

NPR Morning Edition: Ant Lovers Unite!



Enlarge Stupid Fun Club/Justin Ide, Harvard News

Ant Obsessed: Will Wright (left) and E.O. Wilson share an interest in evolution and games.

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Ants make some people cringe — but for E. O. Wilson and Will Wright, they provide never-ending fascination.

Biologist E. O. Wilson, professor emeritus at Harvard University, is a two-time Pulitzer-winning ant expert who helped develop theories of island biogeography, chemical ecology, and sociobiology. A leader in the modern environmental movement, Wilson has devoted his life to understanding how all forms of life are connected.

Computer game mastermind Will Wright has read every one of Wilson's books. He credits Wilson for inspiring him to develop SimAnt, one of the games he created along with The Sims — the most successful computer game in history — and more recently Spore, in which players create virtual single-cell organisms and evolve those organisms into more complex forms of life.

Where Games And Science Meet

Always fascinated with biology and evolution, Wright had many scientific questions for Wilson when the two spoke for Open Mic — but, Wilson had other ideas.

"I came into the interview with all these questions I wanted to ask him about evolution," Wright said, "but his first response was, 'Oh, I thought we were going to talk about games!'"

Wright wasn't completely surprised. One of Wilson's goals has been to "unify science with disciplines such as the humanities," Wright said. "He is one of the few scientists who really has the guts to do that."

So the first question he asked Wilson was if he saw a role for games in the educational process.

"I'll go to an even more radical position," Wilson said. "I think games are the future in education. We're going through a rapid transition now. We're about to leave print and textbooks behind."

Rethinking The Way We Teach Children

Wilson imagines students taking visits through the virtual world to different ecosystems. "That could be a rain forest," he said, "a tundra — or a Jurassic forest."

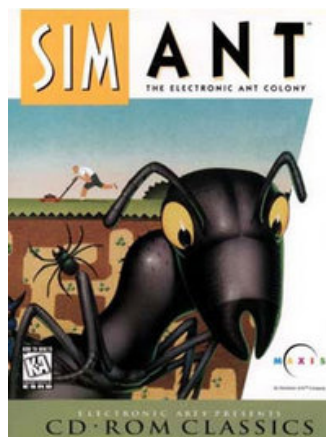
Wilson said that for the most part, we are teaching children the wrong way. According to the biologist, "When children went out in Paleolithic times, they went with adults and they learned everything they needed to learn by participating in the process."

That's the way the human mind is programmed to learn, Wilson said.

But he believes that today, virtual reality can be a steppingstone to the real world. It can motivate a child to exploration.

Wilson had a very different experience growing up. He explored the real world — and its creatures and plants — from a very young age. He credits his permissive parents and the schools he attended for allowing him to "disappear" into the forest.

"No one knew what I was doing," he said.



Courtesy EA/Maxis Studio

Will Wright's SimAnt game uses complex rules of society-building and community space.

Bug Obsessed

One of Wilson's earliest memories is of being stung by a velvet ant (really a wasp) at the age of three. "A viciously stinging insect," he said. He learned never to touch one of those again.

And then at the age of nine, Wilson started reading *National Geographic*. He wanted to be one of those writers who could explain, using photographs, the existence of creatures like beetles, "winged jewels of the tropics."

But the most important early influence on Wilson, he says, was a 1934 article by William Mann called "Ants: Civilized and Savage." The article, he recalls, had beautiful pictures.

"I got hooked," he said, "And I decided I wanted to be an entomologist."

It was when in college in the late 1940s that Wilson learned about evolution. "Ah, that was the epiphany," he said. He recalls thinking, "All this chaotic information I've been storing up could be fitted together by evolution."

Embracing Controversy

But Wilson has also taken on some controversial subjects. "I've never been afraid of controversy," he said.

One of the most memorable of those controversies transpired in the 1970s, when Wilson was called a racist and a misogynist for his development of the field of sociobiology.

In his books *Sociobiology: The New Synthesis* and *On Human Nature*, Wilson proposed that biology is the foundation of the behavior of social animals — including humans. In his view, characteristics such as parental love, sexual orientation, greed and selflessness were all part of evolution, and all of them have their roots in an individual's DNA.



Paul Gauguin/Photograph (c) Museum of Fine Arts, Boston

Paul Gauguin's Tahitian masterpiece, "Where did we come from? Who are we? Where are we going?" has inspired E.O. Wilson as he ponders the human species' evolution.

In his 2006 book *The Creation: An Appeal to Save Life on Earth*, Wilson, who was an evangelical Christian as a child, called on conservative religious leaders to act as stewards of nature. He lectured at churches, telling congregations that they shared a sacred duty along with scientists to preserve biodiversity.

Where Are We Going

In their conversation, Wright also asked Wilson what issue he sees as the biggest unanswered question in the world of biology.

"It's the one I'm working on right now," Wilson answered. "The origin of altruistic social behavior."

Few people want to ask the essential questions anymore, Wilson said — where did we come from, who are we, and where are we going?

Wilson says that he thinks we can't have any answers before we've done a lot more science to find them. And he believes that the best way to do that is to integrate science with the other great branches of learning — the social sciences and humanities.

In the end, the ultimate answer Wilson wants to know, he said, is, "What is the nature of the evolution that finally created the human species?"