



A LIVING HISTORY

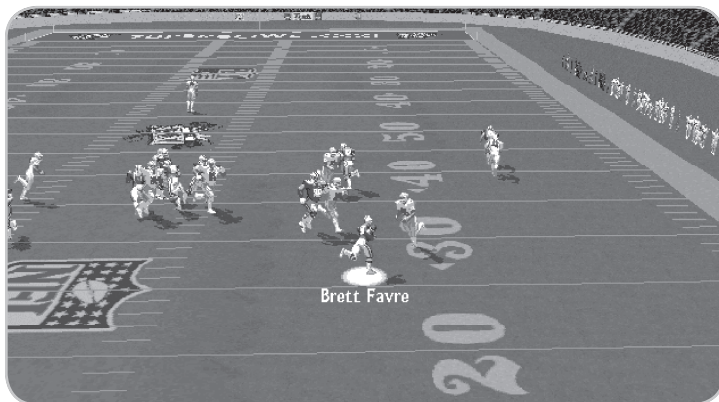
TO THOSE THAT CAME BEFORE

One of the most interesting things about writing a book about the history of video games is that when it comes to history in general, video games are super young.

I mean, how many other history books can you think of where the original people involved with the topic are still alive? Not to mention, most of them are still innovating and doing new things in the game industry today.

It's cool, when you think about it. Everything is really new. Even Pong is still new enough that if you looked around, you could find a copy, in some format, and check it out today. The game industry is alive and growing, and that is very exciting.

I remember my grandpa John telling me that he loved his career because he was always learning. He was a veterinarian, and new advancements in medicine happened all the time. He had to study to keep up on things. When I was lucky enough to enter the game industry, I discovered the same joy my grandfather had known. Minus the puppies but with way more Left 4 Dead office LAN party breaks, of course.



NFL Legends Football 98 © Accolade

I started making games in 1997, painting digital football players for a game by Accolade Software called *Legends Football 98*. I had to paint each frame of the animation by hand, because 3D graphics weren't advanced enough at that point to be of any help. It was pretty cutting-edge stuff at the time, but a short six years later I was making complex 3D digital sculptures of those same football players for Electric Arts' *NFL Street*. Three years later I was messing around with controllerless systems like the Xbox Kinect, and creating 3D graphics for games on the Nintendo 3DS that actually displayed things in 3D without needing fancy glasses.



NFL Street © Electronic Arts, Inc.

And now I'm working with a group of crazy smart innovators at a company called The Void, where we are marrying VR (virtual reality) with real-world locations. The best way I can describe it is that we are building a digital theme park where you not only play a game, you get to be *in* the game. It's mind-blowingly cool if I do say so myself, and something I never dreamed about when I was touching up 2D sprites of Jerry Rice on my 386 PC in 1997.

The video game industry goes through big changes every year, but even the most advanced, high-tech,

innovative ideas stand on the shoulders of games that have come before.

There'd be no Madden NFL if Pong hadn't put the first sports game on a gaming console.

Would we have Grand Theft Auto V without The Legend of Zelda showing us what an open world looked like back in 1986 on the Nintendo Entertainment System?

And Forza Motorsport 6 owes a lot to the racing games of the past. In fact, they paid homage in their promotional commercial in 2015, where they showed their realistic-looking Ford GT zipping through pixelated versions of older games like Gran Trak 10, R.C. Pro-Am, Pole Position, and Ridge Racer, just to name a few. A tagline on the Forza Motorsport website claimed, "Every pixel and line of code ever written has been leading up to this moment."



Xbox's Forza Motorsport 6 TV commercial © Microsoft Corporation

I couldn't have said it better myself.

The games we play today, as well as the games we will fall in love with tomorrow, promise us hours of enjoyment. Days, weeks, years of fun lie just around the corner, but it is important to take a look back from time to time, to get a better understanding of those that came before.

So, gamer, put on the old time-traveling helmet. Crank the dial back on the Wayback Machine to a time before the Internet. To a time before cell phones and color TVs. Way back to a time before controllers, handheld gaming devices, social media, and even microwave pizza.

Let's go back to the beginning. After all, these are not just the games that influenced the game designers of today and tomorrow. These are the games that shaped us all.



PONG

1972

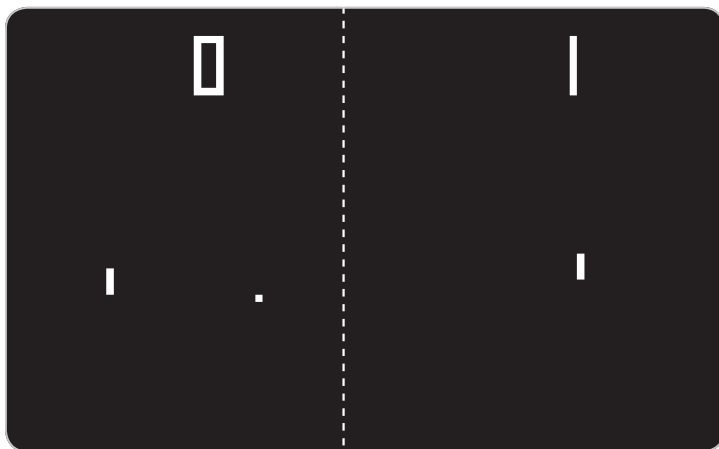
GAME, SET, MATCH

1

9

7

2



Pong © Atari Interactive, Inc.

It wasn't the first game. Not by a long shot.

In fact, Pong wasn't even the first digital *tennis* game. Some say it wasn't even the most complicated or most advanced, or even the most innovative game of its day.

So why do so many people consider Pong the godfather of video games?

It might be because Pong is just a fun word to say. Go ahead. Say it out loud. You know you want to. I'll wait. Heck, I'll even join you.

Pong. POOOOONG! Pingity-Pong Pongity-Pong.

See, it's fun! And in the end, the game was just as simple as rattling off a bunch of pong nonsense, and *that* is what made Pong so great. It was easy. The games before Pong were interesting, and innovative, and difficult, and usually could only be played by other computer and software engineers. But Pong didn't need instructions, only cost a quarter to play, and instead of sitting inside a computer lab, the first Pong machine stood in a busy tavern. But I'm getting ahead of myself.

For now, let's rewind a bit and see how Pong came to life.

In the early days of computer games, there was a ton of confusion about who created what first. Part of the problem was that creating games at that time required hardware that cost mountains of cash, and part of it was



Before Atari decided on the name Pong, the game was code-named Darlene, after one of the early Atari employees. While Darlene is a perfectly fine name, it isn't nearly as fun to say as ... go ahead. I know you can't stop now. POOOONG!



Pong has been featured in many popular TV shows like *That '70s Show*, *King of the Hill*, and *Saturday Night Live*.



.....

The problem with Spacewar! was that it was so difficult you needed to be an actual astronaut to pilot the game's digital ship.



.....

In 1960 it cost twenty-five cents to play a game of pinball. Sounds about right, doesn't it? I mean, it still costs a quarter to play most arcade games today. Well, do you know what else cost twenty-five cents in 1960? A GALLON of gas. If arcade prices jumped up as fast as gas prices, it would cost around three dollars to play a single game!

that people didn't really understand what games were back then.

Although there were a lot of inventions that could make a pretty good claim to being the first video game, there's no doubt who made the first successful game. It was video game pioneer Nolan Bushnell.

While attending the University of Utah in 1962, Bushnell spent most of his time studying in the computer engineering lab. While he was there, he got the chance to play a game called Spacewar! and he was hooked. The game was played on a living room-sized computer called a PDP-10, and it was complex, challenging, and most of all, addicting.

Up until that point, the closest thing people had ever seen to a video game was probably pinball. If you haven't seen a pinball machine, you really should try to find one. Basically, you shoot a one-inch metal ball up through a slot and it bounces around, knocking over "pins" and bouncing off lights and rubber-coated bumpers. Sounds like fun, right? Well, it was, and still is, a popular form of gaming, but what Bushnell saw on the PDP-10 changed everything.

Attending college was expensive back then—still is, actually—and to pay for school Nolan worked in the arcade of a local amusement park called Lagoon.

The arcades in the 1960s didn't look at all like the arcades of today. They were filled with pinball machines, photo booths, and mechanical fortune-tellers. While Nolan Bushnell loved the arcade's shiny lights and loud sounds, he could see an even brighter future just out of reach. Bushnell had a vision of people dropping quarter after quarter into digital machines to play games like Spacewar! But the technology needed to make that happen didn't quite match Bushnell's vision. It took nearly a decade to put his dream into motion, but in 1972, the planets aligned and Bushnell started Atari.

Nolan Bushnell was a pretty good engineer himself, but he was also smart enough to hire Al Alcorn, who Nolan recognized at once to be a better engineer than he ever dreamed of becoming. Under Bushnell's direction and with

Alcorn's impressive engineering abilities, Atari was ready to test their invention in a few short months.

On November 29, 1972, the modern video game industry was born when Bushnell installed his Pong arcade machine in a local bar, crossed his fingers, and hoped that the game would be a hit. Word traveled fast in Sunnyvale, California, and people flocked to Andy Capp's Tavern for a chance to give Bushnell's electronic tennis game a try.



Pong arcade cabinet © Rob Boudon



Al Alcorn had no experience in computer games, so Nolan Bushnell assigned him the job of creating Pong as a warm-up exercise. Talk about making a good first impression on your boss!



Between the time Bushnell played Spacewar! in 1960 and the launch of Atari in 1972, the world had changed a lot. Russians sent the first human to space in 1961, the computer mouse was invented in 1964, the first portable calculator was invented in 1967, and the first man walked on the moon in 1969. Oh, and the US used the Internet for the first time in 1969.

Why?

