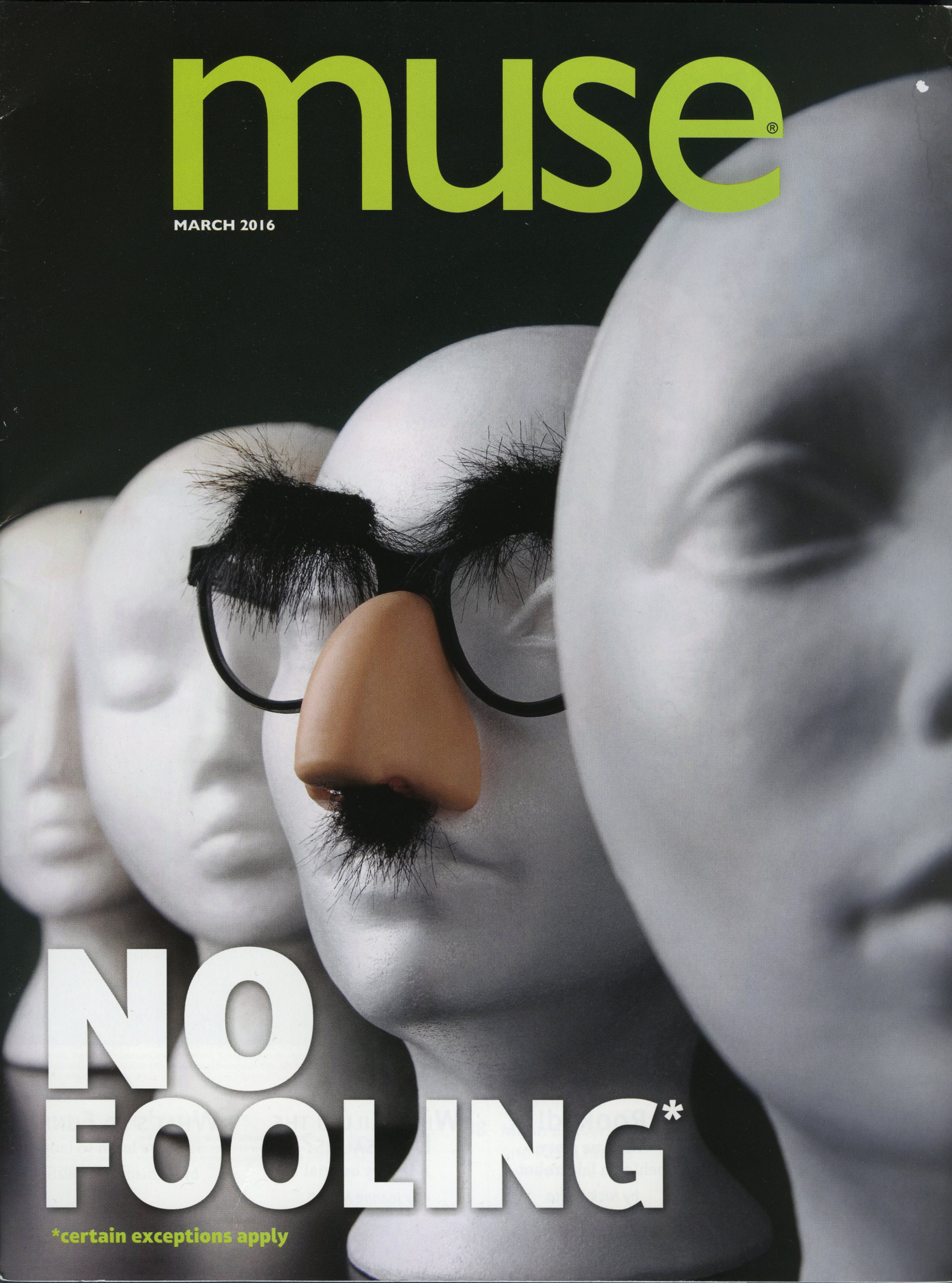


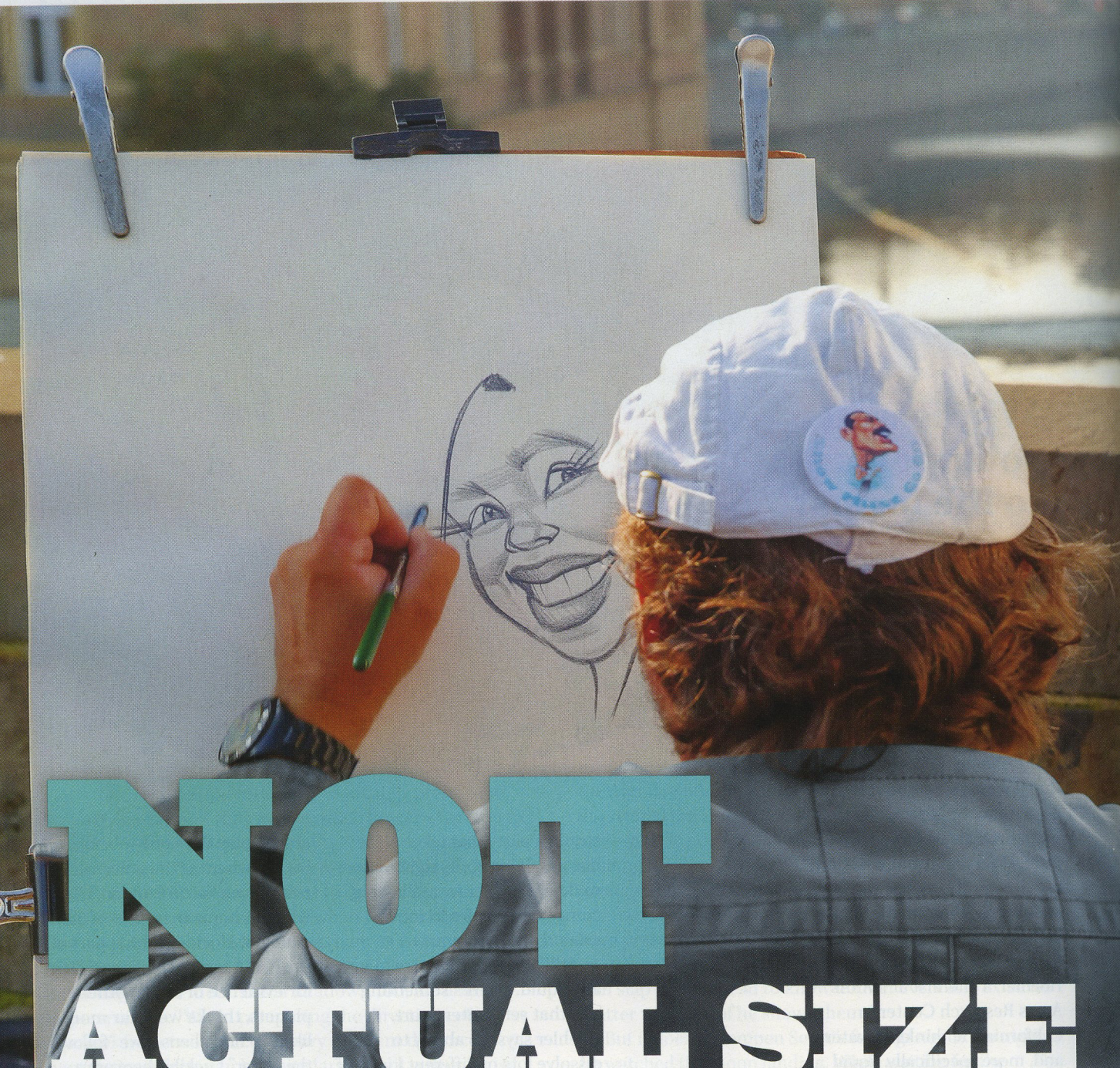
muse[®]

MARCH 2016



NO FOOLING*

*certain exceptions apply



NOT ACTUAL SIZE

EXPLORING THE MANY FACES OF CARICATURE

A painter, a psychologist, and a policeman all walk into a carnival. They ask the cotton-candy man where they should go for a good laugh. He looks to