

## Peirce's New Rhetoric

"...the purpose of my memoirs [is]...to lay a solid foundation upon which may be erected a new logic fit for the life of twentieth century science."

Peirce, in his application to  
the Carnegie Institution, 1902  
(MSL75 Memoir 28: 388)

The dispute between rhetoric and philosophy is as old as the one between poetry and philosophy (cf. Plato, *Phaedrus* 266). The history of logic in particular has been one of interesting divisions of labor and struggles of power between rhetoric and logic. Yet, for most contemporary mainstream philosophers brought up on turn-of-the-century logic paradigms, this dispute has settled into a disinterest in logic's sister art: rhetoric is not even a topic in the venerable *Encyclopedia of Philosophy*. Ironically, I think it can reasonably be argued that, as the limitations of the logism paradigm have emerged, philosophy has moved towards more rhetorical themes — even if it is not acknowledged as such.

Peirce's semiotic, I think, encourages us to revisit this dispute and, in fact, suggests an interesting resolution, a "new rhetoric," that could have appeal to the traditional concerns of both logic and rhetoric. Although it is only developed programmatically, Peirce's rhetoric concerns the *practice* of inquiry, and calls for an integration of rhetoric and logic on that basis, one which could possibly transform both disciplines in a fruitful way.

The particulars of Peirce's notion of rhetoric have been speculated about by several scholars from both philosophy and rhetoric (cf. Bird 1959; Johnson 1968; Braun 1977, 1981; Michael 1977; Lyne 1978, 1980; Fisch 1978; Krois 1981; Kevelson 1984; Savan 1988; Perreiah 1989; Bybee 1991; Liszka 1991, 1996; Santaella-Braga 1999). However, my aim here is to examine some of the historical context in order to demonstrate the programmatic value of Peirce's ideas, and by placing them in the history of rhetorical thought, showing some of their innovation and promise.

Most everyone acquainted with Peirce is familiar with his division of semiotic, or the theory of signs into a trivium that mirrors the classical liberal arts:

grammar, logic, and rhetoric. Semiotically focused grammar, however, is concerned to study the essential features of a sign, “those conditions without the fulfillment of which [signs] would not be signs at all” (MS 1147A:111). Logic studies the conditions under which signs may represent their objects truthfully (CP 2.229), or “the conditions which determine reasoning to be secure” (CP 2.1). Although these two divisions of semiotic are well-developed, the same is not true of the third division of rhetoric. Peirce has at least seven different names for his rhetoric and something like 30 different definitions. The various names are *speculative rhetoric* (MS 774: 7-8), *universal rhetoric* (W1: 175), *general rhetoric* (MS 346: 3), *formal rhetoric* (CP 1.559), *pure rhetoric* (CP 2.229), *objective logic* (CP 3: 430; NEM 4: 26-31), and *methodeutic* (NEM 4: 62; MSL75: 378). *General*, *universal*, and *formal* seem to be the earliest used terms (1864, 1865, and 1867, respectively), *formal* still being employed as late as 1893. The name, *speculative rhetoric*, is introduced around 1895 and continues to be used at least up to 1902; in 1896, however, it is said to be exchangeable with *objective logic* (CP 3.430). But in 1897, it is called *pure rhetoric* (CP 2.229) — a term not apparently used again. In 1898 *methodeutic* is introduced for the first time and continues in use til Peirce’s last days. In 1906 he says that *methodeutic* is to replace the term *speculative rhetoric*. The fact of the matter is that however it is called throughout its history, it is considered in a number of different ways: as the matter of conducting research wisely (W2: 539), or as how truth must be properly investigated (MS 320:27; MS 606: 15, CP 1.191), as the formal conditions for the attainment of truth (CP 2.207); the ordering and arranging of inquiries (MS 478; MS 452:9; CP3.430; CP 2.106-110), the study of the general conditions under which a problem presents itself for solution (CP 3.430), the method of methods (CP 2.108), the management and economy of hypotheses (MSL75). But it also has to do with the power of symbols to appeal to a mind (CP 4.116; CP 1.559; CP 1.444), or conditions for the intelligibility of symbols (MS 340: 34; W1: 175; MS 774: 9-11), or the clarity of ideas (MS L75; MS 322:12); it is concerned with the transmission of ideas (CP 1.445; CP 2.93), the consequences of accepting beliefs (NEM 4: 291), or how to render signs effective (MS 774: 2). In addition, speculative rhetoric studies the growth of Reason (NEM 4: 30-31), the science of the general laws of a symbol’s relation to other systems of symbols (W1: 258), evolution of thought (CP 2.108; CP 2.111), the advancement of knowledge (MS 449: 56), and the influence of ideas (NEM 4: 31); it is concerned with systematic and architectonic matters (MS 346: 3; CP 4.116). In other words, one might say that every time Peirce defines his rhetoric he defines it somewhat differently. This is clear sign that Peirce continually struggled with the matter, and even in its best, most comprehensive presentation in the 1902 Carnegie Institution grant application, the number and the nature of the drafts on this aspect of his system, show a mind still struggling with the basic design and outline of the discipline.

However, what is clear is that by including a theoretical rhetoric — at least in

name — among the legitimate branches of logic, Peirce distinguished himself from almost all trends in late 19<sup>th</sup> and early 20<sup>th</sup> century logic. This inclusion of rhetoric within logic probably seemed alien to most 20<sup>th</sup> century logicians and undoubtedly contributed to whatever exclusion was dealt Peirce from mainstream logic. The paradigm of early modern logicians, such as Bertrand Russell, is Cartesian — in the sense of his analytic method by which one began from the simplest, most secure and minimal number of elements to compounds or wholes, the goal being to create a universal method of thinking. Indeed as A.J. Ayer has said of Russell, “Russell’s answer...goes back to Descartes. We are to start with the elements which are the least susceptible to doubt and then see what can be constructed out of them, or inferred from them” (1972: 30). An axiomatic, formalized logic becomes a method of thinking that is justified by means of the formalization of the system itself; to that extent the system becomes an ideal way, an ideal language, especially for scientific purposes, to represent the world. Peirce’s sense of system and his system of logic set up a different paradigm than the Cartesian, and seems to employ a more rhetorical notion of grounding and validity. Peirce’s system does not start from simples and work to wholes, but works from presumptions which are probable and fallibilistic, and always have the possibility of revision — much in the way in which presumption is espoused in the rhetorical theories of Richard Whately — who served as a significant formative influence on Peirce. For the Cartesian paradigm, the validity of logic lies in the adequate formalization of the system — one cannot semantically ground the system — and certainly not by pragmatic means; but for Peirce, the leading principles of traditional logic find their basis in their continuing use by a real community of inquirers in the *practice* of inquiry — their guarantee is their success in inquiry, not in their formalization in a logical system (cf. Liszka 1996: 75ff). What logic provides to the inquirer is not a rigidly rigorous language, but a prudential method that probably will reduce error. For Peirce, the rhetorical aspect of inquiry is an important and vital aspect of logic.

Charles Morris is the only 20<sup>th</sup> century philosopher of note to retain Peirce’s division of logic in some fashion — specifically in his canonized division of it into syntax, semantics and pragmatics. Of course, pragmatics, in the form of speech act theory, and the like, developed without any real specific connection with Peirce’s formal rhetoric — and was not a real concern of the early 20<sup>th</sup> century logicians who mattered in the formative direction of modern logic. Although one can see, in retrospect, some similarities between Peirce’s work on assertion and speech act theory, there is no real historical continuity between speculative rhetoric and mainstream pragmatics. Besides, I think it can be argued, that Peirce’s formal rhetoric, when properly understood, is broader than pragmatics, but comprehends it as well.

### *I. Possible Historical Sources of Peirce's Notion of Rhetoric*

In investigating the historical influences on Peirce's notion of rhetoric, one comes to the realization that there is no one particular source to identify. We have to understand his original contributions on this matter as the result of an erudite understanding of the history of thought surrounding the relation between logic, dialectic and rhetoric. Peirce saw the imprint of his own ideas in this regard in several authors, which probably confirmed his view that the triadic division of semiotic — and his sense of rhetoric in particular — was widely recognized, and ought to be continued.

Of course, Peirce's semiotic trivium mirrors the classical trivium as it was canonized in the Medieval schools — that is, the division among grammar, dialectic or logic, and rhetoric. But, one of the traditional sources thought to be at the root of his thought on this matter are the scholastic logicians known as the speculative grammarians, or the *modistae*. Since Peirce uses the adjective 'speculative' to modify two of the divisions of semiotic, this might be a likely source. It is also clear that Peirce's own speculative grammar, as he says in his own words, is directly influenced by a work by that name — which he mistakenly attributes to Duns Scotus (CP 1.444, 2.83, 2.206, 3.430) — Thomas of Erfurt being the actual author (cf. ca. 1300-1310; cf. Pinborg 1982) (although Scotus does refer to *grammatica speculativa* (cf. *Opera Ominia*, T.1, 45-76). Included in the group are Boethius of Dacia, Martin of Dacia, Radulphus Brito, and Thomas of Erfurt, the early 12<sup>th</sup> century grammarians including, William of Conces, Peter Helias, Ralph of Veauvais, Gilbert of Poitiers, as well as a number of anonymous writers (cf. Fredborg 1988). Peirce seems familiar with most of these thinkers.

Speculative grammar was inspired by Aristotle's definition of science, as that which is worthy of universal and immutable features of reality. The theory posited three "modes": being, knowing and signifying. The first concerns the structure of the universe; the second thought, and the third language. The modes of language are the same everywhere since they reflect the modes of thought — which, in turn, is the same everywhere since it corresponds to the structure of the universe. In other words the mode of signs reflect the mode of being (cf. Todorov 1969: 15; cf. Robins 1951: 78-79; Bursill-Hall 1971: 73). According to Bursill-Hall, the *modistae* used the term *speculative* in the sense that language *mirrors* reality (1971: 31).

