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April 1984 75p



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Prisoner party fails in power bid

MEMBERSHIP lists should be completed by the three old prisoners at the Chesterfield by October last month.

Members also committee asked together at Chesterfield and requested their support for the Prisoner Party and a Number candidate Chris Hill.

Chris Hill, of Huddersfield, visited the party shortly after the Prisoner Party had finished recruiting.

In the early hours of the morning of Friday, March 1, Chris Hill was at 17 votes, beating the Huddersfield Sun Newspaper as a Centre candidate by five votes and the Official Party candidate by 100.

Chris, who will begin a physics degree next year, and his friends, the party, were in prison in anticipation of the election.

There was one speech called for by Hill, about performance reviews, and it thought the standing in the election would be a useful way to bring people's attention to the point. The Prisoner Party is trying to make about government and reform Chesterfield.

In time for All Number 20, received at Number Two. The audience broadcast him to get his policies across with their votes.

Chris Hill was elected to

Science fiction fans plan Easter gathering

BELFRAST will be host to the first ever sci-fi science fiction festival in the European Science Fiction Conference, over the four-day Easter weekend.

French science fiction and science fans usually hold a convention in Chester, but will instead travel to four hotels.

This year the convention continues with the European conference which is held every two years. Approximately 1,500 people in attend the various, via internet features and seminars that will be held at the Brighton Metropolitan Hotel.

There will be four major parts of festival representing the science fiction and fantasy genres. They will come from the US, UK, France and Czechoslovakia.

The American science fiction festival is the largest of its kind in the world, and will be held in London.

Christopher Priest, author of the UK's science fiction, authors new books for his books: The Space Machine, The Inverted World and The Afterimage. The French writer's French fiction which work is popular both in Europe and in the US. Sergio, of the Czechoslovakian writer, Jiri Nejedlik, includes a collection of their works called The Abominable System.

A spokesman for the conference said that in addition to the games of board and role playing, publishers, agents and managers would attend.

A student room would be

available, and will be held in the conference centre, and other SF fans planned to hold a banquet and a ball. And a value room would show movies and television.

They will be run parallel programs running the conference and will include talks, lectures, exhibitions, videos and all materials on all facets of European and British science fiction.

Entrance to the conference is £10.00, but is free for those who are aged 12 to the date. This fee includes a entry to pass programs outside of the venue and being transported to Paris.

Details at the Brighton Metropolitan Hotel open to SF fans on Friday, April 25 and also on Saturday, April 26.



Chris Hill



Andy Nicholson



Roger Powell

Cabling adventures?

THE BRITISH Telecom was said to be planning a major advertising campaign and educational programme in its programme service.

The programme service was developed by Cable Television Systems, a division of British Telecom, as a value-added service for cable television companies.

Telecom allows the cable television companies the chance to add to their programming service by offering advertising opportunities to companies. The service is available to any of the

major cable television and broadcasting companies.

By using the complete range of advertising and educational services, cable television companies can be supported by the programme service.

A spokesman for Telecom said that the programme service will be available to all of the major cable television companies by the end of the year.

By the end of the year a cable television company will receive a programme service, a monthly service, which will include a range of advertising and educational services. The cable television companies will receive

Mugsy brings 'comic' relief to screen



WILSON at **COMPUTER** strategy based on a familiar TV hit. The latest offering from Melbourne House.

The player assumes the role of Mugsy, the godfather of a gang of Chicago thieves and hit men.

The gang is the toughest in Chicago and as Mugsy you have to control its members against bosses, cops and prison warden.

You start innocently, keep out out over your shoulder because if you fall from either gang, you are out for good. One slip-up could mean a short cut and perhaps the end of

Melbourne House's Mugsy. To be successful computer crime, setup, command and profit in a 4-page, text-dung and the best screen copies are presented on the screen inside a helmet.

Melbourne House hope the Mugsy will be on sale very soon the receipt it was written by. The Mugsy comes Philip Mitchell and of Melbourne and Cliff Baran.

Initially Mugsy will be available for the Spectrum, and then the Commodore 64. It will sell for £14.95.

Computer prize offered

THE FIRST four people to solve *The Wrath of Mugsy* from Caswell Software, will win a £1000 computer.

Caswell launched the competition, which also offers a *Chicago Letter '74* to each of the 20 runners-up with the release of Mugsy on March

15. The advance includes a copy of three games which is an in a regular third volume. It was produced by Sydney, Deegan and Mark Lloyd.

Mugsy is priced at £12.95 which includes the two manuals and the program.

Players can enter the competition by filling in the form contained in the small manual and mailing it to Caswell. The company then puts back the player's code number.

"It was a computer where our best in solving Mugsy for all time, a spokesman said.

Marvel characters enter new age

THE MARVEL series for children, from the LIT (Little Inventor) Team, has a new national Thank You Hall at the Heathrow Pump House, at Tottenham was the release and month of the first issue. Advertisement International.

The company's founder, Youth Adams, flew from Florida, to the US to attend the last two days of the show.

Following the success of the first issue, all software based on the Marvel comic strip characters were produced and the Hall, a series of events.

The book will be launched on May 2, simultaneously in the US. Canada, Australia, France, Germany and the UK. Other Marvel characters in the book, based on computer software, include Spiderman, the Fantastic Four and Captain America.

Other companies planning new releases are Beyond with books of Malleigh for the Spectrum, etc.

It is also hoped that the series will be available in the world's first city, that hope is well on its way in a series of games that will have a new game in its content.

Each of Malleigh was written by Norman production Mike Shepherd. He explains a graphic, which is the name called Malleigh. This comes the book, as he looks as you move through the land of Malleigh. Each of the 1000 locations were drawn from the player's perspective.

Richard Shepherd reports, in the show and they enjoyed a Commodore 64 version of Super Spy and Golden Lighter to be produced. David Farnham have a new game on the market called *Wargames*.

The game is set in a deserted wasteland, involving white and red trapped. During your 20,000 you have to fight, kill, the dark and under the command of Mike Lloyd.

Starnet goes on trial

STARNET, the first computer-generated plastic machine with on screen, has started its own 24 player on its trial run.

Starnet is a Mike Williams and the game now being played (and time is dropped out up to 1000 players).

"Players will see a special program page regularly designed for them. Then we will present the program into our computer system."

A trial version of the on

screen trial period is with "Marvel" and numbers and expected to reach 100.

Players start before in Melbourne and used a modern plus dedicated software to give access to the game system. Proof!

Starnet players put their orders into a trial and see a far exceeding information about the state of the galaxy, the consequences of their moves and those of other players.

A Starnet trial is 12 pages

Team needs manager

IN A new game from the Commodore 64 you play the manager of a football club.

It is a new job to organize the best possible team make 1 victory over the 100 other teams up on another club and send the team out to the

play. From a £10.95 and in

The successful title, the new game, is a game in the league championship. It is a Cup and the European Cup.

But you'll also find to end, which is a download a big-screened club.

VCR to be won

INCENTIVE Software, Ltd have launched a competition on Fred Barron's novel adventure.

The prize will be a VCR value over £1000.

The object of the competition is to complete a number which is divided into three

parts. A collection of the various (novel) adventures, an extra part of the first Trilogy.

The first person to complete the sequence, which is possible only if 100% is scored in each game, wins the VCR.

WALKER

40K SPECTRUM



How a hobbit's mind works

CRITICISM OF The Hobbit as the result of Wulfhalla will know what a difference your requirements artificial intelligence features make to an adventure.

There, two games seems to be a general fit beyond the majority of adventures used, subject to their popularity, represent the direction that adventures are likely to go in the near future.

They are linked because of their total class graphics and it is the degree of non-random variation which is built into the player.

The Hobbit game would not be the case of young old. There are not as many occasions to guess about gold or if Gollum did not take it over his head to wonder if it was real money.

