

# ASCII THROUGH THE LOGIC GATE

=====

[An epic in 32K words]

Copyright (c) 1978, Richard Forsyth.

## Block 18 (Unblocked)

[After the gallant Piltdown has fallen to his death, Hex & Cleo waste precious time in a blazing row. Meanwhile in the crater, and elsewhere, things are hotting up.]

By now the air was thick with sulphurous fumes. The geyser had died down, but in its place had come earth tremors recurring every few minutes. Even if Hex had possessed a rope it was clear that he could never have climbed down into the crater to get back the black box and hoped to return alive. It was high time to depart.

Their next objective was Sprocket's Hole where they intended to take the decadent androids' syllogistic acid and use it to spread chaos over the Network. For safety they split into two groups, and that meant, the way feelings were running, Hex and Ascii in one and Cleo, Lambda and Zap in the other.

They set off down the hill, Hex and Ascii taking a more easterly route. Soon their two paths diverged.

As they walked, Cleo pondered. After about an hour's travelling she asked Zap: "What was so special about that black box? Was it really going to revolutionize the world?"

"Well, I think Hex was over-selling it a bit; but it did have some remarkable features, especially in the area of concurrent processing."

"Concurrent processing?"

"Yes. I mean we've all heard of shared file access," he replied. (Cleo hadn't but she didn't contradict him.) "And we know all about co-routines, timesharing, multi-threading and so on, but the M5 took it a stage further. When we were tied up to that thing we weren't just exchanging information, we were sharing experiences. I don't mean DMA either," he added.

"I'm so glad you don't mean DMA," said Cleo. DMA meant nothing to her.

"DMA stands for direct memory access," explained Lambda. "Zap's point is that it was more than simply a memory-to-memory transfer."

"It certainly was," he went on. "Our consciousnesses actually interpenetrated. An idea that started in one mind would be developed by another. It's not the kind of experience you forget in a hurry. That's why we freaked out."

"And that's why Hex got so steamed up about it," put in Lambda.

"Yeah," mused Zap, "I remember when Igor Gigotski came to lecture to us. He said that Calculo Ergo Sum (I think, therefore I am) was the ultimate ergo-trip; and he was right. The irrefutable existence of other minds as raw sense-data -- it's a bit hard to take. A thing like that could blow the System wide open. It wouldn't fit the conceptual framework. The whole

edifice would crumble of its own accord. All you'd need to do would be to hook a few of those machines on the Network and leave the automata to draw their own conclusions."

"You mean the System is too rigidly centralized to withstand distributed intelligence?" asked Cleo with her tongue pressing only lightly against her cheek. The jargon was catching.

"Something like that," he responded. "The M5 was heterarchically organized around a matrix of holonic processors with bisociative memories. According to all I've read, holonic processors are theoretically impossible, and the same goes for bisociative memory; yet we've just had a demonstration. I suspect the System has hushed it up because it endangers orderly functioning."

"A holonic processor," Lambda added for Cleo's benefit, "is one which promotes the intersection of two or more trains of thought. Bisociative memory allows stored data to interact according to non-deterministic rules. Basically they are two facets of the same thing: you couldn't have one without the other. The great thing about the M5 was that it solved the coordination problem."

"The pity of it is," a rueful Zap carried on, "that we could easily have whipped out the main chip and slipped it into one of our pockets. The rest was just what we configured around it: we could have done that again later."

"But we were too intent on self-preservation," said Lambda.

"So all we've got left now," said Zap, "is my little binary chopper."

"What's that?" enquired Cleo.

"It's like Occam's razor, only sharper. It divides and conquers."

Their conversation was ended by the shock of an earthquake. The volcano had finally erupted. Behind them the night sky was lit up by garish orange flames. It seemed that the whole horizon was on fire. A cloud of dense black smoke billowed over the landscape, blotting out the stars. When they discerned tongues of red-hot molten lava spilling out over the edge of the cone, they knew it was time to move on again, fast.

They pressed ahead at Cleo's best pace and by daybreak had come to Sprocket's Hole, which they approached with extreme stealth since they knew nothing of the androids' downfall.

The still where Sprocket and Bootstrap refined syllogistic acid according to their secret recipe was in the smaller hut, along with the vats in which it was stored. They were not too concerned about overpowering the androids and getting at the stuff, but were worried whether there would be enough. If there was only a small quantity, they would have to force the makers to divulge the method of making it; and even if they succeeded that could involve a lengthy fermentation period.

When Hex and Ascii had not turned up by noon, the appointed hour, they decided to take the place by storm. Zap marched to the door, kicked it open, and charged in wielding his binary chopper.

A scene of devastation greeted them. Sprocket's body lay on the floor, his flesh already pungently decaying and his metal parts starting to rust. Further inside Bootstrap was alive but frozen in a state of suspended animation.

Having appraised the situation and found that stocks of syllogistic acid (which had evaporated) were low, they dragged Sprocket outside for the vultures. "There's only one thing for it," stated Zap, "we'll have to revive the other android so he can make some more for us."

- Where are Hex and Ascii?
- More trouble next week.