Well, because:

1. It was cheap. Only twenty-five cents.
.....
2. You played it against your friends, and what's more fun than humiliating your friends in a game of digital Ping-Pong?
.....
3. *Pong* was just plain fun to say. PONG! PONG! PONGITY-PONGITY-PING-PONG! PONNNNG!
.....
4. Pong was EASY. All you had to do was hit the ball back to your opponent, and the game took care of the rest. Even the score! Told you we'd get back to Pong being EASY.

Back and forth, back and forth, until someone earns eleven points. Drop in another quarter and play again. And again.

AND AGAIN!

The *play again* pattern happened so many times that first night at Andy Capp's Tavern, that by the next day Al Alcorn received a call telling him Pong was busted. Frustrated and a little worried, Alcorn rushed over with a bag of tools. Turns out it didn't take an engineer to see what was wrong.

Inside the homebuilt cabinet, Alcorn had rigged a milk carton to catch quarters. There were so many quarters jammed inside that Pong had stopped working. Alcorn emptied the quarters into his tool bag, turned Pong back on, and walked out with a huge grin on his face.

Everybody loved Pong, and soon people were lining up at Andy Capp's Tavern before it even opened, waiting outside to ambush Pong and give it another go.

Bushnell had struck gold, and he did everything he could to grow Atari as fast as possible. He leased out a huge abandoned roller-skating rink and started production of Pong arcade cabinets right away. There were obstacles in the way, the first being that he had to hire



Pong was shown in the 2008 Disney film *WALL-E*. The two main characters, WALL-E and EVE, are shown in front of the game, and later on, WALL-E plays the game by himself in one of his many attempts to awaken EVE from her sleep mode.

people who had no knowledge of how to build an arcade game, but the setbacks did little to slow Bushnell's vision. His dream of a video arcade was on the horizon, and he was determined to make it a reality.

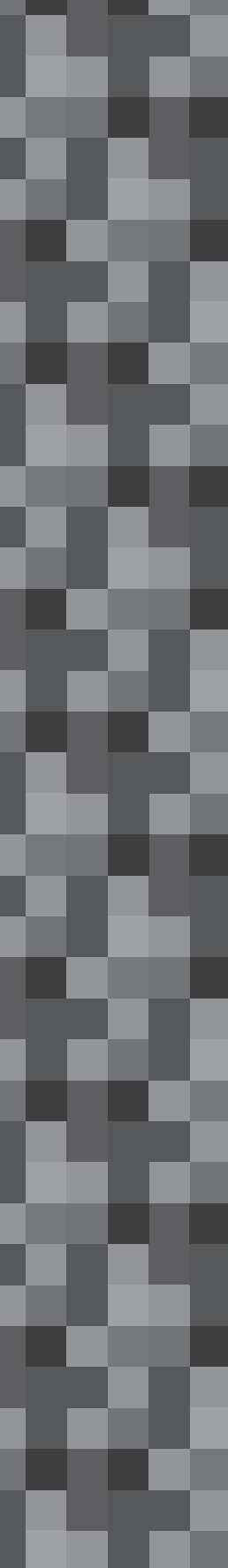


Magnavox Odyssey © Evan Amos

Pong wasn't the first digital tennis game, a fact that would later cost Bushnell and Atari a lot of money as they settled a court case with Magnavox for patent infringement (basically, copycatting). In April of 1972, Bushnell got a sneak peek at a new video game system called the Magnavox Odyssey, an invention by computer science engineer Ralph Baer. The Odyssey was battery-operated, hooked directly to your TV, and featured a digital tennis game very similar to Pong. The system launched in August of that year, three short months before Pong found its way to Andy Capp's Tavern.



A free-to-play version of Pong was conceptualized by Nolan Bushnell to entertain children in a doctor's office, initially titled Snoopy Pong after the popular *Peanuts* character Snoopy. Bushnell also designed an arcade cabinet similar to Snoopy's doghouse, but opted to rename the game *Puppy Pong* to avoid legal action. Probably a good idea considering his case with Magnavox.



HOT TUBS, POOL TABLES, AND SODA MACHINES

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Another thing that Atari pioneered was the idea that in order to make creative games, you needed a creative space to work in. Back in the early days of Atari, the company was housed inside an old warehouse. There were very few walls, “Bohemian Rhapsody” was blasting from boom boxes spread around the office, and the place was rife with hippie culture, man.

Atari employees were encouraged to celebrate victories by partying at the office. The hours were long, but why go home when there is a hot tub in the office, drinks of all kinds in the fridge, music jamming in the air, and everywhere you looked there was a nerd just like

you, giving up their personal time to make great games? I can't help but imagine them as the modern-day Robin Hood's Merry Men, but with fewer green tights and more flip-flops and cutoff Levi's shorts.

It was a creative place and a creative time, and it worked. It led to what would come to be known as the golden age of video games. And in the video game biz, when someone finds that something works, others follow.

Creative and crazy offices are still part of the appeal of working in the game industry. EA in Redwood Shores, California, boasts its own Starbucks, multiple arcades, a theater, a soccer field, a sand volleyball court, a full gym complete with a full-sized hardwood basketball court, a day care for parents who work and want to be close to their young children, an amazing restaurant that serves everything from sushi to hamburgers, and that's just the beginning.

Video game companies around the world love to let their creativity inspire their offices, and their offices inspire their creativity. It's actually really helpful, and if you don't believe me, you can try it out yourself. Try hanging a couple of cool posters in your room, put a handful of amiibos posing on a shelf, stack a few books from your favorite author on your bookshelf (hint, hint).

If you do, I'll bet you'll start to imagine new and cool creative ideas. But do me a favor. When you get a good idea, write it down! Because I'm telling you from experience, if you don't write them down, they will float right out your door and move on to the next guy or gal.

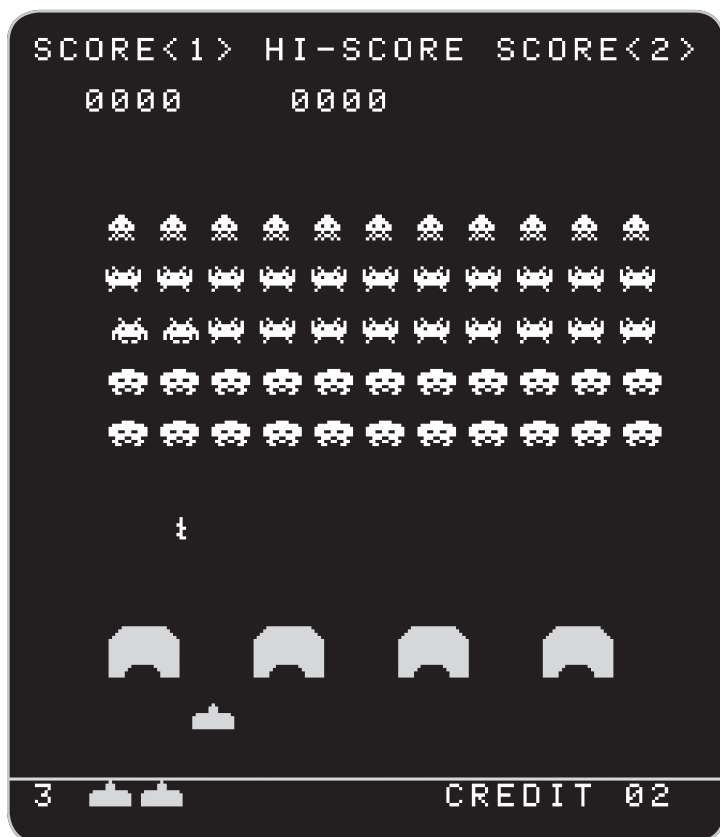
Ideas are funny like that.



SPACE INVADERS

1978

A FIRST INVASION



Space Invaders © Taito Corporation (Japan), Midway Games, Inc. (North America)

At first it was all about beating your friends in digital tennis. Head-to-head battles that usually involved lots of shouting and bragging. And probably a bit of crying, too.

But it wasn't long before the single-player craze hit the arcades.

It started with thirty-six invaders, three defensive bunkers, and a laser-firing tank with enough gusto to defend planet Earth.



Being a kid in 1978 was pretty amazing. Not only were arcades on the rise, but Garfield, that lovable lasagna-eating orange cat, was in just about every newspaper across the country. *Superman* was in theaters for the first time, the Bee Gees were topping the music charts with songs from *Saturday Night Fever*, and *The Incredible Hulk* was the number one TV show in America. Like I said, it was a good time to be a kid.

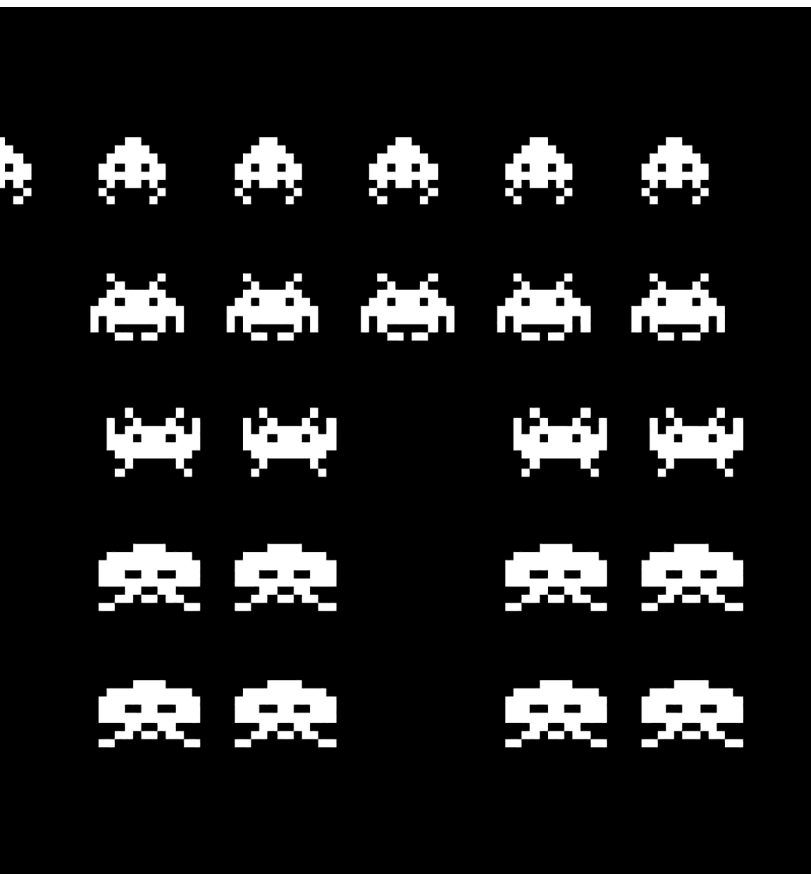


Space Invaders © Taito Corporation (Japan), Midway Games, Inc. (North America)

The game was built to impress. The refrigerator-sized arcade machine was covered top to bottom in artwork to set the mood, and it featured two white buttons, one to move left AND one to move right! Next to the twin direction buttons, you'd find a superslick firing button the color of danger itself, red. But what you couldn't see was the massive speaker hidden inside the beast, which pumped out a sound track some say inspired *Jaws* when it hit the big screen five years later.

