Why the airport of the future will include a chat with a celebrity hologram

The Mercury design of JFK's Terminal One will be a hub for all kinds of futuristic experiences

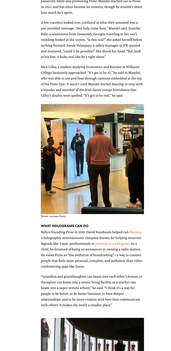


Photo: courtesy of the artist

BY MEGAN ROSEBOOM | MINUTE READ

Grace happened to be waiting for a flight at JFK Terminal 1 on May 16, chances are you bumped into the comedian Howie Mandel. Not in person, of course. Mandel is seven-to-power and doesn't like to fly. But rather in Pepper, a life-sized hologram machine with the ability to "mean" anyone an satisfying inside of it.

At noon, Mandel appeared. He was beaming in live from San Rupo, California, from a dreamer of the holographic communication company Proto. "This is how a gerontophobe comes to New York," he said into Pepper, his face floating and beaming while her claim jaw. "This is how I'd like to live for one of my life."

People started to gather. Mandel recalled the crowd, joining her at pinnacle while also promoting Proto. Mandel reached out to Proto after he saw a Pepper demo in Los Angeles, even though he couldn't share his jokes with people.

A few transfers looked over, confused at the sudden voice and a pre-recorded message. "Hey, lady, over here," Mandel said. Jennifer Lopez, who was in the terminal for a Delta commercial, stopped walking, looked at the screen. "Is this real?" she asked Mandel before inching forward. Sandy Velasquez, a safety manager at JFK, paused and muttered, "I can't stand Mandel." She shook her head. "Not that I'm for, I, I hidin' she like's right there."

Rich Lilly, a student studying Construction and Russian at Williams College fortuitously approached. "It's gon to be AC and so Mandel, who was able to see and hear through cameras embedded at the top of the Proto Eye, it wasn't until Mandel started dancing in step with the passers-by that he realized he was being beamed into Pepper. Lilly's doubts were quelled. "It's gon to be cool," he said.

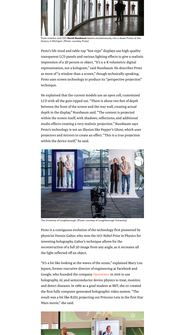


Photo: courtesy Proto

WHAT HOLOGRAMS CAN DO

Proto's Pepper is the brainchild of Matt Roseboom helped one Illusion, a holographic communication company known for helping museum legends like Tupac performance as holograms. Are a chick, for amount of being an automaton or owning a radio station. He views Proto as "the evolution of broadcasting"—a way to connect people that feels more personal, authentic, and authentic than video conferencing apps like Zoom.

"Grandma and grandmaghter can beam into each other's homes, or therapists can beam into a senior living facility, or a teacher can beam into a classroom of students," he said. "It's a way for people to be better, to be better humans, to have better relationships, and to be more creative with how they communicate with others. It makes the world a smaller place."

Photo: courtesy Proto, creating Proto

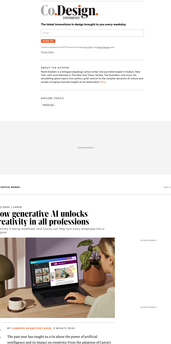
Proto's life-sized and realistic-looking Pepper will also appear transparent LED panels and various lighting effects give a realistic impression of a 3D person or "avatar." It's a 4 volumetric digital representation, not a hologram," said Roseboom. He describes Proto as more of "a window than a screen," though technically applying Proto uses screens and lenses to produce the "perspective projection" hologram.

He explained that the current models use an open-call, continuous-feed system. Pepper's face is a 2D screen, but the lenses in her eyes, between the front of the screen and the rear wall, creating actual depth in the display," Roseboom said. "The content is projected within the screen itself with shadows, reflections, and additional studio effects creating a very realistic projection." Roseboom says Proto's system is similar to Pepper's Ghost, which uses projection and mirrors to create an effect. "This is a true projection within the device itself," he said.

Photo courtesy of Longitudinal Company. Photo courtesy of Longitudinal Company

Proto is a contiguous evolution of the technology first pioneered by physicist Dennis Gabor, who won the 1971 Nobel Prize in Physics for inventing holography. Gabor's techniques allowed for the reconstruction of the 3D image from an angle, as it recreates all the light reflected off an object.

"It's a bit like looking at the waves of the ocean," explained Marc Lou Lessing, a holographic artist who helped Tupac, Michael Jackson, and Google, who founded the company Holoverse in 2016 to use holography, AI, and semiconductor device physics to treat, monitor, and detect diseases. In 1988 as a grad student at MIT, Lessing created the first fully computer-generated holographic video system. "The waves are the light and the patterns are Fresnel zone (a the first first Mass moment," he said.



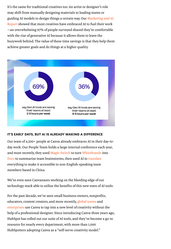
Michael Mandel, Jennifer Lopez, and Sandy Velasquez, from left to right, stand in front of a Proto Pepper hologram machine at Terminal 1 of the Jfk airport. Photo: courtesy Proto

Proto leverages this principle with its 3D display boards, projecting a 3D image of a person to create a realistic holographic representation. Lessing's company Holoverse uses Proto's tech to create "avatars" the real world. Within companies like Magic Leap and Microsoft HoloLens have brought holographic 3D displays to wearable headsets, Proto's tech poses competition comes from something like The Looking Glass. Looking Glass Factory, a desktop holographic display popular for 3D modeling, medical imaging, and interactive art.

