives me the opportunity to engage two senses at once—visual and auditory.

Feel It

The holy grail of a presentation is to transport the audience to another place. The visual display of information helps them to see it, but if the audience cannot physically touch something, how do we complete the journey? Again, think about a presentation as a Broadway play. An award-winning play has a wonderful story, intriguing characters, and relevant props. Great presentations have each of those elements, including simple props that give the audience a feel for what it’s like to be in the scene.

A Musician Gets a Standing Ovation Without Playing One Note

You might recall punk rocker Amanda Palmer from chapter 3. I mentioned that Palmer’s TED 2013 video received more than one million views within one week of being posted online.

Palmer's theme was simple and straightforward—don't make people pay for music. Since digital content is already available and shareable, Palmer suggests artists should ask for support directly from their fans. Most of the people who watch her presentation probably never have experienced life on the streets as a struggling musician, but Palmer takes them there.

Without saying a word, Palmer walked onstage and placed a milk crate on the floor. She stepped on the crate, draped a veil across her left arm, and held out a flower in her right hand. She slowly took in two deep breaths, posed motionless for several seconds, and spoke:

So I didn't always make my living from music. For about the five years after graduating from an upstanding liberal arts university, this was my day job. I was a self-employed living statue called the 8-Foot Bride, and I love telling people I did this for a job, because everybody always wants to know, who are these freaks in real life? Hello. I painted myself white one day, stood on a box, put a hat or a can at my feet, and when someone came by and dropped in money, I handed them a flower and some intense eye contact. And if they didn't take the flower, I threw in a gesture of sadness and longing as they walked away.²⁰

Palmer delivered the first three minutes of her presentation while standing on the crate, reliving her experiences and the people who gave her money. "I had no idea how perfect a real education I was getting for the music business on this box." Eventually, her band earned enough money and she quit being a street performer. As soon as Palmer told the audience she had quit being a statue, she walked off the box. The box remained on the stage as Palmer delivered her presentation, its presence acting as a metaphor for her narrative:

I decide I'm just going to give away my music for free online whenever possible . . . I'm going to encourage downloading, sharing, but I'm going to ask for help, because I saw it work on the street.

My music career has been spent trying to encounter people on the Internet the way I could on the box, so blogging and tweeting not just about my tour dates and my new video but about our work and our art and our fears and our hangovers, our mistakes, and how we see each other. And I think when we really see each other we want to help each other.

Palmer concluded her presentation with this challenge: I think people have been obsessed with the wrong question, which is, "How do we make people pay for music?" What if we started asking, "How do we let people pay for music?" As she said thank you, Palmer pulled out the flower that she had used to open her presentation, extended the flower to her listeners with an outstretched hand, and threw it into the audience. The audience jumped to its feet for a sustained 15-second standing ovation. Palmer the musician had given the performance of her life and hadn't played a note.

The TED.com page where Palmer's video had been posted received more than 500 comments in one week. Jody Murray commented, "I'm disappointed in my own skeptical inner voice wanting to dislike this talk but in the end it was not possible to. Amazing presentation and examples of such beautiful ideas realized."

Can you recall ever seeing an "amazing" business presentation with beautifully realized ideas? They don't happen very often in corporate boardrooms, do they? Yet, Amanda Palmer was delivering a business case for giving songs away for free, a very controversial subject in the music industry, and she did it in a way that her listeners could really feel and experience.

Feeling the Pain of Slow Downloads

Palmer stood on a prop—a milk crate—to help people “feel” the pain of being a struggling musician. Props and demonstrations are useful multisensory tools to help the audience tangibly grasp your idea and the problem it solves.

For example, I worked with tech-company executives to introduce an extremely fast USB drive for computers. The product had a “read/write speed of 190/170 megabytes per second.” The description itself is not very interesting or tactile in any way, yet in a simple demo we found a way to get the audience to “feel” their current pain and to contrast that pain with the joy they’d feel by using the new product.

After a brief introduction and explanation of the product, the speaker walked to stage left, where a laptop computer was sitting on a chest-high table. He pulled the new product—a USB drive—from his pocket, plugged it into the computer, and handed a stopwatch to someone in the audience. He asked the audience member to start the clock as he moved a 1.5 GB movie file from the computer to the drive. The total time that elapsed was 10.5 seconds. He then asked the audience member to start the clock again, and this time as he transferred the file using a competitor’s product. Without saying a word, the executive and the audience watched as the transfer happened. They waited. And waited. And waited. More than 40 seconds later the transfer was complete. “Not all USB drives are created equal,” he concluded. If the executive had talked through the demonstration, time would have gone faster for the people in the audience. Instead he was silent, drawing out the pain of slow downloads.