For only one quarter you got three lives, and with a little practice—okay, with a LOT of practice—you could last for hours.

It was the summer of 1978, the game was called Space Invaders, and it invaded the allowance of every kid tall



enough to see the screen. Not to mention their older brothers and sisters and half their fathers.

Space Invaders went on to set record after record after it invaded the planet. More than four hundred thousand arcade cabinets were made, and the game pulled in more than 3.8 billion dollars by 1982. If you factor in inflation, that would be THIRTEEN BILLION DOLLARS today, making it one of the highest-grossing video games of all time.

Yeah. Billion. With a B!

That was just the beginning. The 3.8 billion dollars doesn't include the twelve spin-offs that rolled out over the next thirteen years. This house-sized wad of cash also doesn't include the merchandising: everything from candy to T-shirts, which are just as cool now as they were back



The game wasn't going to be called Space Invaders at first. The original name was Space Monsters, which actually makes a whole lot more sense when you think about it. After all, they aren't exactly invading space, are they?



Midway Games started in 1958 as a manufacturer of amusement park games, and in 1973 they became the first big player in the American arcade game scene. In the 1970s they formed a tight alliance with Japanese arcade giant Taito. The two companies worked well together, importing each other's games and sharing ideas for many years to come.



Nishikado admitted that while he loves video games, he is actually quite horrible at playing them. He kept the secret for more than thirty years, but in a recent interview he admitted that he struggles to complete even the first level of his Space Invaders game.



On October 7, 2011, New Jersey native Richie Knucklez blasted his way into the record books by doubling the previous high score recorded in *The Guinness Book of World Records*. Knucklez kept firing away until his score read an unbelievable 110,510 points.

in the 1980s. And today there are almost as many Space Invaders clones on the Internet as there are dancing cats in sombreros.

Looking back, one of the most amazing things about Space Invaders is that it was created by one man, Tomohiro Nishikado. Not only did Nishikado create the art and game design for Space Invaders, he spent a year developing the necessary hardware for the game to run, putting together a computer from scratch.

Nishikado was a one-man wrecking crew. He was as comfortable sketching spaceships and aliens on graph paper as he was soldering circuits on a breadboard.

But wait, there's more! Nishikado's desire to innovate led him to a long list of firsts. Firsts that are part of every gamer's vocabulary today.

1. Space Invaders made the concept of "high score" popular. Can you imagine a game without a high score nowadays?

2. Space Invaders was the first game to actually save the player's score. Before this, you'd have to convince your friends about the amazing game you had while they were outside playing baseball. Now you could just drag them back to the arcade and show them you were the Space Invaders king right there on the screen. That is, unless some bully like Charley Schultz-wazer unplugged the machine just after you typed in your initials. Yeah, I'm still bitter about that one, Schultz.

3. Nishikado introduced the never-ending horde. There was no way to actually win Space Invaders—the game just got faster and more difficult the longer you played.

4. Before Nishikado's masterpiece, players never had to dodge a bullet. Nishikado changed all

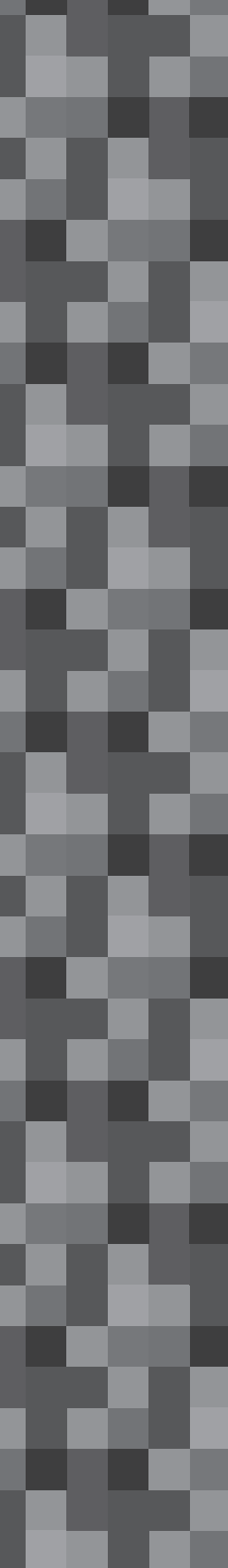
of this by allowing the player to avoid lasers and hide behind barriers. In other words, *Space Invaders* was the first shooter game—Halo's great-great-great-grandfather.

And last but not least . . .

5. Perhaps the most overlooked and underrated invention that Nishikado shared with us was his concept of a continuous background sound track. If you've played the game (and if you haven't, you really owe it to yourself to check it out), you'll recall the four descending bass notes repeating in a loop. This on its own would have been a step up from the rest of the pack, but Nishikado wasn't happy with "good enough." He wanted awesome, and he got it by changing the speed of the music as the game got harder. It was awesome! It made your heart pound and hands sweat as you gripped the joystick tighter with every move. Add in a layer of sound effects, a technique that had also never been used before, and any kid with a quarter in his pocket would come running like a rat to the Pied Piper.

If I were picking teams for anything from antigravity combat karaoke to underwater car repair, I'd pick Tomohiro Nishikado first. Seriously, this guy does it all.

Simply put, *Space Invaders* was, and perhaps always will be, the champ.



THE AMAZING INPUT/OUTPUT MACHINE

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So, here's a question for you, gamer. Why do we call these wacky things that eat up all our spare time *VIDEO games*?

Sure, we call them things like *computer games*, or *electronic games*, but let's face it—we all still think of them as *VIDEO games*.

And it doesn't really make a lot of sense when you think about it. It's not like you're watching a video. You watch videos on YouTube or TV. And back in the day, when video games were just starting out, people watched videos on a VCR, which stands for *VIDEO cassette recorder*. Even that makes more sense.

But video games are totally different. You don't just sit there and watch a video game—you **PLAY** a video game. And they have computers inside them, and controllers plugged into them, and all that other good stuff.

Well, the explanation is actually quite simple, and it has to do with what a gaming console does.

A console, like the Atari 2600 or the PS4, is really just a fancy translator.

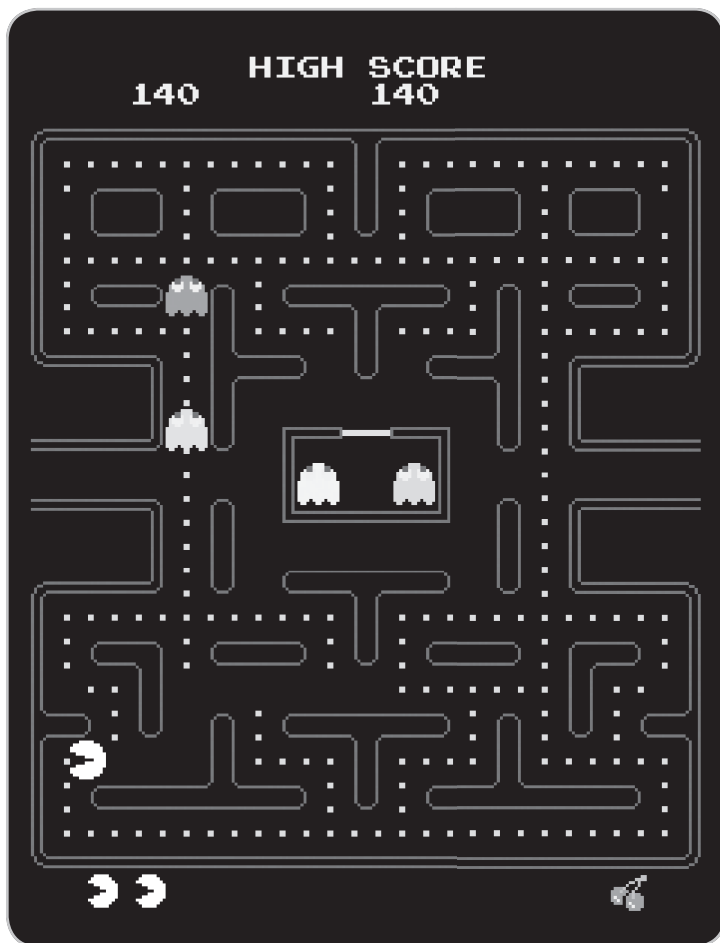
The games are written in specific language that is stored onto a cartridge, or disk, or a hard drive. If you try to jam an Atari 2600 cartridge into your TV, it won't do anything except scratch your new TV screen.

And the consoles also have controllers like joysticks, or motion controllers like on the Wii U, or maybe even a bright red plastic guitar. These controllers speak their own language, too.

