

# ASCII THROUGH THE LOGIC GATE

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[An epic in 32K words]

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## Block 26 (En Bloc)

[Hex has been challenged by the DPM to play against the special-purpose chess machine CHECKMATE (Chess Heuristic Evaluation Computer Knowing Midgame And The Endgame), with his life as stake. He has declined to take part without a second. As a result the DPM has ordered him back to the cells.]

On the way down to the dungeons Hex thought about chess. In his youth he had been a keen player, but he had hardly seen a chessboard for over a decade. Still, he reckoned he could give any machine a good run for its money.

Even so, he didn't regret passing up the contest. It was sure to have been rigged.

The gate clanged open and he was hurled in. He could see nothing in the darkness. Then he heard the jingle of McNull's electronic trinkets.

"Art thou hurt?"

"I'm all right."

"That is a blessing."

"Listen. Are you any good at chess?"

"Surely the hour for gaming is not at hand."

"It is. The reason I was taken up to the DPM's exalted presence was to play a game of chess."

"Passing strange are the ways of the System," McNull intoned, "and its doings are beyond the understanding of mortal man." The shock of captivity had reactivated his brain impediment.

"They promised me freedom if I won; but I refused to play."

Before McNull could comment on this perversity, their gate was once again flung open. The bright light assailed their eyes.

"This way," barked one of the warders.

This time they were both herded up to the DPM's office. Inside, Hex saw, the CHECKMATE automaton was still in the centre of the floor.

"I have relented ...." began the DPM.

"A miracle!" blurted out McNull. "Mine own ears have heard it. Abraham called Synapse is risen from the grave."

"Shut him up," commanded the DPM, "or you will be sent straight back where you came from."

"Shhh," said Hex to McNull.

"In my infinite wisdom," continued the voice of the System, "I have acceded to your demand for a second, unreasonable though it was. I have decided to interpret the rules leniently, in the interests of the game as a whole. As for an unbiased umpire, the question does not arise, since I am of course perfectly impartial."

"Oh yes," snorted Hex.

"My decisions will be final and binding. There can be no appeal. Now, let the game commence."

"Not so fast," said Hex. "First of all, you cannot act as second to CHECKMATE if you are referee, so he needs another helper; secondly, this room is too big and bare. The match must be adjourned to a more suitable venue. Besides, I cannot play without a comfortable chair."

"You will play here; you will play now; and you will play standing. Otherwise the game is off."

Some tone in that synthesized speech told Hex that this was no bluff.

"I wish to register a protest," he stammered weakly. "This match is not being conducted according to FIDE championship regulations."

The DPM ignored him. "You have first move."

"How do I make a move?" Hex asked.

"Vocal input -- just tell it your play and the display will be updated to reflect the revised board positions. Once you have spoken, a move cannot be rescinded. You must make 16 moves per hour."

Hex thought for a moment, then coughed to clear his throat. Clearly and distinctly he enunciated "pawn to king's pawn four".

"Input acknowledged," came the reply, sounding surprisingly tinny considering how well they had recreated Dr Null's voice. The white pawn flashed, then reappeared on its new square.

Hex awaited the machine's response. It seemed to take an inordinately long time. He wondered if the same timing restriction applied to it as to him. Presumably that would be enforced at the DPM's discretion.

After all the preliminary skirmishing, the game itself turned out to be something of an anticlimax.

<b>White</b> (The Hexadecimal Kid) 1. P-KP4	<b>Black</b> (CHECKMATE) Resigns. [1-0]
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Hex and McNull leapt up and down, whooping with joy and disbelief. The tension released itself in an impromptu jig around the chess machine. One down, half to go: all he needed now was a draw.

The DPM could scarcely conceal his frustration. "As you can see," he remarked sourly, "it has made a very deep analysis of the game."

Hex was cock-a-hoop. "It looked too far ahead," he declared. "So much for theory!"

"Don't be overconfident," warned the DPM. "This machine has the most powerful collection of tree-pruning routines known. You have not won the series yet."

"Come on then," said Hex, "let's get stuck in."

The next game was more conventional. It all proceeded much according to the book for the first 12 moves. The machine opened with P-KP4, indicating that it took its previous evaluation seriously, and Hex put up a variant of the Sicilian defence. In the early middle-game he tried to build up a Queen's side counterattack; but unfortunately left his king exposed. Suddenly, he was a piece down, and his attack lay in ruins.

Gradually his position collapsed. An unforced blunder led to the loss of a rook. The machine started to force exchanges he couldn't refuse. Soon he was defending desperately. Eventually it boiled down to a black knight and one pawn against two white rooks, a bishop and two pawns. Hex was up against it.

Then the machine did something curious: it moved its bishop into an unguarded position. Hex looked for a hidden trap.

McNull was the first to give a reason. "It knows how to win with king and two rooks against king and knight. The extra bishop is an impediment in its eyes."

Hex tested this hypothesis by making a noncommittal move. Sure enough, the machine replied by offering it up for sacrifice again.

It was as good as over. All he had to do was lie low and let CHECKMATE fruitlessly offer up its bishop. A draw by repetition of moves became inevitable.

Final score: Hex 1½, Checkmate ½.

- Is this his moment of triumph?
- Don't be too sure.