However harmonious the metaphysics of the speculative grammarians is with Peirce's own views, it appears that the speculative grammarians do not have any corresponding account of rhetoric — that is, there is no speculative rhetoric among the *modistae*. In this regard, this seems to be Peirce's own invention (cf. CP 1.444). However, if we were to draw an analogy, so that speculative grammar is to grammar what speculative rhetoric is to rhetoric, and if rhetoric is understood in the classic Aristotelian sense as the right method and means in succeeding in persuasion (Rhet 1355b22f), then speculative rhetoric would aim at a relatively broad and universal account of methods of conviction and persuasion

or success in the “fixing of belief” — as Peirce would call it (cf. NEM 4: 291; MS 774: 2). Or if, correspondingly, speculative grammar is the study of the universal character of languages in their ability to communicate, then speculative rhetoric would be the study of the universal characters of communication of meaning, or transmission of meaning — and indeed there is this indication in Peirce in regard to some of the definitions of speculative rhetoric (cf. CP 4.116; CP 1.559; CP 1.444; MS 340: 34; W1: 175; MS 774: 9-11; MS L75; MS 322:12; CP 1.445; CP 2.93). Work by Johansen (1993), Parmentier (1994), Habermas (1995), Colapietro (1995), Liszka (1996), and recently by Mats Bergman (2000), focus on this particular aspect of Peirce's rhetoric.

Besides its possible source in the medieval *modistae*, there is a mention by the Renaissance humanist, Juan Luis Vives, of a *universal* rhetoric that seemed current in his time (1586: 239; cf. McKeon 1965: 210n.89). Peirce was certainly familiar with the Renaissance humanists, and Vives in particular (CP 4.30; cf. CP 3.384). As noted by McKeon, this notion of universal rhetoric may have its origins in the distinction made by Cicero in his *De finibus* (Bk II.vi.17) between philosophic rhetoric, and the “popular style” as used in the law courts for example — but this can also be found in Aristotle (cf. *Topica* I.2.25ff). The sense of ‘universal’ here is roughly equivalent to ‘general’, and seemed to have more to do with classification than substance. The Renaissance humanists used this distinction to argue that, because rhetoric was more general than logic, logic as a discipline should be included under it — rather than conversely. Universal rhetoric applied to all things, and logic or dialectic could be seen as a branch of it. This was contrasted with particular rhetoric, which was restricted to certain sorts of civil and legal use.

We find something of Cicero's and the humanists' distinction between a universal and a particular rhetoric practiced in Bacon. For Bacon there are four intellectual arts: invention, to develop that which is sought or propounded, disposition, or arrangement, to judge what is invented; memory, to retain what is judged, and delivery, to transmit what is retained (1605: *De aug* V, 1, *Works*, IV, 405). The entire scheme reflects a version of the traditional Aristotelian-Roman “canons” of rhetoric: invention, disposition (or arrangement), elocution, memory, and delivery (cf. Cicero *De inventione* 1.9). Yet it is the last art, the art of “transmission” or “tradition”, as he calls it, that is the specific domain of traditional practical rhetoric (*De aug.* VI,1, *Works*, IV, 438-9), just as traditional logic is relegated to judgment. Still, Bacon makes it clear that invention belongs to both logic and rhetoric (*De aug.* V, 3, *Works*, IV, 423), and disposition, although part of logic, also finds a place in rhetoric (*De aug.* VI, 2, *works*, IV, 448). Thus, all arts are divided on the basis of a general rhetorical model, and each contains rhetorical features, but practical (“particular”) rhetoric is confined to the last branch. As we'll see later, these classifications have importance for the tradition of rhetoric.

In any case, if this is Peirce's sense of “universal” or “general” rhetoric, it is

somewhat modified. Peirce's larger semiotic trivium does not reflect the canons of rhetoric but of the liberal arts; consequently, rhetoric — even if it is understood as universal — is one division of semiotic. Nonetheless — as I'll argue later — there is most likely a considerable influence of Bacon here on Peirce's notion of rhetoric in other respects. But even if Peirce doesn't accept something like Bacon's rhetorically-tinged classification of the intellectual arts, Peirce's semiotic rhetoric is universal rather than particular in that sense, and is not concerned with the traditional issues of practical or particular rhetoric. Indeed, Peirce seems to express this view of rhetoric in 1904, where he calls for a "generalized" conception of rhetoric (MS 774: 3), "a universal art of rhetoric" that could in principle apply to "everything" "in the physical universe" (MS 774: 3-5).

There may be other acknowledged influences for Peirce's sense of rhetoric as well. In discussing the historical sources of what he considers three traditional divisions of logic for *The Dictionary of Philosophy and Psychology*, he is clearly using his own division as the framework for the question (CP 2.205-207). In regard to speculative grammar, he notes its origins in both Scotus (i.e., Thomas of Erfurt) and Kant, specifically the first division of *The Critique of Pure Reason* into the "Doctrine of Elements." We might also mention the Kantian, William Hamilton, in this regard, from whom Peirce seems to have borrowed the term *stocheiology* as a substitute for *speculative grammar* (cf. Hamilton 1869: I:46; Michael 1977).

Peirce believes the origins of critical logic can be found in Plato (*The Statesman* 260b), where a distinction is made between critical (*krisis* — meaning to judge or decide) and directive (*epitactic* — from words derivative of performance and practice) sciences — the first coming to some verdict or judgment about a claim, the second concerned with the performance of actions on the basis of that claim or knowledge. The implication here is that critical logic makes judgment on the goodness of a particular piece of reasoning or inference; the epitactic sciences, we presume, put good reasoning into practice. Using Diogenes Laertius (ca.4thCE: I.chapt v.29) as a reference, Peirce argues that this notion of critical logic can also be found in Aristotle, and forms the second of the three divisions of logic attributed to him: discovery or invention, judgment (*krisin*), and utility. According to Diogenes, the first is covered by *The Topics* and the lost treatise, *Methodics*, and supplies probable arguments for the solution of certain problems. The second is covered in the *Prior Analytics* and the *Posterior Analytics*, and concerns the nature of the syllogism and the character of scientific inquiry. The third, Diogenes claims, is covered by the work on *Sophistical Refutations*. Cicero seems to disagree somewhat with Diogenes, and argues that Aristotle proposed just a two-fold division of argumentation into invention and judgment — which he also adopts — and the latter also concerned with the validity of arguments (*Topica* II.6). As Peirce notes, Critical logic is also mentioned in passing by Locke (1690:BkIV,chapt XXI.4), where it is also assigned the job of weighing and considering claims to human knowledge. Peirce mentions how this tradition

is preserved in Kant's use of the term in *The Critic of Pure Reason*, where, in this case, *critic* is essentially employed in the sense of passing judgment on the use of pure reason. Thus, Peirce's own notion of critical logic conveys this tradition of articulating, classifying, and passing judgment on the forms of inference. As he puts it succinctly, "it classifies reasonings and determines their value" (MS 452:9).

In examining the historical basis of the third division of logic, Peirce says "it is further generally recognized that another doctrine follows after critic, and which belongs to, or is closely connected with, logic" (CP 2.207). However, unfortunately, he does not list any sources in this case. Nonetheless, by saying that "it is often called Method," he does implicate some of the philosophers mentioned in the context of this passage, specifically Ramus, Hobbes, and Kant, each of whom had a particular sense of that term.

Ramus — like Cicero — advocates a division of logic or dialectic into discovery (invention) and judgment (1555:5). But Ramus treats judgment in an interesting way. Part of Ramus's great reform in logic — as we'll see later — was to unify and compartmentalize disciplines, so that wherever disciplines shared concepts or topics, one was selected as having domain over that matter. This was especially relevant to the shared divisions of rhetoric and logic (or dialectic). Both deal with invention. But Ramus also argues that there is similarity between judgment and arrangement (or *dispositio*). In keeping with his idea of reform, Ramus argues that the shared divisions of invention and arrangement properly belong to dialectic or logic, and rhetoric should have domain over elocution and delivery. Thus, the invention of rhetoric is comprehended under the invention of dialectic, and arrangement under judgment. The result is an interesting account of judgment articulated primarily in terms of the proper arrangement or ordering of knowledge. The arrangement of logic has three divisions: proposition, syllogism and method (1555: 71). The proposition is the arrangement by means of which something is stated of something else (1555: 71). The syllogism is the arrangement by means of which a question under examination is ordered along with the proof and brought to a necessary conclusion (1555: 87). Method, on the other hand, is defined as a proper and systematic ordering of knowledge within a discipline from clearest and most general to less general (1555:88; cf. Ong 1953: 239-240 ; part of method is, following Plato, also concerned with classification of subject matter by a division into contraries (1559:2v; cf. Kristeller 1979:60) , especially as it is found in *The Statesman* (also an original source, according to Peirce, of the notion of critical logic). Thus, method becomes closely associated with the essential aspects of *dispositio* or arrangement (cf. Freedman 1993: 106ff) and serves to justify Ramus's own classifications. As Walter Ong points out, Ramus seems to have picked up the term *method* from a medieval context in which it designated a subject in the school curriculum, especially as it was arranged for memorization (1953: 240). This was broadened to include the discussion of what was first in the order of *intelligibility* (*primum in cognitione*) in a discipline,

i.e., the ordered arrangement of the principles within a discipline that would make it intelligible as such; but it also connotes the idea of which principles are the most primary, and therefore the most presumptive within a discipline, in the sense that other principles are dependent upon them, for example, the manner in which the conservation of mass principles are primary in physics. Ramus's notion of method is the impetus for the numerous debates about the topic which occurred in the late 16<sup>th</sup> and early 17<sup>th</sup> century, including Descartes's *Discourse on Method* (cf. Freedman 1993: 106; Gilbert 1960: 121-122).

Ramus's sense of method as something pertaining to the ordering of knowledge within a subject or discipline is found in grander, but related form in Kant, where method, in the last part of *The Critique of Pure Reason*, is defined as the formal conditions of a complete system of pure reason, an architectonic, i.e., the systematic organization of sciences under one idea (A708; B736, A832; B860; cf. CP 1.176ff) (on the relation between rhetoric and architectonic, see McKeon 1968, 1971). Method is also defined more simply by Kant as a "procedure according to principles" (A855; B883), and he discusses in this context the scientific method as he understood it. The two senses are related — architectonic is the systematic organization of all inquiries, while method concerns the process involved in a systematic inquiry. Peirce also adopts both senses of method and, in fact, seeks a way to relate these various senses in a unified way under the rubric of *methodeutic* (cf. MSL75 Memoir 29 Draft E: 183).