Luckily for us, consoles not only speak the language of the video game cartridge and the controller (inputs), but they also speak fluent TV or *VIDEO* (output) language.

It takes information, or data that is stored on a cartridge or a disk, or, heck, even streamed over the Internet, and it translates that data to a *VIDEO* signal that you could play games on. Ya know—*VIDEO* games.





Pac-Man © Bandai Namco Games, Inc.

Blinky, Pinky, Inky, and ... Orangey? Stinky?
No. Of course not. It needs to be something
random, like Clyde.

Why random, you ask? Well, we'll get to that in a minute. I promise. You can count on me, because I am as predictable as Blinky.

Of course, this chomping ball of fun needs no introduction, but just to be safe, meet Pac-Man.



After the Pizza Hut app was launched on the Xbox 360, gamers gobbled up over one million dollars of pizza in the first four months!



1980 was quite a year for feathered hair and light blue polyester suits, but that wasn't all it was known for. Ronald Reagan was on his way to the White House. The fax machine was invented in Japan, and *Star Wars Episode V: The Empire Strikes Back* was the number one movie in the world. And, Luke, he's still your father.

The story of this hungry video game character begins in 1979, when an exhausted twenty-seven-year-old Namco employee, Toru Iwatani, was daydreaming while staring at one of the most important things in a video gamer's life. Pizza. No joke.

The legendary pie was missing two slices, which resembled a mouth, and Iwatani imagined the jaws opening and closing as it gobbled up everything in sight. What resulted from Iwatani's vision was Pakkuman, the first spark of what would become the Pac-Man we all know and love.

Actually, this might be a good time to point out something really important. We often think that new ideas, like video games or characters, come out of thin air. We might even think the video game idea fairies whisper into some lucky game designer's ear while she's sleeping, then—BLAMMO—out pops a shiny new stroke of genius. But in reality, more times than not, great ideas are inspired by the things that surround us. Like Iwatani's pizza, or his other reference, Popeye, whom he has quoted as an early inspiration for Pac-Man's habit of eating food to gain power. It's a cool thought that new ideas come from paying attention to what is around us, but it does make you wonder if Miyamoto, the famous Nintendo designer, hangs out with girlfriend-stealing, spiked-shelled turtles and mustached plumbers.

Anyway, back to 1980, a year after Iwatani and his famous pizza. Up until this point, video games were really geared toward boys. Especially in Japan, where arcades were overflowing with young men lining up with quarters to play *Space Invaders* and *Asteroids*. Iwatani knew that arcades would be more popular if he could attract girls as well as boys. So, he created the first video game mascot, added a maze component, and pumped it full of all the colors found in a bag of gummy bears. The name of the game was changed from Pakkuman to Puck-Man, and do you know what? It worked!

In October 1980, the game made its way to America, where a few more changes were made. The difficulty and speed were ramped up and all-new art was added to the cabinet. Smartly, the name was changed again to Pac-Man,

in fear that the previous name might be “altered” into some pretty foul language.

Another big difference after the shift from Japan to America was Pac-Man’s reception. In Japan, the game started off slow, but in America it was an overnight success. So successful, in fact, that it surpassed Space Invaders, the current king of the arcade hill, by earning over a billion dollars in quarters in its first year alone. By the early 1990s, the always-hungry Pac-Man had brought in over 2.5 billion dollars just in quarters. That is 125,000 pounds of quarters!

Possibly the biggest addition Pac-Man brought to the party was character and story. Before Pac-Man hit the arcades, games were mostly concerned with skill and action. Blasting incoming asteroids, playing a quick game of digital table tennis, or breaking through a brick wall were all experiences that proved to be addictive and fun, but gamers fell in love with Pac-Man in a whole new way.

For the first time, gamers were shown story by way of cut scenes between game levels. These cut scenes played like small movies, and involved memorable music, humor, and, of course, our hero, Pac-Man, always looking good in the end. Pac-Man was quickly becoming a pop icon, and he found his way to lunch boxes, shirts, and posters, and eventually made his way to TV, when *Pac-Man* became a hit in 1982.



Screenshot from “A Bad Case of the Chomps,” Episode 1.12 of the *Pac-Man* TV show (originally aired Dec. 11, 1982)



While gamers were trying to play Pac-Man as long as they could on a single quarter, another toy craze was happening, only this time it was all about SPEED. The Rubik’s Cube became popular in 1980, and immediately competitions started up to see who could solve it the fastest. I could solve it in about two minutes, but only if I was allowed to pull off the stickers and put them back in the right order. That’s how you do it, right?



The Guinness Book of World Records named Pac-Man the most recognizable video game character of all time. Ninety-four percent of people asked recognized the little yellow guy. This means that if you have 100 Facebook friends, six of them still don’t recognize Pac-Man. It’s probably your grandparents.



Although Buckner & Garcia's "Pac-Man Fever" was a breakout hit, it wasn't the only song inspired by Pac-Man. "Weird Al" Yankovic, Lil' Flip, Bloodhound Gang, and many more have paid tribute to the dot-eating critter.

Shortly before Hanna-Barbera released the TV show, a rock duo by the name of Buckner & Garcia recorded "Pac-Man Fever." It soared to the top of the charts to become a top-ten single in 1981. The album containing the song became a gold record in 1982, by selling over one million copies, and to date it has sold over 2.8 million copies.

Before long, Pac-Man was a social juggernaut. Everyone knew the song, everyone watched the show, and of course, everyone played the game. We all had a bad case of Pac-Man fever, and the only cure was more quarters.

Like his predecessor, Tomohiro Nishikado of Space Invaders fame, Iwatani had his list of firsts, too.

1. Pac-Man became the first video game mascot.

2. Iwatani and his team created the very first power-up. You know, those big pills that make all the ghosts turn royal blue and run away from Pac-Man. This little gem of an idea has found its way into just about every game launched since.

3. Pac-Man was the first game aimed at a female audience.

4. Nobody can forget that Pac-Man introduced us to cut scenes, fully animated cartoon-style movie shorts to entertain players between levels—not to mention give them a few seconds to crack their knuckles and massage their tired wrists.

Add this up, add that it was also the first maze game to boot, and there is no doubt that Iwatani created a legend. Oh yeah. I almost forgot. The random naming of Clyde.

5. Coming in at 5: Iwatani designed the first character AI, or "artificial intelligence," in a video game. But he didn't just create one

smart ghost, he created four. Each ghost had its own personality. Blinky (red) and Pinky (pink) are the predictable ghosts, as they chase Pac-Man in the most direct way. Inky (blue) implements ambush attacks by focusing on a point thirty pixels behind Pac-Man, while Clyde (orange) is the most dangerous ghost of all, because his behavior is completely random.



Pac-Man © Bandai Namco Games, Inc.

Turns out, a game inspired by three-fourths of a pizza is a whole lot more than simply munching dots.



It is possible to get a perfect score in Pac-Man, because it has a finite number of dots, ghosts, and fruit to chomp. This superhuman challenge is included in Ernest Cline's book *Ready Player One*, where his main character sets out to play a perfect game. Just in case you want to try, the score is 3,333,360. Good luck!

JUST ONE BYTE

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Pac-Man might have started the hungry video game character craze, but it didn't end there. In fact, food has played a big part in video game history. Not only has it been a reward, like the fruit in Pac-Man, but it has become the universal symbol of health in games. If you're hungry or running low on energy, just chomp down on some dog meat in Fallout, or maybe some pumpkin pie in Minecraft, and you'll be good to go.

Check out my list of the top ten tempting video game snacks. But be warned, it may cause you to reach for a bag of Cheesy Poofs.

10. Mooshroom Stew—Minecraft

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Ever milked a mooshroom by the pale moonlight? No? Well, don't worry, because that's not the only way to make a bowl of Minecraft mooshroom stew. You can craft a bowl of the hearty stuff with ease. All you need is a bowl, one red mushroom, and one green mushroom. After you've

created your stew, it will pop a solid three drumsticks of food into your hunger bar.

9. Ramen Noodles—Cooking Mama

It's really hard to pick a food winner in this game. Everything you help Cooking Mama make looks wonderful, but the noodles are especially fun and yummy.

8. Burger Layers—Burger Time

Imagine a burger so large that it could take up an entire floor of an apartment building! Yeah. I know. I want one, too! Well, in the classic arcade hit Burger Time, each floor of the rickety building the chef runs through contains a different part of a hamburger: the bun on top, then a slice of cheese, some lettuce, the beef, and finally another bun. Running across the burger parts drops them to the layer below. Drop them all and you'll build a burger—the burger of your dreams. But beware, you're being chased by angry hot dogs and bitter pickle slices. Totally normal, right?

7. Pretzel—Ms. Pac-Man

With all the treats in Ms. Pac-Man, why would this one get a special place on this list? Well, because it's the only goodie in the game that isn't a piece of fruit. Nothing against fruit—I like a good banana as much as the next guy, but nothing beats a toasty, warm, salt-covered pretzel.

6. Moogles Pie—Final Fantasy XI

One look at this delicious braided loaf of syrupy apple goodness and you'll want to lick the screen. (Don't.) This treat packs quite a punch. It boosts every single attribute for your character by at least one point, and gives you a pile of health points and magic points. But perhaps my

favorite part of the moogle pie is the description when you first find it.

This apple pie is made by (not of) moogles. Although slightly burnt, a magical spell placed upon it by the baker makes it seem more delicious than it really is.

5. Love Potion—The Sims

In order to make the love potion in The Sims, you need to have a chemistry set—the Concoctanation Station—and an enemy of the opposite gender. Yeah. An enemy. This fun little potion will make the person who hates you most in the game fall instantly in love with you. Beware, there will be kisses involved.

