Methodeutic

1902 | Minute Logic: Chapter I. Intended Characters of this Treatise | CP 2.105

All this brings us close to Methodeutic, or Speculative Rhetoric. The practical want of a good treatment of this subject is acute.

1902 | Minute Logic: Chapter I. Intended Characters of this Treatise | CP 2.93

Logic is the science of the general necessary laws of Signs and especially of Symbols. As such, it has three departments. Obsistent logic, logic in the narrow sense, or *Critical Logic*, is the theory of the general conditions of the reference of Symbols and other Signs to their professed Objects, that is, it is the theory of the conditions of truth. Originalian logic, or *Speculative Grammar*, is the doctrine of the general conditions of symbols and other signs having the significant character. It is this department of general logic with which we are, at this moment, occupying ourselves. Transuasional logic, which I term *Speculative Rhetoric*, is substantially what goes by the name of methodology, or better, of *methodeutic*. It is the doctrine of the general conditions of the reference of Symbols and other Signs to the Interpretants which they aim to determine...

1902 | Logic | DPP 2:21; CP 2.207

It is further generally recognized that another doctrine follows after critic, and which belongs to, or is closely connected with, logic. Precisely what this should contain is not agreed; but it must contain the general conditions requisite for the attainment of truth. Since it may be held to contain more, one hesitates to call it heuristic. It is often called Method; but as this word is also used in the concrete, methodic or methodeutic would be better.

1902 | Carnegie Institution Correspondence | NEM 4:62

27. *Of Methodeutic*. The first business of this memoir is to develope a precise conception of the nature of methodeutical logic. In methodeutic, it is assumed that the signs considered will conform to the conditions of critic, and be true. But just as critical logic inquires whether and how a sign corresponds to its intended *ultimate* object, the reality; so methodeutic looks to the purposed *ultimate* interpretant and inquires what conditions a sign must conform to, in order to be pertinent to the purpose. Methodeutic has a special interest in Abduction, or the inference which starts a scientific hypothesis. For it is not sufficient that a hypothesis should be a justifiable one. Any hypothesis which explains the facts is justified critically. But among justifiable hypotheses we have to select that one which is suitable for being tested by experiment. There is no such need of a subsequent choice after drawing deductive and inductive conclusions. Yet although methodeutic has not the same special concern with them, it has to develop the principles which are to guide us

> in the investigation of proofs, those which are to govern the general course of an investigation, and those which determine what problems shall engage our energies. It is, therefore, throughout of an economic character. Two other problems of methodeutic which the old logics usually made almost its only business are, first, the principles of definition, and of rendering ideas clear; and second, the principles of classification.

1902 | Carnegie Institution Correspondence | HP 2:1035; NEM 4:26

No. 27 of Methodeutic. The first business of this memoir is to show the precise nature of methodeutic; how it differs from critic; how, although it considers not what is admissable but what is advantageous, it is nevertheless a purely theoretical study, and not an art; how it is from the most strictly theoretical point of view, an absolutely essential and distinct department of logical inquiry; and how upon the other hand, it is readily made useful to a researcher into any science, even mathematics. It strongly resembles the purely mathematical part of political economy, which is also a theoretical study of advantages. Of the different classes of arguments, abductions are the only ones in which after they have been admitted to be just, it still remains to inquire whether they are advantageous. But since the whole business of heuretic, so far as its theory goes, falls under methodeutic, there is no kind of argumentation that methodeutic can pass over without notice. Nor is methodeutic confined to the consideration of arguments. On the contrary, its special subjects have always been understood to be the definition and division of terms. The formation of systems of propositions, although it has been neglected, should also evidently be included in methodeutic. In its method, methodeutic is less strict than critic.

1903 | Syllabus: Syllabus of a course of Lectures at the Lowell Institute beginning 1903, Nov. 23. On Some Topics of Logic | EP 2:260

All thought being performed by means of signs, logic may be regarded as the science of the general laws of signs. It has three branches: (1) *Speculative Grammar*, or the general theory of the nature and meanings of signs, whether they be icons, indices, or symbols; (2) *Critic*, which classifies arguments and determines the validity and degree of force of each kind; (3) *Methodeutic*, which studies the methods that ought to be pursued in the investigation, in the exposition, and in the application of truth. Each division depends on that which precedes it.