In regard to the first sense of method as architectonic, clearly some of Peirce's definitions of rhetoric do stress this connection with this Kantian notion (MS 346: 3; CP 4.116). For example, Peirce considers the classification of sciences part of architectonic, and he places that practice under his rubric of *methodeutic* in his 1902 grant application to the Carnegie Foundation (MS L75: 181-183, 391). This is also confirmed in the context of a rather obscurely written passage in MS 774 (13-15) where he attempts a classification of speculative rhetoric without much elaboration. A rhetoric of science is included among the several divisions he makes. In turn, this is divided into the rhetoric of communication of discoveries and the rhetoric of scientific digests. In CP 1.181, Peirce makes the matter of scientific digests a part of "sciences of review." The latter is involved with "arranging the results of discovery" (CP 1.182). But the classification of sciences is also included within it (CP 1.182).

But Peirce's rhetoric qua *methodeutic* is clearly connected with this sense of the proper ordering among disciplines, and the proper ordering of principles within disciplines in order to attain a unified sense of science. For Peirce, this systematic hierarchy of sciences begins with mathematics, moves to philosophy, and ends with the empirical or idioscopic sciences (cf. Kent 1987; Liszka 1996: 3-6; this is similar to Kant's large distinctions (cf. A837; B805ff). That is to say, they form a hierarchy from the most general, abstract and formal sciences, to the more specific and empirical ones (cf. CP 1.176-283).

But Peirce's classification — in Ramist fashion — also stresses the hierarchy



of the most general and abstract *leading principles* serving as the leading principles for the less general and abstract disciplines, for example, the manner in which logic ought to draw upon the leading principles of mathematics, and how the leading principles in phenomenology can serve to classify sign types in semiotic, or the way in which the leading principles in metaphysics should serve as the leading principles in the empirical sciences (CP 3.427). Peirce expresses this idea in a rather succinct form which, although attributed to Comte, could have been just as easily inspired by Ramus:

...the sciences may be arranged in a series with reference to the abstractness of their objects; and that each science draws regulating principles from those superior to it in abstractness....So far as the sciences can be arranged in such a scale, these relationships must hold good. (CP 3.427)

Thus, after citing the historical sources of his method in Hippocrates, Plato and Aristotle, Ramus writes:

And in a word this artistic method [in reference to his own method] to me appears as a sort of long chain of gold, such as Homer imagined, in which the links are these degrees thus depending one from another, and all joined so justly together, that nothing could be removed from it, without breaking the order and continuity of the whole (1555: 122).

This can be seen in Kant's sense of architectonic as well: "the unity of the end to which all the parts relate and in the idea of which they all stand in relation to one another...." (A832;B860). Methodeutic, understood in its aspect as architectonic, is precisely a systematic, chain-like ordering of disciplines and leading principles as they stand in their relations of dependence, and seems to be, indeed, the leading idea of Peirce's own classification of the sciences.

Methodeutic in this sense can also be understood as the *quest* for a systematic *completion* of an idea or argument, and figures prominently in his analysis of inference and argument. For Peirce the *grundsatz* of formal rhetoric, as he calls the discipline in this instance, "is that an idea should be presented in a unitary, comprehensive, systematic shape" (CP 4.116; cf CP 3.454). That is to say, its comprehension is achieved when it is related to a whole of which of it is a part, much in the way in which a geometrical diagram, initially diagnosed as unintelligible, can be made intelligible by the construction of a few connecting lines (CP 4.116) (Peirce uses an account of the mathematical notion of limits here to illustrate the same point (cf. CP 4.117-119)). Similarly when something outlying or excep-

tional occurs relative to a certain theory or idea, it can be made regular by the appropriate enlargement of the system (CP 4.116). In other words, abductive adjustments to a theory that cannot account for the surprising or the exceptional event are warranted under the principle of formal rhetoric.

This notion of formal rhetoric or methodetic as concerned with the systematic unfolding of a concept may also help clarify some of the mystery around Peirce's notion of *objective logic*, which he at least at one point claims to have often used as another name for speculative rhetoric (CP 3.430), but other times as apparently part of it (MSL75 Memoir 33) — but even that is not entirely clear (cf. CP2.111; MSL75 Memoir 33 Draft D: 382). In any case he certainly does not use it as a frequent substitute for speculative rhetoric. There seems also to be some evolution or change in Peirce's thought on objective logic. In 1893, it is characterized as the logic of second intention (CP 4.80), understood classically as thought about conceptions, or thought about thought (CP 4.465). Included among conceptions that are discussed in this context are simple relations such as zero, 1, and infinity, the relation of inherence, the transitive relation, correspondence, etc. (CP 4.81). In 1896, it is thought of as the study of the general conditions under which a problem presents itself for a solution (CP 3.430). But in the Carnegie grant application it is a name said to have its origin in Hegel (MSL75 Memoir 33: 392), and definitely has Hegelian overtones (although it can also be found in Hamilton (1869: I: 37). In his grant application, Peirce defines it as “the logical processes of ideas acting upon the external world” (MSL75 :Memoir 33 Draft D 387), and “the consideration of the outward influence of ideas” (MSL75 Memoir 33 DraftD: 382). In the same manuscript, he also talks about the difference between the subjective method and the objective method; the objective method consists in the view that truth will unfold in the long run; the subjective method is based on a purely instinctive feeling of rationality (MSL75 Memoir 14 Draft B: 11). However, in the drafts for his *Minute Logic*, we find the longest explication of it:

whether there be a life in Signs, so that...they will go through a certain order of development, and if so, whether this development be merely of such a nature that the same round of changes of form is described over and over again whatever be the matter of the thought or whether, in addition, to such a repetitive order, there be also a greater life-history that every symbol furnished with a vehicle of life goes through, and what is the nature of it. (CP 2.111)

Digging the sense of objective logic out of Hegel would be formidable task and certainly a separate paper, although there are some familiar expressions of it: “The process by which they [moments of mind] are developed into an organi-

cally connected whole is Logic or Speculative Philosophy" (1807:97); or, "...the systematic statement of the mind's experience..." (1807:97). In both cases there is some family resemblance to Peirce's definitions related to the growth of ideas or symbols. Indeed, W.T. Harris, whose Hegelianism Peirce was familiar with early on in his career (cf. W 2: 132-162), calls Hegel's method of reasoning the "objective method" (W2: 136). It is described as one that traces a concept through all the phases which necessarily unfold within it (W2: 136). However, Peirce expresses his fundamental disagreement with Hegel's claim, that to be and to be represented are the same; doing so disavows the reality of secondness, and the result that ideas can have no real influence in the physical world. The inclusion of secondness for Peirce stands Hegel on his head by making representation causative, both in an efficient and final sense. The function of objective logic for Peirce is to trace out the systematic consequences of an idea. In this regard it clearly retains a family resemblance with his other senses of methodetic as architectonic.

But, in this regard, there is another connection of methodetic with systematization which shows its association with rhetoric more closely. This is found in Peirce's analysis of the enthymemic or incomplete argument, as he calls it. As Peirce explains:

An *incomplete* argumentation is properly called an *enthymeme*, which is often carelessly defined as a syllogism with a suppressed premiss, as if sorites, or complex argumentation, could not equally give an enthymeme. The ancient definition of an enthymeme was "a rhetorical argumentation," and this is generally set down as a second meaning of the word. But it comes to the same thing. By a rhetorical argumentation was meant one not depending upon logical necessity, but upon common knowledge as defining a sphere of possibility. Such an argument is rendered logical by adding as a premiss that which it assumes as a leading principle. (CP 2.499fn1)

In other words, a *complete* argumentation is one, as Peirce says, in which all the leading principles are supplied (CP 3.166). As an illustration, he asks us to consider the following enthymeme (CP 3.166): Enoch was a man, therefore Enoch died. The leading principle in this case is 'All men die', which creates the more complete argument: All men die, Enoch was a man, Enoch was to die. Yet, the leading principle of this is the *nota notae* ('a mark of a mark is a mark of the thing itself' — which can be better expressed in modern quantificational logic), so the more complete argument is one that adds this leading principle as a premise: *Nota notae*, All men die, Enoch is a man, therefore Enoch will die. As Peirce notes, if we attempt to add a leading principle to this argument, the *nota notae* is

again employed; thus, as he says, “the argument is no more complete than the last one” (CP 3.166).

However, as Peirce notes, this argument supplies only all of the *logical leading principles*, but it is not absolutely complete. A logical leading principle is one that must be supposed true in order to sustain the logical validity of any argument (CP 3.168). But there is also the leading principle which is a premise of all deductive arguments, namely, that if a particular logical principle is valid, then in no analogous case will it lead to a false conclusion from true premises (CP 2.204, 2.267, 4.477; W 4: 246). Similarly with the other two major types of inferences, induction and abduction; for induction it is that “if steadily adhered to, [induction] would at length lead to an indefinite approximation to the truth, or, at least, would assure the reasoner of ultimately attaining as close an approach to the truth as he can, in any way, be assured of attaining” (CP 2.204; cf. CP 1.93). For abduction it is the principle that the human mind is akin to the truth such that in a finite number of guesses it will light upon it (CP 5.172).

Yet, although these leading principles articulate the basic types of inferences used in inquiry, they do not articulate the leading principles of inquiry as such. These are found in certain “prelogical” principles, which serve as the basic presuppositions and presumptions of inquirers. These include a presumption that there is such a thing as truth, and that it can be found out; that it can be found out primarily by reasoning about it, and that the latter is superior to other means of doing so (CP 2.125-2.133). In general then, the job of formal rhetoric is to disclose these basic and ultimate leading principles that are common to all inquiry — which like the enthymeme of classical rhetoric — presupposes them to be commonly held between speaker and audience and, as such, are probable or fallibilistic, but nonetheless presumptive. Formal rhetoric, in this regard, aims to disclose all the leading principles of inquiry, that is, the collection of presuppositions and presumptions which serve as the general, common and common-sense appeal among inquirers. Thus, the difference between a logically valid argument and a rhetorical argument is the difference between adding the leading principle as a premise in the argument in order to complete it, and the presumption of the principle. Thus, as Peirce emphasizes, a rhetorical argumentation was meant as one not depending upon logical necessity, but upon common knowledge as defining a sphere of possibility. Thus, one can *logically* complete any argument by supplying all of its logical leading principles; still it is essentially rhetorical argumentation because the status of the ultimate leading principles — and certainly the extralogical ones — is presumptive — in the sense that they rely on, as Peirce says, “common knowledge as defining a sphere of possibility.”