4. The Cake—Portal

In Portal, you are guided by the soothing yet robotic voice of GLaDOS. She's an artificial intelligence computer that "helps" you navigate the unpredictable Aperture Science. And she knows how to get what she wants. Early on, she promises you a cake if you help her out. But, well, I won't spoil it. I'm just saying, not everything in Portal is what it seems.

3. Lava Cookie—Pokémon

This crummy-looking snack isn't just tasty, it can cure any status effect from a hurt Pokémon. Poisoned? Eat a lava cookie. Burnt? Paralyzed? Confused? No problem. Just give your favorite Pokémon a lava cookie and she'll be back to normal.

2. The 1UP Mushroom—Super Mario Bros.

The green mushroom in the Mario franchise has become

an icon in video game lore. Just one look at it and you know you have to have it. Of course, they are usually hidden inside blocks or in hard-to-reach places, but they are totally worth it. Gobble one of these tasty treats and you'll get one extra life!

1. Elixir Soup—The Legend of Zelda: The Wind Waker

What's better than soup? Special magic soup made by your grandmother, of course. This isn't easy to find, but it's an important item that will restore all of your life energy and give you a magic power. Your attack power doubles until the first time you take damage. Man, grandmothers really are the best.

You just can't have a chapter on digital goodies and not mention two of the all-time great video game munchers, Yoshi and Kirby. These two Nintendo all-stars gobble up everything in their path, and use the energy-mojo-strength-whatnot they absorb through eating to do everything from transform into the item they devoured, to spit it out as a nice slobbery weapon. They have both munched their way into many gamers' hearts, including mine.



ZORK

1980

YOU ARE LIKELY TO BE EATEN BY A GRUE

1

9

8

0

```

Forest                                     Score: 25   Moves: 13
>open trap door
The door reluctantly opens to reveal a rickety staircase descending into
darkness.

>down
You have moved into a dark place.
The trap door crashes shut, and you hear someone barring it.

It is pitch black. You are likely to be eaten by a grue.

>n
Oh, no! A lurking grue slithered into the room and devoured you!

**** You have died ****

Now, let's take a look here... Well, you probably deserve another chance. I
can't quite fix you up completely, but you can't have everything.

Forest
This is a forest, with trees in all directions. To the east, there appears to
be sunlight.

>

```

Zork © Infocom

I realize this might be hard to believe, but there was a time when computers were rare.

I know, I know. Today they are everywhere. School libraries are filled with computers. The checkout stand at the grocery store has one, or maybe two. The dentist's office? The movie theater? The water park? Heck, you can find them at the zoo, and even the animals are starting to get them.

But back in the 1970s this wasn't the case. Sure, arcades were popping up all over the place, but it wasn't like you could walk into your friend's house and find a Centipede arcade cabinet blipping away in the kitchen next to the dining room table.

Part of this was because computers in the 1970s were actually bigger than a dining room table. In fact, the PDP-11 was one of the most common computers at the time, and it was the size of the entire kitchen!

But everything was about to change with the invention of the personal computer. It started in office buildings, but it didn't take long for the "home computer" to make its way into every kid's bedroom.



The ape house in the Lincoln Park Zoo has given the chimpanzees access to touch-screen computers. Scientists are learning quite a bit about how apes understand their environment, and the apes are learning that nobody can beat level 151 of Candy Crush Saga without buying a lollipop or two. Or three.



It seemed like every company that had ever made an electronic device, from a calculator to a toaster oven, wanted to get into the computer-making business. Some, like the Commodore 64, did great, but there were a lot of failed attempts, too.



Moms loved Zork! Okay, maybe not all moms, but there was no doubt that it was easier to get a mom to buy a game that forced kids to read than it was to ask her for a handful of quarters to run down to the arcade to zap aliens. Infocom took notice and started selling their games in bookstores, not just in the electronic stores like other games. Not a bad idea.

The computers were pretty basic and mostly used for paying bills and writing book reports. But it was Zork that had everyone fighting for the keyboard.



Commodore 64 © Evan Amos

And for Zork, a keyboard was all you needed. You didn't need a joystick because there were no graphics. You didn't need speakers, either, because there was no sound. Just words. Clever, entertaining, DANGEROUS words.

Yup. Words. You didn't just PLAY Zork, you READ Zork. But it totally worked because the story was just that good.

So, here's how Zork worked. You'd get a small snippet from the story, then it was your turn to decide what to do next. It went something (okay, exactly) like this.

West of House

You are standing in an open field west of a white house, with a boarded front door.

There is a small mailbox here.

>_

And then it's your turn. What do you do? Do you go to the house? Do you look in the mailbox? Go on. It's your choice. Really, just shout it out. Oh, you want to "Look inside the mailbox." Good idea.

Opening the mailbox reveals:

A leaflet.

>_

You take the leaflet, by simply typing "Take the leaflet." You can read the leaflet, of course, but that is obvious, so there's a good chance you might try a couple other options first. Like . . .

"Eat the leaflet"

I don't think that the small leaflet would agree with you.

```
>_
"Kill the leaflet"
What do you want to kill the small leaflet
with?
>_
"Kill leaflet with sword"
You don't have that!
"Kill leaflet with bazooka"
You can't see any such thing.

Bummer, if only you had a bazooka.
```



Zork was written between 1977 and 1979 by MIT students Tim Anderson, Bruce Daniels, Dave Lebling, and Marc Blank. The young adventurers got the idea for Zork from playing the first-ever text adventure game, Advent, also called Colossal Cave Adventure. Advent was such a hit with Anderson, Daniels, Lebling, and Blank that they set to writing Zork right away. They had no idea that Zork would end up being one of the most important and well-respected games of all time.

```
West of House                               Score: 0           Moves: 3
ZORK is a registered trademark of Infocom, Inc.
Revision 88 / Serial number 840726

West of House
You are standing in an open field west of a white house, with a boarded front
door.
There is a small mailbox here.

>open mailbox
Opening the small mailbox reveals a leaflet.

>take leaflet
Taken.

>eat leaflet
I don't think that the leaflet would agree with you.

>kill leaflet
What do you want to kill the leaflet with?

>kill leaflet with sword
You don't have that!

>_
```

Zork © Infocom

As you can tell from this little sample, there are about a bazillion ways to explore (and goof around in) Zork, and all we've done so far is open a mailbox and try to eat/bazookafy a leaflet.

And the game gets better once you step inside the house and you get some real clues: an ancient oil lamp, an empty trophy case, and an intricately engraved sword. (Man, where was this sword when we were dealing with that leaflet?)

You look around and find a trapdoor that leads below the house, and the adventure begins. Getting in through the trapdoor is simple, but the real trick is getting back out.

The goal of the interactive fiction game was to return from the Great Underground Empire alive with the twenty



.....

The Thief was actually something totally new to games at the time. Until him, games really didn't have a character to act as a narrator or storyteller—someone that showed up again and again to further the story. Probably because the stories in these early games were very simple in comparison to what Zork offered. I mean, being chased by colored ghosts is awesome, but it isn't going to be something you can write a book report about.



.....

Spoiler alert! At first the grue seems downright terrifying, but the big beastie hiding in the dark is actually afraid of the light. Just strike a match and it'll go running!

treasures of Zork. Along the way you ran into grues, zork-mids, and all kinds of confusing and twisting corridors. Oh, and a character cleverly named “The Thief,” who loves to pick your pocket, lie to you, and pick up anything you might have left behind to help you find your way.

And the enemies—oh, the enemies!—were terrifying! Okay, I know what you're thinking. You can't imagine being scared just reading about a troll that you can't even see, but there was something about *NOT* seeing the troll that made it even worse. And the trolls were deadly, but they were nothing compared to the grue.

What's a grue, you ask? Well, nobody really knows because nobody has ever seen one and lived to tell about it. They lurk in the pitch-dark, and they get closer to you with every move. Every decision. Every thought—until—GULP. “Oh no. You have walked into the slaverling fangs of a lurking grue. You have died.”

That simple eleven-word sentence haunted the nightmares of Zork players everywhere, and it is easy to see why. It's the monster hiding beneath your bed. It's the unseen spook in the dark closet. Man, I'm starting to give myself the willies. Words are powerful things, right?

Part of Zork's success was that the writers of the game had a real sense of humor. There was lots of techy nerd stuff in there, too—some of which has gone on to be part of the gamer vocabulary today, but it was the funny stuff that really kept players playing. For example, if you ever play Zork, and you should, say hello to the troll. If that isn't enough, try “smell the troll.” Believe me, it's worth it, and it will be a gaming moment you will never forget.

The launch of Zork was pretty slow. In fact, in 1980, when the game was ready to go out on the TRS-80 home computer, the game was copied to a floppy disk by the developer, then they used a photocopier to make a copy of the instructions. They stuck the disk and the instructions

in a plastic zip-top sandwich bag and sent it to the first buyer in the mail.

Not exactly like going to the big chain superstore and asking a guy in a blue vest if he'll unlock a massive glass case of video games for you so you can get the newest copy of Mario Kart, now, is it?

Zork started off pretty darn small, but the game's popularity exploded. Soon everyone at school was talking about how to get past the tricky parts, sharing maps they'd drawn on graph paper, and swapping ideas of funny things to try. And part of the reason people were swapping ideas is that Zork was HARD. Super hard.

Some gamers thought the game was intentionally trying to trick them. For example, there are twenty-eight unique ways to die in Zork. Twenty-eight! How many ways can you die in Pac-Man? Yeah, that's right. One.

But Infocom was there to help. Before Zork II hit the shelves, Zork's publisher, Infocom, started a newsletter that players could have mailed right to their own "small mailbox" called the *New Zork Times*. It had hints about how to get through tricky areas, interesting fake articles about the world of Zork, and funny parody articles advertising goods from the city of Frobozz. The newsletter was a cool addition to the game, and it led to something even bigger. After the Zork series (Zork I, Zork II, and Zork III) had shipped, Infocom released a whole new version of the game in a brand-new box. No cheap sandwich bags here. This new box was called the "gray box" series, and not only did it come with the game and instructions, it came with a bunch of cool stuff they called *feelies*. Feelies were maps, coins, illustrations, and other items from the land of Zork, and many players purchased the entire collection again just to have the feelies.