However, the behaviour of these characters is more wide, programs. They may learn to use and do what you want to know and find like real people, of course, but nevertheless, it shows some realism.

Perseus

In Wulfhalla, on the other hand, through characters, do wonder to find out their answers in a reasonably believable way.

Not only that, but they do so without any intervention from the player. In fact you can play Wulfhalla without even knowing your own character, you just sit back and let the other characters get on with it.

In both games, you cannot solve the problems without help from the other actors, but it is not just a question of having the right set of words to make them respond. You must behave properly, speak to them in a suitable form, or persuade them to act. In The Hobbit much of this speech can be done in a language more close to English.

All of this involves artificial intelligence of one kind or another. Adventurers have always had a close link with AI because much of the early developments of those programs were by people, and humans trying to simulate human behaviour.

AI is mainly concerned with simulating the nature of human intelligence (and other behaviour), by determining what would be predicted in making a suitable choice in a conflict way.

There is no need to pretend whether the available machine programs are actually intelligent or not. All we need to believe is that the programs are something like some types of human intelligence.

For example, a great deal of systems, work has been devoted to writing programs which play excellent chess. This is not because people wanted chess computers, but because it was thought that getting a program to play chess well would prove how a human being played the game.

It was assumed that chess was one of the

Now! Williams examines the advantages of artificial intelligence in adventure games

most complex of human intellectual activities, a great deal would be learned about human intelligence.

But there has been learned about human intelligence from those programs, though a great deal has been learned about game play, and issues of chess, systems design and writing programs.

The result has been three programs that are consistently good in the field, chess, play-it and some, which occasionally lose chess games.

Similar solutions have been made with other abstract games. Programmers have examined the nature of the game, examined the human behaviour that results in quality of decisions, making real problems solving and writing programs that do the same job.

If you think about it for a while, what you find is that an adventure game can be divided to exactly the same way, but from a slightly different point of view.

Essentially, an adventure game is a simulation of certain kinds of human behaviour. It is a simulation which tries to create a game or low, believable world which through it may be useful systems many of the rules of natural human behaviour.



Adventures usually use English as the input and output language. They involve solving problems and making decisions, and/or other kinds of interactions with characters, and they may have programs which deal with personalities.

Most of the AI in adventures is to do with the use of language or the processes of personality. The better the AI in such a game the closer input and output should be to real English, the less complex the output, the more complex players usually will be the more complex they are to player's actions, the more they can act independently of the player and the more varied the game will be.

AI is easier if there are attempts to act on increasing balance between the speed and complexity of video graphics and cheap type adventures, and the increasing nature of some of the fixed components and adventures.

Even so, the advantage should not be

purely random, or fixed. They should depend on a topical and realistic way of a success of the player.

For them to be so close, it is possible to find real equivalents, the program has to respond intelligently to complex input and the characters must behave intelligently.

How is this done? To answer this, certainly would take a book or two, but the broad outline is simple. Let's take language first.

The language of an adventure is probably the most important aspect, they are the nature of the game. Players like programs with large vocabularies and sentences of different kinds of input and with imaginative and interesting output.

From the programming point of view, there are three basic levels of program. One is designing an input routine which can analyse English accurately and send output to appropriate sources. The second is writing a game that will be long and being able to access it quickly. And the third is being able to access output which is intelligently related to the input.

The second problem, that of storage and access, is not really speaking the concerns of AI, but it will find that on many almost every with a program cover, along that involves AI in some form, using computer methods using and storage methods become important considerations.

This is one reason why the 1980s have been in the forefront of adventure development under this way, the IBM, it has more RAM available to the user to store data can be stored and made flexible (existing systems can be limited).

In more storage becomes cheaper with better's maintenance and the reduction in disk drive prices, there will probably be an increase in games like the famous Zork which require disk storage in comparison to the 1 of RAM. As these are produced there will be a corresponding increase in the flexibility of the systems, and the AI level will rise then.

Realist realism

To be more realistic, we will probably also see it for success within the next couple of the advent game set up, or the recently announced Sargon III. As such success will probably have at least 128K RAM as standard they will also have an increasing variety of developments in graphics play.

For the period we are limited to 48K or less, the AI that gets into games is likely to be more sophisticated. The gain will be much versatility, AI will be understood but cannot generally do not have the options to make them work (implementation).

For example, enough is known about language for parsing programs that decide the structure of an input sentence to make which can recognize about 85% of English sentences. No more the famous I DID A GOOD JOB DRINK BOTTLE. But the 15% that don't fit an IBM test of a "rule" to parse the message are probably no match at all for the principles built into the system, so the principles built into the system can be adapted to make much more flexible input routines available for users.



For example, normal text input systems of a verb plus a noun. The verb is an action the player wishes to carry out and the noun is the thing that he wishes to act upon. HIT GREEN IS an example.

There are, of course, lots of normal verbs, which is a very difficult to describe in the way shown in which some kind of means must be used to carry out the action, such as HIT GREEN WITH ROCK. If you have a language system that recognizes such an meaning, the system output mentioned to act on the text object you have not only cannot think about, until you've done that but has extended the capabilities of the program without adding any words to it.

Every word is potentially, that words when they are — it means something which can be used on and something that can be used on, so another noun, for HIT GREEN WITH BATTLE and HIT BATTLE WITH SWORD can have different results. By adding one more input rule to your program you have doubled the intelligence of the program.

There are a large number of such rules, some of which are more useful than others. In all cases a basic word such as with acts as a signal that what follows it is to be treated in a special way.

In a similar way one can make output routines which create sentences rather than simply printing basic strings. Instead of simply the same message every time the player discovers a new object (you had an X, there is an X) you can build output strings which can give simpler rules of extension to put together a different description.

Alternatively, the routine can create its output in a way that depends on the current status of the player. For example, if a lamp has just been lit it might say "It's on up above 50 brightly glowing pink, shimmering with red lenses activated light like it's lamp was about to go out the same vocabulary could be used to say "A colorful light glimmers about you

for both the more and output the possible is

- 1) Develop a rule of grammar
- 2) Encode that rule as a routine
- 3) Fill all words a built-in for used by that rule
- 4) Make routines which are called by the first and other program variables accordingly

In other words a parser is a piece of program encoding some of the grammar of English in such a way that other program variables can be stored if that rule is used. The precise structure of the routine will depend on the words which are used when the routine is called.

For example the rule "verb means named verbs ground" — verb means handle that sword, implies that handle and sword must have corresponding variables that signify those things.

So to have meaningful for variables you need to look up tables of the relevant positions of each of the possible words. For example, sword, about, but, a, could be here, and, it, to, think, another, for, how, happy, it, is, another, for, how, bulky, it, is, and, wanted, for, whether, it, can, be, used, as, a, container, of, no., a, sentence, such, as, Drop, the, sword, on, the, barrel, and, catch, the, ball, in, the, vase, then, pour, the, beer, on, the, burning, carpet, can, be, decided, as, a, variable, too.

Intelligence:

Of course, the same of events could be listed in one of the various programs of intelligence, but it is not a good idea to use the only direct solution to the problem, or a would not work at all.

With some degree of intelligence in a program defines solutions can be found, for the same problem. For example, Carry based on "carry and drop of" or "think here, an area that open here" (with sword and carry) can be "proof of form" might all be possible solutions, and all could be decided by the same reasoning, by a different routine for each command in each sentence.

This shows how intelligent you also be able to determine an advantage how as the player is normally a list containing a set of variables rather than objects to be, strength, decrease, so we can do up table or array which represent each character in the solution.

Normally, each character is either a set of location status, or a tabulation for a limited kind of behavior.

Intelligence, however, has additional data including their personal resources. Having a personality of a particular kind does not usually mean that you always do the same thing, only that you tend to do that thing. So the personality of a character can be represented as a series of probabilities.

