

2024

31

January

Week

Day 031/31

Wednesday

PRIORITY

• It is logically possible for the premises of this inference to be true and yet the conclusion false.

• In a typical inductive inference, we move from premises about objects that we have examined to conclusions about objects of the same sort that we haven't examined — in this ex, eggs.

• The inference from 'up until now, my computer has not exploded when I turned it on' to 'my computer will not explode this time' is inductive, not deductive. It is logically possible that your computer will explode this time, even though it has never done so before.

• The central role of induction in science is sometimes obscured by how we talk. For example, you might read a newspaper report which says that scientists have found 'experimental proof' that genetically modified maize is safe to eat. What this means is that scientists have tested the maize on a large number of people and none have come to any harm. But strictly speaking this doesn't prove that the maize is safe, in which mathematicians can prove Pythagoras' theorem, say. For the inference from 'the maize didn't harm any of the people on whom it was tested' to 'the maize will not harm anyone' is inductive, not deductive. The newspaper report should really have said that scientists have found good evidence that the maize is safe for humans. The word 'proof' should strictly only be used when we are dealing with deductive inferences. In this strict sense, of the word, scientific hypotheses can never be proved true by data.

• Most philosophers —> Science relies heavily on induction.
• Karl Popper claimed that scientists only need to use deductive inferences.

December 2023							January 2024						
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
48							01	1	2	3	4	5	6
49	4	5	6	7	8	9	10	02	8	9	10	11	12
50	11	12	13	14	15	16	17	03	15	16	17	18	19
51	18	19	20	21	22	23	24	04	22	23	24	25	26
52	25	26	27	28	29	30	31	05	29	30	31		