Just about everyone who owned a computer in the 1980s had a copy of Zork in one version or another. The game truly was a phenomenon and it smoothed the way for the story games we still play today. Games like *The Legend of Zelda*, *Uncharted*, *Final Fantasy*, and certainly *The Walking Dead*, *Tales from the Borderlands*, and *The Wolf Among Us* all owe a bit of who they are to Zork.



Even the name Zork had meaning to early computer nerds. The word is a nonsense word that hackers once used to define an unfinished program until it was ready to be installed on the system.



Later, Infocom sold hint books called *InvisiClues*. The books were printed with invisible ink that could only be revealed with a special marker, so players could get clues as needed without spoiling anything later in the game. Some critics claimed that Infocom made their games intentionally difficult to help push the sales of their *InvisiClues* books. Those critics were eaten by a grue.



But it's not just games that drew inspiration from Zork. Rapper MC Frontalot's song "It Is Pitch Dark" is all about facing the grue and the awesomeness that is Zork. In the hit spy TV series *Chuck*, the game is mentioned as one of Chuck's favorite childhood games, and Zork commands were used by CIA operatives as secret code in the show. And in megahit sitcom *The Big Bang Theory*, the character Sheldon Cooper loves Zork, and likes to play it on "Chinese and vintage video game night"—his quote, not mine. Zork comes up multiple times in *The Big Bang Theory*, and in one episode Sheldon delivers a line that is super-Zork-ish: "Hit troll with ax."

Infocom's interactive fiction game was more than a hit, it was a movement. And while Zork wasn't first, it was the one that really gave the story-driven games category its start. Interactive fiction games covered every reading taste out there, from mysteries, to science fiction, to pirates, and they owe it all to Zork.

I think you can boil down why Zork was such an important game into five innovative points.

1. **Zork was funny.** That might not sound all that original now, but that is how innovation works. Someone does it first, then a lot of other people follow along.

2. **Zork was smart.** Not only was the writing funny, Zork was filled with inside jokes that only the geekiest of computer geeks understood. Heck, it even had a few MATH jokes. In fact, it could be said that Zork helped spawn the "it's cool to be a geek in the know" movement that is so huge today. And yes, it is cool to be a geek. Very cool.

3. **Zork lived on outside the computer.** The feelies, the *New Zork Times*, the InvisiClue books. These were all ways for players to stay involved with Zork when they were away from the computer. Remember, this was almost thirty-five years before the iPhone, and even if you could get a battery big enough to power the thing, lugging your Commodore 64 around to play Zork at recess was not advised. It was much easier to slip a zorkmid coin in your pocket.

4. **Zork spoke your language.** I mentioned earlier that Zork wasn't the first interactive fiction game. Many point to Advent as holding that honor. But the engineers who built Zork wrote a state-of-the-art tool called a

language parser. It allowed players to write commands in plain English, which was a HUGE step up for the genre. For example, in Zork you could type, “Put sword, ax, torch, and map in chest,” while in Advent you might be held to two- or three-word commands like “Ax in chest.” Which, as you can see, could be taken in the wrong way. Ouch!

5. Zork had the first video game cliff-hanger. So, I hate to spoil the ending, but I’m gonna anyway. After you’ve collected the last trophy and placed it in the trophy case back in the white house, you are awarded the rank of Master Adventurer, and an ancient map with further instructions that send you to a “stone barrow.” It turns out the entrance to the stone barrow is the end of Zork I and the beginning of Zork II. Zork fanatics had to wait for months for a chance to continue the story, but it was worth it.

Zork went on to ship another thirteen games in the series in one form or another. That doesn’t even count all the games Zork inspired along the way. To this day there is a dedicated group of players that both write and play interactive fiction, and take it from this old game designer, it’s a great way to learn how to design games. Oh, and to learn how to write fun and entertaining fiction.

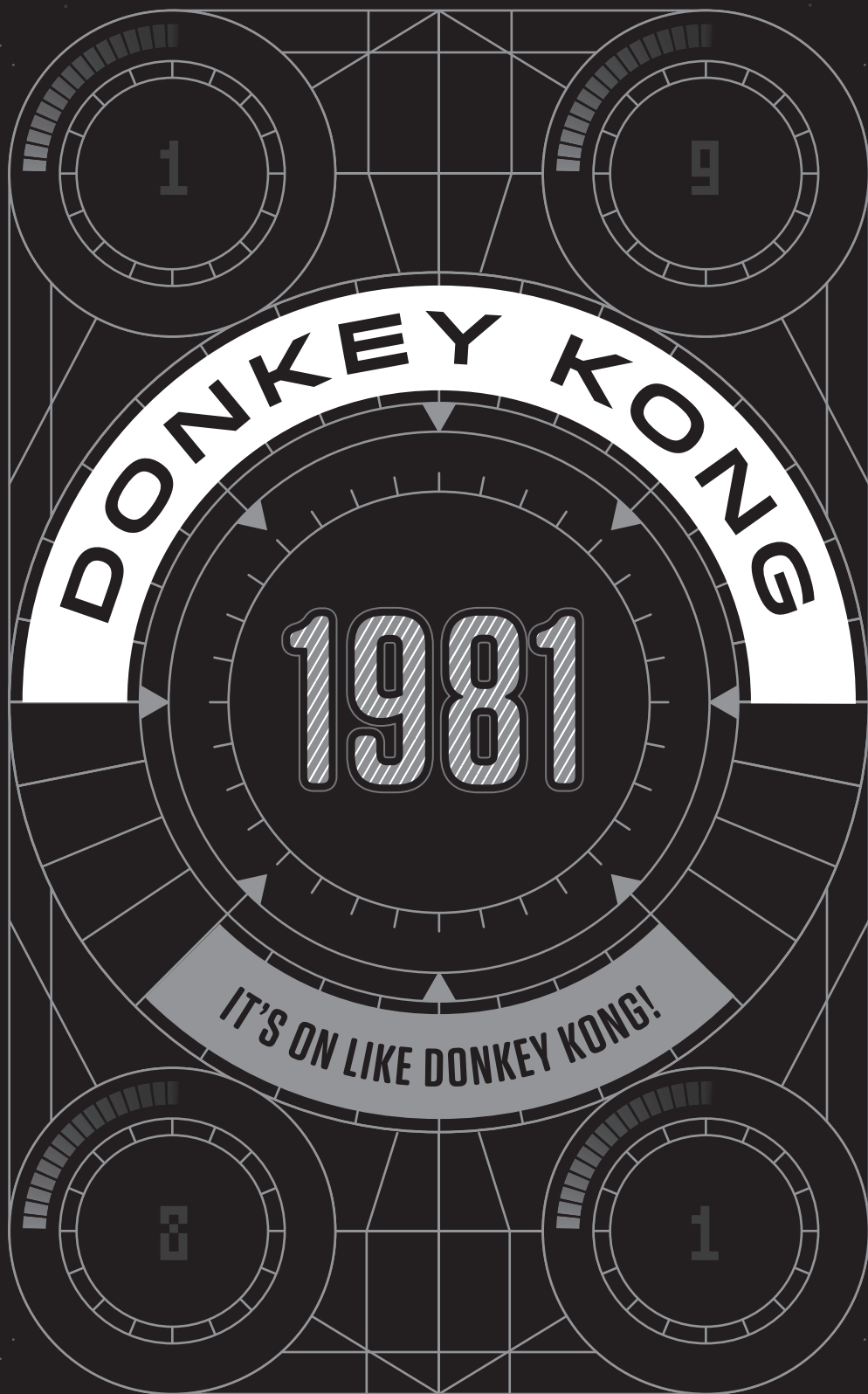
You should give it a shot sometime. I promise, it’s not as dangerous as lurking in a dark cave being hunted by a grue.

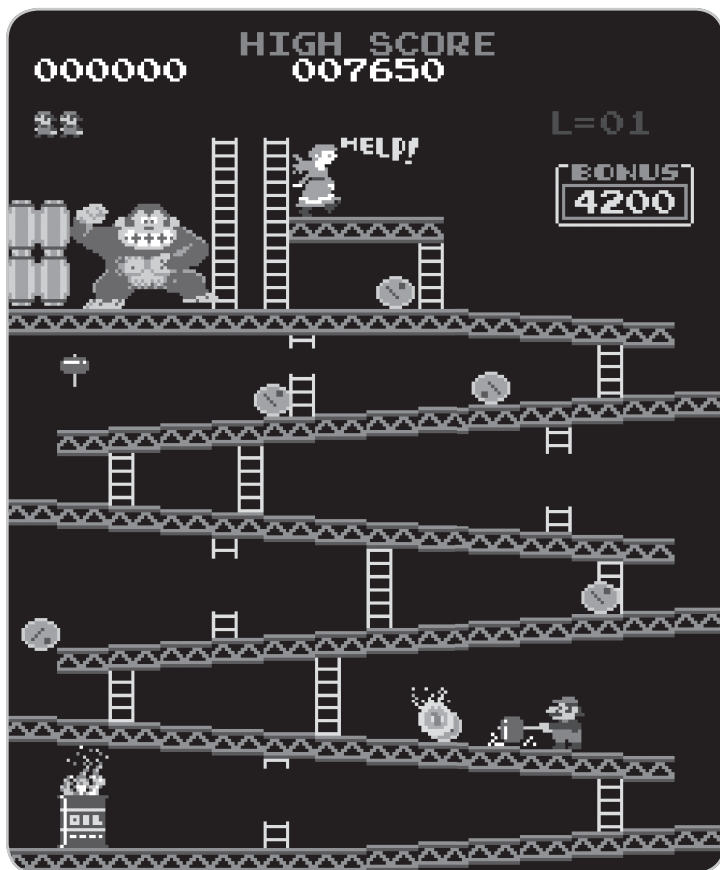


In 1984, Infocom published a game version of Douglas Adams’s famous sci-fi novel, *The Hitchhiker’s Guide to the Galaxy*. The game had a reputation for being particularly difficult—especially one instance where the player had to get a Babel fish out of a dispenser hold on a Vogan ship. It was so difficult, in fact, that Infocom celebrated their deviousness by selling shirts that read “I Got the Babel Fish”—a great inside joke for those who were lucky enough to proceed.