the ring toss and then the fun house and shakes his head. Finally, he points to the caricaturist creating a portrait showing a woman with abnormally gigantic front teeth, chomping on a carrot.

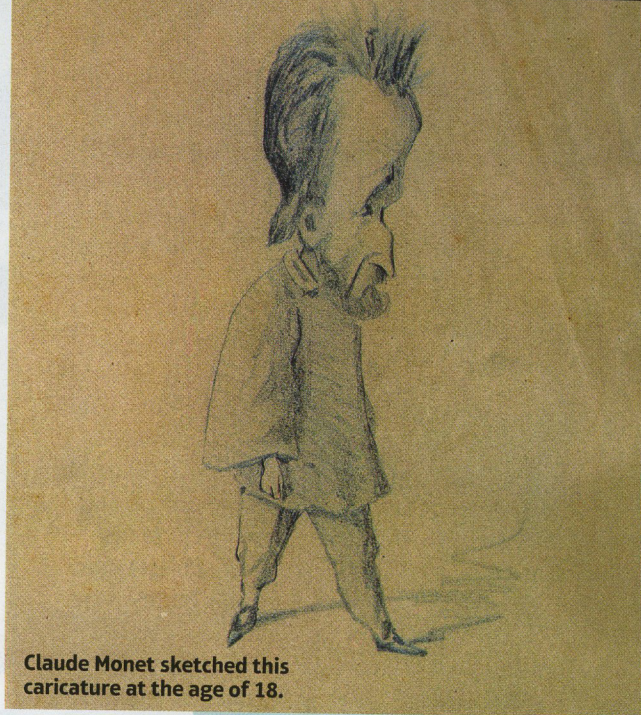
by Kristina Lyn Heikamp



Have you ever seen an artist creating a funny, exaggerated portrait—or drawn one yourself?

