

Chapter 10, Explanations: Purposive and Causal Explanations

Causation and induction

1. Causation:

Hume – Question = how can two events be causally related i.e. how can there be a necessary connection between two different events, so that given one event the other must occur?

a) This is only a difficult question as long as you introduce two assumptions:

- (i) you adopt two concepts: the mental and material substances
- (ii) and then you ask if there can be any necessary connection between what happens in one and what takes place in the other

b) But if you eliminate:

- (i) the two meaningless concepts of the two substances
- and (ii) the equally unintelligible idea of a necessary connection between events then the answer is clear: no causal relationship can be observed
 - only ‘constant conjunction’:
 - between physical events e.g. thunder and lightning
hammer and nail
 - between mental events e.g. the feel of a pear in the mouth and the taste
the smell of a log fire and the heat

c) All that anybody ever meant by necessary connection is that two events have been constantly conjoined – so that when we see one we automatically expect and predict the occurrence of the other

2. Induction:

a) The problem: how to establish the truth of universal statements which are based on experience e.g. All swans are white

- (i) this cannot be inferred from singular instances: a statement referring to an infinite set cannot be entailed in a finite set of instance statements
- (ii) therefore, since the evidence is always finite, the belief in the truth of a universal statement can never be justified

b) Answer: the principle of induction:

- (i) insert the principle into an invalid inductive argument to turn it into a valid deductive argument
- (ii) principle: ‘In all cases unobserved instances resemble observed instances’

e.g. All observed swans have been white
In all cases unobserved instances resemble observed instances
Therefore, All swans are white
S is a swan
Therefore S is white

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c) Hume's 'vicious circle':

- (i) But how do we know the principle of induction to be true?
- (ii) Answer: experience – it has worked in the past, therefore it will work in the future
- (iii) But this is the same as the inference from the colour of some swans to the colour of all swans
- (iv) = Hume's 'vicious circle':
 - To know that the inductive methods of argument are correct we need to know that the principle of induction is true.
 - But we can only know this to be true once we can show we can rely on induction
 - Therefore, there is no reason for believing that inductive arguments are correct