In *Call of Duty: Black Ops*, you can earn the achievement “Eaten by a Grue” by sneaking around until you find an antique computer terminal and playing Zork. The entire game is included, and most gamers nowadays find finishing Zork more challenging than finishing single-player campaign mode in COD: Black Ops.





Donkey Kong © Nintendo

Hey, gamer, let me ask you a question.
What do you think about Radar Scope?

Wait. You've never heard of Radar Scope?

Don't worry. It was a trick question. Nobody's heard of Radar Scope. Not because the game stunk—it was actually a pretty good space shooter. Nobody knows about this game because a few months after Nintendo shipped three thousand Radar Scope arcade cabinets to America, they decided to pull the plug on it. Literally. Nintendo had high hopes for Radar Scope, but nobody was playing it, so they decided to fix the game.



A gamer is someone who plays video games A LOT, but that's just the start of it. A gamer not only plays games, but is usually really good at playing games, wears video game T-shirts, has video game posters in their room, eats video game cereal for breakfast ... well, you get the point.



There are a lot of stories about where the name Donkey Kong actually came from—everything from a bad fax that made the Nintendo of America team misread *Monkey Kong*, thinking the *M* was a *D*, to its being named after King Kong. But in the end, Miyamoto said it was simpler than that. They wanted an English name because they knew the game would be a hit in America. The word *donkey* was used to imply something silly, or dumb, and in Japan, *kong* is a slang word used for an ape. Basically, Miyamoto and crew were naming the game Silly Ape, but they felt Donkey Kong was, well, just more fun to say.

And by “fix the game,” I mean totally turn it into something new that would revolutionize the industry forever. And we owe it all to one hardworking man.

No, not Mario. Shigeru Miyamoto.

So, here’s the story. It was 1980. Arcades were popping up in every mall across the globe, Luke Skywalker had just found out that Darth Vader was his father, and kids were getting kicked out of class for chewing grape Hubba Bubba (still the best bubble gum of all time). Disco was dead, and pop music was all the rage. Things were changing, and changing fast, and to be honest, arcade gamers were looking for something new. It seemed like every game out there that wasn’t Pac-Man was a space shooter, and Radar Scope was lost in the mix of awesome that was 1980.

So the president of Nintendo at the time, Hiroshi Yamauchi, tapped on the shoulder of a young graphic artist, Shigeru Miyamoto, and asked him to see what he could do to make Radar Scope stand out. And, boy, did he deliver.

While Miyamoto was a great artist, he was a FANTASTIC storyteller, and he knew right away that the best way to make a game stand out in the arcades was to add a story. So he turned to one of his favorite cartoons for inspiration: Popeye. You know, the old pipe-smoking sailor guy your parents used to use as an example to get you to eat your spinach. Popeye had everything a young game designer needed: a hardworking hero, a supercute princess, and a big bully. But Miyamoto wasn’t satisfied with good enough; he wanted GREAT. So he turned those elements into a carpenter that could bounce over anything in his path (Jump Man), a pretty princess in a pink dress (Lady), and a girlfriend-stealing ape named Donkey Kong.

While the story for Donkey Kong was a huge hit, there was one thing that gamers had never seen before that really made the game a winner. The jump button. Yeah, no joke. Before Donkey Kong, nobody had ever jumped in a video game. Sure, they had dodged back and forth and shot lasers and had even eaten dots, but it took until 1981 for a video game character to JUMP. And you know what, that

little jump button changed gaming forever, and started a whole new gaming category: the platformer.

And to this day, the best way to define a platformer is to describe the game play in Donkey Kong. So, here goes. Jump Man starts in one point in the game screen (the bottom left corner), and he needs to use all of his skills to travel to another location (toward the princess at the top). Along the way he has to defeat or crush enemies (barrels with hammers), jump over obstacles (bouncing and flaming barrels), climb ladders, and avoid pits—oh, and jump from PLATFORM to PLATFORM. At any time if you mess up, miss the timing, or don't jump far enough, you're through. You must start over on the level that konged you, until you reach the top.

Another thing that you can't ignore when it comes to Donkey Kong is the music and the sound. You might not even realize that you recognize the music, but I know you do. Look it up—it's everywhere. And not only was the music great, the sound effects timed with the music made it even better. As soon as you dropped your quarter in the machine and hit the "Player 1" button, you saw Donkey Kong climbing a ladder with Lady under his arm. Dark and scary theme music creeps along. *Dum, da-doo-da, doooooooooo-dum*. At this time, Donkey Kong climbs to the top of the screen and stomps his feet six times on the dark red platform inside an abandoned building.

BOMP!

BOMP-BOMP-BOMP-BOMP-BOMP!

Then he grins at you, tempting you to even *try* to climb up after him.

Finally, the game asks you a very important question: How high can you get? When Jump Man's theme music (which is a lot more playful than Donkey Kong's) plays, you're ready to start.

Really, if you haven't played the game, you should give it a shot. There are fully playable versions on the interwebs, but even if you don't, you **MUST** check out the intro sequence on YouTube or something. The music is SO great, and you will totally recognize it.

By the time the game was ready to stand tall in arcades



Not only did gamers love Donkey Kong, but musicians did as well. Buckner & Garcia recorded a song called "Do the Donkey Kong," based on the game. And artists DJ Jazzy Jeff & The Fresh Prince rapped about it in their hit "Human Video Game." The song is awesome, nerdy, and shows that even back then, it was cool to be a GAMER!



One might wonder why the president of Nintendo chose Shigeru Miyamoto to build Donkey Kong over the top of Radar Scope, thus wiping it from history. It's because Miyamoto was part of the Radar Scope team in 1980, so he was familiar with the hardware.

across America, Donkey Kong had stacked up a nice list of innovative firsts:

- **THE FIRST PLATFORMER.** For decades after Donkey Kong, Nintendo turned platformers into their bread and butter. But games like Sonic the Hedgehog, Ratchet & Clank, Mega Man, Little Big Planet, Banjo-Kazooie, and many more also followed in Jump Man's footsteps.
- **THE FIRST JUMP BUTTON.** Before Jump Man jumped on the scene, characters had to rely on running to get out of trouble. Thank you, Donkey Kong, for letting gamers around the world test their hops.
- **THE FIRST GAME SOLELY DESIGNED BY VIDEO GAME LEGEND SHIGERU MIYAMOTO.** While he'd worked on other games before, Donkey Kong was Miyamoto's first breakout title, and we all know it wasn't his last.
- **And let's not forget this important tidbit: DONKEY KONG INTRODUCED THE WORLD TO MARIO.**

Have you ever felt like you have wanted something your entire life, but you didn't realize you wanted it until you SAW it? That's kind of what Donkey Kong did for arcade junkies. It was a refreshing new take on arcade games, and the bright colors, sing-along sound track, and new jumping action branded it on the hearts of gamers everywhere.

But the biggest thing to come out of Donkey Kong was actually pretty little. It was a suspender-wearing everyday hero with a mustache. That's right, Jump Man, the star of Donkey Kong was none other than Mario. And, boy, was he ready to JUMP into video game history.

CAN I TAKE IT HOME?

.....

Games expanded pretty fast the first few years or so of the gaming world. Just for argument's sake, let's say that Pong was the first big hit. Well, we already did, so let's say it again.

Pong was the first big hit.

And that first big hit led to every arcade in the world filling up with gamers and quarters.

While the arcade boom was going strong in 1975, the next natural thing to do was to bring the arcade craze into the front room of every home in America. Or at least, that's what Nolan Bushnell, the founder of Atari and cocreator of Pong, thought. So when department store giant Sears approached him and offered to help him put Pong in their stores, Bushnell jumped at the opportunity. Or Ponged. That's a verb, right? Ponged?

So Bushnell and Atari went into the home video game console business, and in a few short months a new craze was starting: home video gaming.

Pong on your own black-and-white TV was cool, but gamers wanted MORE. And two years later, Bushnell and Atari had just what they were looking for.

The Atari 2600!

It was AWESOME! It had fake wood paneling, six aluminum levers you could switch to change game modes, a slot for jamming in new game cartridges, super cool one-button joysticks, and it was in COLOR! One hundred twenty-eight colors on-screen at one time, to be exact.



Atari 2600 © Evan Amos

Now the games you played in the arcade could continue to drive you crazy at home.

There were nine games at launch, covering almost every genre we know and love today: Combat (a shooter), Blackjack (a casino game), Indy 500 (a racing game), Video Olympics (a sports game), and even Basic Math . . . which was basically math.

The original Atari 2600 came with the console, two joysticks, two paddle controllers, and a two-player game with twenty-seven variations called Combat. All this for \$229!

But the big hits for Atari really started the following year in 1978, when a game programmed by a very famous duo of Steves arrived on shelves just in time for the

holidays. It was called Breakout, and it was programmed by Steve Jobs and Steve Wozniak.



Breakout © Atari Interactive, Inc.

Yeah, *that* Steve Jobs. Before they gave us the Apple computers and the iPhone, Steve Jobs and Steve Wozniak were Atari employees.

Things kept on cruising for Atari, and it seemed like every game they made was plated in gold. That is, until Nolan Bushnell left Atari to start up something new, and things started going a little wonky.

