## **Matthew Tompkins**



Mary Todd Lincoln with her deceased husband, image: William Mumler (1872)



P.T. Barnum with the ghost of Abraham Lincoln, image: Abraham Bogardus (1869)

Do you believe in Spooks? Together, these images tell a fascinating story about the interplay between evidence, belief, emerging technology, and trust in authority. But which is a genuine fake? The photo of Mary Todd Lincoln with the specter of her deceased husband was produced by William Mumler, history's most notorious spirit photographer. Mumler wasn't the first to claim that he'd captured images of souls on camera, but he, along with his wife and fellow medium, Hannah Green Stuart, were arguably the first people to successfully commercialise the practice. Mumler maintained that he had no understanding of the mechanism by which spirits seemed to materialise, and he retains believers to this day. But sceptics within and without the spiritualist community were quick to point out that there are methods of fraudulently producing spirit photos. Case in point, the image on the right is a portrait of the hoaxer and showman PT Barnum, likewise accompanied by the shade of the assassinated president. Barnum was outspoken about how his image was obtained by trickery. He had commissioned the photographer Abraham Bogardus to demonstrate how easily cameras could be exploited into falsely depicting spirits. Barnum, accompanied by his hoax image, was a star witness in the State of New York's failed attempt to convict Mumler of criminal fraud. Ironically, Barnum's own reputation for fraud and unreliable narration, or, in the parlance of his time, 'humbug', led to him being elevated as an 'expert witness' on trickery. At the trial in 1869, Barnum and the prosecution argued that Mumler was deliberately using trickery to take advantage of people's grief for financial gain. The defense, in turn, argued that Mumler was a pioneer at the cutting edge of a new scientific and religious paradigm shift. The prosecutors presented nine methods that could have been used to perpetrate the trick; however, they were unable to prove that Mumler deployed any of them. And, in the

end, Mumler was discharged. Years later, he would go on to produce his iconic photo of the Lincolns, an allegedly genuine rendition of Barnum's false evidence. Paradoxically, when looking at these images today, I find it simultaneously depressing and comforting that the controversies surrounding them are echoed so eerily in contemporary discussions of digitally manipulated media and fake news.

As a semi-professional magician and an experimental psychologist specialising in the study of illusions, I accidentally stumbled upon the history of spiritualism and its purportedly empirical miracles while investigating historical accounts of magic tricks being deployed to help and hinder scientific investigations. Like the prosecutors who appealed to Barnum, scientists have appealed to magicians to help them develop naturalistic explanations for inexplicable phenomena. Early photography aside, the debate isn't black and white. Even when we can show that a phenomenon can be replicated via trickery, this doesn't prove that genuine phenomena have never happened. And just because something can't be disproven, doesn't mean it happened. Nonetheless, collaborations between researchers and expert tricksters have enriched our scientific understanding of concepts like perception, memory, and reasoning. Sometimes, it's necessary for researchers to actively deceive participants to induce genuine responses; I and my colleagues employ a variety of tricks, magical and otherwise, in the lab. These days, I'm employed to design fake mind reading machines, which we use to investigate how people perceive and misperceive emerging technologies. For purposes of our studies, it doesn't matter that the machines are fictional, so long as our participants think they're real and behave as if they were. As honest liars, we always reveal our deceptions at the end of our experiments and explain that the technology was genuinely fake.