Peirce’s doctrine of critical common-sensism attempts to articulate the status and character of these basic presumptions and presuppositions — a topic which, given the purpose of this paper, can only be addressed briefly. “The critical common-sensist,” as Peirce says, has as his first task, “the systematic business of endeavoring to bring all his very general first premisses to recognition....” (CP

5.517). The philosophy of critical common-sensism — which Peirce identifies with the essence of pragmatism — also recognizes the paradoxical position that certain beliefs used as premises in inquiry are indubitable and acritical, yet still possibly subject to genuine doubt and criticism (CP 5.514). This seeming inconsistency can be clarified by making a distinction between the indubitable and the infallible. No belief is infallible, but some may be indubitable. A belief — such as that there is an order to nature, or the leading principle of induction — is indubitable in the sense that it is presumptive of inquirers and used as the acritical premise of an inquiry. It is presumptive in the sense that inquirers do not feel genuine doubt about it. As opposed to the possible “paper” doubt of Descartes, genuine doubt requires a struggle to attain — there must be a reason to doubt. At the same time such beliefs are inherently vague — for example, a belief that there is an order to nature does not specify the order of nature, only that there is one as such (CP 5.446). It is also a belief with a tradition — to the point of being instinctive, and acted on from habit (CP 5.516). As such, these beliefs are already operative, in the sense that they are ensconced in the process of inquiry as living habits, and some may in fact be inescapable (CP 5.508). Still, it is quite possible that some indubitable beliefs may be false (CP 5.451). Thus, they are not infallible, but only probable.

This particular topic points to another possible rhetorical influence on Peirce, namely, the account of presumption in the rhetorical work of Richard Whately, whose logic as we know by Peirce's own admission was of formative influence on him ( cf. Fisch 1982: xviii-xix). Although he was to later rightly denounce Whately as a nominalist, still his admiration for him seemed to carry even to the end of his days (MS 774). In his rhetoric, Whately claims that presumption means

not (as has been sometimes erroneously imagined) a preponderance of probability in its favour, but, such a *pre-occupation* of the ground, as implies that it must stand good till some sufficient reason is adduced against it; in short, that the *Burden of proof* lies on the side of him who would dispute it. (1846: 112)

Examples of presumption are found in legal discourse, for example, the presumption of innocence, which does not mean that we are to take for granted the innocence of the person, nor that it is more likely than not that he is innocent, only that the burden of proof lies with the accusers (1846: 112-113). In any case, the connection, at least in Peirce's mind, between the rhetoric and the articulation of presumption is made clear in 1909 where he explicitly states that the discussion of certain kinds of presumptions belongs to methodeutic (MS 637).

Whately also weighs in with a view concerning the relation of logic and rhetoric. Whately — claiming to go back to Aristotle — sees rhetoric as an off-

shoot of logic (1846: 13). However, as opposed to treating both invention and judgment as part of logic, and as opposed to Ramus's division of labor for logic and rhetoric, he sees the "art of inventing and arranging Arguments...the only province that Rhetoric can claim entirely and exclusively (1846: 40). On the other hand, "the business of Logic," he says, citing Cicero, is to "judge" arguments (1846: 40). Thus, as opposed to Ramus, he returns to a distinction between judging and arranging arguments.

Peirce's methodical and architectonic approach to inquiry does seem to have a rhetorical tenor to it — if not in the least by its generic analogy to the function of *dispositio* or *arrangement* of arguments in classical rhetoric — that is, giving a proper order to argument or inquiry. But the rhetorical sense of architectonic — understood as a public and civic enterprise is captured in Peirce's rather ebullient reading of Kant's notion in a piece written in 1896, and apparently meant to be a foreward to his projected *Principles of Philosophy* (CP 1.176ff). Here he elaborates on Kant's use of the word *cosmic* and the metaphor of architecture in association with architectonic (Indeed this harks back to Bacon's phrase that "method is as it were the architecture of the sciences" (*De aug*, vi, 2, *Works*, IV, 448)). *Cosmos* in its etymological roots implies the sense of whole, as does the sense of architectonic; but Peirce says he prefers to use the word *public*, for reasons that coincide with the metaphor of architecture. Unlike painting or sculpture, which can be executed by individual artists and can, in principle, be cordoned for private viewing, an architectural work is inherently public. He says — in one of his rare populist moods — "...a great building...is meant for the whole people, and is erected by the exertions of an army representative of the whole people. It is the message with which an age is charged, and which it delivers to posterity" (CP 1.176). The implication here is that the architectonic of science is, like a building, a publicly spirited expression of human endeavor, and to the extent that it concerns knowledge, belongs more to the traditional domain of rhetoric, understood as part of civil, communal discourse and collective work, rather than private reflection and effort. As will be shown later, this public and collective sense of science will have significance for Peirce's estimation of Cartesian methods.

However, architectonic is clearly not the whole of the sense of method for Peirce (as similarly for Kant (A832;B860)), nor is method, as we have seen, the whole of speculative or universal rhetoric — even though it becomes more of a preoccupation for Peirce in his later years. Besides method understood as architectonic, method also has for Peirce its contemporary sense as a procedure for doing science. As Ong also notes in regard to Ramus's notion of method, it seems somewhat contrasted with the more traditional Greek — but also more contemporary — sense of *methodos* as a kind of inquiry or procedure in inquiry (cf. Aristotle, *Nic. Ethics* 1094a1). Indeed, Peirce's discipline of rhetoric *cum methodentic* seems to capture this more current sense of the term, understood as "the general theory of how research must be performed" (CP 2.106; cf. MS

L75), or "the doctrine of how truth must be properly investigated, or is capable of being ascertained" (MS 320: 27; cf. MS 606: 1; CP 1.191), or the formulation of a "general rational course of inquiry" (MSL75: 389), or simply "the general method of successful research (CP 7.79). It is in this spirit that Peirce defines logic as "the art of devising methods of research" (CP 7.59). "Logic," he continues, "will not undertake to inform you what kind of experiments you ought to make in order best to determine the acceleration of gravity, or the value of the Ohm; but it will tell you how to proceed to form a plan of experimentation" (CP 7.59). Indeed, Peirce goes into great specifics of how, at least, a student ought to proceed in research (CP 7.80ff), and the general character of method in this sense is outlined in his application to the Carnegie Institute in 1902 (MS L75).

We may say in sum — using the historical sources Peirce explicitly mentions or implicitly suggests — that it seems his rhetoric has three connotations: (1) its concern with the universal or formal conditions for the communication of knowledge, and the fixation of belief; (2) its concern with the systemic and architectonic characteristics of inquiry and the sciences, including their classification, evolution, leading principles and presuppositions; (3) its concern with method, understood as general procedures for efficient and successful inquiry.

## II. *The Historical Context of Peirce's New Rhetoric*

...all the reforms of science have been logical reforms. The Ramists sneered at the scholastics, the modern natural theorists at both [Kant and the Ramists], and certain persons are now beginning to sneer at the natural theorists. Another reform seems to be coming: it is in the air. (W1: 162)

Looking at the historical sources has not given us a complete picture of Peirce's rhetoric. It might be worthwhile, in this case, to examine some of the relevant history of the relation between logic and rhetoric in order to put Peirce's rhetoric in a proper context, and underscore its vision. This is no mean task. Suffice it to say, that for sake of the present analysis, all I want to do is to give an overview that stresses certain shifts in thought about rhetoric, in order to show how Peirce's ideas about universal rhetoric fit into the scheme of things in this matter.

In this regard one can spot at least three lines of descent that seem relevant to Peirce's rhetoric. The first is the Cartesian line. This relegates rhetoric to a peripheral, purely ornamental role in the quest for knowledge and the practice of scientific inquiry. Through the *Port-Royal* logic and other sources, the Cartesian line culminates in the modern, formal logic attitude, which separates itself clearly from the traditional concerns of rhetoric. Formal logic's initial goal is to devise a rigorous, completely formalized language that can be used as a precise scientific language in the conduct of science. When that enterprise does fail later on, this

line of thought turns to more consideration of pragmatics and the history of scientific inquiry and practices. However, it does this without any serious consideration of rhetoric or its tradition. Incidentally, one can see the complement of this line in the elocutionist movement — but it is not germane to Peirce here, so I'll forego any discussion of that trend.

The second is the humanist line. This stands conversely to the Cartesian line, and stresses the subordination of logic to rhetoric. Beginning with Agricola and Melancthon — via the Renaissance rhetoricians, and through Vico, it culminates in the rhetorics of Burke and Perelman — and could count Derrida and Rorty among its ideological members. For the humanist tradition, all knowledge is based in communicative discourse which is the proper subject matter of rhetoric. There is a questioning, especially beginning with Vico, of the certainty and power of science for acquiring knowledge and truth. There is a strong attack on Cartesianism with its emphasis on solitary, axiomatic processes, as opposed to the more dialogic and communal process of inquiry found in traditional rhetoric and dialectics; and there is the primacy of language over reason, and the will as the highest human faculty.

The third is the Baconian line, Locke being a tangential member of this trend. This stands somewhere between the humanist and Cartesian. Unlike the Cartesians, Bacon does not see rhetoric as purely ornamental. Rather, he sides with the humanists in stressing its crucial role in translating reason into action for the sake of the good. However, unlike the humanists, Bacon does see rhetoric as subordinate to science and logic — although the latter, especially, has a strong rhetorical tenor to it. One general way of characterizing Bacon's position in regard to logic and rhetoric is to suggest that it is integrated — in the sense that these two disciplines work in a fused way to achieve the traditional goals of logic and science.

It could be argued that Locke belongs in this line, although he suggests a more separate but, nonetheless, complementary role for logic and rhetoric. Logic, specifically inductive reasoning from experience, is to serve as the means by which to attain truth, and a certain revised form of rhetoric will be the means by which to communicate this knowledge to others. The emphasis here is on the perspicuous presentation of information, so that the weight of reason and argumentation itself will prevail rather than the seduction of appeals to emotions, opinions, and conventions. The goal of rhetoric is not to engage in deceptive persuasion, but simply to allow the evident to be communicated — and so allow the force of reason to prevail. Bacon's integrated logic, on the other hand, stresses the working of all principal human faculties in the process of communication and transmission — understanding, imagination, the passions and the will.

