

C.S. Peirce's Rhetorical Turn: Prospects for Educational Theory and Research

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Students of Peirce must be animated by the paradoxical realization that, on the one hand, they cannot go beyond Peirce without first catching up to him and, on the other hand, they cannot catch up to him without strenuously and imaginatively trying to go beyond him.

— Vincent Colapietro¹

This essay is motivated by a common call for a reconceptualization of educational processes. Taking the contemporary era of informationalism,² transnational knowledge economies,³ and, by implication, an epistemification of everyday life,⁴ it is held that the dynamics of globalized knowledge structures, altered epistemic cultures, and learning seems to be undertheorized.⁵ One distinct dilemma seems to be the inherent paradox of the current discourses, signifying — on the one hand — a move away from “the postmodern condition” towards universalism, while — on the other hand — carrying an anti-universal thrust, emphasizing diversity, complexity, and hybridity of knowledge.

My essay will by no means offer any solution to the paradox. Nevertheless, in giving an account of C.S. Peirce's later semeiotic, while pointing to some fruitful contributions from his “speculative rhetoric,” I here explore how Peirce may help to illuminate the dynamic relations of knowledge and learning within a globalized world of change.⁶ In what ways may Peirce's later semeiotic carry a promise of a productive theory of the dynamics of knowledge and learning that moves beyond traditional notions of educational processes?

The first section of this essay outlines Peirce's semeiotic as a theory of educational processes. The second section demonstrates how Peirce's new rhetoric contributes to a richer conception of the dynamics of knowledge and learning, as he — after his “rhetorical turn” — establishes an explicit connection between his phenomenology, pragmatism, and semeiotic. Thus, in the third section I sum up the prospects of Peirce's new rhetoric as a productive model of the dynamics of knowledge and learning within contemporary symbolic economies.

EDUCATION AS SEMIOSIS

Peirce conceives knowledge as “a living historic entity,” acquired through experience, mediated through signs, comprehended through the pragmatic maxim, and validated by the final consensus. In his 1903 essay “On Phenomenology,” Peirce claims, “*experience is our only teacher*”:

In all the works of pedagogy that ever I read, — and that have been many, big, and heavy, — I don't remember that any one has advocated a system of teaching by practical jokes, mostly cruel. That, however, describes the method of our great teacher, Experience. She says,

Open your mouth and shut your eyes
And I'll give you something to make you wise;

And thereupon she keeps her promise, and seems to take her pay in the fun of tormenting us.⁷

Here, Peirce quotes a children's rhyme, cited when giving the child a gift of sweets. He thus implicitly says that a practical joke is a sweet thing, because it makes us wise. This recalls Aristotle, who holds that "Good riddles are pleasing...for there is learning."⁸ In other words, there seems to be a parallel between Peirce's claim that jokes make one wise, and Aristotle's claim that riddles convey learning.

To Aristotle, "the very nature indeed of a riddle is this, to describe a fact in an impossible combination of words (which cannot be done with the real names for things, but can be with their metaphorical substitutes)."⁹ Consequently, the riddle provides an unexpected and contradictory image, concurrently saying that "this is that" and "this is not that." This paradox surprises, bewilders, and helps to uncover a hidden relation beyond the paradox. In other words, it is exactly this paradoxical attribution of the riddle that conveys learning. Aristotle therefore says that learning "occurs when there is a paradox and not, as he [Theodorus] says, in opposition to previous opinion; rather it is like the bogus word coinages in jests."¹⁰ In short, the paradoxical attribution of a riddle first, surprises — as it describes a fact in an unexpected manner; next, bewilders — as it contests our previous categories of thought; and third, it conveys learning — as it uncovers a relationship hidden beneath the paradox.¹¹

Peirce, however, seems to go beyond Aristotle, since he attributes the paradox to — as he says — "the action of experience" (*EP 2*, 154). "Experience" here denotes "semeiosis," meaning the flows of signs mediating actual lived experiences. In explaining this action, he says that it comes forward as "a series of surprises." "The phenomenon of surprise in itself is highly instructive in reference to this category because of the emphasis it puts upon a mode of consciousness which can be detected in all perception, namely, a double consciousness at once of an *ego* and a *non-ego*, directly acting upon each other" (*EP 2*, 154). Hence, Peirce moves beyond Aristotle in his way of attributing the surprise to the inherent contradictions of the *experience* acting upon our consciousness. Imagine that

Your mind was filled with an imaginary object that was expected. At the moment when it was expected the vividness of the representation is exalted, and suddenly when it should come — something quite different comes instead. I ask you whether at that instant of surprise there is not a double consciousness, on the one hand of an Ego, which is simply the expected idea suddenly broken off, on the other hand of the Non-Ego, which is the Strange Intruder, in his abrupt entrance. (*EP 2*, 154)

In other words, the series of surprise, which indeed jumbles our categories of thought, happen because of a double consciousness which on the one hand is aware of the familiar and vivid representations *and* on the other hand of the new and unexpected ways of seeing. Thus, the surprise is not in the abrupt and unexpected experience. The surprise is rather in the *relationship* between the known and the unknown; between the familiar and the new; or between the "expected idea" and the "strange intruder." Therefore, the reason for the surprise is that we experience the *relation* between our familiar ways of thinking and something totally new and unexpected.

