

Immaterial Girl

Pop star Hatsune Miku is huge in Japan. Her fans adore her. They even write songs for her—and she performs them. Just one thing: She's not exactly human.



BY JAMES VERINI

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A HATSUNE MIKU CONCERT begins humanly enough. If you've ever had the heart to accompany a daughter or niece to, say, a Justin Bieber or Miley Cyrus extravaganza, you know the drill: The young crowd rushes in, giggling, making yelp-like noises that adult throats don't make, repeating the titles of songs as if they were mantras. The band emerges, followed by more young-throat noises, followed by the diminutive but eerily poised headliner, who recalls one of those grown-up-looking babies in Renaissance art. Followed by pubescent rapture.

Some 3,000 fans attended a Hatsune Miku concert in Singapore.

At a Hatsune Miku concert, that's also the moment when the proceedings take a turn for the, well, the only precise way of saying it is *for the Japanese*. Miku is not human. She is a virtual idol, a holographic star. Miku is crowdsourced, ever-evolving, famous software. Not even her fans know, or care, how to taxonomize her. ("She's rather more like a goddess: She has human parts, but she transcends human limitations. She's the great posthuman pop star," one fansite reads.) Her bandmates are all actual people playing real instruments, but Miku is projected onto the stage, singing, if that's the word, in avian-robot trills. She was programmed to do this months before, thousands of miles away.

Not that her forecoded unreality interferes with widespread adoration. On the

friend, was even more enthusiastic. The two fans were in full Miku regalia: blue wigs, gray sleeveless one-pieces, and blue clip-on ties. "It's a good thing" Miku isn't human, she said. "She's not going to die. She's not going to turn into Miley Cyrus, where she gets drunk or something."

AMY FIRST BECAME interested in Miku after seeing concert footage online. She then submerged herself in Miku subculture, but she knew little about the star's origins. This is just as Miku's creators would have it.

Miku got her start as a marketing ploy. Nearly every corporation and organization in Japan has an anthropomorphized mascot, from the telecom giant NTT Docomo (Docomodake, a glum-faced mushroom) to the Tokyo Metropolitan Police (a flying

mouselike creature called Pipo-kun). Miku was conceived as a mascot for Crypton Future Media, a maker of virtual instrument software, the stuff that facilitates the creation of the noise you hear in commercials and videogames but also, increasingly, much of the Top 40.

In 2007 Crypton's CEO, Hiroyuki Itoh, was looking for a way to market a virtual voice program he'd developed using Yamaha's Vocaloid 2 technology. Vocaloid's first

version had not sold well because, it was suggested to Itoh, it didn't sound very life-like. He disagreed. (Japan's appetite for all things humanoid is insatiable, he knew, if properly plied.) What Vocaloid needed, Itoh believed, was an *aidoru*, an idol. So he engaged an illustrator of graphic novels in Tokyo who goes by the single name Kei. Itoh told Kei he wanted something cute but also slightly edgy, something that would attract creative young people to Vocaloid. Kei came back with a rendering of a 16-year-old girl who was 5'2" and weighed 92 pounds. She had long, thin legs, coquettish bug-eyes, pigtailed blue locks that reached almost to the ground, and a computer module on her forearm. Her first name, Miku, meant "future"; her surname, Hatsune, "first sound."

Crypton's small office is on a tree-lined boulevard in Sapporo. As Japanese cities go, it's pretty unfuturistic. So is Crypton's

office. There are no robot assistants. Instead of a talking Miku holograph, you're greeted in the conference room by a row of Miku figurines and dolls sitting dejectedly on the windowsill.

Like Miku's fans, Itoh has difficulty defining what category of thing Miku falls into. Around the office, he says, she's not referred to as an idol or a character or a cartoon.

"She's... Hatsune Miku," he says.

Has he ever imagined a backstory for her? A home, a family, a life before Vocaloid?

