

Computer Games, Then and Now

Be a Power Reader

The Author's Craft Before you begin, skim this article. Examine the two major headings. These headings tell you how this article is organized. The article covers two major topics: Game Platforms and Computer Game Categories. On a piece of paper, create a table for each of these topics. As you read, write down the major points covered under each topic. When you are done, spend a few minutes reviewing your table. This will help you remember the major points of the article.

Introduction

So, what's your favorite computer or video game? Is it one where you solve complex puzzles to go to a higher level? Or maybe it's an auto-racing game where you have to react quickly to hairpin turns and cars spinning out of control. It's fun to test your skills either against yourself or an opponent—or simply spend a study break playing Freecell.

This article explores how electronic games have changed over the past 50 years. We'll also look at the four major categories of computer games.

Game Platforms

Computer games differ from conventional games in many ways. Traditional games, such as board or card games, stand by themselves. In other words, to play Monopoly®, you need a Monopoly board, and to play chess you need a chess board. But with computer games, you need a **platform**: a device that runs the software to let you play the game.

The first computer game platform was the **mainframe** computer in the 1950s. These computers filled entire rooms in university computing centers. Two common games were tic-tac-toe and chess. Because these games required a mainframe, they were not available to the general public.



Early computer games, such as tic-tac-toe, were very simple.

In the 1970s, **video-arcade games** brought a new kind of excitement. Arcade games were stand-alone computer devices. Players used **joysticks**, buttons, or both to control the on-screen action. For twenty-five cents, players could pit their speed, skill, and timing against either a human opponent or the computer itself.

Today's arcade games are much more complex. They may have steering wheels for racing and mounted "guns" to point at the screen. Some even rock back and forth to make you feel as if you are moving.

In the mid-1970s, video games started coming into our living rooms. These devices were attached to ordinary television sets. The first TV attachments were simple boxes with joysticks and buttons mounted on top. In 1974, Atari released the 2600 model. It let the player insert cartridges, each one with a

different game. For the first time, a single device could be used to play many different games, including tennis, baseball, and hockey. Sales went through the roof. Between 1975 and 1976, some video game manufacturers had their sales jump by as much as 1,000 percent. Later generations of TV attachments included Nintendo, Xbox, and PlayStation products.

The next video game platform was unveiled in the 1980s: the **personal computer (PC)**. Programmers wrote games for the IBM PC and the Macintosh as soon as they were released. Soon practically everybody was playing games on computers.

The Internet opened up a whole new world: **online gaming**. Today, players around the world compete against each other using real-time games. You can play with someone in Tokyo before breakfast and another person in Amsterdam after lunch.

The Game Boy company came up with another platform with its handheld games. Players carry their Game Boys with them wherever they go. All kinds of accessories, including cases to hold the equipment, posters, and T-shirts are available. You can even get headphones so that the constant noise doesn't bother your parents on long car trips.



Golden Sun is an adventure game played on Game Boy Advance.

Now that we know about the different machines on which we can play computer games, let's explore some of the types of games we can play.

Computer Game Categories

Computer games can be divided into four categories: **action**, **adventure**, **simulation**, and **strategy**.

Action Games

When most people think of computer games, they think of action games. These games require fast reflexes and excellent hand-eye coordination. Because of this need for speed, some people call them "twitch" games. They were the first kind of games developed for video arcades in the early 1980s.

Space War, which was released in 1961, was the first real computer game. It ran on a mainframe computer. Then, in 1972, Nolan Bushnell released the first video game: *Pong*. The game pitted two players against each other in a ping-pong match. Each player used a paddle to try to hit a moving ball. The computer kept score.



Pong was the first video game.

Pong was a huge success. The game's rules were easy to figure out. The machines were everywhere. And the price of a game was only twenty-five cents.

In the twenty years following *Pong*, computer graphics dramatically improved. Action games such as *Doom*, *Quake II*, and *Max Payne* all had excellent graphics for their time.

Adventure Games

The next category of computer game to evolve was the adventure game. These games provide a "world" through which the players move. Players must solve puzzles in order to move on to the next step or level.

The first adventure game was called *Adventure*, written by a cave explorer and programmer named William Crowther in 1976. *Adventure* was an entirely text-based game. It had no graphics. The game provided text descriptions of a scene and the player used the keyboard to enter commands.

Computer graphics improved during the 1980s, making the games more exciting than ever. New “camera angles” provided players with different “points of view.” *Castle Wolfenstein* was the first game to provide players with a 3-D point-of-view. It displayed events as if they were really happening to the player.

Adventure games offer many chances to test your problem-solving skills. For example, you learn how to activate a number of power sources in *Myst III: Exile*. In *The Watchmaker*, your goal is to recover a lost machine in a 14th century Austrian castle. And the adventure game *Starship Titanic* light-heartedly presents its problems for you to solve.