Caricatures are drawings that make someone look funny or foolish by exaggerating her appearance or character. The word “caricature” comes from the Italian word *caricare*, which means “to load” but can also indicate exaggeration. These visual jokes on a page became popular in the sixteenth and seventeenth centuries, but examples of caricatures can be found as far back as ancient Egyptian art.

Today, the uncanny portraits appear on magazine covers and postage stamps. They turn up on oceanfront boardwalks and in art galleries. Caricatures incite a giggle or a blush, but the funny faces have a rich history. And they’re being used in cool—and unexpected—new ways.



Claude Monet sketched this caricature at the age of 18.

A Face Only an Artist Could Love

Painter, inventor, and scientist Leonardo da Vinci loved to study the human form. He especially treasured the most curious-looking people he saw on the streets of Italian cities in the fifteenth and sixteenth centuries. If he saw an interesting face, whether young and beardless or hairy and old, he might follow the person around all day long, memorizing their features. With the images tucked inside his brain, he would return home to turn what he’d seen into “monstrous faces”—the phrase he used to describe his collection of caricatures.

Another artist, Claude Monet, also created a series of caricatures. In 1855, at 15 years old, Monet sketched charcoal portraits of the locals of his maritime town in France. He charged 10 to 20 francs per picture. Artists have also played with the power and influence of visual jokes. In the nineteenth century, caricatures took on politics and social commentary.

The Pen Is Mightier Than the Sword

President Abraham Lincoln reportedly called Thomas Nast the best recruiting agent for the Union when his sketches roused citizens to join the Civil War. Often known as the Father of the American Cartoons, Nast used caricature to critique slavery and political corruption. His parodies were a powerful communication tool during a time when some of society could not read.

On the lighter side of his career, Nast created today’s popular image of Santa Claus. The white-bearded, plump-bellied, red-nosed man was first portrayed in Nast’s illustration, published in *Harper’s Weekly* in December, 1866. Before Nast’s jolly portrait, artists had depicted Santa in different ways, including as a beardless man whose sleigh was pulled by a turkey. Rumor is that Nast had insider knowledge.

A Sight for Sore Eyes

Caricatures have also jumped off the page and into the research lab. While Leonardo da Vinci saw wild exaggerations of human faces, Dr. Jessica Irons sees caricatures as a way to help people with vision disorders. Age-related macular degeneration (AMD) is the leading cause of vision loss in the United States. Because people are living longer, the estimated number of adults with AMD is expected to more than double by 2050.

“The one thing people with AMD miss most is being able to recognize people, especially their family. We think that caricaturing will help,” says Irons, an experimental health psychologist. So Irons and her team put the funny faces to the test. In their experiment, they simulated AMD vision by showing blurry faces to test subjects. As the researchers expected, the subjects were horrible at recognizing the unclear images. But then the researchers caricatured faces with computer software that exaggerated key facial shapes. Study subjects were more likely to recognize these fuzzy faces. “This is exciting because it suggests that caricaturing might allow some people with mild AMD to be just as good at recognizing faces as people with normal vision,” Irons says.

She is working with researchers to develop software that will help create a caricature mobile app. People with AMD could then use a tablet or smartphone with the app to help recognize faces by studying exaggerated photos of those same faces. They are also testing whether caricatures can assist with other vision problems. “We are researching whether it will help improve face recognition for people with a ‘bionic eye’—an artificial eye that can restore [some] vision to blind people,” she says.

Flying into the Face of Danger

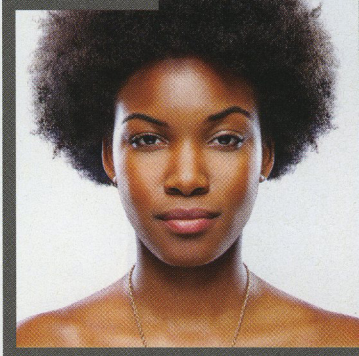
Dr. Charlie Frowd once sat for a hand-drawn caricature by a London artist, and he loved it. As a forensic psychologist at the University of Central Lancashire in the United Kingdom, Frowd thought maybe the fun could be put to work to help fight crime.

Following a crime, victims and eyewitnesses may try to describe what an offender looked like to a sketch artist. The artist’s sketch is called a facial composite. Police use the composite to help identify suspects. Building a single face composite this way doesn’t always work well. It can be hard to recall a face glimpsed for only a few minutes or seconds.