All three of these lines find their focus in the figure of Petrus Ramus. Even though he was not a specially talented logician or philosopher, Ramus started a pedagogical revolution by rethinking the role of rhetoric and logic. As we saw earlier, what Ramus wanted to do was retain the scholastic notion of logic or dia-



lectic as a disputational art, but avoid the redundancies — as he saw it — between logic and rhetoric. The result was, as he argued, that invention and arrangement of arguments — which traditionally played an important role in rhetoric — properly and solely belonged to logic. Rhetoric then was relegated primarily to the matter of style and eloquence. As the eminent scholar of rhetoric, Wilbur Howell, put it: “In effect while Ramus damaged logic by underplaying its intent in the method of discovering new truth...what he did to rhetoric threatened it with catastrophe. Limited to delivery and to mere extremes of style, rhetoric no longer had anything of real importance to say or do” (1971: 78). This reduction of rhetoric to eloquence was wholeheartedly adopted by the Cartesians and the Port-Royalists. Secondly, as previously discussed, Ramus emphasized the notion of method as an important part of logic, which except perhaps for Galen and the art of medicine, lay dormant in the scholastic treatises. Third, Ramus’s special emphasis was on perspicuity, simplicity and clarity of thought in regard to the communication of scientific demonstration. In general, the paradigm was mathematical or axiomatic demonstration.

Descartes seems to have accepted the broad body of Ramus’s changes to the disciplines of logic and rhetoric. In one revealing passage, Descartes announces: “I esteemed eloquence most highly and I was enamoured of Poesy, but I thought that both were gifts of the mind rather than fruits of study. Those who have the strongest power of reasoning, and who most skillfully arrange their thoughts in order to render them clear and intelligible, have the best power of persuasion even if they can but speak the language of Lower Brittany and have never learned Rhetoric....Most of all was I delighted with Mathematics because of the certainty of its demonstrations and the evidence of its reasoning...” (1637: 85). Thus, with Ramus, there is a dismissal of rhetoric as mere eloquence, and a stress on method, modeled on mathematics, as a clear and intelligible way to persuade the reasonable person. In this sense Descartes’ “Discourse on Method” sets out in the Ramsian tradition to set the rules for an inquiry or investigation, guided by the leading idea of clearness and perspicuity, and the paradigm of mathematics as a guide. The analytic method of Descartes conforms to the Ramsian-inspired model of discovery, breaking down presumption, the everyday and the obvious, into what is most simple, clear and distinct, and from there reconstructing, synthetically, by certain inferences the basic principles articulating the subject matter of the inquiry. By relegating rhetoric to mere eloquence, and replacing discovery and disposition with a Ramsian-like program for method (although Descartes and the Port Royalists were certainly critical of the specifics of Ramus’s notion of method), Descartes develops the solitary monologic method for which he is well known. Inquiry becomes an affair of individual consciousness, done alone without reference to the larger community.

George Kennedy sees an attack on rhetoric taking place during this period quite comparable to the Platonic address in classic Greece. He writes

that the starting point of these criticisms is the *Discourse on Method* of Rene Descartes... and their most specific manifestation is the Port Royal Logic of 1662. The effect of these works was to challenge traditional rhetoric, whether Ciceronian or French. Put in an extreme form, the new logic claimed that the only sound method of inquiry is that of geometry, proceeding from self-evident axioms to universally accepted conclusions. The topics of dialectic and rhetoric are useless in discovering the truth or in demonstrating it, and the five traditional parts of rhetoric are a form of deception. (1980:222)

Later humanists, such as Vico, make the same complaint. Vico, Professor of Rhetoric at the University of Naples for forty years, took issue with Cartesian geometry precisely on the grounds that it recommended to all students of mathematics, its “defiguralization of the geometrical and...its conversion into algebraic values.” Arguing from the primacy of rhetoric and the *vita activa*, Vico attacked Cartesian analysis for encouraging a solitary existence, rendering students incapable of civic life. Cartesian geometry “worked contrary to the skills of effective public action and implied a spirit utterly repulsive to the mind of a jurist”(cf. Vickers 1988: 183). Renato Barilli claims that “with rationalism modernity arrives at the most radical divorce from rhetoric” (1989: 74). Descartes rejects the matter of rhetoric, with its emphasis on probability, dialogue, and the community between speaker and audience. He finds fundamental truths in intuitive self-evidence, rather than dialogue.

Modern rhetoricians, such as Chaim Perelman, also trace much of the conflict between logic and rhetoric to Ramus and Descartes. By moving dialectic to the province of logic and reducing rhetoric to verbal ornamentation, Ramus set for later philosophers the impossible task of applying the truth criteria of logic to questions of value and behavior. And Descartes exacerbated the problem by declaring the “merely plausible” to be “effectively false” (cf. 1969: 505-507).

The second line of rhetorical theory, as mentioned, is the humanist one. Figures such as Lorenzo Valla, Agricola and Melachthon precede Ramus, and although he is influenced by them, his position is almost the converse of theirs. For the humanists, dialectic is claimed to be an inferior discipline to eloquence. For them persuasive eloquence is the highest end of discourse, since language is primarily a political and social tool rather than an instrument of propositional consistency or rigor (cf. Leff 1978: 17ff). For Valla, even the search for metaphysical truth is dangerous, because it diverts people from the real problems of the community; knowledge should be directed toward social and political ends instead. Melanchthon is even more radical, arguing that the whole of philosophy ought to be subordinated to rhetoric (cf. Ong 1952; McNally 1974).

Much of the theoretical fuel for this subordination of logic to rhetoric is

found in their faculty psychology which shows a clear supremacy of the will to other human capacities. Jean Luis (Ludovicus) Vives is prominent in this regard:

in man the highest law and government are at the disposal of will. To the will, reason and judgment are assigned as counselors, and the emotions are its torches. Moreover, the emotions of the mind are enflamed by the sparks of speech. So, too, the reason is impelled and moved by speech. Hence it comes to pass that, in the whole kingdom of the activities of man, speech holds in its possession a mighty strength which it continually manifests". (1531: 180; cited in Vickers 1988: 277)

In general, as Brian Vickers (1988: 276) points out, humanist rhetoric — with its emphasis on the will — also emphasized the connection between rhetoric and ethics:

The effectiveness of rhetoric derived, as everyone who had read the classical texts knew only too well, from its power over the emotions. Renaissance rhetoricians gave enormous attention to this topic, and related it to the new emphasis in psychology on the will as the source of freedom and responsibility. Rhetorical *movere* was increasingly conceived of as mobilizing the will to good ends.

The third line of descent is from Bacon and Locke, through Campbell and Whately. Bacon is the most interesting and influential thinker in this line. To understand Bacon's contribution to this matter, we have first to endure a long division of disciplines in order to discern his account of logic and rhetoric. Bacon divides human learning into three basic branches, history, poesy, and philosophy, based on what he believes to be the three principal human faculties: memory, imagination, and reason (*Adv of Learning, Works, III, 329*). Without going through all the laborious divisions of philosophy, suffice it to say that philosophy, in part, deals with mind in terms of its substance, its faculties, and the use and purposes of those faculties. The faculties of the mind comprise understanding, reason, imagination, memory, appetite, and the will (*De aug., IV, 3, Works, IV, 398*). It is under the division into the uses of the faculties that we find two important parts of philosophy: ethics and logic. Logic is concerned with understanding and reason, ethics with the will, appetite, and affections. Logic is composed of four intellectual arts that compare with the purposes of the intellectual faculties: "for man's labour is to invent that which is sought or propounded; or to judge that which is invented; or to retain that which is judged; or to deliver

over that which is retained. So the arts must be four: Art of Inquiry or Invention; Art of Examination or Judgment; Art of Custody or Memory; and Art of Elocution or Tradition” (*De aug.*, V, 1, *Works*, III, 384-385). The last art is often called the Art of Transmission (*De aug.*, VI, 1, *Works*, IV, 438-439).

The Art of Transmission is divided into three parts: the Organ of Discourse, the Method of Discourse, and the Adornment of Discourse, the latter forming the principal matter of ordinary rhetoric (*De aug.*, VI, 1, *Works*, IV, 439). The first is associated with grammar, the second with the arrangement and management of a discourse, the third is rhetoric, properly speaking and understood as a practical art. Grammar is divided into literary and philosophic (*De aug.*, VI, 1, *Works*, IV, 441), the first dealing with usual topics in traditional grammar, the latter dealing with the general nature of signs, or what he calls “the notion of things” (*De aug.* VI, 1, *Works*, IV, 439-440). It is here in this context that Bacon makes a distinction between emblematic signs — roughly equivalent to Peirce’s notion of icons, and what he calls “real characters,” roughly equivalent to Peirce’s notion of symbol (*De aug.* VI, 1, *Works*, IV, 440).

What is striking about Bacon’s laborious divisions of the intellectual arts is their rhetorical tenor — in the sense that they reflect the traditional divisions of rhetoric: invention, arrangement, memory, style, and delivery. Yet collectively, these arts compose logic, and rhetoric — understood in its usual practice — is one aspect of one of these arts. There is a fractal quality to Bacon’s arrangement, in the sense that the parts reflect the whole. Rhetoric is incorporated into a rhetoricized logic. Bacon’s “new logic,” his particular sense of induction, is the dominant methodology within the art of invention and, so, one part of the more comprehensive sense of logic, and it is something that applies to all the arts and sciences (*Nov. Org. Works*, IV, 112). Put simply, as opposed to Ramus, Bacon reintegrates the two disciplines, so that invention belongs to both logic and rhetoric (*De aug.*, V, 3, *Works*, IV, 423), and disposition, although part of logic, also finds a place in rhetoric (*De aug.*, VI, 2, *Works*, IV, 448; cf. *De aug.*, VI, 2, *Works*, IV, 448; Wallace 1943: 25).