The company Nolan Bushnell left Atari to develop was called Pizza Time Theatre. The company was a cool idea, but it didn't become popular until he changed the name to Chuck E. Cheese. Say what you will about Nolan Bushnell, but the guy knows how to keep us entertained.

Some say it was because they grew too fast. Some say it was because of the hot tubs in the office. But most people blame it on a little alien with a big heart and a glowing finger.

E.T. THE EXTRA-TERRESTRIAL

1982

DON'T PHONE HOME

1

9

8

2



E.T. © Atari Interactive, Inc.

I'll bet you a warm handful of Reese's Pieces that you've heard Atari's E.T. game is the worst game in video game history. It's legendary, for all the wrong reasons.

But do you know how it happened? Or what actually makes the game so horrible that millions of copies were buried in a dump in New Mexico?

No? Well, you've come to the right place, 'cause I've got the scoop.

All right, let's get a few things out of the way first. Yes. It is true. E.T. the Extra-Terrestrial was a bad game. Maybe not the worst game ever made, but it was really bad. The game, if you didn't know, was based on the huge hit movie *E.T.*, directed by Steven Spielberg. It was a story about a kid who finds an alien, whom they name E.T., and the boy and his siblings have to find a way for E.T. to contact his family in outer space to get home before he grows too weak. It is an amazing story about being a hero and helping a friend. It's full of laughs and adventure. Oh, and Reese's Pieces.

The game was about . . . well, I'm not really sure, and neither was anyone else.

E.T., with his elevator neck and glowing finger, was in the game. The Reese's Pieces made it in there, too. But aside from that, the rest of the movie was missing. There were a bunch of pits that you would fall into that you couldn't climb out of. That was fun. And cops or FBI agents or something that would pop on-screen at random times and capture you and end your game. That was fun, too.

I'm lying. It wasn't fun.

The game was a mess. Nobody knew how to play it, and the only way to really win it was to try to fall into every pit and see if it magically sent you in the right direction. Over and over again until you found enough pieces to build a phone. No, not Reese's Pieces, broken chunks of an actual phone.

Even the Reese's Pieces were disappointing. They looked like stale muffins.

All in all, the game got its bad reputation the old-fashioned way. It earned it. But like all tragic stories, there is more here than meets the eye.

Allow me to set the dial on the time machine back a little to help you get a good picture of the mess that was E.T. the Extra-Terrestrial.

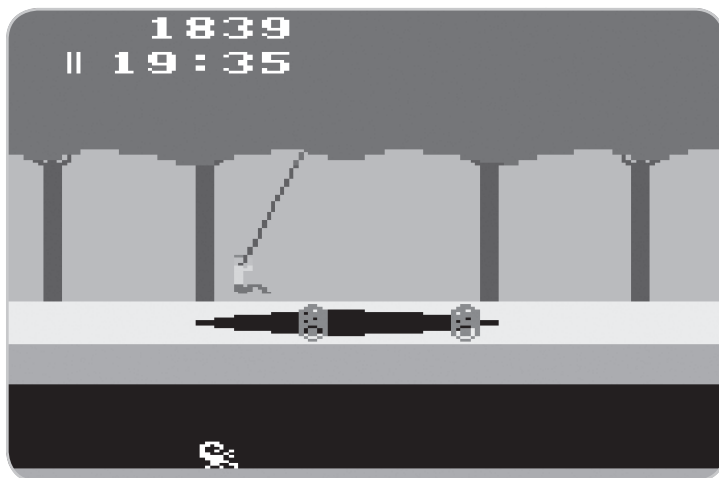
The year was 1980, and the Atari 2600 was selling so fast that Nolan Bushnell and company had a hard time keeping up with demand. They were making games as fast as they could for the 2600, and gamers were gobbling them all up. All of them! Then Atari made a big announcement that Space Invaders would be coming home on the Atari 2600 for the first time ever, and fans lined up. Atari doubled the number of consoles in the world, and it looked like there was no end in sight.

By this time, Bushnell had been running the company for nearly ten years, and he was ready to move on. He sold the company to Warner Bros., who had big dreams for Atari and lots of money to make them happen.

But soon after Bushnell left Atari, a few old-time designers split and started up another company you might have heard of, Activision. And Activision really opened

the floodgates, because not only did these guys know how to make games, they knew how to make games for the Atari 2600!

This might not sound that crazy to you nowadays, but back then it was HUGE news. Nobody saw it coming, especially not Atari. For the first time ever, a game developer was making a game for someone else's console. And Activision didn't just make good games, they made GREAT games, like River Raid, Kaboom!, and Pitfall!



Pitfall! © Activision

Things were good for Atari, but they were just as good for Activision.

Let me put it this way. In 1981 Atari became the fastest-growing company in the history of the United States. And the very next year, 1982, Activision replaced them by stealing the crown and becoming the fastest-growing company in the history of the United States.

Video game companies popped up overnight like a crop of zits on a teenager's forehead after an all-night pizza party. Problem was, most of these companies had no idea how to make good games. And by the end of 1982, not only did you find great games like Pole Position and David Crane's Pitfall!, you would also find total stinkers like I Want My Mommy, a Donkey Kong clone where you played as a teddy bear trying to avoid dream demons.



David Crane's Pitfall! (1982) went on to be the second-best-selling game on the Atari 2600 (after Pac-Man), with over four million copies sold.



After Warshaw pitched the concept to Spielberg, his first response was "Couldn't you do something more like Pac-Man?" Warshaw was shocked by this, but looking back, Spielberg might have been onto something.

The real problem here wasn't that there weren't any good games, it was that the good games were getting drowned out by the bad ones. Gamers started seeing the Atari 2600 as an expensive garbage delivery system. Atari had to fix this problem, and in typical Atari fashion, they wanted to fix it fast. So they decided they needed to make games that would rise above the clutter. Big, A-list games that players would recognize and flock toward.

They tried Pac-Man first (1982), and gamers were pumped! Unfortunately, Atari thought that just having the name Pac-Man was enough, and the product itself was not that great. The ghosts popped in and out in random places, the sound effects were bad, and the game didn't really look like Pac-Man. Pretty much every place they could have failed on the game, they did. In the end, Pac-Man ended up being the bestselling game in Atari 2600 history, selling seven million copies. But that left five million unsold cartridges sitting on shelves, gathering dust.

But Atari had a plan that they thought would make up for Pac-Man's failure. It was that lovable alien E.T., the extraterrestrial.

They decided to make the game in July of 1982, and they wanted the game in stores in time for the holiday buying rush. To make a quality game for the Atari 2600 back in the day, it would take around six months of serious pizza-slamming, sleeping on the couch, and overtime work.

Atari gave their team six WEEKS.

Well, actually it was more like five and a little change, and it wasn't a team, it was just one man. Howard Scott Warshaw.

And they picked the right guy. Warshaw was a monster engineer, and he'd already put out two great games for Atari, Yar's Revenge and the movie-inspired Raiders of the Lost Ark. He had wizard-level coding skills, he nearly built these games by himself, and he'd earned quite a reputation as a go-to guy at Atari.

And to make a bad situation worse, Warshaw had only two days to design the game before he was to fly to Los Angeles to meet with Steven Spielberg.

To make the best use of his time, he had Atari install a development workstation in his home. He didn't work twenty-four hours a day, but he has said that it was the most grueling five-week period of his life.

It's hard to blame Howard Warshaw for the poor quality of E.T. But in the end, gamers didn't really care. They thought the game was horrible, and they'd had enough from Atari.

In the end, over two million E.T. game cartridges were returned to retailers. Truckloads of cartridges made their way back to Atari, so they took out the trash. Literally. Atari paid to have the unopened E.T. the Extra-Terrestrial boxes delivered to a landfill in Alamogordo, New Mexico. They dug a big hole, filled it full of cartridges, then covered E.T. the Extra-Terrestrial with a massive slab of concrete and tried to forget that it ever happened.



Atari New Mexico Dig © taylorhatmaker

This was a huge blow to the hearts and minds of Atari players, and just like that, the golden age of Atari was over. By 1983, Atari had completely tanked, and in the end they had lost over 530 million dollars. Most of us freak out if we lose our lunch money, and in a single year Atari lost over half a BILLION bucks! That'll ruin your weekend, not to mention your company.



On April 26, 2014, remnants of E.T. and other Atari games were unearthed in the New Mexico landfill. This finding proved once and for all that the stories of burying copies of the epic fail were true. In December 2014, the Smithsonian Institute added an excavated E.T. cartridge to their collection.



E.T. © Atari Interactive, Inc.

So with that in mind, here are five mistakes that led to E.T. the Extra-Terrestrial being known as the worst game of all time.

1. IT'S ABOUT QUALITY, NOT QUANTITY.

There were so many games out there that it was impossible for gamers to tell the good from the bad.

2. GAME PLAY IS MORE IMPORTANT THAN STAR POWER.

I mean, having E.T. or Shaq or Michael Jackson on your video game cover might get some attention, but nothing beats a good game. NOTHING.

3. YOU CAN'T RUSH ART.

And video games ARE art. There's a big difference between a quick scribble on the back of a napkin and the *Mona Lisa*. Good things take time.



E.T. © Atari Interactive, Inc.

4. IT'S OKAY TO MAKE THE GAME HARD IF THE RULES ARE EASY. E.T. wasn't knocked because the game was hard; it was bad because nobody knew what to do. You can make a game so hard it makes a gamer cry, as long as you play by the rules.

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5. And most important . . . NEVER UNDERESTIMATE A GAMER! If your game stinks, gamers are going to let you know. Gamers are smart, passionate, and unforgiving. And smart. Did I mention gamers are SMART?!

Being by far the biggest player in the video game world at the time, this hit to Atari sent the entire industry on a downward spiral that nearly tanked video games forever.