

Book Review-1

Kuldeep S. K., Jagjit S. D., Anupam B., & Shalli R. (2023). *Cyborg: Human and Machine Communication Paradigm*. CRC Press, 332 pp., ₹10,094, ISBN-13:978-1032479675

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Imagine a world where humans and machines work together as one. The book *Cyborg: Human and Machine Communication Paradigm* helps us understand this new world straightforwardly. It explains how technology is becoming a part of our bodies and minds. The book has 12 easy-to-read chapters. These chapters discuss brilliant brains, body sensors, brain-computer interfaces, memory changes, robot thinking, and body changes. It also discusses problems related to law, rights, and ethics as machines and humans come closer. The book asks many important questions about the future. It helps students, teachers, and all readers learn how machines are not just tools- they are becoming like us. This book is helpful for anyone who wants to know how life is changing with technology. It offers clear ideas about how we may live with machines in the near future. A cyborg is a human whose body or mind is partly supported by machines. With technology, people can move body parts, hear better, or even stay alive using devices. Machines that help a person walk, see, or control pain are examples of this. The use of machines inside the human body is called cyberization. Over time, this idea has changed how we think, learn, and live. For example, a person with an artificial hand or a heart pacemaker shows how machines and humans work together. These changes also affect education and identity, where humans are no longer seen as entirely natural beings. Social questions, such as how race and power relate to machines, are also important. As the connection between humans and technology grows, people must learn new skills and understand their role in this world. With fantastic support from machines comes the need for care, responsibility, and ethical use.

Cyborg ontology is the understanding of how humans are changing because of machines. Today, we use technology not just for work, but it is also part of our body and mind. Mobile phones, smart watches, and virtual reality are not just tools- they change how we live and think. People now create their online selves, called avatars. For example, a girl from a small village who cannot travel much can use virtual reality to explore the world or attend classes online. This gives her hope and happiness. Cyborg ideas say that the digital world also shapes our thoughts, feelings, and dreams. What we see online affects what we think is real or beautiful. We now live in two worlds- real and virtual. Sometimes, we feel closer to our online life than to the real one. This mix of human and machine is what makes us a modern “cyborg.” Cyborg communication refers to how humans and machines share thoughts and signals. This includes brain-machine interaction, where a person can control a device just by thinking. For example, some people who cannot speak use machines that read eye movement or brainwaves to type words. Like a boy in Delhi who cannot speak but uses a screen to communicate via eye-tracking, this shows how mind and machine work together. This type of communication helps connect inner thoughts to the outside world and offers new hope for people with physical limits. Women today use machines and technology in many aspects of life. From health care to housework, machines help make things easier. For example, pregnancy can now be monitored using smart apps that guide and support women. Some machines help with cooking or cleaning at home. Technology is also used in beauty and fashion, often making women feel pressure to look perfect. But it also gives new freedom and control. Women are learning to work with machines more intelligently. A simple example is a woman in a village using a mobile app to check her baby's growth and health. This shows how women and machines now grow together.

In today's world, humans are slowly becoming more connected with machines. Tools such as smart glasses, artificial arms, and brain-computer interfaces are helping people live better lives. For example, a person who lost a hand can now use a robotic hand to eat or write. This shows how science and technology are changing our bodies and minds. Virtual reality is also growing, allowing people to feel as if they are in another world. Some people are excited, but others worry machines will control too much. Still, many believe this change brings new hope, health, and beauty.

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It is the beginning of a future where humans and machines live and grow together. Telepathy in cyborgs means sharing thoughts or feelings directly from one brain to another using machines. For example, a soldier could send a silent message to a teammate during a mission. This is done through brain-computer systems that read brain signals. It sounds magical, but it creates significant concerns. Who controls this? Can someone steal your thoughts? Can machines become more intelligent than humans? Supercomputers like Watson show this may happen. Also, our laws are not ready for such changes. We need strict rules to protect people's privacy and bodily rights. In short, while this technology is powerful, it must be used with care and wisdom.

Cyborg brains are like intelligent machines that can think and learn. They use artificial intelligence (AI) to work like a human brain. For example, a robot with a brilliant brain can drive a car, talk to people, or even make decisions in hospitals. These brains are built with special software and hardware. But there are concerns. Who will control these brilliant brains? Can they be used for bad things? Also, these machine brains might become more intelligent than human brains in the future. So, laws must be made to protect people. We also need to make sure machines don't replace humans in every job or decision. Neuroproteins are used to help the human brain or body. For example, a person who cannot hear can use a cochlear implant to hear again. In cyborgs, these tools go beyond healing- they can improve memory, thinking, or even connect minds. But this creates new problems. What if someone reads your mind without permission? Or does it put a virus in your brain through a chip? People are now talking about cognitive liberty, the right to control your own mind. We need strong laws to protect privacy, freedom of thought, and our brains from misuse.

In the future, people may use machines to replace or change their body parts. This is called becoming a *cyborg*. For example, someone who has lost a hand can get a robotic hand that works like a real one. Some people may even upload their minds into machines. But problems come, too, like how others react to these new bodies. If a robot looks too real, people may feel scared. This is called the "uncanny valley." Also, some robots may face unfair treatment based on their appearance, just like humans. So, we need fair rules for machine bodies and faces. Today, people can add machines to their bodies. This is called *body hacking*. For example, a person can put a chip in their hand to open doors. Some people use prosthetic arms or legs. But there are risks too. Hackers can attack these machines. They can even try to change someone's brain or memory. This is dangerous. Also, we need strong laws to protect our bodies and minds. If someone adds a device to their brain, it must be safe. In the future, machines and humans will work more closely together, so we must consider safety and rights. In the future, robots and intelligent machines (AI) will play a significant role in our lives. These machines will be able to think, learn, and do work like people. For example, they can help in homes, hospitals, offices, and even in wars. Some robots may look and act like humans. Some may even build other robots. But there are problems too. What if robots do something wrong? What if they take away people's jobs? Some robots may not understand human feelings. That can be dangerous. That is why people say robots need rules. We should teach them what is right and wrong. Companies and governments must be careful. We must use robots to help people, not hurt them. Stories, movies, and science also explore what robots might be able to do in the future. The future of robots can be promising, but we must think before we act.

This book offers a clear, practical look at how humans and machines are coming together in today's world. It explains complex topics like brain-machine interfaces, AI, sensors, and legal issues in simple terms. The book is suitable for students and new readers who want to understand cyborgs and modern technology. It brings together ideas from science, law, and communication. But in some places, the book feels too theoretical. It would be better if it had more real-life stories, examples, or simple case studies. Also, social issues such as gender, access to technology, and the rich-poor gap are not discussed in depth.