'Induction' (pub. 03.02.13-18:25). 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-some-consequences-four-incapacities-2.

Term: Induction

Quote:

Induction may be defined as an argument which proceeds upon the assumption that all the members of a class or aggregate have all the characters which are common to all those members of this class concerning which it is known, whether they have these characters or not; or, in other words, which assumes that that is true of a whole collection which is true of a number of instances taken from it at random. This might be called statistical argument. In the long run, it must generally afford pretty correct conclusions from true premisses. If we have a bag of beans partly black and partly white, by counting the relative proportions of the two colors in several different handfuls, we can approximate more or less to the relative proportions in the whole bag, since a sufficient number of handfuls would constitute all the beans in the bag. The central characteristic and key to induction is, that by taking the conclusion so reached as major premiss of a syllogism, and the proposition stating that such and such objects are taken from the class in question as the minor premiss, the other premiss of the induction will follow from them deductively. [—] Accordingly, induction has been defined by Aristotle as the inference of the major premiss of a syllogism from its minor premiss and conclusion. The function of an induction is to substitute for a series of many subjects, a single one which embraces them and an indefinite number of others. Thus it is a species of "reduction of the manifold to unity."

Source: Peirce, C. S. (1868). Some Consequences of Four Incapacities. *Journal of*

Speculative Philosophy, 2, 140-157.

References: CP 5.275

Date of 1868

Quote:

URL: http://www.commens.org/dictionary/entry/quote-some-consequences-four-incap

acities-2