"No," he says, as though the pointlessness of that should be obvious. "Just age, height, weight—and outfits."

In fact, it would be pointless; Itoh knew that if Miku caught on, her followers would write her story. Such is the genius, beauty, and grotesque fetishistic wonder of *otaku* culture. These geeky fans are devoted to characters, not Western-style celebrities. Human stars burn out quickly in Japan, but beloved characters—from Hello Kitty to Gundam—last for years. When a character from an anime series or a manga comic, a videogame, a toy line, or even porn catches on, fans engage with it by making new iterations and variations of their own—homemade videos, manga, games, more porn. The Japanese term for this, *niji sousaku*, translates as "secondary creativity."

Cultural critic Hiroki Azuma calls the results a "database model" of creation, driven by networks of consumer-producers for whom authenticity and intellectual property are less important than detail and invention. "It is quite ambiguous what the original is or who the original author is, and the consumers rarely become aware of the author or the original. For them, the distinction between the original and the spin-off products (as copies) does not exist," Azuma wrote recently.

Jan Condry, a professor at MIT who teaches courses in Japanese pop culture, including a section on Miku, says the character serves "as a platform people can build on. She becomes a tool of connection who, through people's participation, comes alive."

In a nation plagued by economic entropy, otaku keep things churning. Consider Gundam, the iconic Japanese robot character. In the '70s, a large Japanese toymaker, Clover, created Gundam and sponsored an anime series to market him. The experiment failed, and the show was canceled. But it had developed a cult following. Fans began producing Gundam manga and wearing homemade

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contrary, Miku is now one of the biggest acts in Asia—as popular in her native Japan as Sega's iconic Sonic the Hedgehog. She has devotees beyond Japan too. Last November she gave a concert in Singapore, drawing 3,000 fans—only about half of them female, not all young. They sang along in Japanese, a language many of them didn't speak. Some came dressed as Miku. Others waved Miku dolls to the beat. One girl watched a Miku video on her phone while a digitized Miku played in front of her.

A young man holding a Miku figurine aloft like a votive offering said her songs are "very touching." Another fan, Wei Qi, who was 15 and was wearing clip-on cat ears, pointed out that "it doesn't take a human to sing a good song."

Amy, a 13-year-old who'd come with a

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Gundam T-shirts. Soon Gundam conventions were springing up. Noticing this, Bandai, a company specializing in model kits, bought the rights to the character. Today, Clover is out of business. Bandai, which later got in on the Power Rangers craze, is now the third-largest toymaker in the world.

Otaku preceded the Internet, but the Internet has facilitated it in ways unimaginable a few years ago. Google "Hatsune Miku," and you'll get some of 22 million results. Most of them lead to a Miku fan, not to Crypton.

MIKU WAS "BORN," as Itoh puts it, on August 31, 2007, with the launch of her software. The program would soon become popular, but from the start Miku attracted her own fans, and they began riffing. Crypton set up a site where they could post their creations, and by that first afternoon, according to Itoh, illustrations of her had appeared. Thousands followed. Fan sites proliferated. Creation myths were assembled. Aspiring apparel designers, collectibles makers, and online-game designers went to work. People wrote songs for her to perform. Someone uploaded a free animation program, MikuMikuDance, for choreographing her routines in music videos.

