

Leading Principle

1877 | The Fixation of Belief | W 3:245; CP 5.367

That which determines us, from given premisses, to draw one inference rather than another, is some habit of mind, whether it be constitutional or acquired. The habit is good or otherwise, according as it produces true conclusions from true premisses or not; and an inference is regarded as valid or not, without reference to the truth or falsity of its conclusion specially, but according as the habit which determines it is such as to produce true conclusions in general or not. The particular habit of mind which governs this or that inference may be formulated in a proposition whose truth depends on the validity of the inferences which the habit determines; and such a formula is called a *guiding principle* of inference. Suppose, for example, that we observe that a rotating disk of copper quickly comes to rest when placed between the poles of a magnet, and we infer that this will happen with every disk of copper. The guiding principle is, that what is true of one piece of copper is true of another. Such a guiding principle with regard to copper would be much safer than with regard to many other substances – brass, for example.

1880 | On the Algebra of Logic | W 4:164-6; CP 3.160, 164

A cerebral habit of the highest kind, which will determine what we do in fancy as well as what we do in action, is called a *belief*. The representation to ourselves that we have a specified habit of this kind is called a *judgment*. A belief-habit in its development begins by being vague, special, and meagre; it becomes more precise, general, and full, without limit. The process of this development, so far as it takes place in the imagination, is called *thought*. A judgment is formed; and under the influence of a belief-habit this gives rise to a new judgment, indicating an addition to belief. Such a process is called an *inference*; the antecedent judgment is called the *premise*; the consequent judgment, the *conclusion*; the habit of thought, which determined the passage from the one to the other (when formulated as a proposition), *the leading principle*.

A habit of inference may be formulated in a proposition which shall state that every proposition *c*, related in a given general way to any true proposition *p*, is true. Such a proposition is called the *leading principle* of the class of inferences whose validity it implies. When the inference is first drawn, the leading principle is not present to the mind, but the habit it formulates is active in such a way that, upon contemplating the believed premise, by a sort of perception the conclusion is judged to be true.¹ Afterwards, when the inference is subjected to logical criticism, we make a new inference, of which one premise is that leading principle of the former inference, according to which propositions related to one another in a certain way are fit to be premise and conclusion of a valid inference, while another premise is a fact of observation, namely, that the given relation does subsist between the premise and conclusion of the inference under criticism; whence it is concluded that the inference was valid.

¹Though the leading principle itself is not present to the mind, we are generally conscious of inferring on some general principle.

1893-1895 [c.] | Division III. Substantial Study of Logic. Chapter VI. The Essence of Reasoning | MS

The habit or disposition according to which the conclusion is inferred from the premise is of the nature of a belief; and the proposition expressing this belief is called the *leading principle*.

It is of the essence of reasoning that the reasoner should proceed, and should be conscious of proceeding, according to a general habit, or method, which he holds would either (according to the kind of reasoning) always lead to the truth, provided the premisses were true; or, consistently adhered to, would eventually approximate indefinitely to the truth; or would be generally conducive to the ascertainment of truth, supposing there be any ascertainable truth. The effect of this habit or method could be stated in a proposition of which the antecedent should describe all possible premisses upon which it could operate, while the consequent should describe how the conclusion to which it would lead would be determinately related to those premisses. Such a proposition is called the “leading principle” of the reasoning.

Two different reasoners might infer the same conclusion from the same premisses; and yet their proceeding might be governed by habits which would be formulated in different, or even conflicting, leading principles. Only that man’s reasoning would be good whose leading principle was true for all possible cases. It is not essential that the reasoner should have a distinct apprehension of the leading principle of the habit which governs his reasoning; it is sufficient that he should be conscious of proceeding according to a general method, and that he should hold that that method is generally apt to lead to the truth. He may even conceive himself to be following one leading principle when, in reality, he is following another, and may consequently blunder in his conclusion. From the effective leading principle, together with the premisses, the propriety of accepting the conclusion in such sense as it is accepted follows necessarily in every case. [—] Leading principles are [...] of two classes; and any leading principle whose truth is implied in the premisses of every inference which it governs is called a “logical” (or, less appropriately, a *formal*) leading principle; while a leading principle whose truth is not implied in the premisses is called a “factual” (or *material*) leading principle.