1903 | Lecture I [R] | MS [R] 449:56; EP 2:256

…*Methodeutic*, which is the last goal of logical study[,] is the theory of the advancement of knowledge of all kinds.

1903 | Lecture I [R] | MS [R] 452:6-7

…the third branch of logic which specially considers how inquiries are to be ordered and arranged is by

Plato and Aristotle and all their followers, and by English logicians generally, called *Method*. But in order to distinguish this from the concrete and more usual meaning of the same word *method*, I prefer to call it *Methodeutic*. The German logicians call it *methodology*; but methodeutic is a better word from every point of view.

1903 | Syllabus: Syllabus of a course of Lectures at the Lowell Institute beginning 1903, Nov. 23. On Some Topics of Logic | EP 2:272

Logic, which began historically, and in each individual still begins, with the wish to distinguish good and bad reasonings, develops into a general theory of signs. Its three departments are the physiological, or *Speculative Grammar*; its classificatory part, judging particularly what reasoning is good and what bad, or *Logical Critic*; and finally, *Methodeutic*, or the principles of the production of valuable courses of research and exposition.

1905 | Adirondack Summer School Lectures | MS [R] 1334:28

...one branch of logic is methodeutic, which should investigate the general principles upon which scientific studies should be carried on.

1905-06 [c.] | Chapter III. The Nature of Logical Inquiry | MS [R] 606:17

...the only branch [of logic] that is particularly concerned with practice is *Methodeutic*, the study of the proper way of arranging and conducting an inquiry.

1906 | Phaneroscopy | CP 4.9

The highest kind of symbol is one which signifies a growth, or self-development, of thought, and it is of that alone that a moving representation is possible; and accordingly, the central problem of logic is to say whether one given thought is truly, i.e., is adapted to be, a development of a given other or not. In other words, it is the critic of arguments. Accordingly, in my early papers I limited logic to the study of this problem. But since then, I have formed the opinion that the proper sphere of any science in a given stage of development of science is the study of such questions as one social group of men can properly devote their lives to answering; and it seems to me that in the present state of our knowledge of signs, the whole doctrine of the classification of signs and of what is essential to a given kind of sign, must be studied by one group of investigators. Therefore, I extend logic to embrace all the necessary principles of semeiotic, and I recognize a logic of icons, and a logic of indices, as well as a logic of symbols; and in this last I recognize three divisions: *Stecheotic* (or stoicheiology), which I formerly called Speculative Grammar; *Critic*, which I formerly called Logic; and *Methodeutic*, which I formerly called Speculative Rhetoric.

1906 [c.] | On Signs [R] | MS [R] 793

The whole discussion of the logical nature of the different kinds of possible signs makes up the first division of logic, or *Speculative Grammar*. The second division, *Critic*, discusses the relation of signs to their objects, that is, their truth. The third division, *Methodeutic*, discusses the relations of signs to their interpretants, that is, their knowledge-producing value.

1908-07-10 | Letters to Francis C. Russell | MS [R] 387

In my view, logic has three parts, 1st *the Elements* which makes analysis of what one has to deal with; Arguments &c. 2nd *Critic*, which examines the conditions of the validity of arguments, and 3rd *Methodeutic*, which shows how any inquiry ought to be conducted.

1911 | Letter to J. H. Kehler | NEM 3:207

... the third branch of logic, *Methodeutic*, which shows how to conduct an inquiry. This is what the greater part of my life has been devoted to, though I base it upon Critic.

nd | Miscellaneous Fragments [R] | MS [R] S104

Semeiotics has three parts: Speculative Grammar, which studies the essential nature of the different kinds of signs; Critic, which studies the general conditions of their relations to their objects; and Methodeutic, which studies the general conditions of their fulfilling their purposes. In this third part, to which Pragmatism belongs, I allow some use of facts of history and also facts of mind some of which are in a measure discoveries of psychology.