

World Revolution

A computer revolution is sweeping the world and changing the face of society. It's the world of tomorrow and it's happening today

The computer revolution coincided with the space race and the drive to get the first man on the moon. The billions of dollars pumped into this effort resulted in a concentration of the best scientific minds, and in breakthroughs in manufacturing techniques. The drive was to get a near-impossible job done. The spin-offs have ranged from new ceramic materials, plastics and adhesives, to the micro-miniaturisation of incredible computing power.

When 'computer' meant racks full of circuits, it also meant thousands of electronic components individually wired together. Manufacturing costs were enormous. Those same circuits can now be packed into silicon chips small enough to fit inside a case no bigger than a keyboard.

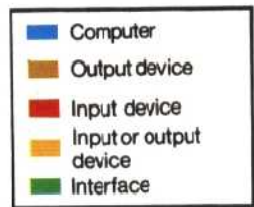
The computer chips inside a Dragon or Spectrum computer are not only small, they can be mass-produced at almost negligible cost. Silicon, the raw material from which the chips are made, is one of the world's commonest substances. Every grain of sand consists of almost nothing else.

Now that the computer has found a place in homes and offices throughout the developed world, we have the opportunity to witness first hand the start of the second industrial revolution. The original industrial revolution replaced laborious manual labour with powered machinery. The computer revolution will save skilled workers' time and replace factory workers with computer-controlled robots.

The long term impact of this revolution on our lives is far from clear. What is certain is that patterns of work and leisure will change, and fast. Robots, which are no more than mechanical extensions of computers, are replacing workers. These people are faced with the choice of learning new skills or being put out of work.

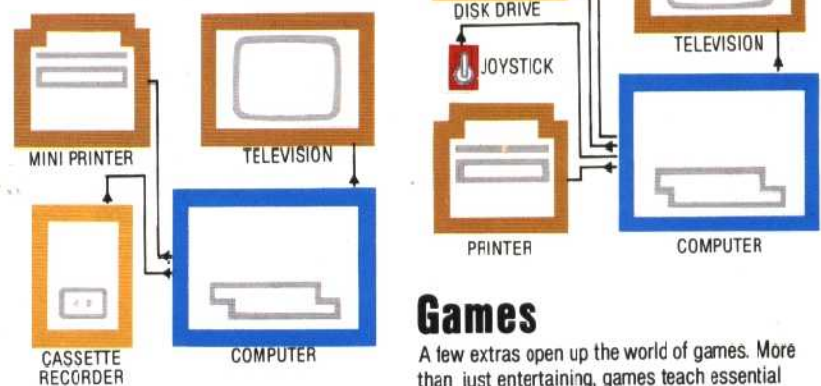
Traditional crafts such as printing and typesetting are just as vulnerable. Even teachers could be replaced using existing technology. And a visit to the family doctor could soon mean an interview with a computer terminal.

The social consequence of the first industrial revolution was to displace millions of people from the countryside and to create the industrial squalor — and material benefits — that characterise the western world. We are standing at the brink of a computer revolution just as dramatic. A revolution where the computer is the driving force of society. A revolution where understanding and using computers will be the key to survival.



Home

A low-cost home system can be put together for under £100. It's your passport to the future



Games

A few extras open up the world of games. More than just entertaining, games teach essential principles of computing

