



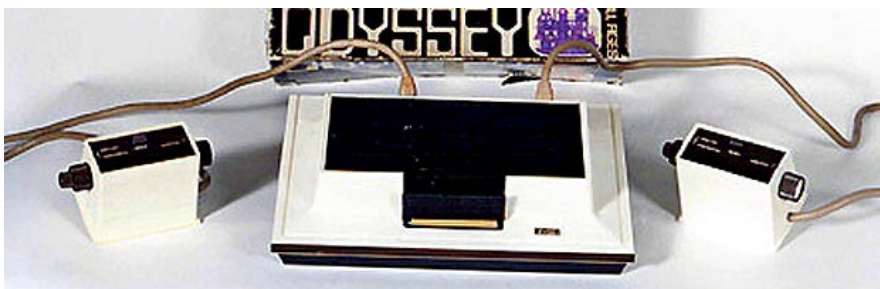
Simon Turns 30

Videogaming's First Grudge.

By [Benj Edwards](#)

In May 1972, consumer-electronics giant Magnavox staged a two-day exhibition of its latest products for dealers and the press in Burlingame, CA. Attending the show that day was a young engineer named Nolan Bushnell, who signed his name in a guest book as an employee of Nutting Associates, an early arcade game manufacturer. Bushnell noticed a strange box hooked up to a television set sitting next to the typical TVs and high-fidelity audio systems of the day. With this new toy one could play a game of electronic Ping-Pong by turning a knob and watching the screen. It was the Magnavox Odyssey, the world's first home videogame console.

After the show, Bushnell returned home and commissioned an engineer to build an improved version of the Odyssey's **Table Tennis** game, which later became the arcade hit Pong. By virtue of that game's success, Bushnell launched Atari -- and then an empire. Meanwhile, the man responsible for the Odyssey languished behind the scenes.



What goes around comes around

Ralph Baer, creator of the Magnavox Odyssey, often regretted having to stay quiet while Bushnell received credit for "inventing" videogames in the press. At first, Magnavox pursued Bushnell and Atari for infringement of Baer's patents. Atari, seeing an easy way to get Magnavox off its back, licensed Magnavox's videogame patents for \$100,000 in 1976. Since Bushnell was a client, Baer felt that he had no reason to challenge the Atari founder for the limelight. "For years, I kept my mouth shut when Nolan was getting his face in front of the cameras," wrote Baer in his 2005 book, *Videogames: In The Beginning*. "In subsequent years, it would increasingly bug me to hear Nolan referred to as the ?inventor? of videogames." Yet unknowingly, Baer would soon get his chance at revenge.

In November 1976, Baer flew to Chicago to attend what was then the annual Music Operators of America (MOA) trade show, where amusement and vending-machine manufacturers debuted their coin-operated devices. By 1976, the show regularly included arcade videogames, which had begun to overtake pinball tables and jukeboxes as top coin-op revenue generators of the day. Ironically, Baer was most interested in something that wasn't even a videogame; he noticed a line of Atari arcade games on display, including *Touch Me*, a 3 1/2-foot tall yellow plywood pedestal with four large buttons spaced evenly across the top. Baer and his associate, Howard Morrison, tried their hand at the game.

*Touch Me* was an electronic version of Simon Says: The machine presented a sound, and a corresponding light would turn on above one of the four buttons. After the player pushed the matching button, the machine would play another sound while lighting another corresponding button. The game continued like this, building on a sequence for the player to follow. If the player slipped up three times, he lost.

*Touch Me* was not a new game when Baer saw it that year; a product of Atari's Grass Valley think tank, it had been released in 1974 to little fanfare. Steve Jobs, co-founder of Apple Computer,

helped Atari put the finishing touches on it. But in an intensely competitive and growing arcade videogame market, Touch Me failed to take off.

Yet Baer and Morrison found a kernel of potential in Touch Me -- a sort of ugly duckling in need of a new coat of feathers. "Nice gameplay. Terrible execution. Visually boring. Miserable, rasping sounds," says Baer. At home in New Hampshire later that month, Baer and Morrison realized that Touch Me would make a wonderful handheld electronic toy. Baer built a crude mock-up and pitched it to Marvin Glass & Associates, an independent toy design group he had recently worked with on other projects. Upon their enthusiastic reception, the project -- now christened "Follow Me" -- received the green light for further development.



#### Building Simon

Before long, Baer built a more refined prototype, which had a four-tone generator centered on the TMS 1000 microprocessor. The TMS 1000 was a low-power Texas Instruments chip whose unprecedented low cost made its inclusion in a consumer toy possible. The same chip powered legions of electronic toys and calculators of the 1970s.

In 1977, Lenny Cope, one of Baer's partners, spent numerous days and nights programming the core of Baer's new *Follow Me* game. Cope wrote all of the code for the project via a dreadfully slow Teletype tied to a mainframe in Pennsylvania as he struggled to squeeze all of the desired features into the TMS 1000's limited memory. "Lenny made steady progress encoding the ever-growing list of changes Howard Morrison and I laid on him," recalls Baer.

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While Cope worked on the code, Baer set about selecting the four tones that Follow Me would play. Recalling the "miserable, rasping sounds" of Touch Me, Baer knew instinctively that these four tones, whatever they were, would make or break the game. That's when inspiration hit. Baer opened up his son's *Compton's Encyclopedia* and searched for an instrument that could play many songs using only four notes. After some searching, he found what he was looking for: "The bugle!" recalls Baer. "Henceforth, our game was programmed to beep G, C, E, and G -- the bugle sounds that can be played in any sequence and still sound pleasant."

Soon, the small team had a complete unit to demo to toymakers, an 8-inch-by-8-inch unit that functioned perfectly. For protection, Baer filed for a U.S. patent on the device, before offering a prototype to toy giant Milton Bradley. They knew a hit when they saw it. Milton Bradley quickly licensed the game and renamed it *Simon*.



Close encounters

Upon its release, Simon hit the market with a bang. Public reception was enthusiastic for the \$24.95 device. Simon found its way to department and toy stores in time for Christmas, where it became the hot toy of the 1978 holiday season. Simon's runaway success may well have been aided by the toy's similarity to the multicolored, note-playing alien saucers featured in Steven Spielberg's *Close Encounters of the Third Kind*, which had premiered the year before.

Soon after Simon's launch, Atari noticed Milton Bradley's success and released its own handheld version of Touch Me. As a gawkish, yellow rectangular box, Atari's unit didn't fare nearly as well as Simon and soon dropped out of sight. Ironically, the public perceived Touch Me as a rip-off of Simon. For once, Baer had upstaged Bushnell.

Ultimately, Milton Bradley sold millions of Simon units and started a sensation, spawning hundreds of copycat products and earning Simon a permanent place in American pop culture. Remarkably, Simon remains in production 30 years later. The simple and addictive game is still available in stores, albeit in a modified form.

Baer, now 86 years old, still tinkers in his home workshop on new electronic inventions, although he knows that no victory could be as sweet as Simon's.

In a 2007 interview I asked Bushnell if he was upset that Baer borrowed Atari's Touch Me idea.

"I wasn't upset," said Bushnell, "I was more upset at myself for not seeing the consumer opportunity. And so, hat's off to him. But I don't think he should claim authorship of it."

Baer might not have originated the idea for Simon, but like Edison with the lightbulb, the Simon team took Atari's concept and perfected it into a multigenerational classic that persists to this day. After all, when was the last time you saw Touch Me in stores?



For more information on Ralph Baer's videogame inventions, see [Video Games Turn 40](#).