

'Induction' (pub. 02.02.13-09:48). Quote in M. Bergman & S. Paavola (Eds.), *The Commens Dictionary: Peirce's Terms in His Own Words. New Edition*. Retrieved from <http://www.commens.org/dictionary/entry/quote-logic-drawing-history-ancient-documents-especially-testimonies-logic-histo-11>.

Term: Induction

Quote: It is desirable to consider a large range of inductions, with a view to distinguishing accurately between induction and abduction, which have generally been much confounded. I will, therefore, mention that, in the present state of my studies, I think I recognize three distinct genera of induction. I somewhat hesitate to publish this division; but it might take more years than I have to live to render it as satisfactory as I could wish. [—]

The first genus of induction is where we judge what approximate proportion of the members of a collection have a predesignate character by a sample drawn under one or other of the following three conditions, forming three species of this genus. [—]

The second genus of induction comprises those cases in which the inductive method if persisted in will certainly in time correct any error that it may have led us into; but it will not do so gradually, inasmuch as it is not quantitative; - not but that it may relate to quantity, but it is not a quantitative induction. It does not discover a ratio of frequency. [—]

I seem to recognize a third genus of inductions where we draw a sample of an aggregate which can not be considered as a collection, since it does not consist of units capable of being either counted or measured, however roughly; and where probability therefore cannot enter; but where we can draw the distinction of much and little, so that we can conceive of measurement being established; and where we may expect that any error into which the sampling will lead us, though it may not be corrected by a mere enlargement of the sample, or even by drawing other similar samples, yet must be brought to light, and that gradually, by persistence in the same general method. [—]

[—] We have now passed in review all the logically distinct forms of pure induction. It has been seen that one and all are mere processes for testing hypotheses already in hand. The induction adds nothing. At the very most it corrects the value of a ratio or slightly modifies a hypothesis in a way which had already been contemplated as possible.

Source: Peirce, C. S. (1901). *On the Logic of Drawing History from Ancient Documents Especially from Testimonies (Logic of History)*. MS [R] 690.

References: CP 7.208-217

Date of 1901

Quote:

URL: <http://www.commens.org/dictionary/entry/quote-logic-drawing-history-ancient-documents-especially-testimonies-logic-histo-11>