

The Problem of the Purloined Pearls

Although the great deductive powers of Sherlock Holmes are well known, it is not generally known that he made many of his startling conclusions through the use of truth tables. As a case in point, Holmes might establish that Lord Feather committed a crime and Lady Merriweather was present. The truth table for conjunction would indicate that if both of these conditions were true (the conjunction was true), then neither could be false. Elementary, you might say, but this is merely a simple example.

Holmes and Watson were called in to investigate the theft (or apparent theft) of Mrs. Hoyt-Schermmerhorn's pearl necklace. There were two apparent suspects: the chauffeur and Mrs. Hoyt-Schermmerhorn herself; she was thought to have stolen the necklace for the insurance money. Dr. Watson made the statement, "If Mrs. Hoyt-Schermmerhorn stole the pearls herself, then the chauffeur did not steal them."

"Wrong, Dr. Watson," exclaimed Holmes.

Use a truth table to determine who stole the pearls, assuming, of course, that Sherlock Holmes is always right.

The situation changed quickly, however, when it was discovered that there was still another suspect: the well-known Hindu jewel thief R. Sanloopan. After more investigation, Dr. Watson came to the following conclusion: "It seems to me, Holmes, that the idea that of Mrs. Hoyt-Schermmerhorn stole the pearls or her chauffeur did not steal them is not true. And, naturally, it is not true that if they were stolen by the chauffeur, then they were also stolen by R. Sanloopan."

Holmes patiently explained, "This time, my dear Watson, your rather negative statement is correct. But, of course, the fact tells us who the real thief is."

Who stole the pearls?