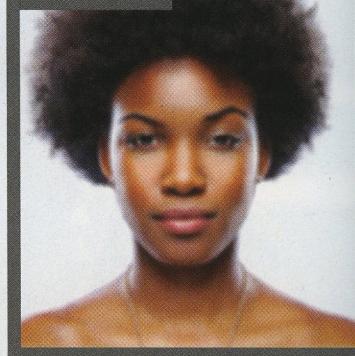
Frowd and his project team investigated caricatures and their effect on facial recognition. Test subjects viewed caricatured images of celebrities. Frowd’s team tested various levels of caricature—from a little exaggeration to a *lot* of exaggeration—and asked subjects to try to identify the faces. They discovered there wasn’t one specific “most helpful” level; sometimes a little bit of caricature helped and sometimes a lot.

Blurriness in the center of vision is a common symptom of age-related macular degeneration. Experimental health psychologist Jessica Irons investigated ways to help people recognize faces that look fuzzy.

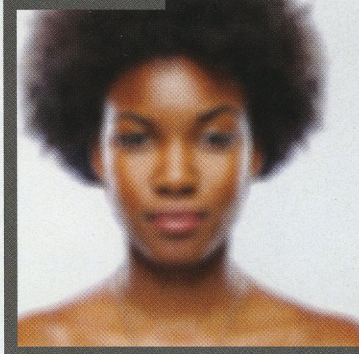
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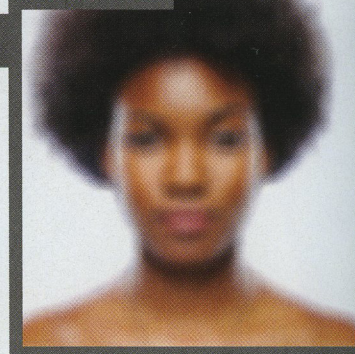
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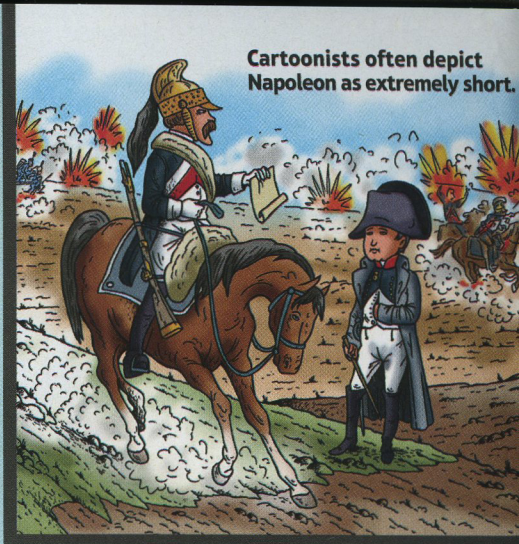


BLUR 30



GETTING THE SHORT END OF THE STICK

Sometimes visual jokesters conjure images that we just can't shake. English caricaturist James Gillray had a knack for creating lively and influential caricatures of political figures during the French Revolution. His main target: Napoleon Bonaparte. Gillray drew Napoleon many times, often caricaturing the French general as extremely short and hotheaded. The most famous of his works, "Plumb-Pudding in Danger," shows England's prim and proper prime minister, William Pitt, dining with a stunted and sloppy Napoleon. The two men are carving up a globe that represents a dessert called plum pudding. Another one of Gillray's caricatures shows King George III scrutinizing a pint-size Napoleon and declaring him among the most "pernicious, little-odious-reptiles that nature ever suffer'd to crawl upon the surface of the Earth." In reality, Napoleon's height was average for the time, around 5'6" or 5'7". But Gillray's images have stuck, and we often think of Napoleon as unusually short and aggressive.



"The surprising result was that showing someone an animated sequence was the best trigger to recognize the composite," he said. These results helped Frowd to develop software called EvoFIT for police stations around the world. EvoFIT allows witnesses and victims of crime to select whole faces from many options, combine their choices, and "evolve" a composite over time. Once the digital face is assembled, the software caricatures it and creates a short animation to alert the public. "It's all about trying to catch criminals and keep the streets safer. It is such good fun to be involved in this aspect of forensic psychology with the police," he says.

Written All Over Your Funny Face

The many faces of caricatures have reached far and wide through the arts, politics, and science. Caricaturing is helping people recognize and recall faces—be it a bionic eye recognizing a sister, or a crime victim recalling a perpetrator. Where will funny faces take us next?

Kristina Lyn Heitkamp is a Montana-based writer, researcher, and environmental journalist. Hoping to hone her stick-figure skills, Heitkamp signed up for a caricature drawing class. And she is stoked. Her family and friends have been warned.



Forensic psychologist Charlie Frowd used caricatures of celebrities in his research. Singer/songwriter Peter Andre, pictured here, is a familiar face to TV audiences in the United Kingdom. The facial composites above represent Andre's face with various levels of exaggeration.