Term: Retroduction

Quote: ... the division of the elementary kinds of reasoning into three heads was made by me in my first lectures and was published in 1869 in Harris’s Journal of Speculative Philosophy. I still consider that it had a sound basis. Only in almost everything I printed before the beginning of this century I more or less mixed up Hypothesis and Induction ...

The general body of logicians had also at all times come very near recognizing the trichotomy. They only failed to do so by having so narrow and formalistic a conception of inference (as necessarily having formulated judgments for its premises) that they did not recognize Hypothesis (or, as I now term it, retroduction) as an inference ...

When one contemplates a surprising or otherwise perplexing state of things (often so perplexing that he cannot definitely state what the perplexing character is) he may formulate it into a judgment or many apparently connected judgments; he will often finally strike out a hypothesis, or problematical judgment, as a mere possibility, from which he either fully perceives or more or less suspects that the perplexing phenomenon would be a necessary or quite probable consequence.

That is a retroduction. Now three lines of reasoning are open to him. [—]

Or, second, he may proceed still further to study the phenomenon in order to find other features that the hypothesis will explain (i.e. in the English sense of explain, to deduce the facts from the hypothesis as its necessary or probable consequences). That will be to continue reasoning retroductively, i.e., by hypothesis.