Second, Bacon sees an important function for Rhetoric, one which serves as mediator between reason and the will, between the true and the good, between logic and ethics, and in doing so engages all the human faculties: reason, imagination, the passions, appetites, and the will. He stands in agreement with the humanists in the vital role that rhetoric plays in the intellectual arts, and its ethical importance in directing the will and, in general, in addressing all human faculties. However, he disagrees with them in terms of the relative hierarchy of human faculties. For Bacon, rather than reason being a counselor to the will, the will serves in the interest of reason. Bacon makes this clear in his well-known definition of rhetoric: “the duty and office of Rhetoric is to apply Reason to Imagination for the better moving of the will.” (*Adv. learn. Works*, III, 409).

This definition shows that, first, rhetoric incorporates all of the human faculties: reason, imagination, appetite and the will; secondly, it places them in the

proper hierarchy or order, so that all the faculties are subordinated to reason; but thirdly, it shows that rhetoric is geared toward practice, rhetoric has as its end or purpose, action or moving the will, which consists of both conviction and persuasion. In other words, rhetoric is the process by which reason is translated into action. Bacon postulates, as Wallace suggests, not an isolated individual, but a social being whose life and actions are inextricably bound up with his fellow beings (1943: 28). Such a conception, he continues, moves Bacon to view the end of rhetoric not just as conviction of belief, but as action. Belief and action become inseparable, since in Bacon's psychology, the appetite and the will are the agents which impel action; thus to influence the will is to secure action (1943: 28). Rhetoric becomes an instrument of reason to induce right action.

Although Locke can be seen as belonging to the Baconian line, George Campbell is the rhetorician most influenced by Bacon's ideas (Bevilacqua 1965; Howell 1956: 596; Wallace 1943: 223-4), calling him "perhaps the most comprehensive genius in philosophy that has appeared in modern time" (1823: I, 12-13). Campbell adopts the principal theses of Bacon's rhetoric: that rhetoric — or eloquence as he often calls it — is to address the entire person, in the sense of comprehending all human faculties in their proper hierarchy, and translating beliefs into action; secondly, that logic and rhetoric form an integral whole. However, Campbell seems also influenced by the Cartesian tradition in stressing 'perspicuity or clearness of ideas in style, and in a manner reflective of that tradition: "perspicuity results...from...accuracy of method, where the mind is regularly, step by step, conducted forwards in the same track..." (1823: I.i, 28).

For Campbell logic, rhetoric, and grammar form an integrated whole — logic concerns discerning true thought, grammar its proper expression, rhetoric, establishing its conviction and persuasion (1823: I.i). In particular, logic and rhetoric play interrelated and complementary roles. The ultimate end of logic is the eviction of truth, the ultimate aim of rhetoric is the conviction of the hearers (1823: I.iv, 28). "Pure logic regards only the subject, which is examined solely for the sake of information....Eloquence not only considers the subject, but also the speaker and the hearers, and both the subject and the speaker for the sake of the hearers, or rather for the sake of the effect intended to be produced in them" (1823: I.iv, 28). Indeed his general definition of eloquence is "that art or talent by which discourse is adapted towards its end" (1823: I.i). In this context, he also makes his distinction between conviction and persuasion. Conviction is achieved by proving some position disbelieved or doubted by the hearers; persuasion is accomplished by convincing the judgment, interesting the passions and fixing the resolution (1823: I.iv). The rhetorician appeals to the understanding much as the logician does, and moral knowledge — which is thought to be the domain of rhetoric by Campbell — rests on the same mental operations as science. What is most interesting in this regard is that, for Campbell, the difference between moral and scientific knowledge is a question not of certainty versus probability, but of the degree of probability (1823: V.ii.pt. iv). Thus, unlike Des-

cartes, all knowledge is fallible and measured by degrees of probability. For this reason, Campbell does not find much use for syllogistic reasoning (1823: I.vi).

Campbell also agrees with Bacon's doctrine that rhetoric treats of all the human faculties: eloquence or rhetoric is "the grand art of communciation, not of ideas only, but of sentiments, passions, disposition, and purposes" (1823: I.14). As he says,

In order to evince the truth considered by itself conclusive arguments alone are requisite; but in order to convince me by these arguments, it is moreover requisite that they be understood, that they be attended to, that they be remembered by me; and in order to persuade me by them, to any particular action or conduct, it is further requisite, that by interesting me in the subject, they may, as it were, be felt. (1823: I, 186-187)

Two things must be done to persuade others: "The first is, to excite some desire or passion in the hearers; the second is, to satisfy their judgement, that there is a connexion between the action to which he would persuade them, and the gratification of the desire or passion which he excites" (1823: I, 200). Thus persuasion and conviction — as the specific domain of rhetoric — must appeal to all the human faculties, and with a certain division of labor. Knowledge furnishes materials for the fancy, the fancy readies these to affect the passions, and the passions are the natural spurs to volition or action (1823: I.i, 28-29). But, more importantly, Campbell retains the Baconian hierarchy among the faculties—imagination and the passions subordinate to reason, so the supposition is made by Campbell that human beings have a disposition to be moved only by those ideas which they accept as truthful and good. In this regard as Howell says, "... the *Rhetoric* is not simply influenced by Bacon; rather, it carries out a specific plan which to Bacon's mind would yield promising results towards the advancement of learning" (Howell 1971: 596).

Whately can also be seen as belonging to the Baconian line, but only in the sense that he is certainly influenced by Campbell. Aristotle is the other important source for Whately (cf. Howell 1971: 710). One significant difference with Bacon and Locke is the importance and value of syllogism. Whately gives it prominence and support, whereas Campbell, following Locke and Bacon discredits it, especially in regard to its rhetorical use. Whately also adds a discussion of the role of presumption in rhetoric, which was discussed earlier in the context of Peirce's critical common-sensism. However, a more important difference is the account of the division of labor between rhetoric and logic. Although Whately insists that rhetoric is an "offshoot" of logic, and uses Aristotle as the authoritative source for such a position (1846: 4), he makes it clear that the primary business of logic is "the ascertainment of the truth by investigation" (1846: 5), that it achieves this

primarily by inferential processes, i.e., syllogistic (1884: 282), and so serves in the capacity of judging arguments (1846: 40). Rhetoric, rather than being concerned with the ascertainment of truth is worried about the "establishment of it to the satisfaction of another" (1846:5); its primary function is to invent arguments (1846: 39) for the purpose of advocating (1884: 283) or *proving* an argument (1884: 282). Thus, using the legal metaphor, rhetoric is the advocate and logic the judge. More specifically, the function of rhetoric is "*finding* suitable arguments to prove a given point, and the skilful *arrangement* of them..." (1846: 39). "The business of logic is, as Cicero complains, to judge of arguments, not to invent them" (1846: 40). Thus, unlike Bacon who had a tendency to conflate arrangement and judgment, Whately wants to separate them into two separate disciplines.

Peirce addresses each of these three trends although, by and large, he reserves most of his criticism for the Cartesians. Of the humanists Peirce says, "The new awakening consisted in the conviction that the classical authors had not been sufficiently studied, at the same time the reformation of the churches came. Logic once more became simple, and this time took on a rhetorical character. Ramus... Ludovicus Vives, Laurentius Valla, were the names of logicians who contributed a few things, but on the whole, rather important things to the tradition of logic" (CP 4.30; cf. CP 3.384). In regard to the Lockean-Bacon line, he criticizes it mostly in terms of its incomplete account of logic, especially in relation to the scholastic tradition:

At the time of the Renaissance, the treatises of Ramus and of Rudolf Agricola show pretty adequately the peculiarities of the humanist mind. But when the scientific age came, so great an intellectual step was made that logic could not well keep up with science. Then some writers, such as Bacon in his *Novum Organum*, and Locke in the *Conduct of the Understanding*, inconsiderately put aside the old syllogistic and topics [of the scholastics] as though they contained something false, instead of being only incomplete; while others either weakly endeavored to apply the old theory to the new practice or else abandoned the attempt to represent scientific methods in their logic altogether. (W3:3)

Peirce is aware of and acknowledges the importance of these two lines of rhetorical thinking, but, by and large, most of his focus is on Cartesianism. After working intensely on his logic in the formative years of his life, Peirce turns next in 1868 to a criticism of Descartes. Why Descartes? As he says in the opening of "Some Consequences of Four Incapacities": "Descartes is the father of modern philosophy," and Cartesianism, generally speaking, is that movement of thought

which “displaced” scholasticism (CP 5.264). In this article written for *The Journal of Speculative Philosophy*, Peirce lists four main theses of the spirit of Cartesianism (CP 5.264): (1) that philosophy begins with doubt; (2) that the ultimate test of certainty lies in individual consciousness; (3) that there is only one basic type of inference that will lead any inquiry to the truth; (4) that there are inexplicables. Peirce counters each one of these point by point with his own (CP 5.265): (1) instead of beginning with doubt, any inquiry should begin with the inquirers’ presumptions, understood as those things which have not actually engendered doubt, but could in the future; (2) instead of certainty guaranteed in individual consciousness, we must appeal to the accumulated results of inquiry done in the long run, and through the auspices of a community of inquirers; (3) successful inquiry uses a variety of inferences and arguments as modeled in the sciences; (4) there must be the presumption that there is nothing that inquiry can’t resolve.

What Peirce is attempting to do here is to replace Descartes’s method with one he sees as more reflective of true scientific process. In doing so he dips backwards into the wealth of the scholastics and the ancients. It is as if he wishes to rewrite history — suppose there was a person named Peirce who lived nearly the same time as Descartes, and who was just as much a polymath as Descartes, but who reacts to the tradition found in scholasticism in a different way, and whose ideas will portend the character and direction of science more closely than his rival’s.

The focus of this criticism of Cartesianism is method, because one thing that Descartes’s genius recognized, which Peirce’s genius also recognized — and, which even Ramus recognized, was that much hinges on method (note that Peirce later on in 1893 wants to incorporate these three *Journal of Speculative Philosophy* articles on Cartesianism, under the title “Search for a Method”). As Peirce says much later near the end of his life, “...if we can find out the right method of thinking and can follow it out...then truth can be nothing more nor less than the last result to which the following out of this method would ultimately carry us” (CP 5.553). Descartes, of course, begins his philosophic career with questions of method — the “Rules for the Direction of Mind,” composed in 1628 in the same year as his famous debate with Chandoux. The substance of that debate was whether science could be founded on anything more than probabilities — Descartes of course taking the position that it could, and that he had such a method in hand. The very next work, published in the vernacular in 1637, is *Discourse on the Method for Rightly Directing One’s Reason and Searching for the Truth in the Sciences*, followed by three examples of its application in Optics, Geometry and Meterology.