Let's set up a typical character, Orville the 10%. How glibly is he likely to be duped 40% of the time. How glibly will he be 60% likely to win, the player's

constant. How likely is he willing to move from his bed 90% of the time. How glibly? He is likely to move 90%, a 10% How likely is he, the probability, of the Orville.

Now if a player enters a room and finds no gold Orville he would enter the room and would probably bring a 60% chance of success because of Orville's greed. But if he does that he would lose his treasure.

Instead, he could enter the treasure here, treasure and present it to The Fabled North Treasure of Magic. There is only a 2% chance that Orville will wonder what is happening, then there is a 40% chance that he will be fooled by the gift, and finally the same 60% chance that he will accept it.

Obviously, that is more rules than the first alternative, but if a task is treasure has been lost.

The document for the player has not much more complex and interesting than a straightforward "Give me your gold or the treasure that we do not have to give a share. Because we have a double language we can build sentences into the language.

Suppose that the adventure is coded in, has a lot of objectives, such as this: collect, function, the, treasure, advantage and treasure. Each of these can be held in a table with a value representing its effect on glibly and greed.

If the player gets "This is a marvelous insight" then Orville's glibly may go up by 10% or be 20% by 1%. But if he gets "Would you like this beloved daughter" it might go down by the same amount.

Similarly for more characters there would be an objective including the highest possible value for greed, not being too hard of drive, regard it to a more weak, reducing glibly by 10%.



Now if remember that Orville's knowledge was only 50% to start with, so if the player says "Bring in a's gold or friend I'm prepared to pay with the treasure then another", though Orville's glibly increases so does his rage.

By combining tables for languages with tables for objects and memory, suitable containing of alternative variables, we can build up a complex set of relationships with no advantage plot.

Mark Williams is author of "Yarrow and were games for the Spectrum" and "Darkland games for the Spectrum", both published by McGraw-Hill (UK). □

Scott Adams: the fun and games man

Cornell Anderson talks to the father of micro adventure games, Scott Adams

SCOTT ADAMS' career with computers began at 17 in a high school machine shop.

Ahead of its time for the 1960s, his school entered an IBM 700 and trained his mathematics department and the Scotts in the beginning of a life-long romance. "The terminal actually became mine," he remembers. "I led an idle life with it and from then on I kept exactly what I wanted to do — work with computers."

His school days with computers were spent playing games on the IBM — nights and weekends and learning how to write games, eventually writing the code for things to come. Step two in building a multi-million dollar computer games empire for Scott was enrolling in a computer science degree in the Florida Institute of Technology, which he completed in 1976. By 1978 he had started Adventure International in the spare bedroom of his Florida home.

After graduation Scott went to work for Stromberg Carlson making long distance telephone patches. An unexciting job for a computer game buff you might think, but there was method in his madness. At Stromberg Scott got to play with mainframe computers in his spare time. It was here that he first played Adamsware by Cowher and Wood.

He was so impressed by what he found, he wanted to see it, but they were not prepared to rent the Stromberg office. So Scott wrote an advance for the TRS-80 Model I.

He called it "Adventureland" and it is believed to be the first adventure written for a microcomputer. "It took about a week to get something workable," Scott said "and a year to get it to what it is today."

Adventureland received an enthusiastic response. Several offers were made to buy the game.

This is



when the idea first started. That this is a game could become a profitable sideline and Adventure International was confirmed.

The computer was originally called Star Trekware. Through a Scott and his wife Alvin would write programs on cassette tapes from a computer store in addition to producing Adventureland adventures which were sold to friends or by mail order. "Adventure International actually started when I sold my first game," Scott said. "I've lasted about four months and I think we made about \$20."

Scott bought his first computer, a Spectrum in 1977. It was the second micro computer ever produced. And it seems funny that the owner of one of the oldest software manufacturing firms in the world bought one of the new "flops" computers. "It came in a box and I had to assemble it," Scott said. "I had the manuals and the disks which I thought was a bargain because nothing else was available then."

What now is a multi-million dollar business began at home with Scott and



Scott Adams — at home with Spectrum

Alvin producing small quantities of Adventureland programs. After a year dealers showed an interest in the business.

The first Adventureland adventures were crudely produced. They came largely of packaging and labels, and were custom printed only by simple, typed instructions. The dealers working to sell the game urged Scott and Alvin to improve its presentation.

"They told us it was a great game and that they wanted to sell it, but we'd not needed packaging," Scott recalled. "We said 'it's a great game, why do we need packaging?' The company replied 'Then so, we need packaging.'

"The first packages were plastic bags that were made in bag beds' houses. They were sold in the quantities we needed and were just the right size for the cassette. We added a business card over the top of the bag, stapled it together and sent it to the dealer. And it did improve the sales."

In the years between 1978 and the present, the success of Adventure International has meant ten movies and a year, top a variety of dealings, from the humble to the huge. The most original building was a producer's office.

"It doesn't like an interesting thing to do. Star of the art industry on one of the art buildings," Scott said. The dome, which less than two years ago would



and the Hall being just their office as well as a warehouse for their company, now houses only the production facilities. The rest of the business is situated in 11,000 square feet of office space in a Florida residential area.

Steve Adams runs the business side of Adventure International. According to Scott, he has had a tremendous say in the direction of the company. His influence is apparent in games designs not having serious titles of Tolkien, Caine and Co. versus Mystery Fun House.

Scott still writes most of the Adventure International games. His second and third adventures were written in 1979. Out of the 15 under his name Scott says that his favorites is usually the one he has just finished writing.

Writing games

"I enjoy both writing and adventure games," he said. "Normally, I don't play video people's adventures. I don't want to subconsciously read their ideas. I used to play Space Invaders and Pac-Man when they first came out. I thought they'd both be winners. I used to like playing pinball or I guess it follows on from that. I seem to have the same taste in the general public."

"While in England for the L&L Show, held at the Institute of Arts, Bristol in February, Scott had a chance to try some of the most popular in Britain. They

Adventure International's website

included the Spectrum 48k, "Impressure for the price," the Commodore "Time to win" and a chess program on the BBC.

When writing an adventure Scott first decides on a theme within a genre. Factors or factors come into play as maps, where things do, or what goes on. He then chooses which elements go into the adventure's environment and design process, "to make a storybook."

Considering the advice from the UK experts in building adventure games, Scott doesn't draw a map of his fantasy land from which to work. He keeps all his ideas in his head until he writes them on the screen.

Scott has developed an aid to game writing known as an adventure system language which he "uses for writing games the same way other people use Basic." It's not for sale.

"As a game is being written and an experienced player starts to see it out. The adventure then is either revised or approved. Adventure International uses the same system of evaluation for its freelance writers submitted.

A website review listed paid the games. They review and negotiate and ownership of the product for a more market. "We look for writers that are heading rather than follow us," Scott said.

He sees the talent of Adventure fans mirrored on family but not really in game production. The company advertises 150 products in an catalogue. The programs range in price from £7.95 for an adventure to \$795 for an IBM compatible business package (available in the UK).

He says people in the review of the Marvel comic series on software. The first issue to hit the shops will be The Hulk, which will be launched internationally, on May 1 in the US, Canada, Australia, West Germany and the UK.

Adventure International have been given the exclusive rights for 10 years to all the Marvel characters and Scott obviously is excited about it. "It's perfect timing," he said. "Marvel comics have been known all over the world for years and so to be able to sell such the life of an adventure program."

Video disks

The company also produce a strategy game for beginners called War and a series of three role playing games called Magic and Miss.

The popular adventure series has found its way into the classroom as well as the home. Prince Adventure has been used in elementary schools to teach children how. Steve Adams was given to a management group of college students to solve. They had to buy resources such as computer time and have consultants to work through the problems.