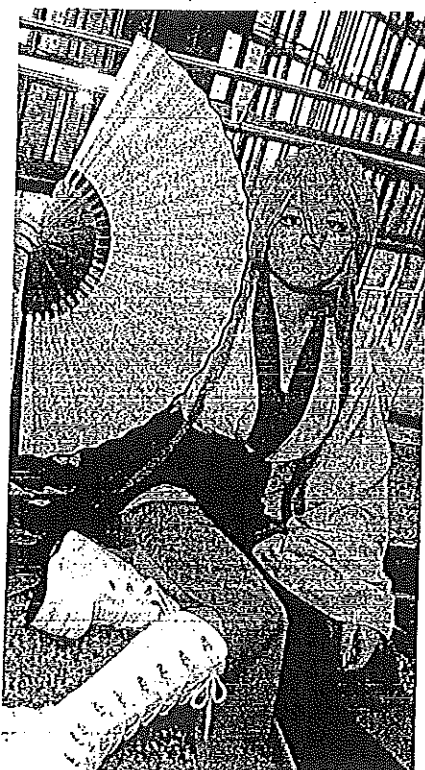
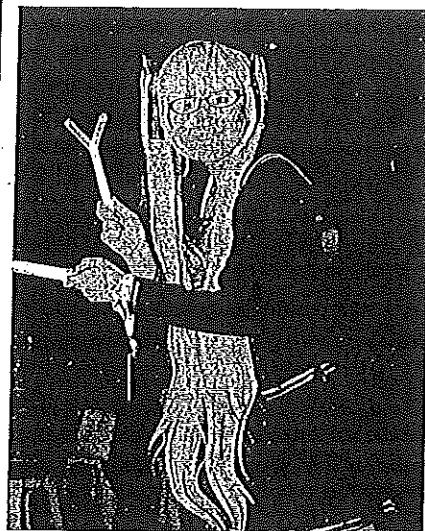
Today the crowd creates material on a vast scale. About 3,000 fan-made Vocaloid songs are now on Japanese iTunes and Amazon, Itoh estimates, and hundreds of thousands of Miku-related videos have been uploaded to YouTube. Miku songs are regularly among the most-requested karaoke tunes in Japan.

She's helped launch the careers of in-demand producers and DJs and animators. A few fans saw a homemade Miku music video in which she plays a fictitious instrument, a kind of keytar with a touchscreen interface. They took a screen capture, blue-printed the thing, and built it. Now it's a real instrument.

That's just online. In Tokyo, one need only go to the Akihabara district to see how deeply Miku has sunk into physical reality. Akihabara is otaku ground zero, a *Blade Runner* bombardment of the senses that at first glance seems to consist only of pulsing billboards and giggling Japanese girls in costume. Any photos you've seen don't do the place justice: According to local lore, shoppers have been known to collapse in photo-sensitive epileptic fits. Once your eyes adjust, it becomes clear that the office towers contain not offices but floor after floor of shops: cacophonous electronics, comic,



Hatsune Miku's fans create songs, videos, costumes, and backstories for their pop idol. They gathered to celebrate at last year's Anime Festival Asia in Singapore.



doll, fetish, porn, and costume stores. And Miku is everywhere. Miku arcade games, Miku playing cards, Miku wigs. Some of the more interesting material is on the bookshelves. There is a wealth of oddly touching devotional texts: a handsome edition entitled *Miku-4* by a fan named Nagimiso, a volume of Miku-inspired poetry and Miku-poetry criticism by Eureka, and a collection of songs transcribed into sheet music called *Selection for Piano*, with a cover illustration of Miku seated at a baby grand.

"She's a wiki-celebrity," Condry, the MIT professor, says. "Enough people act on her that she takes on a life, but not of her own—everybody else's life."

A 30-minute metro ride from Akihabara is Sega headquarters. Parked outside is a white Toyota station wagon with a vinyl-painted Miku dancing across its doors. Seeing what a phenomenon she had become, Sega partnered with Crypton in 2007. By that point, most of the work that might fall to the lead designer of *Project Diva*, a Sega Vocaloid game that features Miku, had already been done. Almost all of the songs, along with ideas for her outfits and the landscape

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settings, were supplied by fans (including some Sega employees who create Miku stuff in their off-hours). The design team, led by Hiroshi Utsumi, picks their favorites.

"If they say it's Hatsuné Miku," Utsumi says, "it's Hatsune Miku."