Instead of Descartes’s analytic method — with its emphasis on deductive certainty, Peirce wants to replace it by the pragmatic or experimental one (CP 7.666), which as Peirce thinks, is more characteristic of science. But what he realizes of course is that the pragmatic method engenders public, intersubjective,



dialogic and communal procedures for inquiry, as opposed to Descartes' intuitive, subjective and monologic method. It is for this reason, I would argue, that Peirce begins to consider the importance of rhetoric in the context of his semiotic. Attention to rhetoric would make sense if it was viewed in its more robust and classical sense as having to do with discourse among members of a community and if community, in terms of the community of inquirers, becomes a focus of Peirce's new method. By revamping logic as semiotic, and placing (a more formalized) rhetoric within its trivium, he also changes the sense of logic. Peirce seems to agree with Ramus and Descartes on the importance of method as the center of logical concerns, but unlike Ramus and Descartes, rather than diminishing the role of rhetoric in inquiry, he wants to expand it — and precisely because of the pragmatic method. Peirce has developed a renovated concept of rhetoric under the rubric of a renovated sense of logic.

But just to the extent that he disavows the Cartesian method he is influenced by the Baconian line, which is harmonious with this more dialogic characterization of the practice of science. In many respects one can see Peirce as an inheritor of the Baconian line. The influence of Whately is well known (cf. Fisch 1982: xviii), even to the end of his days (MS 774), but also his initial education and training in rhetoric is under the influence of Campbell. His introduction to Campbell's rhetoric is in 1848 at the age of 9 (cf. Brent 1993: 38). In college he most likely also studied the text of George Campbell, the most frequently used text in America on the subject (cf. Kennedy 1980: 234). Indeed, Peirce seems to acknowledge Campbell in a way that a student might acknowledge the tutelage of his master, even as late as 1906 (CP 5.13). But, I would argue, there are many unacknowledged or implicit influences of Bacon on Peirce. Collecting these influences together, they can be summarized as follows: first, like Bacon — and to some extent Whately — Peirce is working for an integrated view of logic and rhetoric. Logic is broadened from its narrower role as critic to the discipline of semiotic, which not only includes traditional critical logic, but also understands the important role of a formalized grammar and rhetoric in the use of signs in any inquiry. This is opposed to the Ramian framework which sets separate and disparate functions for logic and rhetoric. It is more consonant with the humanists, but Peirce does not see logic as subordinate to rhetoric — or for that matter his critical logic as subordinate to formalized rhetoric, but as functionally cooperative and working toward a common goal.

Second, in agreement with the humanists, but also with Bacon and Campbell, his account of inquiry and semiotic generally is one that attends to all the human faculties. We find in Campbell the emphasis of rhetoric as properly concerned with the complete person, that is, it should address persons in terms of their reason, imagination, and emotions, rather than their reason alone (1823:101). Speculative rhetoric, at least in one of Peirce's many definitions of it, is the study of the relation between symbols and their interpretants (MS 774: 5). Since, at least as applied to the life of human beings, signs can have emotional,

energetic and logical interpretants, then speculative rhetoric would consider the emotional, energetic and logical interpretants of signs in the practice of inquiry. The rhetorical sense of this consideration is articulated nicely in Peirce's remarks about Tetens, Kant's teacher. There has been a question of where he

got his idea that Feelings, Cognitions ...and Volitions or acts of willing made up the mind. I have never seen this question answered. Yet the answer is not far to seek. He took it from the ancient writers upon rhetoric [in another passage, Peirce identifies the source as the rhetoricians of the sixteenth century who, in turn, found it in Plato (W6: 183)]. For they instruct the orator to begin his discourse by creating a proper state of feeling in the minds of his auditors, to follow this with whatever he has to address to their understandings, that is, to produce cognitions, and finally to inflame them to action of the will. ( CP 7.541)

Certainly this is a reference to Plato's argument, found in the *Phaedrus* (271, 273, 277c), where the function of rhetoric is to influence the soul, but also relative to the type of soul which, in the *Republic* (435-442) is divided into the rational, the passionate and the appetitive. It is undoubtedly also reference to Aristotle where in *The Rhetoric* the very classical distinction between appeals of the orator to logos, pathos and ethos is made (1356aff).

Third, as we've seen, he sides with the humanists and Bacon against Descartes, in envisioning inquiry as a communal, cooperative, discursive practice. For Peirce, the method of inquiry is lifted from the subjective and intuitive framework that characterizes most of modern philosophy to the public and communal form typical of Peirce's sense of it, and so concerns many of the traditional matters of rhetoric.

Science is to mean for us a mode of life whose single animating purpose is to find out the real truth, which pursues this purpose by a well-considered method, founded on thorough acquaintance with such scientific results already ascertained by others as may be available, and which seeks cooperation in the hope that the truth may be found, if not by any of the actual inquirers, yet ultimately by those who come after them and who shall make use of their results. (CP 7.54)

The emphasis on the practice of inquiry, cooperation and community, give Peirce's methodology a distinctive rhetorical emphasis; the fact that it is wrapped

around his semiotic makes it consonant with Kenneth Burke's distinctive definition of rhetoric: "the use of language as a symbolic means of inducing cooperation in beings that by nature respond to symbols" (1950: 43). Understood in this way, Peirce's formal rhetoric not only provides a methodology for the practice of science, but studies the means by which the communicative and cooperative framework required for its practice is articulated. We also might use Wayne Booth's notion of "coduction" (1988) as a good stand-in term for what speculative rhetoric studies. As generously interpreted, coduction could be thought of as a species of rhetorical argument which uses the pragmatic method — in the sense of the interrelation of abduction, deduction and induction — but within the context of a cooperative effort of inquiry, *interhomines*, in which, presumptions, principles, hypotheses, collateral experience, intersubjective norms, feelings, emotions, interact over time to produce and revise hypotheses and beliefs.

This robust treatment of method, as dealing with the kind of community most conducive to inquiry, the character of the person most suitable for inquiry, and the sentiments necessary for proper inquiry, all form the proper subject matter of universal rhetoric for Peirce.

### III. *The General Design of Peirce's Rhetoric*

References to likely historical sources gives us some sense of what Peirce had in mind with his rhetoric. Giving some historical context to Peirce's rhetoric also helps in that regard. Still these do not give us a complete picture. In this case, as an experiment, it might help to imagine — taking a hint from Bacon's own design — that Peirce's general rhetoric is analogous to the framework of classical rhetoric. Indeed, the argument here is that this working hypothesis proves fruitful. If Aristotle defines rhetoric as the "counterpart of dialectic" or logic (*Rhet.* I.1), then we could see Peirce's methodetic or speculative rhetoric as the generalized or formalized counterpart of classical rhetoric. Taking the Ciceronian divisions as a starting point, one can find ready correspondences in Peirce for invention, arrangement, memory, elocution, and delivery. Cicero defines invention as "the discovery of valid or seemingly valid arguments to render one's cause plausible" (*De inventione*, I.9). The obvious counterpart to invention in Peirce is abduction: "methodetic has a special interest in abduction," its purpose is "to develop the principles which are to guide us in the invention of proofs, those which are to govern the general course of an investigation, and those which determine what problems shall engage our energies" (L75 Memoir 27 Draft D 279). Indeed, in at least one place, Peirce goes so far as to say that methodetic "concerns abduction alone" (MSL75 DraftD: 329), and whether a hypothesis should be the first among the justifiable hypotheses to be considered (MSL75 Memoir13 Draft E: 164). Because it is concerned with what problems an inquiry should invest in, and which hypotheses should be considered for testing, the process of discovery can be seen, in part, as an economical one. "The economics of research," Peirce says, is, so far as logic is concerned, "the leading doctrine

with reference to the art of discovery" (MSL75 Memoir 27 Draft D: 330). His original work on this topic is done in 1879 (cf. CP 7.139-157), and it is also outlined in his Carnegie grant application in 1902. In general, the purpose of discovery is to help render inquiry efficient, not only in the selection of hypotheses, but in the selection of areas of research as well. Part of the purpose of the economy of research is determine those areas of investigation which prove the most profitable, relative to the value for science (MSL75 Memoir 28: 388). Campbell and Whately also developed a "management" notion of invention (cf. Ehninger 1963: xxviiiiff), although in a somewhat different sense. For Whately especially, invention as management consists of two basic parts: the classification of forms of arguments, followed by advice concerning their use in a procedure of argumentation. As we'll see, this seems to overlap somewhat with Peirce's sense of arrangement. But, generally speaking, Peirce's rhetoric is not only interested in the classification of the basic types of inference, but also in how they are to be coordinated in the process of inquiry.

Arrangement, as the second aspect of classical rhetoric, is understood by Cicero as the distribution of arguments in the proper order (*De inventione* I. 9). But, as we have seen, this gets interpreted by Ramus and Kant as method or architectonic, which is also partly Peirce's sense. For Peirce, as noted, this involves the generic sense of system, that is, systematic or methodical. This has variations, as discussed. In one sense it can be seen as the next step in thought and as the domain of deduction — that is, if abduction is the concern of invention, then deduction may be associated with system. If abduction is the logic of the discovery of hypotheses, then deduction in this context is the *systematic* development of the consequences of a hypothesis. As Peirce articulates this:

That which is to be done with the hypothesis is to trace out its consequences by deduction, to compare them with results of experiment by induction, and to discard the hypothesis, and try another, as soon as the first has been refuted....How long it will be before we light upon the hypothesis which shall resist all tests we cannot tell; but we hope we shall do so, at last. (CP 7.220)

In this case, arrangement seems to be a conflation of *dispositio* and judgment, that is, it is involved in the ordering of the consequences of an hypothesis, but also making a judgment on its credibility. Peirce clearly notes the distinction between the invention of the proof, and the acceptance of the proof (MSL75Memoir 10 Draft C: 84 ). In this case, induction, in its general sense, is involved in the second aspect of Peirce's rhetoric.

In addition to the matter of hypotheses, arrangement also involves the systematization of concepts and the ordering of sciences themselves, including the classification of the sciences (MSL75 Memoir 31: 391).

