## David Hume: Problems of Induction

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## Induction

- Induction enables us to predict the unknown through observed evidences
- What we usually do:

"All arguments from experience are founded on the similarity which we discover among natural objects and by which we are induced to expected effects similar to those which we have found to follow from such objects (Hume, AW546b)".

### Hume's Problems with Induction

 Are our beliefs formed by experiences justifiable?

"Should it be said that we infer a connection between the sensible qualities and the secret powers? The question still recurs: on what process of argument this inference is founded? Where is this medium, the interposing ideas which join propositions so very wide to each other (Hume, AW547a)"?

### Inductions Do not Hold

- (1) we don't gain induction from reasoning
- (2) past events and future events can be disconnected
- (3) Illogical: circular and begging the question
  (4) Conjunction of two events ≠ connection between sensible qualities and results

#### (1) Inductions are not Drawn from Reasoning

"Our conclusions from that experience are not founded on reasoning or any process of the understanding (Hume, AW545a)".

- B1. I have seen one billiard ball strike another many times.
- B2. Each time the ball which was struck has moved, motion was transferred.
- BC. So, the struck ball will move this time (Marcus).
- We appeal to customs, and our feelings. We feel that the struck ball will move this time. Therefore, we do not come to this conclusion through reasoning.
- Therefore, all inferences from experience are effects of custom, not of reasoning (Hume AW550a)

# (2) Disconnection between past events and future events

• An event does not necessarily follow another

e.g. "The bread which I formerly ate nourished me – that is, a body of such sensible qualities was, at that time, endowed with such secret powers. But does it follow that other bread must also nourish me at another time and that like sensible qualities must always be attended with like secret power" (Hume, AW545b)?

Invalid argument:

Induction: If A happens, then B will also happen.

- If every time A happened, B happened.
- A happened.
- B does not have to happen.

It is possible that the premise is true while the conclusion is false.

#### (3) Illogical: Circular and Begs the Question

- Circular: the proof of induction presupposes that sensible qualities will enable us to predict unknown events
- Begging the question

"To say inferences are experimental is begging the question. For all inferences from experience suppose as their foundation that the future will resemble the past and that similar powers will be conjoined with similar sensible qualities (Hume, AW547b)".

## (4) Conjunction of two events/ sensible qualities ≠connection between sensible qualities and results

- We assume that the connection between sensible qualities and results is the conjunction of two events or more.
- Events are individual events in themselves, and future events are not included in the sensible qualities, because

"Our senses inform us of the color, weight, and consistency of bread, but neither sense nor reason can ever inform us of those qualities which fit it for the nourishment and support of a human body (Human, AW545b).

• Therefore, there is no known connection between the sensible qualities and the secret powers.

## **Danger of Appealing to Induction**

"If we ascribe to it further qualities or affirm it capable of producing other effects, we can only indulge the license of conjecture and arbitrarily suppose the existence of qualities and energies without reason or authority (Hume, AW588a)".

By arbitrarily assigning effects to events, we might contradict the truth.

## Limits of Reasoning

 Hume admits the limit that we cannot form induction with reasoning

e.g. "Reason is incapable of any such variation. The conclusion which it draws from considering one circle are the same which it would form upon surveying all the circles in the universe. But no man, having seen only one body move after being impelled by another, could infer that every other body will move after a like impulse (Hume, AW549b)".