



DROIDS AND ROBOTS

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CHAPTER

1

Born in Fiction

A metal arm bends and twists. It welds a car door. A big cat races across a field. This is not like other cats, though. It is made of metal and wire. A woman greets people at a store. Her head is plastic.



These are all robots. Bots is another name. Bots are machines that do tasks on their own. They have been around for a long time. Today's robots are very high tech. Most are run by computers.

From the Minds of Writers

Androids are robots that have a human look. Droids is another name. These robots began in the minds of writers. Authors wrote about future worlds. The worlds were full of androids. They could think and feel. These droids acted like people. Most obeyed their owners. Others fought them. They rose up and fought back. Their goal was to take over.

Real robots are not like that. They don't look much like people. The world is full of them. Some build cars. Others help doctors. Troops use them in battle. Bots even do chores around the house. They can make life easier and safer.



FAST FACT: A play from the 1920s titled *R.U.R.* included machine beings. The writer called the beings *robota*. It was shortened to *robot*. That is where the word comes from.

Fans and Critics

It seems clear. Robots help us. They keep costs down. That means items are cheaper. This helps buyers. Even still, not everyone is a fan. Robots do jobs once held by people. Because of this, some people are out of work. These jobs may never come back. This is a big problem. There are no easy answers.

Tech keeps getting better. Robots get smarter. They can do more. This means other jobs will be lost. There is hope, though. The robot industry is big. It can create new jobs.



History

Robots may seem new, but they are not. **Automated** machines go back thousands of years. There was a Greek man. His name was Archytas. He made a bird out of wood. It flew on steam power. This was around 400 BC.

A clock is a kind of robot too. Springs and gears run on their own. They keep track of time. The first clocks were made in the 1300s.

It was the late 1700s. The **steam engine** came into use. Many tasks were automated after that. Machines wove cloth. Mills ground grain. These tools were helpful. Food and clothes could be made faster. This caused a big shift in jobs. Over time, more people worked in factories.



THE THREE ROBOT LAWS

Isaac Asimov was a writer. Many of his books had robots. His bots were as smart as people. He thought there should be rules for them. This was in 1942. People think his rules still make sense today.

1. A robot must never harm a person.
2. A robot must do all a person asks of it. (But this must not conflict with Law 1.)
3. A robot may protect itself. (But this must not conflict with Laws 1 or 2.)



The Modern Robot

Today's robots use computers. The first was invented in 1954. It was called Unimate. This bot had an arm connected to a steel drum. The arm weighed 4,000 pounds. Unimate lifted and moved objects. It welded metal parts. General Motors bought a few in 1962. Other car companies bought them too.

Over time, **computer chips** got smaller. They could do more. Robots were easier to control. **Sensors** let bots see and feel what they touched. **Complex** tasks could be done. Bots could put parts together. In 1969, robots helped people go to the moon. In the 1980s, robots even helped in surgery.

Robots were in many industries by the 1990s and 2000s. Today, they fly and drive. Some swim, jump, and run. Others play chess. They can even move bombs.

ROBOT FAIL

Car robots were a boon to business. They saved companies a lot of money. But people were not always sure how to run them. In 1988, someone at General Motors goofed big time. Robots at a car plant went wild. Some smashed car windows. They painted each other too.

DROIDS AND ROBOTS

Robots may seem new, but their roots trace back more than 2000 years. Today, we have more robots than ever before. They work in factories, cook our meals, and even perform surgery. As robots become more like humans, what new changes will they bring to our world?



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