60-Second Adventures in Thought

The Chinese Room

Can a machine ever be truly called intelligent?

American philosopher and Rhodes scholar John Searle certainly can. In 1980 he proposed The Chinese Room thought experiment in order to challenge the concept of strong 'artificial intelligence' – and not because of some Eighties design fad.

He imagines himself in a room with boxes of Chinese characters he can't understand and a book of instructions, which he can. If a Chinese speaker outside the room passes him messages under the door, Searle can follow instructions from the book to select an appropriate response. The person on the other side would think they're chatting with a Chinese speaker - just one who doesn't get out much. But really it's a confused philosopher.

Now, according to Alan Turing, the father of computer science, if a computer programme can convince a human they are communicating with another human, then it could be said to think. The Chinese Room suggests that, however well you program a computer it doesn't understand Chinese – it only simulates that knowledge – which isn't really intelligence. But then sometimes humans aren't that intelligent either.