

## The Camera Never Lied, Until Artificial Intelligence Told It to

An amateur photographer who goes by the name “ibreakphotos” decided to do an experiment on his smartphone to find out how a feature called “space zoom” actually works. The feature, first released in 2020, claims a 100x zoom rate, and Samsung used sparkling clear images of the moon in its marketing. Ibreakphotos took his own pictures of the moon—blurry and without detail—and watched as his phone added craters and other details.

The phone’s artificial intelligence (AI) software was using data from its “training” on many other pictures of the moon to add detail where there was none.

“The moon pictures from Samsung are fake,” he wrote, leading many to wonder whether the shots people take are really theirs anymore — or if they can even be described as photographs.

Samsung has defended the technology, saying it does not “overlay” images, and pointed out that users can switch off the function. The firm is not alone in the race to pack its smartphone cameras with AI — Google’s Pixel devices and Apple’s iPhone have been marketing such features since 2016. The AI can do all the things photographers used to labor over — tweaking the lighting, blurring backgrounds, sharpening eyes — without the user ever knowing. However, it can also transform backgrounds or simply wipe away people from the image entirely.

The debate over AI is not limited to hobbyists on message boards — professional bodies are raising the alarm too. The industry is awash with AI, from cameras to software like Photoshop, said Michael Pritchard, director of education and public affairs at the Royal Photographic Society of Britain.

“This automation is increasingly blurring boundaries between a photograph and a piece of artwork,” he said.

The nature of AI is different to previous innovations, because the technology can learn and bring new elements beyond those recorded by film or sensor. This brings opportunities, but also “fundamental challenges around redefining what photography is, and how ‘real’ a photograph is,” Pritchard said.

## **The Ban on Single-use Plastic Cups in New Taipei**

Beverage shops in New Taipei City would be banned from providing single-use plastic cups, to cut down on plastic waste, starting May 1st, the New Taipei City Environmental Protection Department announced in a press release on April 10th, 2023.

There are currently about 2,704 beverage stores in New Taipei City. They would be banned from using disposable plastic cups, including those made from the widely used bioplastic polylactic acid. The city's Environmental Protection Department added that the rule would take effect on May 1st. It is estimated the use of 368 million plastic cups, including biodegradable ones, can be eliminated every year after the policy is enacted in May.

Since 2022, the department has hosted several discussions with beverage shop operators about the new policy to help them prepare alternatives, including paper cups, to replace plastic cups. Officials have communicated with beverage industry operators in the region multiple times to understand their inventory of plastic cups and the availability of alternative paper cups. According to the department, the beverage industry operators are willing to cooperate with the plastic reduction policy. The regulation is expected to reduce the use of disposable plastic cups in the city by about 368 million per year. Beverage shops were informed of the impending policy last year, and they were advised to use up remaining stocks of plastic cups and begin purchasing paper cups instead, the department said.

The department will continue to promote the policy before its implementation and urges operators to comply to avoid penalties. After the regulation takes effect, beverage shops that contravene the rule would risk a fine of NT\$1,200 to NT\$6,000, which can be imposed repeatedly if violations continue, the department said, citing the Waste Disposal Act. If they fail to make improvements within a specified period, they may face continuous daily penalties. New Taipei City is the second city to adopt the environmental protection measure, following a similar decision by Taipei in December, 2022.

## Earth Day's Environmental Origins

On the first Earth Day on April 22, 1970, rallies were held in Philadelphia, Chicago, Los Angeles and most other American cities. In New York City, the mayor closed off a portion of Fifth Avenue to traffic for several hours and spoke at a rally in Union Square. In Washington, D.C., thousands of people listened to speeches and performances, and Congress went into recess so its members could speak to their voters at Earth Day events.

The first Earth Day was effective at raising awareness about environmental issues and transforming public attitudes. According to the Environmental Protection Agency, “Public opinion polls indicate that a permanent change in national priorities followed Earth Day 1970. Then, 25 percent of the U.S. public declared protecting the environment to be an important goal, a 2,500 percent increase over 1969.” Earth Day kicked off the “Environmental decade with a bang,” as Senator Nelson later put it. According to Nelson, “Earth Day worked because of the spontaneous response at the grassroots level. We had neither the time nor resources to organize 20 million demonstrators and thousands of schools and local communities that participated. That was the remarkable thing about Earth Day. It organized itself.”

During the 1970s, a number of important pieces of environmental legislation were passed, among them the Clean Air Act, the Water Quality Improvement Act, etc. Another key development was the establishment in December 1970 of the Environmental Protection Agency, whose tasks included protecting human health and safeguarding the natural environment—air, water and land. Since 1970, Earth Day celebrations have grown. In 1990, Earth Day went global, with 200 million people in over 140 nations participating. In 2000, Earth Day focused on clean energy and involved hundreds of millions of people in 184 countries and 5,000 environmental groups. Activities ranged from a traveling, talking drum chain in Africa, to a gathering of hundreds of thousands of people at the National Mall in Washington, D.C.

Today, the Earth Day Network collaborates with more than 17,000 partners and organizations in 174 countries. More than 1 billion people are involved in Earth Day activities, making it “the largest secular civic event in the world.”