



# Would You Replace Your Dog With That?

Robots could be the pets of the future.

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**I**magine you wake up one morning to find that your parents have granted your request for a pet. Even better? This pet doesn't shed, claw the furniture, or need to be walked. You'll never have to feed it or remember to give it water or clean up its poop. Your new pet will never get sick, and you can even leave it home alone when you go on vacation.

What is this amazing creature?

It's a robot.

Not quite the warm, cuddly, wriggly bundle of love you had in mind? Fair enough. But someday in the not-so-distant future, many of us could be choosing robopets over the real thing.

## Robot Bonding

The benefits of owning a pet are well-documented. Research shows that living with a pet makes people happier and healthier. Just recently, a study in Japan found that when dog owners gazed into their dogs' eyes, their brains released oxytocin, a chemical that creates feelings of trust and happiness and helps mothers bond with their infants. In another study, at



Massachusetts General Hospital, when women were shown photos of their dogs, certain areas of their brains reacted the same way as when the women were shown photos of their children.

These studies seem to support what pet owners have long known—that the bond between a human and an animal can be powerful and deep.

Could we really form that same sort of bond with a robot? Could we feel the same rush of love for a machine that we feel for a dog that greets us at the door with a wagging tail or for a cat that, sensing our sad mood, hops into our lap and starts to purr?

According to Hal Herzog, a psychologist who

studies how people interact with animals, robotic pets would have to be highly **sophisticated** to truly win our hearts. “They would need to respond to verbal commands and express needs, desires, and affection for their owner,” Herzog explains.

### “Dead” Robodogs

To some degree, robotic animals can already do these things. Genibo, a robot dog designed in South Korea, can recognize its owner’s face, respond to voice commands, and use sounds and movement to express emotions. (It can also do the Korean martial art taekwondo; good luck teaching your labradoodle that!)

Hasbro’s Joy for All robotic cat will purr if you pet it, and roll onto its back for a belly rub. As technology improves, robotic animals will become more and more lifelike.

But even the robopets currently available can inspire strong feelings. When Sony announced in 2014 that it would stop repairing Aibos (robotic dogs it sold from 1999 to 2006), many owners were heartbroken. In Japan, where Aibos are very popular, some owners even held funerals for their “dead” robodogs. Meanwhile, a robotic baby seal called Paro is having a positive effect on nursing-home

residents, improving their moods, relieving their loneliness, and encouraging them to be more social.

### Loyalty and Affection

There’s no denying that robotic animals have some advantages over the living, breathing, shedding variety. Robotic animals are certainly easier to care for. They are a great option for anyone who can’t have a real pet, such as those with allergies. Robotic animals have less impact on the environment than real animals too:

The livestock used for meat in dog and cat food requires a lot of space and energy; pet poop can pollute waterways.

But there are some big questions to consider before we all rush to the store.

There are already millions of cats and dogs in need of homes—what will happen to them if we choose robots instead?

Do we want kids to miss out on the opportunity that pets—real pets—provide to learn to care for another living being?

Is the loyalty and affection of a robot the same as the loyalty and affection of a real dog?

And most of all, do we want to live in a world where we bond with machines instead of with animals?

No doubt we will ponder these questions and others as robotic pets become even more sophisticated and popular. (We’ll know they have finally arrived when a video of a robotic cat goes viral on YouTube.)

For now, though, they remain a **novelty** item—toys rather than replacements for our beloved family pets. ●

