Speculative Grammar

So, cultivators of the art of reasoning found themselves long ago obliged to institute a *speculative grammar* which should study *modes of signifying*, in general. It is best regarded as separate from logic proper; for one of these days philologists may take it in hand, for which logicians will thank them.

An art of thinking ought also to recommend such forms of thinking as will most economically serve the purpose of Reason. [—] Since this is the general foundation of the art of putting propositions into effective forms, it has been called *speculative rhetoric*.

The sciences of speculative grammar, logic, and speculative rhetoric may be called the *philosophical trivium*.

“Exact” logic, in its widest sense, will (as I apprehend) consist of three parts. For it will be necessary, first of all, to study those properties of beliefs which belong to them as beliefs, irrespective of their stability. This will amount to what Duns Scotus called *speculative grammar*. For it must analyse an assertion into its essential elements, independently of the structure of the language in which it may happen to be expressed. It will also divide assertions into categories according to their essential differences. The second part will consider to what conditions an assertion must conform in order that it may correspond to the “reality,” that is, in order that the belief it expresses may be stable. This is what is more particularly understood by the word *logic*. It must consider, first, *necessary*, and second, *probable* reasoning. Thirdly, the general doctrine must embrace the study of those general conditions under which a problem presents itself for solution and those under which one question leads on to another. As this completes a triad of studies, or trivium, we might, not inappropriately, term the last study *Speculative rhetoric*. This division was proposed in 1867 by me, but I have often designated this third part as *objective logic*.

Of Representation, in general, there are three Theories, namely, *First*, the Theory of the general conditions under which a representamen may embody a Meaning; this has been known as *Speculative Grammar*.
But besides being logical in the sense of demanding a logical analysis, our inquiry also relates to two as a conception of logic. The term “logic” is unscientifically by me employed in two distinct senses. In its narrower sense, it is the science of the necessary conditions of the attainment of truth. In its broader sense, it is the science of the necessary laws of thought, or, still better (thought always taking place by means of signs), it is general semeiotic, treating not merely of truth, but also of the general conditions of signs being signs (which Duns Scotus called grammatica speculativa), also of the laws of the evolution of thought, which since it coincides with the study of the necessary conditions of the transmission of meaning by signs from mind to mind, and from one state of mind to another, ought, for the sake of taking advantage of an old association of terms, be called rhetorica speculativa, but which I content myself with inaccurately calling objective logic, because that conveys the correct idea that it is like Hegel’s logic.

In consequence of every representamen being thus connected with three things, the ground, the object, and the interpretant, the science of semiotic has three branches. The first is called by Duns Scotus grammatica speculativa. We may term it pure grammar. It has for its task to ascertain what must be true of the representamen used by every scientific intelligence in order that they may embody any meaning. The second is logic proper. It is the science of what is quasi-necessarily true of the representamina of any scientific intelligence in order that they may hold good of any object, that is, may be true. Or say, logic proper is the formal science of the conditions of the truth of representations. The third, in imitation of Kant’s fashion of preserving old associations of words in finding nomenclature for new conceptions, I call pure rhetoric. Its task is to ascertain the laws by which in every scientific intelligence one sign gives birth to another, and especially one thought brings forth another.

There are three ways in which signs can be studied, first as to the general conditions of their having any meaning, which is the Grammatica Speculativa of Duns Scotus, second as to the conditions of their truth, which is logic, and thirdly, as to the conditions of their transferring their meaning to other signs.

It is generally admitted that there is a doctrine which properly antecedes what we have called critic. It considers, for example, in what sense and how there can be any true proposition and false proposition, and what are the general conditions to which thought or signs of any kind must conform in order to assert anything. Kant, who first raised these questions to prominence, called this doctrine transcendentale Elementarlehre, and made it a large part of his Critic of the Pure Reason. But the Grammatica Speculativa of Scotus is an earlier and interesting attempt. The common German word is Erkenntnistheorie, sometimes translated Epistemology.
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...

That our thoughts are signs is an old and familiar doctrine. I show that it is only in so far as thoughts are signs, and particularly [...] symbols, that they become subjects of logic; and further that the rules of logic are applicable to all symbols. Accordingly by regarding logic as a science of signs or formal semeiotic, and in the main as a science of symbols, or formal symbolic, we accurately cover its subject matter, and at the same time insure ourselves against all risk of being led astray into psychology. The word formal, in this connection, signifies that only the general conditions to which signs ought to conform are to be considered.

But those conditions may be distinguished into three kinds, leading to a corresponding distinction between three departments of logic, in its wider sense; or Formal Semeiotic. Namely the conditions are either, first, such as must be fulfilled in order that an object may be a sign at all; second, such as must be fulfilled in order that the sign may refer to the object to which it aims to refer, that is, may be true; and third, such as must be fulfilled in order that the sign may determine the interpretant it aims to determine, that is, may be pertinent. I call the study of the first series of conditions Speculative Grammar. It is the [...] introductory branch of logic...

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.
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.

I [...] take a position quite to that of the English logicians, beginning with Scotus himself, in regarding this introductory part of logic as nothing but an analysis of what kinds of signs are absolutely essential to the embodiment of thought. I call it, after Scotus, Speculative Grammar. I fully agree, however, with a portion of the English school, – a school I may observe which now has a large and most influential and scientific following in Germany, – I agree, I say, with a portion of this school without thereby coming into positive conflict with the others, in thinking that this Speculative Grammar ought not to confine its studies to those conventional signs of which language is composed, but that it will do well to widen its field of view so as to take into consideration also kinds of signs which, not being conventional, are not of the nature of language. In fact, as a point of theory, I am of opinion that we ought not to limit ourselves to signs but ought to take account of certain objects more or less analogous to signs. In practice, however, I have paid little attention to these quasi-signs.

... a speculative rhetoric, the science of the essential conditions under which a sign may determine an interpretant sign of itself and of whatever it signifies, or may, as a sign, bring about a physical result. [—]

In the Roman schools, grammar, logic, and rhetoric were felt to be akin and to make up a rounded whole called the trivium. This feeling was just; for the three disciplines named correspond to the three essential branches of semiotics, of which the first, called speculative grammar by Duns Scotus, studies the ways in which an object can be a sign; the second, the leading part of logic, best termed speculative critic, studies the ways in which a sign can be related to the object independent of it that it represents; while the third is the speculative rhetoric ...

...speculative grammar, corresponding to stecheology (Elementarlehre), classifies and describes signs.
... 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.

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.

Logic is [...] synonymous with semeiotic, the pure theory of signs in general. Its first part, speculative grammar, corresponding to stecheology (Elementarlehre), classifies and describes signs.

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.