

'Induction' (pub. 02.02.13-11:10). 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-letter-draft-mario-calderoni-1>.

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**Term:** Induction

**Quote:** ... there are but three elementary kinds of reasoning. [—] The third way of reasoning is *induction*, or experimental research. Its procedure is this. Abduction having suggested a theory, we employ *deduction* to deduce from that ideal theory a promiscuous variety of consequences to the effect that if we perform certain acts, we shall find ourselves confronted with certain experiences. We then proceed to try these experiments, and if the predictions of the theory are verified, we have a proportionate confidence that the experiments that remain to be tried will confirm the theory. I say that these three are the only elementary modes of reasoning there are. I am convinced of it both *a priori* and *a posteriori*. The *a priori* reasoning is contained in my paper in the Proceedings of the American Academy of Arts and Sciences for April 9, 1867. I will not repeat it. But I will mention that it turns in part upon the fact that induction is, as Aristotle says, the inference of the truth of the major premiss of a syllogism of which the minor premiss is made to be true and the conclusion is found to be true, while abduction is the inference of the truth of the minor premiss of a syllogism of which the major premiss is selected as known already to be true while the conclusion is found to be true. Abduction furnishes all our ideas concerning real things, beyond what are given in perception, but is mere conjecture, without probative force. Deduction is certain but relates only to ideal objects. Induction gives us the only approach to certainty concerning the real that we can have. In forty years diligent study of arguments, I have never found one which did not consist of those elements. The successes of modern science ought to convince us that induction is the only capable *imperator* of truth-seeking. Now pragmatism is simply the doctrine that the inductive method is the only essential to the ascertainment of the intellectual purport of any symbol.

**Source:** Peirce, C. S. (1905). *Letters to Mario Calderoni*. MS [R] L67.

**References:** CP 8.209

**Date of** 1905

**Quote:**

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