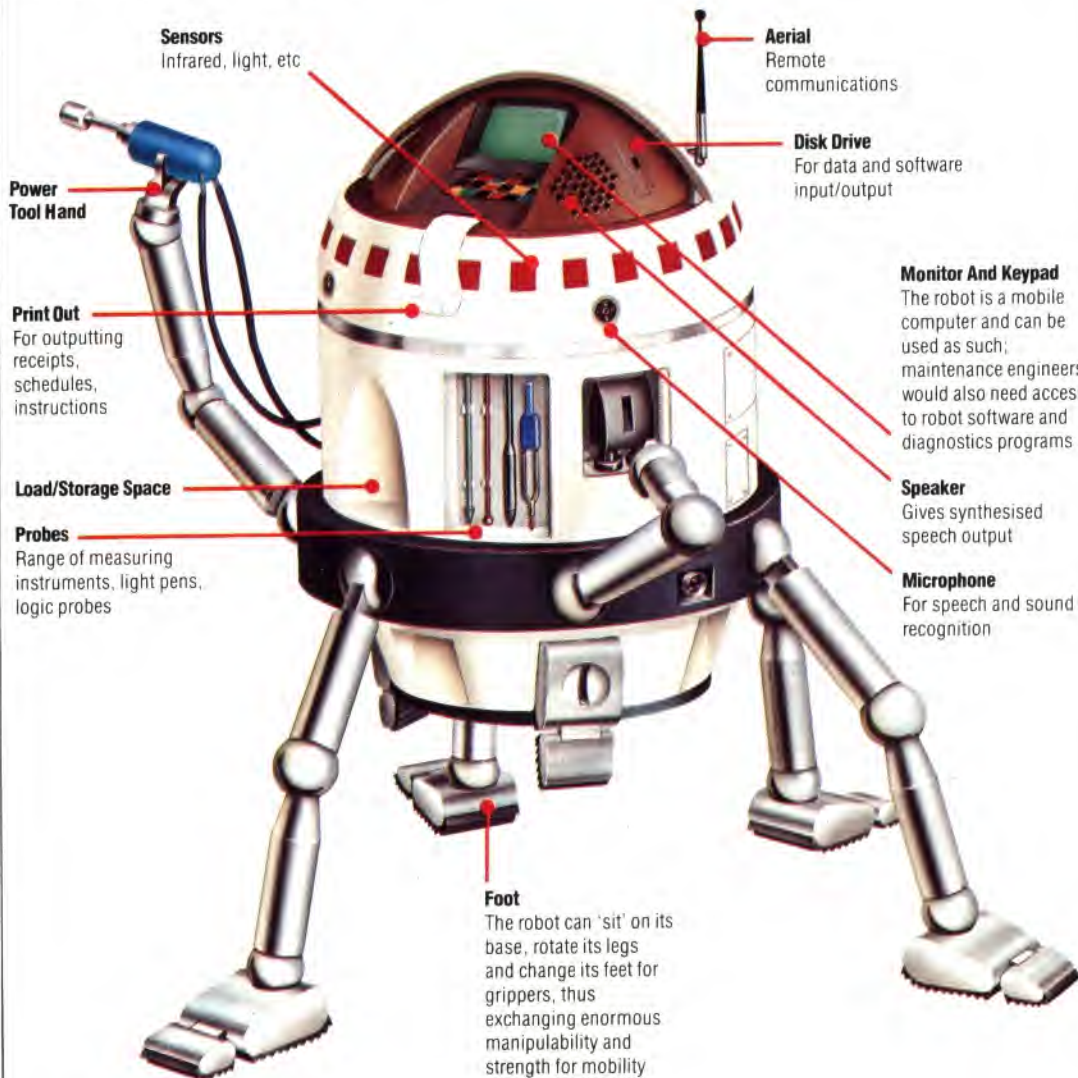




FUTURE PERFECT

Metal Collar Worker



STEVE CROSS

Future Tense

If the general-purpose human-like robot is ever developed at a cost that makes it a reasonable substitute for semi-skilled human labour, it would need a highly developed 'intelligence' comprising knowledge database, sensory integration, skills database and learning software. An intelligence like this could be packaged in a variety of bodies — we show one possible type that might function as a semi-skilled light or heavy industrial worker

Our robotic series has concentrated in some detail on all the various aspects of robot behaviour. In this concluding instalment we consider the practical limitations imposed on present-day robot design and discuss possible future developments in the field as a result of new technological advances.

Our robotics series has shown how the real world of robots remains far removed from the fictional concept of mechanical thinking beings. Our own imaginations have conditioned us to expect

certain things of robots. We expect them to be able to move around freely, under their own power; to see, hear, and feel the world around them; to converse with us on philosophy and science, or at least to communicate with us in an intelligent fashion; and to manipulate objects and ideas as we would do. We have, in other words, created robots in our own image. When we look critically at existing commercial, industrial, and hobbyist robots, we are often surprised at how well they can accomplish their specific tasks, while still feeling disappointed that they cannot do more.

Knowing what we do now about the nature of robot design and implementation, what can we