Presumption [as a form of reasoning]

An imaginary increase of information is an assumption or supposition; but the former word is preferable. An increase of information by induction, hypothesis, or analogy, is a presumption. (A legal presumption is a presumption which follows an accepted rule of the courts, irrespective of the dictates of good sense.) A very weak presumption is a guess. A presumption opposed to direct testimony is a conjecture, or, if weak, a surmise.

Presumption, or, more precisely, abduction (which the present writer believes to have been what Aristotle’s twenty-fifth chapter of the second Prior Analytics imperfectly described under the name of {apagögé}, until Apellicon substituted a single wrong word and thus disturbed the sense of the whole), furnishes the reasoner with the problematic theory which induction verifies. Upon finding himself confronted with a phenomenon unlike what he would have expected under the circumstances, he looks over its features and notices some remarkable character or relation among them, which he at once recognizes as being characteristic of some conception with which his mind is already stored, so that a theory is suggested which would explain (that is, render necessary) that which is surprising in the phenomena.

He therefore accepts that theory so far as to give it a high place in the list of theories of those phenomena which call for further examination. If this is all his conclusion amounts to, it may be asked: What need of reasoning was there? Is he not free to examine what theories he likes? The answer is that it is a question of economy. If he examines all the foolish theories he might imagine, he never will (short of a miracle) light upon the true one. Indeed, even with the most rational procedure, he never would do so, were there not an affinity between his ideas and nature’s ways. However, if there be any attainable truth, as he hopes, it is plain that the only way in which it is to be attained is by trying the hypotheses which seem reasonable and which lead to such consequences as are observed.

Presumption is the only kind of reasoning which supplies new ideas, the only kind which is, in this sense, synthetic. Induction is justified as a method which must in the long run lead up to the truth, and that, by gradual modification of the actual conclusion. There is no such warrant for presumption. The hypothesis which it problematically concludes is frequently utterly wrong itself, and even the method need not ever lead to the truth; for it may be that the features of the phenomena which it aims to explain have no rational explanation at all. Its only justification is that its method is the only way in which there can be any hope of attaining a rational explanation.

Presumption. In logic: a more or less reasonable hypothesis, supported, it may be, by circumstances
amounting all but to proof, or, it may be, all but baseless.

Logical or philosophical presumption is non-deductive probable inference which involves a hypothesis. It might very advantageously replace hypothesis in the sense of something supposed to be true because of certain facts which it would account for.

1902 | Validity | CP 2.780

In the case of hypotheses adopted presumptively on probation, one of the very elements of their strength lies in the absence of any other hypothesis; so that the above definition of strength cannot be applied, even in imagination, without imagining the strength of the presumption to be considerably reduced. Perhaps we might conceive the strength, or urgency, of a hypothesis as measured by the amount of wealth, in time, thought, money, etc., that we ought to have at our disposal before it would be worth while to take up that hypothesis for examination. In that case it would be a quantity dependent upon many factors. Thus a strong instinctive inclination towards it must be allowed to be a favouring circumstance, and a disinclination an unfavourable one. Yet the fact that it would throw a great light upon many things, if it were established, would be in its favour; and the more surprising and unexpected it would be to find it true, the more light it would generally throw. The expense which the examination of it would involve must be one of the main factors of its urgency.

1902 | Reasoning | CP 2.774

Reasoning is of three elementary kinds; but mixed reasonings are more common. These three kinds are induction, deduction, and presumption (for which the present writer proposes the name abduction).