

ATTACKED BY ANTS

The significance of Quicksilver's Ant Attack, a three-dimensional maze game designed for the ZX Spectrum with 48 Kbytes of RAM, lies not in its obvious graphic quality, but in the subtle application of the algorithm that generates the fabric of its maze-like playing ground.

Software writers and publishers have never been satisfied with the protection accorded them by the copyright laws — hence the many and various attempts to safeguard programs from being copied. The author of this game, Sandy White, has attempted to prevent his work from being plagiarised, by using another method — applying for letters patent on the software technique that produces the screen graphics. Since the 1977 Patents Act specifically denies protection of this sort to computer programs (noting that they cannot be considered to be inventions), one is led to the conclusion that the patent in question covers a mathematical formula or algorithm.

This in itself is interesting because one would not normally require a complex algorithm for a game of this sort. What is it about Ant Attack that requires a radically new approach to software protection?

1 My Hero!

On the first pass through the game, the 'victim' is conveniently placed adjacent to the gateway to the city. A quick hop over the protective wall, and the protagonist — male or female — is greeted with a cry of 'My hero — take me away from all this!'

2 Formidable Ant-iclimax

Sometimes, the fact that ants can't climb stairs is very useful indeed — though why our hero has climbed quite so high, one can only speculate. Climbing obstacles like this allows the protagonist to lob grenades at the attacking ants without fear of retribution, but remember that you are playing against the clock



Ant Attack is also unusual in that it is not descended directly from any arcade game. Most popular games for home computers have their roots in the conceptions of Atari, Taito and the other manufacturers of dedicated games machines. Ant Attack was conceived by a graduate from the Edinburgh College of Art who protests his ignorance of the arcade games tradition. Sandy White had never previously written games software and his efforts at market research were restricted to inquiring of friends what it was they liked about such games.

His remarkably forward-looking package was, surprisingly, rejected by Sinclair Research, who could not evaluate the videotape of Ant Attack that White sent them because, they said, they had no video cassette recorder!

The first novel feature of Ant Attack that a user will encounter is that it allows the player to choose the sex of the chief protagonist. And the first oversight follows hard on its heels. Whether you opt to be a girl or a boy, the opening frame of the game, which sets the scene in 30 or so words, explains how you hear a call of distress 'irresistable (sic) to a hero like you'. One can forgive the spelling mistake, but the program's inability to substitute 'heroine' for 'hero' is evidence of a lack of attention to detail. Further evidence is to come.

The protagonist, chased by monster ants, can defend himself (or, of course, herself) by throwing grenades. Unfortunately, there is no consistency in



the effect these grenades have on the ants. While this might result from a deliberate randomising factor, it is more likely to be the result of indiscriminate programming. Moving the protagonist anti-clockwise through 90 degrees is achieved by pressing the Spectrum's M key, and the Symbol Shift key next to it turns the figure the other way. The Spectrum's moulded rubber membrane keys do not give proper control over this transformation, which invariably results in frustration for the player.

It would appear that Ant Attack was developed in advance of the launch of Sinclair's Interface 2, which accepts two Atari-standard joysticks. The game would benefit greatly from being updated to utilise these peripherals, though it would need two joysticks to handle the command structure.

In addition to revolving the token, moving it forward, making it jump or throw grenades (you can also choose between four distances of throw), the player can choose one of four points of view —