

Hitachi demos 3D real-world object projector

October 5 2011, by Bob Yirka



【図2 物体と立体映像を重ねたようす】



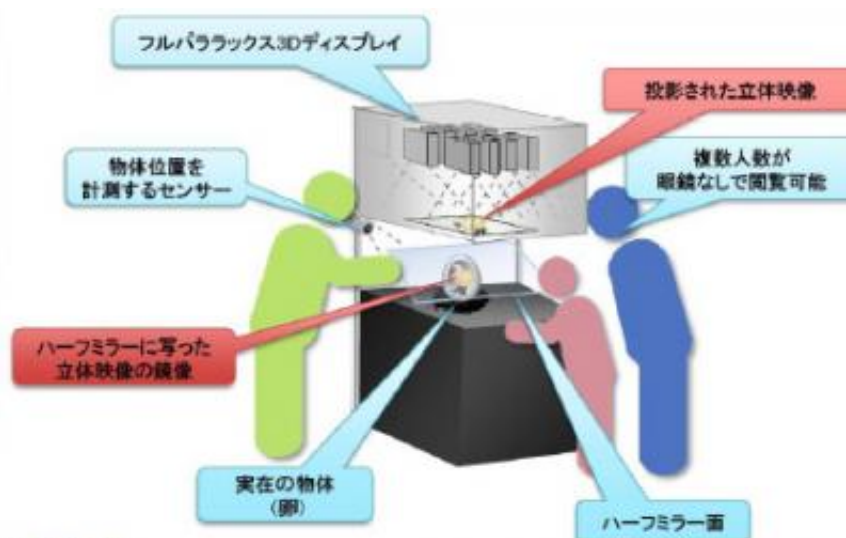
【図3 物体の位置と角度に合わせて立体映像が変化するようす】

(PhysOrg.com) -- In a feat of technical wizardry combined with several doses of panache, Hitachi has demoed a 3D projector that can project images onto real-world objects in stunning fashion. For the demo, a 3D image of a bird hatching was displayed on an artificial egg that was cradled in an artificial nest. But that's not all. Viewers looking at the demo see the bird as a hologram, in that as the viewing angle changes, so too does the view of the image, just as it would were you to be watching a real bird. The demo brings to mind Princess Leia, in Star Wars,

delivering her message via 3D hologram to Obi Wan Kenobi.

The demo, shown as part of the Combined Exhibition of Advanced Technologies (CEATEC) trade show, the Japanese equivalent of CES, at the Makuhari Messe convention center just outside of Tokyo, was meant to show the progress that Hitachi has made in developing 3D projecting devices. Called Full-parallax 3D Display Technology, it looks like hologram technology, but isn't. Instead it utilizes multiple cameras to capture the image then displays it using a group of 24 projectors, transparent mirrors and computers to project the image down onto a real three-dimensional object, such as an egg. In this respect, the technology is truly unique.

When a viewer looking at the image moves up or down or left or right, what they see changes to suit the viewing angle. And if that's not enough, the projected image can be viewed by multiple people from multiple angles, and everyone sees it as they would were there an actual real-world object sitting there. Also, if the object is moved around a little, the system compensates for it automatically.



[図1 システム構成図]

The system has a 60° horizontal and 30° vertical viewing angle and Hitachi reps report that it will have a resolution that is 1.6 times higher than anything shown before, though there are reports that Sony is working on a similar system so that boast may not last long.

In addition to its use as a tool to show off its coolness factor, [Hitachi](#) believes that the [projector](#) could be used by design engineers, digital signature apps and perhaps as a training device in the manufacturing or medical arenas.

More information: [Hitachi press release](#)

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