Myst III: Exile

Simulation Games

The third computer game category is the simulation game. These games try to mimic reality. The events in the game are as “real” as possible. Simulation games let you pretend you are doing things that are too dangerous, too expensive, or too difficult to do in real life. The goal of these games is not to earn points or to figure out a puzzle, but to have the excitement of doing something you ordinarily would not be able to do. These games also can be used to learn a skill, such as flying a plane. Playing the game *is* the goal.

Some of the early action games such as *Space War* or *Asteroids* might be called early simulation games because the player could press buttons to fire missiles. However, the first real simulation game is considered to be *Lunar Lander*. The challenge was to safely land a lunar lander on the moon. The difficulty lay in conserving fuel and using the moon’s gravity to the player’s advantage.

Improved graphics in the 1980s led to increased realism simulation games. By the early 2000s, the topics of these games varied wildly. Some examples are:

- Community simulators. In the *SimCity* series, players must build, manage, and even defend their cities. The community can range from a city (*SimCity*), to an amusement park (*SimThemePark*, *Sim-Coaster*, *No Limits Roller Coaster Simulation*), to a zoo (*Zoo Tycoon*), to ancient Egyptian pyramids (*Cleopatra*).



SimCity 4 lets you plan and run a major city.

- Board and card game simulators. Sharpen your chess skills and play Hearts with your sister or someone four time zones away.
- Flight simulators. These have always been the most popular games in this group. This group offers you the chance to pilot both aircrafts and space ships, some of which don’t even exist yet. Aircraft simulators include Microsoft’s *Flight Simulator* series and add-ons for it like *Air Force One*; the *Red Baron* series; and *Plane Crazy*. The space simulator games include *Lander* and *Star Trek Bridge Commander*.

Strategy Games

The last category of computer games is the strategy game. The goal of strategy games is to learn to cope with limited resources in a constantly changing environment. For example, as a city's mayor, how would you cope with a drought or earthquake?

Strategy games can be divided into two subgroups. The first is the **turn-based strategy game**. Here players take turns the same way they do in a board or card game. Turn-based strategy games allow you to perform an action, and then let the computer or your opponent take a turn. In *Civilization 2*, for example, the "turns" mark the years as time passes. You discover new technologies, build cities, wage wars, and finally go to the stars.

The second subgroup is the **real-time strategy game**, where play is continuous.

Like all good games, real-time strategy games provide the player with lots of chances to learn new skills. *Emergency: Fighters for Life* is a good example. In this game, you are the coordinator of the emergency vehicles in a major city. Just like in real-life, you have a limited budget. Your job is to meet every catastrophe the city experiences without loss of lives. In addition, you must not exceed your budget.

Conclusion

People like excitement and competition. They like being able to do things they can't do in "real life." Today's technology lets you enter different worlds in ever-new and more amazing ways. Choose a game and travel to a different reality—the choice is up to you.



Review Questions

1. Name three computer game platforms.
2. True or false: Action games require you to quietly solve a complex puzzle. Explain your answer.
3. What is a TV attachment? Why have TV attachments been important in the history of computer games?
4. What are some common characteristics of popular computer games?



What Do You Think?

1. What computer games do you enjoy playing? What do you like about them?
2. Ask your parents (or other adults) if they remember the first video game they played. What was it? How was it different from today's games?
3. Use your imagination: What do you think will be the next "smash hit" gaming platform? What kind of environment will host computer games of the future?

Glossary

action game A game that focuses on speed and physical drama, and requires fast reflexes and good coordination.

adventure game A game that focuses on puzzle solving within a story setting. It typically demands careful, logical thinking.

arcade A public gaming facility offering computer games (arcade games).

joystick An input device that consists of a stick that pivots on a base and is used to control on-screen movement.

mainframe A large computer designed to be used by many people at the same time.

Mainframes are most commonly used by large businesses and universities.

online gaming Using the Internet, or other network, to play a computer game against others. Each player uses a separate computer.

personal computer (PC) A small computer designed to be used by a single person at a time.

platform A device that allows the user to run software such as computer games.

real-time strategy game A strategy game in which the action is played out continuously without breaks (as opposed to turn-based strategy games).

simulation game A game that attempts to imitate a real-world activity.

strategy game A game that focuses on the ability to make good decisions based on specific situations. Strategy games may be divided into real-time strategy games and turn-based strategy games.

turn-based strategy game A strategy game in which you take “turns,” as you would in a board game (as opposed to real-time strategy games).

video-arcade game A stand-alone computer device that is used to play a game. Joysticks, buttons, and so forth are used to control the on-screen action.