

Reasoning

1893 | Grand Logic 1893: Division III. Substantial Study of Logic Chapter VI. The Essence of Reasoning | CP 4.38-39

St. Thomas Aquinas [*Summa totius logicæ Aristotelis (Opusculum 48)*] divides the operations of the Understanding in reference to the logical character of their products into

Simple Apprehension,
Judgment, and
Ratiocination, or Reasoning. [—]

Ratiocination or reasoning produces inferences or reasonings, which are expressed by argumentations, as, "I think, therefore I must exist," "Enoch, being a man, must have died; and since the Bible says he did not die, not everything in the Bible can be true."

1893 | How to Reason: A Critick of Arguments. Advertisement | MS [R] 397:2

...in all reasoning there must be something amounting to a diagram before the mind's eye, and [...] the act of inference consists in *observing* a relation between parts of that diagram that had not entered into the design of its construction.

1895 | Short Logic: Chapter I. Of Reasoning in General | EP 2:11-12

Reasoning is the process by which we attain a belief which we regard as the result of previous knowledge. [—]

Again, a given belief may be regarded as the effect of another given belief, without our seeming to see clearly why or how. Such a process is usually called an *inference*; but it ought not to be called a *rational inference, or reasoning*. A blind force constrains us. [—]

The word *illation* signifies a process of inference. Reasoning, in general, is sometimes called *ratiocination*. *Argumentation* is the expression of a reasoning.

1897 [c.] | Logic. The Theory of Reasoning. Part I. Exact Logic. Introduction. What is Logic | PSR 41

...it may perhaps be true that reasoning can only be performed by a mind more or less like that of man, although there are machines which will produce the conclusions from certain premises. But reasonings can be expressed in words, in algebraic formulae, and in diagrams; and such expressions have the same logical characteristics that the mental representations have. Logic, therefore, concerns itself as directly with the outward, as with the inward representations. On the other hand, among the

characters of reasoning which are pertinent to logic, one of the chief is that reasoning is essentially of the nature of a representation or sign. In saying this, I anticipate one of the results of the study of logic, and the reasons which lead to this conclusion cannot be fully appreciated in advance of such study. The premise of a reasoning is supposed to be true, and as such it represents the real world, although only in part. The conclusion represents the very same world. Neither is the world; for one is no more so than the other; and were both the same world they would be identical. They are alike representations, or signs, of the world. But the reasoning does not lie in the premise nor in the conclusion nor in their mere aggregations. It lies in the representation that in every world an analogous conclusion would, either invariably or mostly, be true for every similar premiss that was true. Reasoning is therefore not only a representation, but a representation of possibilities.

Now what are possibilities, what mode of being have they but the mode of being of representations? Whether or not they have any real mode of being, I do not ask; for it is not here a pertinent question. I only say that so far as they are real, the real is of the nature of a representation.

1902 | Reasoning | CP 2.773-774

Reasoning is a process in which the reasoner is conscious that a judgment, the conclusion, is determined by other judgment or judgments, the premisses, according to a general habit of thought, which he may not be able precisely to formulate, but which he approves as conducive to true knowledge. By true knowledge he means, though he is not usually able to analyse his meaning, the ultimate knowledge in which he hopes that belief may ultimately rest, undisturbed by doubt, in regard to the particular subject to which his conclusion relates. Without this logical approval, the process, although it may be closely analogous to reasoning in other respects, lacks the essence of reasoning. Every reasoner, therefore, since he approves certain habits, and consequently methods, of reasoning, accepts a logical doctrine, called his *logica utens*. Reasoning does not begin until a judgment has been formed; for the antecedent cognitive operations are not subject to logical approval or disapproval, being subconscious, or not sufficiently near the surface of consciousness, and therefore uncontrollable. Reasoning, therefore, begins with premisses which are adopted as representing percepts, or generalizations of such percepts. All the reasoner's conclusions ought to refer solely to the percepts, or rather to propositions expressing facts of perception. But this is not to say that the general conceptions to which he attains have no value in themselves.

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).