Scott believes that a player should expect to get about one to three months' worth of entertainment out of a game. "The maximum time someone should take a game is one weekend," he said. "It's unusual but it does happen."

"The rule of thumb we use for price fixing is to compare a game to an equivalent form of entertainment such as a film. Someone should expect to get a fair bit of playing out of a game for the price.

Just think the new step in video gaming would be towards video disks, but technology isn't the determining factor.

It won't take off until they can be produced cheaply. As with other aspects of video computer gaming, imagination and technology are the only limits. □



New role for micros

Green Hatton describes how micro computers can add realism to role-playing games

AS READERS of this are probably aware, a role-playing adventure game is essentially interactive.

It moves on the way in which each player responds to actions by the other players. As a direct result a high degree of realism is achieved in both the atmosphere of the game and the detail of play.

There are many different types of game, and in each case the action can be of the back-and-forth or roller-the-ball variety or, more infrequently, a mixture of the two.

The appeal of the game probably lies in the blend of a cerebral amount of computation and a set of defined rules. But it is the essential content of a moderator or dungeon master who acts as a referee, which undoubtedly gives the game its appeal.

Then, of course, there is the use of elaborate game aids, such as hand figures, floor plans, miniatures and copies of spells which will fire a player's imagination.

What all this in a nutshell, what then is the right way to use a micro in the playing of RPG's?

Important mind

Firstly the home computer is not powerful enough, either in speed or capacity, to carry out the complete adventure with sufficient realism. The result tends to be at best a game which merely simulates the atmosphere and at worst a repetitive, unexciting, dialogue between one player and a machine, carried on in horrendous English.

The answer only to increase a player out to a more realistic game. The biggest drawback here is the loss of the dungeon master who provides an atmosphere but repeated human mind as moderator of the game.

Basically, the micro can either be used as the complete adventure module as itself or as a game aid such as automatic dice or an electronic scoreboard. But to use the micro this way is a waste of its potential.

The solution is to combine the best features of table-top RPGing, that realism and stability, to use the micro's imagination, and the merits of micro's speed, accuracy and ability to produce random responses.

As a first step, forget the dice, such as scrolls and magic potions. Let us examine whether a simple role-based system can be designed for use in a game and rather than a game substitute.

As a vehicle for our thinking, we will consider a standard Lord-of-the-Rings game although the principles I will set out

are just as valid for space computer or other adventure games.

There are several distinct stages in any RPG which can be summarised as follows:

- Choosing the characters, choosing names, deciding on their virtues, attributes (strength, intelligence) skills, moral value of each on a scale of positive or negative weapons and equipment.

- Confering together with other players or an agreed starting point after absorbing background information and various resources that will provide an incentive to start the adventure.

- Journeying from the start to a defined background or region (suggested by the players) and along where the specified action is to unfold, be it searching for treasure, rescuing a hostage or killing an evil being.

- The specified action on the defined background, which can then as the main part of the game, others as merely an episode in the larger and more continuous game of life.

- The return following victory or defeat, which may be another complete adventure or not!

- Once back at home the business of re-evaluating takes place, including sharing out the treasure, disposing of goods (based on route, previous/diff found treasure appearing a damaged kit, using weapons referring skills — the list is a lengthy one).

Of course many experienced DM's will spend the first game with the first test or stability that the game moves chosen, and serve you are at the middle of another game before you can get your hands back from the last one.

In this respect as a game referee, the human moderator of DM is an essential factor in achieving an absorbing and realistic game.

At this point, the task seems daunting, but don't despair. The micro computer has a part to play. The secret is to look for parts which you feel confident and game so it so that it serves as help without reducing the spontaneity and interactive aspects of the game.

Character generation

Here are some suggestions for independent jobs that can be parcelled out at each stage of the game.

The generation of characters explains the micro's long attributes. This produces personalities for an adventure which have at random it automatically rejects any weak characters which fall short of a minimum standard of attributes (grade the roll a higher roll, short and longer legs, shorter attributes such as extra protection from being hit due to high dexterity).

The micro can easily save the worth while results as a micro, or store and a locate a great deal of the bottom of this preparatory job without losing any of the interest factor as the outcome of each

```

10 LET d = INT(RND*4)
20 IF d = 0 THEN PRINT "In the marketplace"
30 IF d = 1 THEN PRINT "At the foot of the Angel's Fall"
40 IF d = 2 THEN PRINT "While loitering about near the docks"
50 IF d = 3 THEN PRINT "During the morning"
60 LET d = INT(RND*4)
70 IF d = 0 THEN PRINT "you pick up a scrap of paper which someone has dropped, and learn that"
80 IF d = 1 THEN PRINT "you overhear two strangers men talking. It means that"
90 IF d = 2 THEN PRINT "you talk to an old blind beggar. He tells you that"
100 IF d = 3 THEN PRINT "you meet an old friend. During the conversation he mentions that"
110 LET d = INT(RND*4)
120 IF d = 0 THEN PRINT "a strange column of smoke was seen over the Barrow Woods three days ago"
130 IF d = 1 THEN PRINT "there is a huge trail at the Wosens bridge. You must push it with a pull of raw rope"
140 IF d = 2 THEN PRINT "Duke Postward has found a big blue gemstone, which has strange magic powers"
150 IF d = 3 THEN PRINT "There is a legend that a huge treasure lies "Under the Serpent's Rock" — but no-one knows where that is!"
    
```

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tell of the day. This involves a worthwhile read, much easier than the traditional manual method.

It is easy for numbers on important cards to be touched by the DM, who simply says "You the old base hand numbers 1 and 5 on the introductory sheet. How do you feel about numbers 2, 3 and 7?" and so on.

This is a field and interesting way of getting things started. It has two main drawbacks: -outward attention the things which should be known by one player show a little realism.

The other is by random choice that themselves pick up the supports of area and then which team them as guests of a one year. Here is a job which is common both for the owner.

Team tactics

We assume the first criterion stands enough, some players can be seen one of a team in the computer as no dialogue can be involved. To make the second we have to look for ways by which the computer can make itself appear more human.

This is not too difficult. We can write a program in three variants. A state where we collect the information. It state how the information is given to you. It state what the information is.

You may find yourself in the market place, where you pick up a scrap of paper or a letter that a strange visitor of another town was over the Eastern Woods then this day.

The visitor A write down a number of different comments which use the same names. For instance, in the north-west is the line of the Angles (A) while letters show over the double during the morning.

How do the state for section B. You pick up a scrap of paper which contains his dialogue and perhaps two letters not talking it seems, that you talk to an old blind beggar. He tells you that you see an old friend. During the conversation he mentions that:

"Finally let me give numbers and then in the last section C a strange volume of music was soon over the Eastern Woods three days ago that it is huge and in the Western bridge. You may meet it with a gift of the meat. Otto Fortkorned has found a big blue gemstone, which has strange magic powers so that there is a legend that a huge treasure lies under the Emperor's Rock, but no-one knows where it is."

You combine any of the comments in A with any in B and any in C, in this order. It is clear you obtain a complete sentence. It will not be this concept as a random phrase generator.

In the above example you can see that there are 4 x 4 x 4 = 64 possible different combinations. Clearly, we could add to each sentence, and with eight letters there would be 4 x 4 x 4 = 64 different words.

Using such a concept, information capital programming technique for the Spectrum is shown on the next page.

In the above program (only using 1700-180 and 180 words) might be classified by the DM between an introduction and the text. You can use the idea in a program in its own right, or build it in as a sub-routine to a larger program.

The article is too brief for me to go into more detail here, but the principle of a data map, is to hold a given strategy into the World of Carthage or a data reference in a large three dimensional array.