Michael Mandel, Jennifer Lopez, and Sandy Velasquez, from left to right, stand in front of a Proto Pepper hologram machine at Terminal 1 of the Jfk airport. Photo: courtesy Proto

THE FUTURE OF HOLOGRAMS

To the Proto has gotten a lot of attention. The Kardashians and it during an episode of Keeping Up With The Kardashians. The Mercury Design Studio commissioned Proto to create a Pepper for its Terminal One lobby-top hologram device that uses just under 12,000 tiles to provide perpetual notice where people can use it for concierge services. Christie's auctions house has partnered with Proto to showcase art and collectibles. Jim Edgar Hogan's 50 million "Petite Amoureux de Paris" sculpture, for instance, will be displayed in Proto's holograph, challenging Hopping Additionally, Longbridge Company in England is testing how Proto will impact student facing teaching.



Jaillbreed's app, a platform for finding and hiring freelance talent, is being tested by Longbridge Company, a company that uses holograms to teach students. Photo: courtesy Longbridge Company

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"Our work platform Jaillbreed is a freelance marketplace where people can hire people to do work," said Gary Bennett, a professor of digital creativity at Longbridge University.

A NEW KIND OF SCREEN IN YOUR LIFE

JFK installed Proto such as part of its new and robust program, a series of installations and exhibits that are meant to represent the future of the airport. Proto's Pepper will be joined by a "Wall of Wonder" of public images, a Sky Deck that will feature exhibits that explore traditional forms of display and communication," and Karl Kjarsvik, Chief Innovation Officer of JFK International Air Terminal.

I asked Dominik JFK has been plans to open up new, exploratory "ways of seeing" and experiences to interact with ideas, items and people that we would not have previously been able to experience," said Vikki Lyons, a professor of digital creativity at Longbridge University's business school. Over the near-year, the university will conduct research to understand the technology and its impact on student learning, while also developing training materials for students and faculty members. Lessing's company Holoverse is also associated with mixed reality experiences.

Yet too, the more interesting benefits come from the 'control of the pixels' which facilitates more interactive ways to relate to what might engage with our students, for example with situated AI avatars, sound-reality sensitive, 'show and tell' content, etc," said Gary Bennett, a professor of digital creativity at Longbridge University.

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Megan Rosebloom is a technology writer based in Brooklyn. Her work has appeared in Fortune, New York, Lithub and Bookforum. She has been, twice, The Guardian's pick for "Best Twitter Account." She's also a fiction writer, a dancer, and a lifelong Catholic who, on occasion, sings Gregorian chants to the detriment of her neighbors. Follow her on Twitter @MeganRosebloom.
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BY CAMERON KHANSE FOR CARMA | MINUTE READ

How generative AI unlocks creativity in all professions

BY CAMERON KHANSE FOR CARMA | MINUTE READ

Illustration: courtesy Carma

The past year has taught us a lot about the power of artificial intelligence and its impact on creativity. From the adoption of Jasper's Magic Studio suite of AI-powered tools, to insightful findings in our Marketing in AI Report and AI Report, we have seen firsthand that AI has the potential to unlock ideas, streamline workflows, and save time for creative teams. Generative AI tools have made it easier to ideate, create, and edit, and free up valuable time to allow for more strategic thinking. Anyone can take advantage of this, whether they consider themselves "creative" or not.

I recently sat down with Kipp Bodnar, CMO of HubSpot, at SXSW in Austin, Texas, to discuss how creativity is changing in the AI age and showcase examples of how anyone, anywhere, can maximize its potential. While we have a long way to go to reach the full potential of AI at work, the early examples we discussed point toward a future of work that's more visual and engaging than what we know now.

IN THE VISUAL ERA, CREATIVITY IS BEING REDEFINED

Democratizing creativity has always been one of our core missions, and we're driven to empower everyone and every workplace with access to creative tools. Canva's Magic Suite, Adobe's Firefly, Jasper's Magic Studio, Microsoft Designer and dozens of others are bringing generative AI to the masses, and the demand for this has only increased.

IT'S EARLY DAYS, BUT AI IS ALREADY MAKING A DIFFERENCE

The roots of AI, AIGC, people or teams already embrace AI in their day-to-day work. Our People Insights Report, a large internal conference each year, showcased how our teams have been using Jasper, Canva, and Slack Gen to communicate more frictionless, more and AI to translate everything to make it accessible to non-English speaking team members based in China.

We've even seen Carmaneers working on the blending edge of our technology stack able to utilize the benefits of this new wave of tools.

For the past decade, we've seen small business owners, nonprofits, educators, content creators and more using Canva's suite of design tools and AI Magic Studio to create a new level of creativity without the help of professional designer. Since introducing Canva Magic suite, HubSpot has rolled out our suite of AI tools, and they've became a go-to resource for nearly every department with more than 1,000 HubSpotters adopting Canva as a "self-serve creativity tool."

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