

ROBOTS

How This Dog Teaches Itself New Tricks

By Otis Port, JULY 4, 2005, for

The version of the Aibo robot dog that Sony ([SNE](#)) introduced last fall, model ERS-7, contains new sensors and software that help it learn. Now, in a "playground experiment" devised by roboticists Frédéric Kaplan and Pierre-Yves Oudeyer at Sony's research lab in Paris, Aibo is helping scientists study how personalities emerge in animals and humans.

The scientists put an Aibo in a playpen with toy balls, or on a mat with objects suspended overhead, similar to the playthings that people hang above baby cribs. For a few hours after being switched on, the Aibo just wiggled its legs and head aimlessly. Then it learned to crawl and walk -- and encountered the playthings. In the case of toy balls, the pet soon started pushing and following them. If there's a hanging bag, Aibo learned to bat it like a boxer.

None of this behavior was preprogrammed. It arose from software that instills generic "curiosity." The robot constantly seeks more complex ways to exercise its senses and appendages. And with Aibo, researchers can always erase its memory and start over.