Not surprisingly, this crowdsourced creativity has led to a sub-genre of sexualized Mikus, including brutal sadomasochistic motifs. There is, inevitably, a market for Miku porn. This happens with many characters in Japan, and it's a source of some embarrassment to Itoh and Utsumi—but they don't discourage it. The psychosexual schismatics are

an essential part of her appeal, they know. "For a lot of male fans, it's clear the short skirt that keeps flipping up is pretty important," says Condry, who calls the erotica "another thread of the participation. People are having real emotional responses to whatever this object-character is."

LAST OCTOBER, Condry brought Itoh to MIT for a discussion of Crypton's business model—opening up Miku to her highly creative fans. The idea was to compare that approach to the practices of a company like Disney, which would be more likely to sue anyone who attempted to create their own versions of a Disney property. "The students came up to me afterward and said, 'He really gets it. The future is about open source,'" Condry says.

The live shows—with their fan-written songs—are a natural extension of this open source ethos, but Itoh was at first reluctant to give them a try. In the mid-1990s a Japanese talent agency hired software designers to create Kyoko Date, a virtual idol, with the hope of turning her into a music sensation. (Coincidentally, William Gibson's novel

Idoru, about a Japanese virtual pop star, was published at the same time.) Kyoko's image was taken from the features of real models, her voice from real singers. She sang, she danced, and she looked very real doing it—and, after a glittery debut, she proved a flop. Japanese fans found Kyoko just real enough to be creepy.

So far they've not had that reaction to Miku, who is just unreal enough, it seems, to be relatable. At a fan convention, Condry told me, he

asked some kids why this was. "They said, 'We know she's not a person. We like that she's a machine. Those of us who are into this like dealing with machines more than with people.'"

Her first solo concert, in Tokyo in 2010, sold out. She's played six since, including one in summer 2011 at the Nokia Theater in Los Angeles, where a crowd of nearly 3,000 attended as part of an anime festival. It takes Crypton and Sega more than six months to design a show, each of which is the equivalent of a modest 90-minute animated/live-action movie. Nearly all of the songs are

written by fans, and some of them are actually good—musically, anyway (the lyrics usually leave something to be desired).

The fans, it turns out, are the best part of a Miku performance. Sega films the shows like high-end concert documentaries, with special roving light-sensitive cameras, and uploads the footage to the Internet, which is why Miku looks so astonishing on YouTube. It's another ingenious marketing ploy. (Certain reporters have made pilgrimages halfway around the world to see her.) But live, she is a disappointment. She really is only 5'2", not giant, and not luminescent so much as indifferently lit. Miku actually is a cartoon on a scrim, a dolled-up Chipmunk.

And she's merely a glimpse of the future of disembodied entertainment. At the Coachella music festival in April, a virtual Tupac Shakur was projected onto the main stage during Dr. Dre and Snoop Dogg's headlining set. The graphics, created by James Cameron's Digital Domain, were significantly more dazzling than Miku's, though the basic projection method—an optical illusion known as Pepper's Ghost—was the same. Digital Domain is also developing a virtual Elvis.

Miku's diminutive size and the scrim didn't seem to bother anyone at the concert in Singapore, however. That may be because Miku's "actual" appearance wasn't the point for them. They already knew that their affection for her and their ideas of her had outpaced those of her creators. The point for her fans, her more inspired and more important authors, is that they get to finally see *one another* in person. And to pump glow sticks.

I did meet one girl who shared my disappointment. She was 8 years old (just young enough to still be taking in Miku passively, as I was). As I made my way through the crowd, she tugged on my sleeve. She wore a look of pained confusion. "Excuse me, is that a robot?" she asked, pointing at the stage. Her mother eyed me expectantly.

"No, it's a ... a digital projected image," I stammered.

Her expression didn't change.

"Like animation," I added.

Nothing.

"Like, you know, like ... Snow White."

Her mother nodded. "It's an *image*," she said to the girl.

The girl frowned and looked toward the glowing red exit sign. ■