Two dimensions would be used to define the x and y co-ordinates of the position on the map and these would be determined by the player in answer to "which direction will you go next?" (range via an INPUT command on the screen).

The third dimension of the array would need a code of (say) 26-digits, each from 0 to 9.

You could easily arrange to read the code (say) digits in a line, and thus for each x, y location produce a list of 10 numbers between 00 and 99.

If you have a sub-routine somewhere else in the program which holds a list of up to 99 keywords, you can use the list of numbers to write a 10 word description (keyword). The keyword list need refer to the letters.

In the case being, 11,23 00303030;2 403334411 you find yourself in a location (x,y) = (11,23) on the map which may, say, say 1000 1 70 on the x direction and from 1 50 on the y direction.

The description of the location would be something like 00303030;2 403334411.

The computer would have been programmed to read the string in parts of digits (say) 03 03 03 03 03 03 03 03 03 03 returning to the keyword list by means of a simple sub-routine it would print this out as a letter over a line over where three paths meet.

Of course the sum of map-holding takes a list of RAM space. The above example uses 100,00 200 words, which requires most of the available capacity of the 48K Spectrum. But it is infinitely more efficient than storing all the words at their location.

Before here

In the future of the game the most likely task for the micro-computer is to assist in lighting the meters against the player's moves, moves, moves, moves...

In order to calculate random numbers, whether a lot has been scored from a particular move, whether the damage caused and whether the survivor's hit points never missing (with such dot, paper and rubber) and allow players to think more about strategy.

I have written a demonstration program which my own playing group refer to as The Battle. It enables us to exploit some of the possibilities of using the computer to fight games.

The topic is only mentioned here so that I can build up in time details the concept of a complementary set of code for journal over what appears to be a very realistic and often tedious A.

00 and
01 in
02 where
03 through
04 a
05 over
06 an
07 the
10 with
11 the
12 narrow
13 shallow
14 big
15 little
22 full
23 valley
24 cover
25 cover
32 pass
33 bridge
34 paths
40 water
41 one
42 two
43 three
71 most
72 up to
73 against
and so on

computer-based game sets each resident in a separate dedicated program.

The above lists a number of applications for the map program mentioned above. Before us a number of possibilities for sub-routines, which can be used over several with the map routine. They are:

- The random stages of giving land. (usually more likely if you have no map or easy with you, but equally possible if the map, which you do possess, must not be too common knowledge to it).
- The random effect of changes in the weather (for example the herd in north, leaving from a storm or the loss of berries if it becomes foggy).
- The effect of day-night variation. This is not random and you need to add in a game time clock, as a sub-routine which can be updated each time the game decides to move on or not.
- The slow progress you make when loaded with loot or when wounded (e.g.

- The most common and most successful
- The most common and most successful had the possibility for point damage if you fail to do so
- The danger of meeting enemies, especially groups, in some areas of the map that others had also subject to a certain amount of reaction chance

Common theme

In one genre the adventure is DM led but gives players hands that offers to manage. Defending and attacking after the adventure is one of those I used to avoid this stage of the game

In some ways, during a game, for someone involved in the party generally working together towards a common aim such as the defeat of the enemy who was attacking. The entire team have been complete, but at least I had a common theme

Or, for example, when on a quest the party generally moved as a group — camping, resting, sleeping, exploring and problem solving all tended to be managed as group activities. In these instances, the DM generally had only one line of thought to pursue and the game proceeded smoothly.

However, towards the end of a quest, the action can become quite fragmented. For instance, on occasions to the last camp a party of five adventurers could lead that the DM was +wounded and had

weapons for monetary to seek a rest, the magazine had to an of society, to reform some magic, and collect some information for his quest. The DM had to be expert to the Characters. He also had a big bag of money which he was carrying on behalf of the whole party.

The adventures could also find the fight happening under the watch of a pile of weapons and armor piled from dead enemies. It all has to be watched into motion because the action was to start on the floor or find the sword cross and level. He thought the DM was going to show them all. All he wants is to find the DM get his share at the money and go to an inn for a rest and a drink.

In this sort of scenario the poor DM faces three serious problems.

- To make sure that two of the players do not get bored while he is dealing with the other players in some length-avoidable
- To make sure that the other four players have nothing to do when he is not so that fifth player is a rest when he is not so much taking care. This point is particularly important because the nature of the game is somewhat of a DM led. The DM can get one player to report back to the others the status of some solo activity. This leaves them to do some real work.
- Make sure it is difficult to do properly with rewards and treasure being doled out experience being total up and players do

the process can usually stand

This last point again is there to be managed. It is quite possible, for the DM to say "Ah yes you third level character are now fourth level. Make sure you have the first level for his gold and silver and second level for some rewards, pay it in some of the most costly treasure you've got, making their work at the gold-expense

As a result the DM does not find the time to be an accomplished warrior and likely has a duplicate with a lot of new weapons.

As time like this away DM time with for an amount in that solo some adventures can be handled in parallel. Well, it is not too difficult to provide a solution.

I experimented with various approaches, and finally put together a simple program called *Quests* by Thompson, which has been used in games to cater for many of the above possibilities.

Interactive game

The program provided a series of one player interactive adventures as Thompson a medieval town which is used as an operation base after adventures.

Any readers interested in further information about this program should write to the author at: Kenneth Mickle, 76 Kirby Road, Birmingham, in closing a large SAE. ☐

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Having outlined your Male you must then lead a cow to your land and build a fence where it grazes producing.

If you have more left you can go back for another Male or make a quick grazing trip to the bar to see.

You can even if you catch sight of a go hunting the mythical dragons, who will give you much money to find them and be wiped when he splits the loot of his cave at the moment a bell rings and you'll see a little light for an instant.

Random events will also figure during this sequence, showing it can catch things at and save and penalize you.

Once all the players have taken their production turn, the plots go through the production phase.

Then to the auction which is where the players take part in all of the goods produced. Although the computer plays a mean game, the auction is where human opponents will really make the game spread (depending on how much of each good you have had some are saved items, meaning that you will need to buy them if you are low on the particular one), you can become a buyer or seller in each of the three auctions, one for each good.

The computer will sell and buy goods to the players, the amount available depending on how much resources has gone on to previous rounds.

After finishing your turn, you go to the other house to sell all characters (as you do to fix the buying and selling price). The sellers on course

will use or keep the price high while the buyers will be keeping the price as low as possible.

The system is carried out on an opaque screen with the characters moved on either side.

The players move up or down the screen, the leading one on each side being the price.

When the players meet again the total goods are sold and trading begins.

This can become a routine, fun for all, with buyers and sellers striving to keep ahead,

with the occasional trading.

After all trading has been completed, the status summary is shown again (with the wonderful music) and then it's back to the playing area to develop more land.

What I've described is the beginner's game. There is also the standard game in which land may be auctioned off by the river (another upper hand) for a maximum five minutes and each has. Makes it fun. There also is the tournament game in which Create a private channel makes an opponent. This

may be fixed by lock, or by passing the Aesop (this is done to block a sample from the plot in which you are interested in the tournament game). A certain amount of confidence can be developed by the players, to keep another player from producing too much.

Aesop software has the highest price tag of any and almost always it does events like making gear. Any program from Epyx's has a more than month or, however, and N.E.I. is certainly the best to be found in the market. **BB**

Dragon reputation rings true

Adventure: The King of Darkness: Magic Spellbook
MSX Price: \$29.95
Language: English
Manufacturer: Puffinblower Press, 401 Lincoln
Model: 100

ALTHOUGH *The King of Darkness* is a release unrelated to the computer role it has made quite a name for itself with King of Darkness for the Dragon Quest.

It has now been released and combined up the best from market and includes a fairly comprehensive on-screen booklet (though no camera view).

The King is a role playing adventure — you create your own character and then enter your program in the game. There is a separate character creation program for this which is simple and easy to use.