The Feather and the Blowtorch

“I’m a pediatrician and an anesthesiologist so I put children to sleep for a living. And I’m an academic so I put audiences to sleep for free.”²¹ That’s how Dr. Elliot Krane, who runs the

pain-management service at Packard Children's Hospital at Stanford, opened his TED presentation in 2011. Pain is usually a symptom of something wrong. For some children, the pain doesn't go away and becomes the disease.

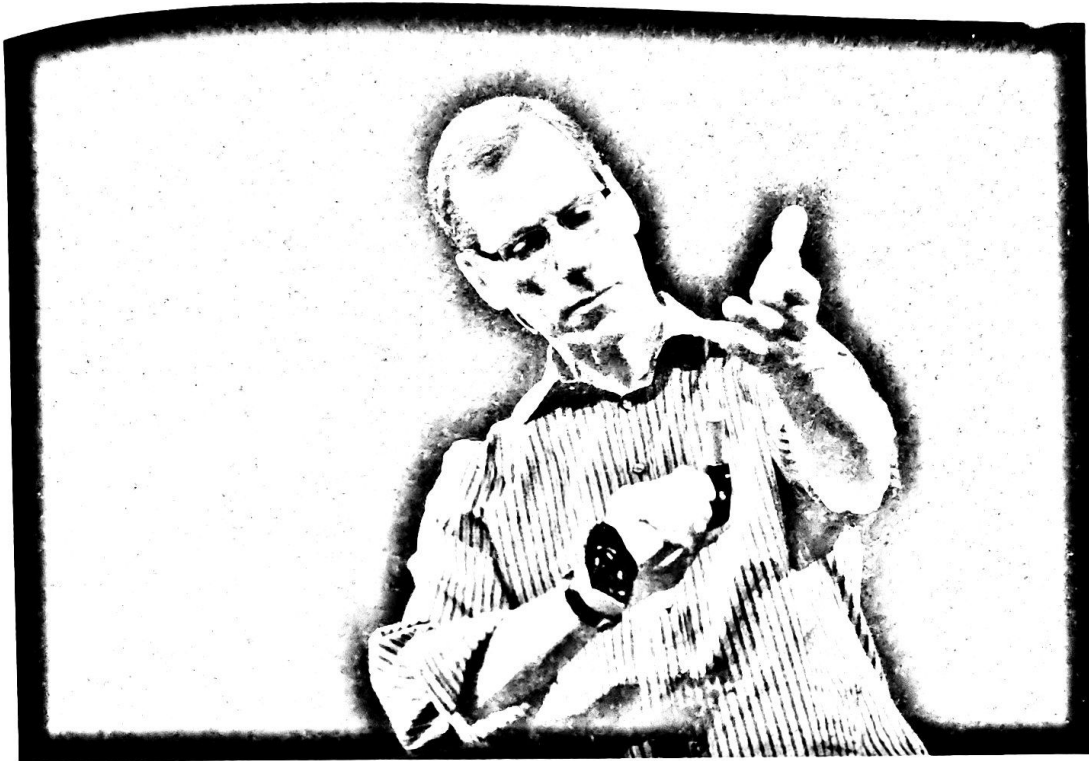
Krane explained that before he showed the TED audience how this type of pain happens and how it's treated, he wanted to show them how it *feels*.

Imagine that I'm stroking your arm with this feather [Krane gently swipes a yellow feather up and down his left arm]. Now I want you to imagine that I'm stroking it with this [He ignites a blowtorch and puts it near his arm. People laugh uncomfortably because they know what it must feel like]. What does it have to do with chronic pain? Imagine what your life would be like if I were to stroke it with this feather but your brain was telling you that this [picks up the blowtorch] is what you were feeling. That is my experience with patients with chronic pain. Imagine something even worse. Imagine I was stroking your child's arm with this feather and your brain was telling them they were feeling this hot torch.

The kinesthetic sense (touch) is sometimes difficult to incorporate into a presentation if the topic is about an idea (or, in Krane's case, a medical condition) instead of a physical product. But as Krane demonstrates, it can be done with a little imagination.

Once he put the blowtorch down, Krane transitioned to the visual sense, showing a photograph of one of his patients, a 16-year-old aspiring dancer who had sprained her wrist and, after it healed, continued to live with excruciating pain in the injured arm. "Chandler" had allodynia, a medical condition whereby the slightest touch causes indescribable, burning pain.

