CHAPTER 7
POSSIBLE IMPROVEMENTS FOR ADVENTURES IN THE FUTURE

At present, a typical layout for an adventure is as follows: the room name is printed out at the top of the screen followed by the "Objects" and the "Inventory" below it. There is then the routine to input commands, and then the reply to each command entered is worked out and printed on the screen. The 16K BASIC Adventure is limited to about fifty rooms with at least one incident per room — a greater number of rooms can be included if the adventure is in machine code which is much more compact than BASIC, but it is harder to program in such a language, and it would require a great deal more time and effort.

The immediate difference in an adventure with an increase in the amount of memory available would be in the actual size, for by doubling your memory capacity from 16K to 32K, many more rooms can be added, and more routines can be allocated for each room. Now that a large number of the newer computers on the market have a potential for graphics, a greater memory capacity will allow limited graphics in adventures for these computers: this could be either as a bird's eye view of the room, or as a 3D representation. Obviously, with 32K of memory, the pictures on the screen cannot be too complicated, but when future computers come out with a standard memory capacity of 256K instead of 16K which it is now, some quite detailed pictures could be drawn on the screen, although it would be made more efficient if disk drives were connected. However, when such large amounts of memory are being moved around, it will not be feasible to use BASIC since it would be too slow; so therefore the only real solution to programming adventures like these will be to use machine code. This could mean that it would no longer become reasonable to write your own adventures, because such a large amount of work, in the drawings and everything else, would be required — the likes of the adventures in this book would therefore not be comparable with this. However, the redeeming factor will be that the new breed of adventures, which will arrive along with next generation's computers, will be more expensive to buy than the traditional adventures, since you will basically be paying for the amount of time spent on writing each adventure. I consequently foresee that the traditional adventures will still be around with the newer adventures on the market, simply because of the price difference.

Two other recent features on micros that can be incorporated into adventures are colour and sound. In the future the colour will be

incorporated into the 3D representations, as may be expected, and the sound will be used to reflect the surroundings — there are also possibilities for speech synthesis whereby you hear the results to your commands as well as seeing what happens on the screen. A typical format for one location could be as follows — the picture may be that of a gorge with a river flowing through it; the player would be able to see the movement of the river and also hear the sounds made by the river. Even further into the future, animated graphics may be used for continous movement, where the perspective changes smoothly as you move between locations. However, this would not only require a large amount of memory, but also a great increase in the speed at which pixels are moved around the screen.

Along with speech synthesis, the converse of this, namely speech recognition, may be brought into adventures. Instead of having to type in commands and objects, you would be able to say them, thus saving time in typing. In a graphics screen the objects would be seen, but an inventory may not be given, since an enquiry by speech to the computer would prompt the response of what is being carried at any one point in a game. On the other hand, the graphics may not take up all of the screen, and room may be left for such things as an inventory or results of commands.

As well as using speech for input and output, the actions required could be carried by using an advanced joystick: by pushing it forward, the intention would be for movement in that direction, and by pulling it back there would be the expected effect of movement backwards — movement of the joystick right or left would produce a rotation in the selected direction, and by pulling it up, or by pushing it down from its centre point, the player would be able to move up or down. 'GET'' and 'DROP'' could be implemented by grasping the joystick more tightly for one, and by pressing a release button for the other, along with a method in each for deciding which object is to be picked up or dropped. Attacking a creature could be made possible by grasping it tightly while pushing it forward, and likewise, retreating could be done by the same method, with the exception of moving it backwards. By twisting it one way, the player could 'TIE'' something, and by twisting it the other way, this object could be untied. There are various possibilities for joysticks being used in adventures, but Obviously they would require to be very tough for such vigorous movement.

Possibly the final step that I can foresee in adventures is linking up the same game to two or more computers and have several players battle it out against each other, each player seeing the game from their own viewpoint. They would be able to make treaties with each other or gang up against each other, while at the same time they would be trying to solve the problems which the computers may give. This has been done before on mainframe computers, but only in the traditional adventure format. The

advanced adventure will not have the time measured by the number of moves made, but instead it will be measured in seconds.

From this chapter you should see that there are great possibilities in the advancement of adventures, but at present, the main prevention of these advances is in the technology of the computers which are now available on the market.