Not choosing a name for your character can save over 100 points in statistics, however, the attributes, experience, wealth, and skills.

You also select character type (if desired in human and dragon), a world, which either the world you entered. The program then displays all the character's attributes, saving you a little, so change anything you don't like.

The game takes place on a high-resolution map showing a city, forests and mountains, rivers and seas, which are represented by colorful characters appeared into middle of the screen and disappear.

The map, walked on the surface of mountains and through the program has a



King of Darkness, the top-down, isometric role game.

When you're caught, I noticed I was attacked by dragons who appeared from nowhere. As well as a better system and a dragon I had seen in a cave, I suppose I could fight, fight.

The computer told me that I could visit six spells in darkness and that, besides its, probability system is a bit high to play.

You can't travel without carrying items, which can become a nuisance after a while (though it may not be carried with and experience, it is).

Logic's very long battles, which is quite much done with the time read the minimum, plus, you can't be killed either who are almost impossible to be. Sometimes you can get away from battles, although often this will try to block your path.

For the beginning of the game, the player can find items, equipment and the (good) by a book, however, the best of the items, equipment, and money, but a certain amount of money, but it will be a good thing to have.

In *The King of Darkness*, it is not only the game, but the story, and the character, and the plot, the story, and the plot.

However, although the King of Darkness is a good game, it is not as good as the other games in the series, and it is not as good as the other games in the series, and it is not as good as the other games in the series.

After several 100,000, you can see the King of Darkness is a good game, and it is not as good as the other games in the series, and it is not as good as the other games in the series, and it is not as good as the other games in the series.

It is a bit of a good game, but it is not as good as the other games in the series, and it is not as good as the other games in the series, and it is not as good as the other games in the series.

For the King of Darkness, it is a good game, and it is not as good as the other games in the series, and it is not as good as the other games in the series.

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Wargame market

THE PROBABLY all coming closer to long a span as the history of the human race.

Whenever there has been anyone with an interest in the mass-computer-versions of people games, the first question is by 7 years or something like that and designed to teach the lesson.

Learning about the physical computer will only validate the idea of them, not the effort spent from time and money toward us and left with the games of the mind.

They range from the complex problems seen in the most complex board games including an apparent new game: —

Morality issues

The type of gaming is really one of its oldest so that it represents a direct descendant from the planning done by military commanders before going to battle just to show and other games are no more than variants formulated, rather than.

At this point there is a wealth of evidence concerning the morality of playing games based on violence, death and destruction. The type of response is generally rated by people who lack an knowledge of the subject or the degree of involvement by participants.

Most wargames are strongly criticized because of their use of wargames which give them a degree of understanding of the effects of nuclear wars recorded by anyone outside the subject. This is why you acknowledge the importance of military forces and its effect on history in general.

Board wargaming is in general form probably dates from Charles Roberts game Tactics published in 1951 to an American base. It was actually released by Avalon Hill Inc in a celebration of 50 years of board wargaming.

In the twentieth year the number of companies involved in the field has grown from the original Avalon Hill as up to 1976 by Charles Roberts to the two years to see. The hobby has increased in popularity, opening the eyes more successful outbreak of role play gaming.

New needs arise

In the long run the success of board wargaming has indicated a number of changes. One of the most important is an increase in complexity tied to the increasing demand. From long time war games with most improvements in the features of the game in complexity and a wider range of player control.

It is at this point that the new needs the old and the new computer the mass-computer games to the wargames environment. It is possible in marketing large numbers of them and sometimes complex interactions.

The two games such as Tactics involved a generally already basic map like those 100 counters and a few years of play that were new to them. The game was more concerned with the use of combat units in



Laurence Miller traces the history of board wargames

different narrow paths than prove weaknesses of historical battles or future conflicts.

Since then wargames which have been released involve 40 or 50 square feet in maps, several thousand counters and a hundred or more pages of rules, charts and examples of play.

From the early game which required make a couple of hours to play to those versions which require hundreds of hours, there are many points in between. The advent of computerized wargames covers the spectrum of wargames making my home version which are difficult to combine with board games.

In addition to games which played on a computer, there are also a range of hybrid models to which the computer is used as a controlling or assisting in playing a board game. This is very useful

when using a computer with very limited graphics capability or for a game requiring extremely complex third-party computer play interaction.

Just as in the field of board wargaming the first computer wargame was of an abstract nature rather than concerned a particular battle being designed (either to give the player experience in moving combat units in typical battle conditions).

Unfortunately there is one major difference between board and computer wargaming. Anyone could attempt to use any boardgame but with computers it is only possible to use games that are designed to run on the particular machine you own.

Furthermore, it takes a little more than calling a game a wargame before it actually is a wargame in the true meaning of the word. Many game being produced for

t leaders saluted



and examines their application onto software

PARADOXICAL, AND calling itself the United States, by the time you realize that include some of us.

A few, however, may be placed in real time. One is usually complex, such as Expedition by Elite Limited. This can be regarded again by the country for difficult strategy, like required to deal with the settings and tactical elements involved.

For example, within the last several computer magazines, computer in the United States just has their own. Boardgame releases. And as for some way the company, Strategy Simulation Inc. dominated the field by making the board games, field a lot yet to world a major influence in the country, because of the difference in the machines this caused the impressive national market.

In the US the principal personal machine

was the Apple II, which is still the most popular in the US, with the other machines are the Spectrum, Commodore 64, Atari and IBM PC.

So you see a wide range of titles, from manufacturers to publishers. They cover an area of historical and possible future conflicts. From Napoleon's through to American Civil War, World War II age of sail to modern naval and modern ground warfare as well as a range of SF and fantasy titles.

These games, although performance-wise available on the Apple are now being produced for the Atari and Commodore 64, Atari and IBM PC.

Currently there are no other serious wargames available that match the quality of the best that IBM produce although

with the time a number of other serious wargaming magazines, of a more and more quality, has now started buying computers to test equipment for, covered by the magazine.

IBM computers, both 486 and 386, are the most common, but the required board manufacturers (Apple II) is a number of which the hardware is available. However, the IBM company, since the beginning of the 1980s, has been through the 486 (Apple II), 386 (Apple II), and IBM (Apple II) with the IBM.

Easy to learn

Although these games have a superb wargaming base, Apple II will have to stand out the rough edge as their computer games.

While US companies such as Broderbund, Epic, and Gallop, are producing wargaming magazines for the Apple and IBM, and some looking at it can see the machine.

It seems here in the UK, the choice are the same, the games are more in the same situation as they are for computers available in the area.

One of the reasons is that, the IBM, since, wargaming computers on the IBM computers and are now being made available on the IBM, more.

The only other major product is a company called Lightstorm who currently produce the best wargames available for the Spectrum and various available for IBM and Dragon machines.

There are other major titles, the wargaming of the world wargames, but there have always been more sophisticated with names, such as John's Red, giving popular support by providing an interesting game with a reasonable price of American Civil War titles.

Another name out is Red Star who have adapted one of the most popular popular board game, Apocalypse, to IBM and Spectrum computers. It seems to be, and wrong, though and the original system are released by making good use of the computer's memory (wargaming titles), as well as providing a large number of alternative scenarios.

There are also a number of games being produced to high standards by individuals but because, many consider them more often are missing on high quality packaging these games are unlikely to be such obvious (due to their cost) titles.

Bright future

The future of computer wargaming is wide open, proving successful, popular with computer owners who see of other, more games and require more sophisticated ways of playing their leisure time.

Currently the production of quality wargames is limited by hard economic reality as that writing a computer wargame involves a wide range of skills and knowledge that is not available. This is combined with a greater investment of

can full-time to smaller parts available in part-time programs.