Medical conferences are infamous for having some of the dull-



8.4: Dr. Elliot Krane using a blowtorch in his TED 2011 presentation. Courtesy James Duncan Davidson/TED (<http://duncandavidson.com>).

est presentations of any event. It's not just my opinion. Ask any doctor. They'll tell you the majority of presentations are boring and poorly prepared. I know. I work with many doctors and executives who run pharmaceuticals, medical-device companies, and health-care organizations. Interestingly, but not surprising, if you do a Google search for "how to give a better medical presentation," the first link takes you to TED.

The bottom line is this: people remember information more vividly when more than one sense is stimulated. The next time you design a presentation, be imaginative about "touching" the five senses through the stories you tell (auditory), the photographs or slides you show (visual), and the props you use (feel).

Not What You Would Expect from a Blue Tiffany Gift Box

Stacey Kramer survived a cancerous brain tumor. An average speaker would have started her presentation with that revelation.

Instead, Kramer took an imaginative multisensory approach to her topic. The audience saw a photo of a beautifully wrapped Tiffany blue box as Kramer said:

Imagine, if you will—a gift. I'd like for you to picture it in your mind. It's not too big—about the size of a golf ball. So envision what it looks like all wrapped up. But before I show you what's inside, I will tell you, it's going to do incredible things for you. It will bring all of your family together. You will feel loved and appreciated like never before and reconnect with friends and acquaintances you haven't heard from in years. Adoration and admiration will overwhelm you. It will recalibrate what's most important in your life.²²

Kramer drew out the story of the gift before revealing the startling conclusion. “By now I know you're dying to know what it is and where you can get one. Does Amazon carry it? Does it have the Apple logo on it? Is there a waiting list? Not likely. This gift came to me about five months ago. It looked more like this when it was all wrapped up—not quite so pretty [photo of a red plastic bag with the word *biohazard* written on it]. And this, and then this [photos of the x-ray showing her tumor and the long scar on the back of her head where the doctors had removed it]. It was a rare gem—a brain tumor, hemangioblastoma—the gift that keeps on giving.”

The contrast between the lovely Tiffany box at the beginning of Kramer's presentation and the unpleasant photos at the end create a striking sensory experience for Kramer's audience. Kramer ended her presentation with a positive message and a lesson from the event that nearly took her life: “And while I'm okay now, I wouldn't wish this gift for you. I'm not sure you'd want it. But I wouldn't change my experience. It profoundly altered my life in ways I didn't expect in all the ways I just shared with you. So the

next time you're faced with something that's unexpected, unwanted and uncertain, consider that it just may be a gift."

TEDnote

HELP THE AUDIENCE TO "FEEL" YOUR PRESENTATION. Step outside the slides every once in a while. Build in demonstrations, show products, ask the audience to participate. If you're launching a product, it's fairly easy to do this because you can show people a physical product to see and touch. But what if your content is pure idea or concept? You can still create multisensory experiences. In one of my keynote presentations on the topic of customer service, I talk about a chain of soap stores called Lush. It's expensive soap. I hold a bar up and ask how many people would pay \$37 a pound for it. Nobody's hand goes up. I walk into the audience and ask for a volunteer to smell and feel the soap. I ask the question again. If they still say they wouldn't pay for it, I give them the bar "for free." I continue to build the story and to give away soap. Soon the audience realizes that the more they learn about the soap, the more likely they are to pay for it. It's a fun way to get the audience involved while helping them improve brand communications and the customer experience.

Secret #8: Paint a Mental Picture with Multisensory Experiences

What Kramer did took courage, and that's why you don't see great presentations every day. It takes courage to make your story so simple that a seventh-grader can understand it. It takes courage to build a slide with one word on it, as Bono did. It takes courage to show photographs instead of filling your slides with bullets points and text. It takes courage to pull out a feather and a blowtorch as Dr. Krane did without feeling silly. Metaphorically, it takes courage to stand on a milk crate for three minutes as Amanda Palmer did.

Courage stands out. Courage gets noticed. Courage wins hearts and minds. Courage is what you need to deliver the talk of your life. I know you have courage. Find it, celebrate it, and revel in it. Courageous public speaking will transform your life and the lives of the people who listen to you. You have ideas that were meant to be seen, felt, and heard. Use your voice to astonish people, inspire them, and to change the world.