I think logicians should have two principal aims: 1st, to bring out the amount and kind of security (approach to certainty) of each kind of reasoning, and 2nd, to bring out the possible and esperable uberty, or value in productiveness, of each kind.

I have always, since early in the sixties, recognized three different types of reasoning, viz: 1st, Deduction which depends on our confidence in our ability to analyze the meanings of the signs in or by which we think; 2nd, Induction, which depends upon our confidence that a run of one kind of experience will not be changed or cease without some indication before it ceases; and 3rd, Retroduction, or Hypothetic Inference, which depends on our hope, sooner or later, to guess at the conditions under which a given kind of phenomenon will present itself.

Each of these three types occurs in different forms requiring special studies.

From the 1st type to the 3rd the security decreases greatly, while the uberty as greatly increases...

I don't think the adoption of a hypothesis on probation can properly be called induction; and yet it is reasoning and though its security is low, its uberty is high.

References: CP 8.384-388
Date of Quote: 1913
Editorial Annotations: From a long letter to written over a period between 14 October 1913 and 19 November 1913 (Editorial note by Arthur W. Burks in CP 8).
URL: http://www.commens.org/dictionary/entry/quote-letters-f-woods