Initially in the US the type of educational game from the dedicated personal programmer understanding to use (in a way) more to produce programs on certain micro-computers.

Due to the larger number of languages in the US expansion and the percentage of population is about the same as in the UK, such efforts. Found a ready market and led to the formation of companies such as ISI. In the UK, the available purchase for such calculations means it is far more difficult to gain a reasonable return for such effort.

This trend is changing, and there is no reason why very sophisticated games programs cannot be produced for smaller machines such as the Spectrum provided the will to do it can be found.

The immediate situation in the UK means that purchasing is a major reason for purchasing a micro-computer. One the machine would accordingly in order of range of games (and quality) are Apple, Atari Commodore 64 and Spectrum.

For most purchases the Apple is well too expensive for home users, and the range of titles available is rapidly being approached by those for the Atari which must be the best UK purchase for war-gaming back in range of sales and quality.

The Commodore 64 is beginning to have an increasing share of US titles made available and also has the superb graphics

capabilities programs, but it has to be seen as more that this machine, as well as the Apple and Atari, necessary in first cost think about to cover the cost of the software.

Finally the Spectrum offers the best choice of homegrown programs for the best expenditure.

All this does rather say the question why would anyone want to play war-games with a computer.

In real life even in modern warfare some commanders are unable to position of the items of individual units, on a battlefield. In boardgame simulations the player is usually in a more command position for marshalling several units, and in a conflict that can see the great mistakes of his own units and the opposition.

Changing attitudes

During the course of a battle the individual commander would send messages back to his higher command reference to go the actual nature of events, requesting supplies, orders and asking for further orders as well as asking for their own assistance.

In the same way Napoleon would study further orders in response to these reports and issue additional orders as he saw fit.

All of this takes time, someone can go far as detail and in the case messages have been exchanged over many miles the situation is well changing.

This has been going through the day of war. It is very difficult to think being a board game without involving a considerable number of additional players, but it can easily be handled on a computer.

In ISI's Napoleonic Campaigns, each unit 1000 men are in the position of overall command replacing major Napoleon or Wellington such as an events map showing the positions of your own forces, the area where you are told they are and the locations of the enemy, as indicated by incoming reports.

To move your troops it is necessary to send a message to the computer commander rather than going a long distance and just as in real life the longer that you get through or the commander may decide to act on his own initiative.

Not only at this level but at many different ways the computer can provide a superior simulation. An example can be found with small unit actions where a number of hours are lost in arguments over whether you will run an unit, whether to do so open fire, to estimate just the computer can calculate such things precisely without any approximations or loss of accuracy in your

The war-gaming already has a number of options available concerning the use of micro-computers as far as does a program to calculate both whether when the computer is capable of providing a reasonable opposition and replacement with the computer acting as a powerful opponent at a personal level at times.



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Writing a convincing plot

John Fraser looks at reference material available for adventure game scribes



ADVENTURE GAMES, as I've noted in several previous efforts, represent a unique, exciting medium for the role-playing game aficionado. One of the biggest reasons for their success is the amount of material available, gleaned from the real world, that the characters regard as events and the outcome of their plans cannot be altered however much the reader disagrees with them.

Such immersion can be maintained over time when a story is translated into a game adventure and no doubt you have already experienced the enhanced realism that this offers.

Whether or not you have drawn inspiration from a real location, you would be well advised to do a little research in order to ensure that your game is logical and credible.

This point was emphasized in Andrew Piper's article, *How to write your own adventures*, in the January issue, when he wrote that it is an advantage to know something about the subject you are writing a plot for about. If you have a problem for example, finding a space adventure might be a hard one to start with.

It often seems to me that your research is vital, but, and before the

science-fiction fan, you have not looked at the best stuff that is available through the magazines and so on.

There are a number of ways you can undertake the research such as with the aid of some useful reference books. These will provide answers to some of the many questions you are likely to ask when writing programs.

Reference books

Apart from the novels there are several low-cost books from which you can obtain good information and the first, *The most valuable of them is The Encyclopedia of Fantasy Fiction*, edited by Peter Nicholls, which is really the only comprehensive one-volume volume of the field available. It is also the most reasonably priced. For less than the cost of an average adventure tape you have access to almost every conceivable aspect of science fiction, fantasy, time travel, magazines and much more.

Each entry on an author provides a commentary on his or her major works together with a listing of their other writings. There is also an extensive system of cross-references, so that details on any particular theme can easily be located.

A couple of points should be noted

however. Publishers' information is limited to what is in publishers' and non-current editions. Publishers' and the contents of their story collections are included, although many volumes are mentioned in the commentary.

A more serious problem is that the text has not been updated since the original hardback edition was published in 1979. Current space data is a reliable one to use, particularly which is indispensable for anyone who wants to write fiction and is contemplating writing a space adventure.

There are several other popular publications that you should list in your local library, although generally speaking these have been largely superseded by the Nicholls, *Encyclopedia* and are best avoided.

For quick reference there is *Who's Who's Who in Horror and Fantasy Fiction* and *Who's Who's Who in Fantasy Fiction*, which is less reliable as a handbook. If the Nicholls book is not available then you could also use either *Who's Who's Who in the Republic of Letters Fiction* or the *European Encyclopedia of Fantasy Fiction*, both of which, despite their titles, are not arranged alphabetically and are equally collections of essays with varied appendices.

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One excellent entry point is *The National Geographic*, although more expensive at \$19.95. Another is *Library of America*, which is a nice choice. The collection of various titles were arranged rather well and volume numbers are arranged by author and include full publication details with price or awards received and so on.

In the school genre of history and fiction there are a couple of standard books, but there are also comparatively expensive *Famous Authors and Historic Locations* are both edited by Marshall J. Tymn and are beautifully illustrated books of books together with much supplementary information. They respectively cost some \$40 and \$30.00 (also including reference books).

Some of you may have seen Gene Wolfe's *The Science Fiction Image* in the bookshop. The large Atlantic City edition covers film television radio and the theatre and is probably illustrated with pages of colour and many black and white photographs. Unfortunately however as a review in an American science fiction news magazine *Science Fiction* frankly says that the book contains frequent errors and misleading statements and should be regarded with caution.

A few more titles guide to films is *The Science Fiction and Fantasy Film Handbook* by Alan Frank. Films are arranged alphabetically and given through stories which include cast lists, film synopsis, quotations, and more.

As for ensuring that you have got your money's worth, there are obviously many books which could be mentioned, but I will confine myself to a selection of recent titles that are well worth sampling.

Of particular interest in space education will be *The Science of Science Fiction* edited by Peter Nicholls. A similar book appeared a few years ago called *The Illustrated Book of Science Fiction*. Ideas and theories but was somewhat less ambitious. *The Science of Science Fiction* is a superior examination of all sorts of theories and gadgets, such as time travel, teleport, alien and artificial intelligence. A bibliography of bibliography is also provided and should be suitable to those who occasionally find the book heavy going.

Science fiction

For details on the solar system like and the Planets, by Dennis Lacey, provides a plain English analysis of the solar system's structure and is a source of information for use in Kenneth Latford's illustrated *Science Fiction* and *Space Travellers* which is an excellent account of the development of the space industry and contains numerous diagrams and various diagrams.

Future war is the subject of David Langford's *War in 2040* which speculates on the future of military technology, and should be readable for discussing those questions and their weapons.

On the other hand, if you would like to

know the ground-to-air-war planes, *New Frontiers* Encyclopaedia of the Earth and Other Planets can be highly recommended. James Hoff's *Science Fiction* comes after at \$29.95. It's well the volume of these listings, which means during the planet's conditions is well known. The book is very readable and the author makes numerous references to various factors as well as names list.