1902 [c.] | Reason's Rules | MS [R] 597:2

We cannot say that reasoning is argument addressed to oneself. For an argument is a communication by which the arguer endeavours to produce a predetermined belief in the mind he addresses. In reasoning, on the contrary[,] we seek the truth, whatever it may be, not knowing beforehand that it is the truth. Two people in conversation may coöperate in this task. It is an operation in which arguments that *might be* put forward, on one side and the other, are sought for by "running over" facts that look as if they might be pertinent, and putting them together in various ways. The possible arguments once suggested, are submitted to criticism.

1903 | Lecture I [R] | MS [R] 451:12-13

...no sooner have we drawn a conclusion, than we begin to turn upon it with a critic's eye, and to ask whether it really conformed to our logical ideals. Indeed, unless we do this, in the proper use of language the operation ought not to be called *reasoning*; for reasoning properly means controlled thought, and the only possible control consists in critical review, or self-confession.

1905 | Issues of Pragmaticism | EP 2:348

... For this theory requires that in reasoning we should be conscious, not only of the conclusion, and of our deliberate approval of it, but also of its being the result of the premises from which it does result, and furthermore that the inference is one of a possible class of inferences which conform to one guiding principle. Now in fact we find a well-marked class of mental operations, clearly of a different nature from any others which do possess just these properties. They alone deserve to be called *reasonings*; and if the reasoner is conscious, even vaguely, of what his guiding principle is, his reasoning should be called a *logical argumentation*.

1905 | Notes on Portions of Hume's "Treatise on Human Nature" | MS [R] 939:3-5

What I call Reasoning differs from an acritical inference in that it is always accompanied by the belief that it, the special inference, is only an instance of a type, or genus of inference. I do not agree with Hume that the line should be drawn between cases where the "check or controul" actually *is* resorted to. It suffices that the mind should appeal to the possibility of such confirmation, just as the moral difference between lawful and lawless action consists, not in the case being carried into court, but in the agent's confidence that a court *would* sustain him. In my opinion, reasoning is only a peculiar variety of action under moral self-control. As in the case of morals, the control may be of a very complex kind; but its essential features are review, critical comparison with previous decisions or with ideals, rehearsal in the imagination of future conduct on various possible occasions, and the formation or modification thereby of habits or dispositions of the occult something behind consciousness. The great stimulus to reasoning is *surprise*.

1909 | Preface | MS [R] 634:6

...there seems to be considerable importance in insisting that reasoning is a performance of the physiological organism under the governance of reason, and not exclusively confined to that *ens rationis* called "the mind," - a sort of *tertium quid* between the body and the soul.

1911 | A Logical Critique of Essential Articles of Religious Faith | MS [R] 852:2

The word Reasoning may be used as the name either of a mental action or of a mental occupation. In the latter sense, it is that occupation of the mind in which one casts about for arguments, considers

them, and draws a conclusion from them. In the former sense, it is a synonym of *inference*, or the passage from an argument to a conclusion.

1911 [c.] | A Sketch of Logical Critics | EP 2:454

By "*Reasoning*" shall here be meant any change in thought that results in an appeal for some measure and kind of assent to the truth of a proposition called the "*Conclusion*" of the reasoning, as being rendered "*Reasonable*" by an already existing cognition (usually complex) whose propositional formulation shall be termed the "*Copulate Premiss*" of the reasoning. The reader will remark, as the point where this definition most markedly breaks with actual usage, that it refuses the name of reasoning to the synthesis into one recognition of the major and minor premises of a syllogism.

1913 | An Essay toward Improving Our Reasoning in Security and in Uberty | EP 2:464

Reasoning-power; or *Ratiocination*, called by some *Dianoetic Reason*, is the power of drawing inferences that tend toward the truth, when their premises or the virtual assertions from which they set out are true.

1913 | An Essay toward Improving Our Reasoning in Security and in Uberty | EP 2:463

When it happens that a new belief comes to one as consciously generated from a previous belief, - an event which can only occur in consequence of some third belief (stored away in some dark closet of the mind, as a habit of thought) being in a suitable relation to that second one, - I call the event and inference, or a reasoning.