



The argument from correlation to cause in science communication

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ABSTRACT

A main activity within popularized science communication is the expert-to-layman transfer of scientific knowledge. Correlative connections have proven to be a problematic concept to adequately communicate and form a relatively common source for the misrepresentation of scientific knowledge. Depending on the strength of the causal claim, such an inferential step can be considered an “argument from correlation to cause”. This paper reconstructs the argumentative pattern that is typical for these arguments and proposes a number of critical questions for their evaluation. Finally, an analysis is presented of a natural example of reasoning from correlational evidence to cause within the context of popularized science.

KEYWORDS

argumentative pattern; cause; correlation; critical questions; popularized science; pragma-dialectics; reasonableness; science communication

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