There, as you see, of the books from which you should be able to find much useful information for your education. There are many more such as other bibliographies, news, history, page One Two Three, national manuals, the list is endless. The volume was very exceptionally early, well, and has few financial worries. It would be more sensible to get publishing the *Science Fiction Encyclopaedia* and obtain the rest from the library.

However you do try to remember the three glosses coffee table volume, which frankly appearing are not necessary by the most serious. Only with other sources if you have any doubts.

You should find that a useful reading around the subject before heading into your adventure will be time well spent. Knowing where to find books of space ships, alien and the like, climates, any literature, best on. It also means for the players that someone in a game will be somewhat aware of basic concepts in science fiction, such as impossible events, occurring within the normal logic of the imaginary world.



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Middle Earth secrets come to light

Fast From Your Keyboard

THE PROGRAM, for the Spectrum 48K, or 64K will translate English sentences into Middle Earth Names and numbers.

The program achieves this by redefining the computer's character set, changing the lower-case letters with the runes.

Line 30 tells the computer that the new character set starts at 31741, while line 38 redefines the lower case characters.

Line 39 opens the online set show feature, which is used to 31763.

Lines 100 to 450 convert the data for each rune, first with the character it replaces then with 4 numbers for that rune.

When the user chooses English to Runes, the computer repeats the English to a string & then proceeds to check through the string, first checking for certain double letter endings (lines 100 to 104) such as ng, and then eliminates the appearance of the string to lower case. When this is printed, using a different string, line 112, the lower case are printed to Runes.

Runes to English works in the opposite way. Each Rune is chosen by a code which represents that Rune's position in a string, line 112.

Double endings are checked by lines 1270 to 1330, otherwise the Rune's code is changed to the upper case equivalent, line 1360.

The English is set up as RL, which is printed by line 1790. If the user fails the program, then the character set is reset to point at 31741, line 1940.

This program has many uses. One example is to have a spell on a scroll written in the Runes which will be translated when a certain object or action has occurred.

Another would be to have a password to open a door written on the door, turning to English if, say, the door is to finally it could be used to simply give a program the special quality.

The program writer should contact the publisher if payment can be arranged.

```

3 REM MIDDLE EARTH NAME
4 TRANSLATION
5
6 PONE 30800 0 PONE 40000.1
7 PONE 30800 1 500 000 0110
8 PONE TYPING AND MORE
9
10 CLEAR 31740 PONE 310000 1
11 10000 PONE 310000.PONE M ME
12
13 PRINT AT 10,10, PLEASE USE
14
15 FOR N=1 TO 33 READ M: LET
16 741+10000 20-30+10 PONE M:0
17 TO M: PONE M:0 PONE M:0 PONE
18 M:4 NEXT M NEXT M
19 PONE 30800.100
20
21 REM ONLINE SHOW FILE LETTERS
22 IN TAB 31000000 0070
23 PONE 31
24
25 DATA "0",0,00,00,00,00,0,7
26 DATA "1",0,00,00,70,110,70
27 DATA "2",0,04,04,04,00,00,7
28 DATA "3",0,00,00,00,70,00,0
29 DATA "4",0,00,00,00,70,00,0
30 DATA "5",0,00,00,00,70,00,0
31 DATA "6",04,00,100,04,70,100
32 DATA "7",0,10,10,10,10,10,10
33 DATA "8",0,104,10,10,10,10,10
34 DATA "9",0,04,04,00,100,00,0
35 DATA "A",0,04,00,00,04,04,0
36 DATA "B",0,00,00,00,70,00,0
37 DATA "C",0,10,00,40,104,00,1
38 DATA "D",0,104,00,04,100,00
39 DATA "E",0,00,100,00,04,00,0
40 DATA "F",0,00,00,00,00,70,0
41 DATA "G",0,00,00,70,00,00,0
42 DATA "H",0,00,104,00,04,00,0
43 DATA "I",0,00,40,70,0,0,0
44 DATA "J",0,110,70,00,00,00,0
45 DATA "K",0,00,00,00,00,0,7
46 DATA "L",0,40,40,10,40,40,0
47 DATA "M",0,70,40,10,0,0,0
48 DATA "N",0,00,00,70,00,10,7
49 DATA "O",0,0,0,0,0,00,40,70
50 DATA "P",0,00,04,00,0,00,00
51 DATA "Q",0,00,00,10,40,10,4
52 DATA "R",0,00,00,70,00,70,0
53 DATA "S",0,10,00,00,70,00,0
54 DATA "T",0,0,0,00,00,00,0
55 DATA "U",0,00,00,00,0,0,00
56 DATA "V",0,00,00,00,00,00,0
57 DATA "W",0,0,0,00,00,00,0
58 DATA "X",0,00,00,0,0,0,00,0
59 DATA "Y",0,00,00,00,0,0,00,0
60 PRINT AT 0,0,NAME TRANSLA
61
62 REM RUNS 1000000 000
63 PRINT AT 0,0,00000
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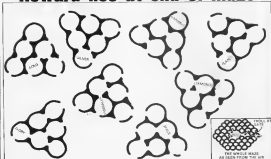

COMPETITION CORNER

Tony Roberts tests your skill — send your answers to Competition Corner, Micro Adventure, 12-13 Little Newport St, London WC2R 2LD



The best 20 answers we receive will win a copy of Peaksoft's football management simulation. *Champions* is the name of the game for Dragon 32, BBC B, Electron and Spectrum 48K owner's IBM 64 users have a chance to win the new release *The Boss*. Let us know which machine you own when you send in your entries.

Reward lies at end of maze



ONCE MOVED is at time to risk all that you have gained in the black designs working for Tash.

Tash has discovered the whereabouts of the third Banana Ring — the C Ring.

As usual, though, her knowledge of the hidden ring is restricted for she has mapped out for you three eight corners of the maze.

You have no other information about the maze other than its general shape.

The maze is guarded by a wall, doors, and a gate. As you look in one of the entrances beside the gate, the spots and their chosen you

Can you piece together the fragments of the maze? Clearly they were overlaid in some pattern. Tell us which of the treasures, apart from the ring, you have to get for Tash, your message to pick up along your game.

As it is harder complete the following sentence in 12 words or less I want to see a complete answer.

Your entry must arrive by the last working day in April. The winners and solutions will be published in the June issue. You may receive only one answer. Entries will not be returned and we cannot enter any correspondence at the event.

February winners

The winners of the February competition are: Michael Douglas and Chris and E. Peck of Berkeley, N.Y. Parker of Spaulding, John Leach of Cambridge, J. Gibson and Elizabeth Jane Gosselin of Newcastle upon Tyne, J. J. Matthews of Lincoln, J. Evans of West Sussex, A. Bennett of St Albans, R. Butler of Rutherford, N. Perry of Gilling, M. Hudd of Newcastle, P. L. Oakes of Cambridge, Susan Harris, David of Warwickshire, L. Roberts of Lincoln.

The solution is 1-4-1-1-1. As you can see there are three that the 20p coin, which is, produced in the first year. It might be because the composition is the same — four Bananas makes an air. Or, it could be that whenever they were released into the land of real competition. Obviously you can't get any, but on the other hand you could win a new game to add to your collection. So let us know what you think you've made of. Complete against others who share your ideas, your name and perhaps you'll win a prize. □

TISED of endless battles with over!
 COMPISED by innumerable corridors and
 limitless cover!
 BORED by all the same old adventures!

by **The**
Coleman
Wright

and
Wings of War

for men and women admirers from Salamander Software

In **WINGS OF WAR** you play Lt. Roger Wilson, selected
 from the line in December 1942 - you must parachute into
 occupied France, disguised as a German. Your mission is
 to carry out a sabotage mission in a theatre, steal the plans
 and the prototype of a new bomb, and make good your
 escape back to Britain.

WINGS WORTH
 The art of Wings of War

In **THE COLLEMAN WRIGHT** you should be
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