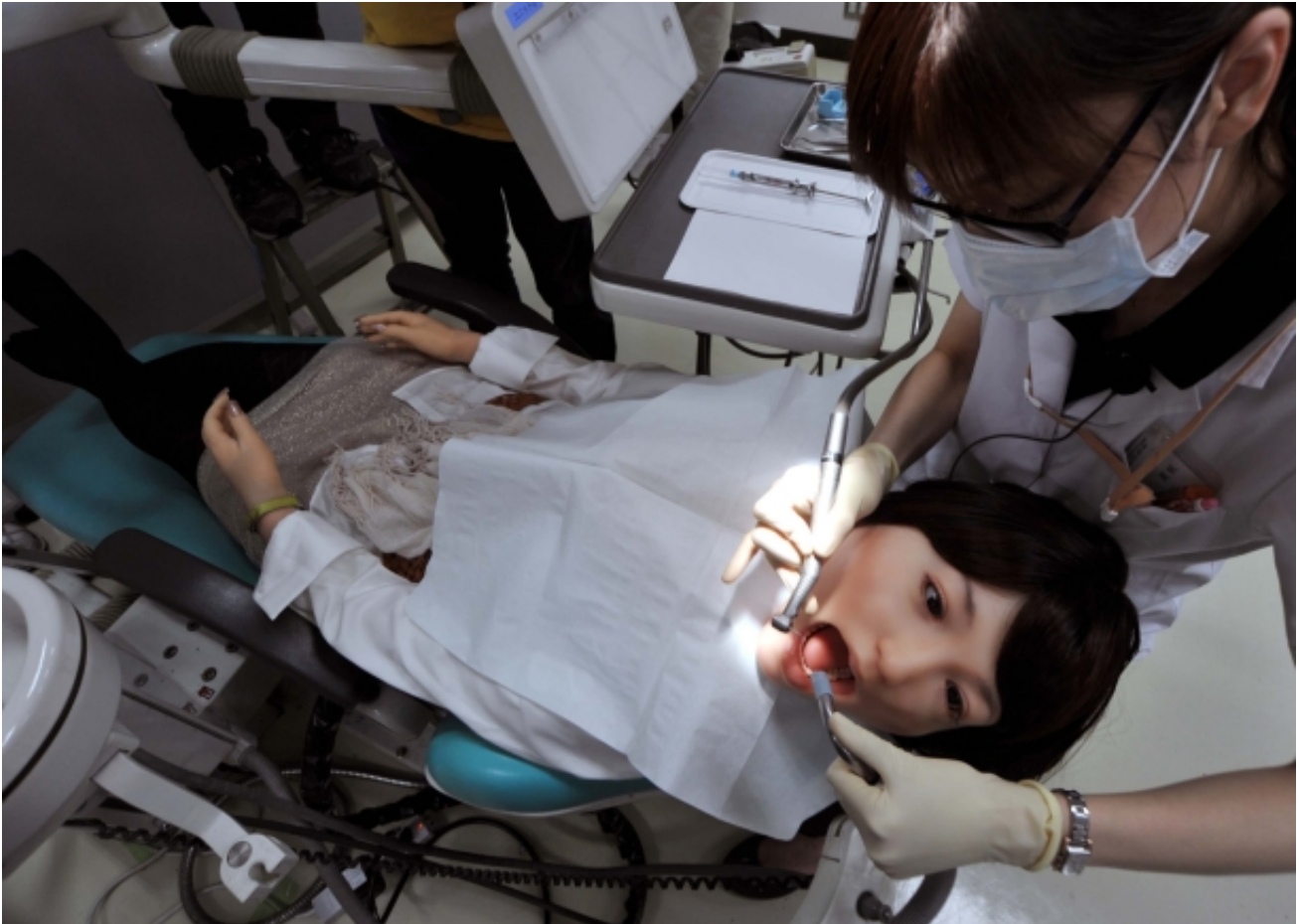


Sex doll tech moves to the dentist's chair



Robotic dental patient Hanako Showa 2 shows off her chompers while making her media debut this week at Showa University in Tokyo. Yoshida Dental Manufacturing will start selling the robot later this year.

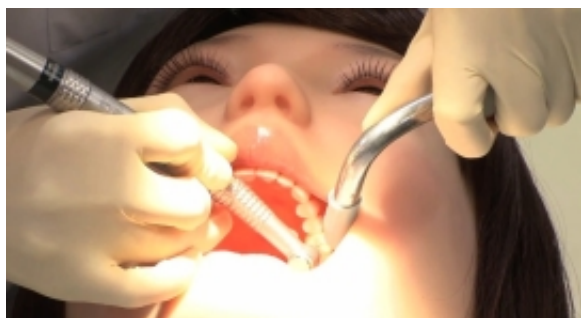
(Credit: Natsuki Sakai/AFLO/Newscom)

If you're freaked out either by humanoid robots or the thought of dental work, proceed with caution. If both make your skin crawl, you might want to reach for the nitrous oxide.

Showa Hanako, a robotic dental patient out of Japan we [told you about last year](#), has been reborn as Showa Hanako 2. Now the [android](#) can not only open and close her mouth, move her tongue, shake her head, blink, cough, sneeze, choke, roll her eyes, and tell her dentist, "Ouch! It hurts!" She can look ultra-realistic doing it.

Jointly developed by Showa, Waseda, and Kogakuin universities and produced by Japanese robot maker Tmsuk, Showa Hanako 2 was created to be a training robot for dental students. But where her elder sister looked like a stiff plastic doll tethered to a dental chair, Showa Hanako 2 looks like a stiff real woman tethered to a dental chair. That's largely because where she used to be made of PVC plastic, she now

features silicone skin, tongue, and mouth lining made by Orient Industry, a creator of sex dolls. Needless to say, Orient has a high stake in making realistic-looking and -feeling body parts.



This is poor Showa Hanako 2's lot in life.

(Credit: Video screenshot by Leslie Katz/CNET)

movements that will hopefully help prepare dental students for patients' real reactions.

"If you don't try to make a robot's face look realistic, it doesn't have the same effect [on] users psychologically," Koutaru Maki, a professor at Showa University's School of Dentistry, told **DigInfo TV**. "It makes quite a difference if patients can train while experiencing the same kind of tension they'd feel about a human patient, thinking, for example, 'I'm really going to make this treatment work' or 'Even the smallest mistake would be unforgivable.'"

Dental supply company Yoshida Dental Manufacturing will start selling Showa Hanako 2's in Japan later this year for an undisclosed sum. So don't be surprised if you see her sitting in your dentist's waiting room flipping through an issue *Robot Vogue* sometime soon.

Orient also brought its sex doll mouth tech to the makers of Showa Hanako 2, helping them form a tongue and cheek in one piece. This, the development team says, prevents water from dental tools from getting into Showa Hanako 2's machinery and causing problems.

Also, where the robot's head previously moved only pneumatically, it now has a motor. Showa Hanako 2's tongue and arms each have 2 degrees of freedom, and the robot overall has 10 degrees of freedom, enabling it to make natural