Elocution is third part of traditional rhetoric. Cicero defines it as “the fitting of the proper language to the invented matter” (*De inventione* I.9). In the rhetoric that Peirce was weaned on — Campbell and Whately — elocution is articulated as style, and then primarily in terms of perspicuity or clearness of expression (Campbell 1823: BkII, chapt vi; Whately 1846: Part III, chapt 1). Clear and distinct ideas are also, of course, a focus of Descartes’s methodology and the Port Royal Logic, and the target in “How to Make Our Ideas Clear” is Descartes’s inadequacies in this regard. Peirce clearly considers the topic as part of his methodeutic (MSL75 Memoir 32: 391) and, so — following the lead of Campbell and Whately — gives it a rhetorical function.

As Peirce articulates it in his famous *Popular Science Monthly* article, the highest grades of clearness are achieved, of course, by the pragmatic method. By implication, then, pragmatism is part and parcel of methodeutic. As is well known, the pragmatic method recommends that the understanding of a concept is achieved through the systematic conception of its practical or ultimate interpretants. Indeed, some of Peirce’s definitions of his rhetoric connote this aspect of it: “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” (MS 774: 5); or, “the doctrine of the general conditions of the reference of symbols and other signs to the interpretants which they determine” (CP 2.93; cf. MS 793: 20). In general, as Peirce says, there are two functions of pragmatism in this regard: the riddance of all unclear ideas, and help in rendering clear ones distinct (CP 5.206).

However, not only does the pragmatic method help in the clarity of ideas, in fact, it permeates every part of methodeutic, if not, as Peirce says, every kind of science, as well as the conduct of life (CP 5.14). Not only is it the best method by which to clarify ideas, it also expresses the best method in the proceeding in the matter of hypotheses, that is, inquiry as such. Not only is each of the three kinds of reasoning pragmatically tinged, but also their coordination in the development and testing of a hypothesis is itself pragmatically conceived. Inquiry as a process of reasoning deductively translates an hypothesis, stated clearly in an experimentally or diagrammatically clear form, into a set of consequences, whose results, when observed, are used in induction to judge the credibility of the hypothesis (for the mathematical version of this process, see NEM 4: 290ff) This is a coordination of the first three moments in Peirce’s methodeutic: the invention of a hypothesis, its clear statement, its proper ordering and judgment. Its rhetorical tenor can be noted by recognizing how it follows the pattern in any ordinary argumentative composition, especially as Whately saw it (cf. 1846:35ff): clear statement of thesis, discovery of proofs for it, the proper ordering and arrangement of those proofs, critical judgment of the thesis on the basis of those proofs. In other words, a good composition is the proper coordination of elocution, invention and arrangement.

At first sight, there doesn’t seem to be anything specifically comparable to

the last traditional part of rhetoric — delivery — in Peirce's rhetoric. However if Bacon serves as the model, this aspect of classical rhetoric is reflected in the last of his logical arts — the Art of Transmission — and this seems to be a more fruitful way of looking at what Peirce is doing in his own rhetoric. It is certainly expressed this way in one of Peirce's definitions of speculative rhetoric as "The necessary conditions of the transmission of meaning by signs from mind to mind, and from one state of mind to another..." (CP 1.444). A similar idea can be found in Whately. Whereas, for him, logic is centered on the ascertainment of truth (1846: 5), rhetoric is concerned with proving and transmitting truth to others (1846:5). For this reason rhetoric is an "offshoot of logic" (1846:4) For him rhetoric is concerned not only with invention and arrangement of arguments, but their transmission as well; the latter he places under the heading of elocution, admixing some of the traditional distinctions between elocution and delivery, and adding style as a separate category. For Whately, invention, arrangement, and style are those parts of rhetoric concerned with the preparation of an oral or written composition for delivery, and for the purposes of engendering conviction and persuasion.

The pragmatic method also helps define this last aspect of Peirce's rhetoric, since it is concerned with the very rhetorical topic of conviction and persuasion which, in the following passage he connects very nicely with the experimental method:

The question of the goodness of anything is whether that thing fulfills its end. What, then, is the end of an explanatory hypothesis? Its end is, through subjection to the test of experiment, to lead to the avoidance of all surprise and to the establishment of a habit of positive expectation that shall not be disappointed....This is approximately the doctrine of pragmatism. (CP 5.197)

For this reason, not only is the pragmatic method concerned with the proper conduct of an inquiry, it is also the most efficient means by which to fix beliefs in the inquirers. This is articulated well in Peirce's classic article, "The Fixation of Belief." There he makes it clear that it is the scientific-qua-pragmatic method that is most adapted to the end of fixing beliefs. As Peirce says in another context, "Every proposition has its practical aspect. If it means anything it will, on some possible occasion, determine the conduct of the person who accepts it. Without speaking of its acceptance, every proposition whatsoever, although it has no real existence but only a *being represented*, causes practical, even physical, facts. All that is made evident by the study which I call *speculative rhetoric*" (NEM 4: 291).

The passage in CP 5.197 is connected to rhetorical concerns in another sense. Peirce articulates the end or purpose of the hypothesis in helping to fix belief, and establish habits of action. In this context, one is struck by Campbell's

definition of rhetoric as "that art or talent by which the discourse is adapted to its end" (1823: 28). If an end of the hypothesis is the fixation of belief in the inquirer, then formal rhetoric should not only be concerned with that matter, but also with how signs generally should conform to their ends, as another definition of Peirce's rhetoric makes clear: "...methodetic looks to the purposed ultimate interpretant and inquires what conditions a sign must conform to in order to be pertinent to the purpose." In general, the pragmatic method is centered on the interpretants of signs, and that as Peirce says in several places, is also the matter of his formal rhetoric (CP 2.93; MS793:20; MS774:5); and to the extent that pragmatism is related to the interpretant of signs, the connection between pragmatic method and methodetic is patent (CP 5.491; 8.185; MS 322:12).

It is in this last aspect of Peirce's formal rhetoric that one finds the strongest rhetorical concerns. The matter of the fixation of belief, the nature of community of inquiry, and communication, all form important subject matter of this part of Peirce's rhetoric. I've addressed this in other places (1996), so I won't repeat it here; but suffice it to say that it is here that we find some of the most interesting topics in Peirce's philosophy, yet ones that clearly are not well developed.

### *Conclusion*

In the first section of this paper, it was claimed that, given the explicit and implicit historical sources, there were three connotations to Peirce's rhetoric: one concerned with the formal conditions of communication and conviction, the second concerned with the systemic and architectonic of inquiry, and the third with general procedures for effective inquiries. These might be more concisely formulated in the following way: how to efficiently inquire, how inquiries are to be systematized, and how inquiries affect inquirers.

How do the three connotations of Peirce's rhetoric fit with the four divisions of Peirce's rhetoric: invention, arrangement, style, and transmission? Consider, for example, the question of how inquiries affect inquirers is managed within the four branches of Peirce's rhetoric. From the perspective of the relation of inquirers to inquiries, invention is an attempt to formulate new beliefs on the basis of genuine doubt, caused by the shock of surprise in the failure of existing ones. Arrangement and style are concerned with the best formulation of new beliefs, and the development of tests that will "determine the conduct of the person who accepts it," that is, will engender certain sorts of habits, and move the person to the ultimate goal of a life of "concrete reasonableness." In this regard, arrangement can also be seen as an examination of the fundamental presuppositions of inquiry and inquirers, the sorts of habits and dispositions necessary for successful inquiry; transmission can be viewed as exploring the conditions of communication and community, conducive to inquiry, and articulating the effects that certain beliefs will have on not only the continuance of inquiry, but the communities in which inquiry occurs. My argument is that the other connotations of Peirce's rhetoric can be similarly filtered through the four branches, yielding different, yet related

concerns and interests.

In his later years Peirce gives a very comprehensive account of rhetoric, which is no longer restricted as it was classically to speech, but covers all sorts of signs:

Evidently our conception of rhetoric has got to be generalized; and while we are about it, why not remove the restriction of rhetoric to speech? What is the principal virtue ascribed to algebraical notation, if not the rhetorical virtue of perspicuity? Has not many a picture, many a sculpture the very same fault which in a poem we analyze as being "too rhetorical." Let us cut short such objections by acknowledging at once, as an *ens in posse*, a universal art of rhetoric, which shall be the general secret of rendering signs effective, including under the term "sign" every picture, diagram, natural cry, pointing finger, wink,...and in short whatever, be it in the physical universe, be it in the world of thought, that.. causes something else, its interpreting sign, to be determined to a corresponding relation to the same idea, existing thing, or law....There ought at any rate to be...a science to which should be referable the fundamental principles of everything like rhetoric — 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. (MS 774: 3-5 1904)

This passage conveys the intent of Peirce for his rhetoric to be a truly general one. But in a sense, all of the various terminologies capture a legitimate aspect of Peirce's rhetoric. If his rhetoric is understood as a speculative rhetoric, that is, as a universal account of the conditions of communication and the fixation of belief, then certainly this is an important — although not well-developed — feature of Peirce's rhetoric. Understanding rhetoric as a methodoetic, that is, a systematic procedure for inquiry and for the systematization of the sciences, is also an important aspect of Peirce's larger vision.

But all of these aspects of Peirce's rhetoric blend into a coherent picture of the position and purpose of rhetoric in his system of sciences: the job of Universal Rhetoric is not so much the communication of knowledge already developed, but an understanding that the attainment of knowledge is itself involved in a process of inquiry within a community. Peirce's rhetoric, then, works to underscore the formal conditions of inquiry *as a practice*, including its presuppositions, purposes, principles, and procedures. In this sense Peirce goes back to the roots



of logic: "it is a historical fact that logic originated in an attempt to discover a method of investigating truth" (CP 4.8). In doing so he departs from most of the logical trends in the 20<sup>th</sup> century. It is only now that we are catching up with Peirce in this regard.

Peirce's promise to develop speculative rhetoric so that it would grow into a "colossal doctrine" that would "lead to the most important philosophical conclusions" (CP 3.454), or that it would become "the highest and most living branch of logic" (CP 2.333), was never realized. But, in 1902 he does say something that certainly is more accurate: "THE book on this subject [methodeutic] remains to be written; and what I am chiefly concerned to do is to make the writing of it more possible" (CP 2.109).

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