In stressing this relation, or rather the experience of it through a double consciousness, Peirce again questions the Cartesian dualism in Immanuel Kant,

Thomas Reid, and Gottfried Leibniz. Peirce states: “every philosopher who denies the doctrine of Immediate Perception, — including idealists of every stripe, — by that denial cuts off all possibility of ever cognizing a *relation*” (*EP* 2, 154). In other words, Peirce seems to parallel the practical joke with Aristotle’s riddle, that articulates truly new things in an unexpected manner. There is also a parallel between Aristotle and Peirce in the ways in which the paradoxical attribution of the riddle — or the joke — surprises, bewilders, and teaches. But to Peirce, the reason for learning from this bewilderment — or “the series of surprises” as he says — is the *action* of experience: Experience is a great teacher because she acts upon our minds by a series of surprises, bewildering our categories of thought, and makes us learn.

However, while experiences teach, any experience is represented by signs. *Signs* are thus the only means of learning we have: A sign is a medium and a mediator, a representation which itself is “an element of the Phenomenon.” To illustrate this point, Peirce, in a letter to F. C. Russell, July 3, 1905, wrote “to peel off signs and to get down to the real thing is like trying to peel an onion and get down to onion an sich.”¹² The mediating structure of signs refers to the triadic relation of object–sign–interpretant, including the sign–relations themselves, which “are even more characteristic of signs” than the object and the interpretant:

I will say that a sign is anything, of whatsoever mode of being, which mediates between an object and an interpretant; since it is both determined by the object *relatively to the interpretant*, and determines the interpretant *in reference to the object*, in such wise as to cause the interpretant to be determined by the object through the mediation of this “sign.” (*EP* 2, 410)

Productive learning processes may thus — at one analytical level — be seen as sign–interpreting processes aiming at making the world intelligible. However, to Peirce, the experience is not in signs, but rather in the signs’ *action* — which is *semiosis*: “By semiosis I mean, an action, or influence, which is, or involves, a cooperation of *three* subjects, such as a sign, its object, and its interpretant, this tri-relative influence not being in any way resolvable into actions between pairs” (*EP* 2, 411).

Peirce thus describes semiosis as an educative process, a process which is conceptualized by and studied through his semeiotic. Consequently, Peirce’s semeiotic can be regarded *both* as a theory on educational process and as a method for studying them. However, I hold that the later writings of Peirce offer a *richer* conception of productive learning processes, since he — after his rhetorical turn — here establishes an explicit connection between his phenomenology, pragmatism, and semeiotic.

PEIRCE’S NEW RHETORIC

Speculative rhetoric — the highest and liveliest branch of logic — is not given much space in Peirce’s texts.¹³ Nevertheless, all his writings are imbued with rhetorical considerations, as he continuously addresses the inter-subjective, dialogic aspect of knowledge constructions. Peirce’s speculative rhetoric — together with *speculative grammar* and *critic* — is part of his semeiotic *trivium*: *Speculative grammar* studies the relation between sign and object, that is, production and forms

of meaning. *Critic*, or what he calls the essence of logic, is for studying the ways in which the sign can relate to the object independently from what it represents, meaning logical conclusions and arguments. *Speculative rhetoric* studies the relation between sign and interpretant, the method or the production of knowledge itself: "Its most essential business is to ascertain by logical analysis, greatly facilitated by the development of the other branches of semeiotics, what are the indispensable conditions of sign's acting to determine another sign nearly equivalent of itself" (*EP* 2, 328). The term "speculative" is not about metaphysical speculation, but rather "the Latin correspondence to the Greek word 'theoretical,' and is here intended to signify that the study is of the *purely* scientific kind, not a practical science, still less an art" (*EP* 2, 328).

Peirce's rhetoric is broadly defined as "the doctrine of the general conditions of the reference of symbols and other signs to the Interpretants which they determine," and can thus be read as a continuation of Aristotle's rhetoric.¹⁴ But Peirce moves beyond Aristotle. Aristotle's rhetoric is an independent argumentation technique that includes all types of practical deliberations. But Peirce's rhetoric is a normative logic of science. In a short essay from 1904, titled "Ideas, Strays and Stolen, about Scientific Writing," Peirce refers to his *speculative rhetoric*. This essay was probably meant to be published in *Popular Science Monthly*, and can be considered as a part of an ongoing debate about "the best vocabulary for one or another branch of knowledge, and the best types of titles for scientific papers" (*EP* 2, 325). But Peirce argues against such a narrow interpretation of rhetoric, which to him is only about "agitating the surface of the scientific deep." Peirce believes that "our conception of rhetoric has to be generalized," since rhetoric until now has offered "little guidance in forming opinions" (*EP* 2, 327). In this essay Peirce wants to liberate rhetoric from its earlier limitations of merely belonging to oratory argumentations. He argues that *it is high time to recognize rhetoric as an important contribution to the logic of science*:

A universal art of rhetoric, which shall be the secret of rendering signs effective, including under the term "sign" every picture, diagram, natural cry, pointing finger, wink, knot in one's handkerchief, memory, dream, fancy, concept, indication, token, symptom, letter, numeral, word, sentence, chapter, book, library, and in short whatever, be it in the physical universe, be it in the world of thought, that, whatever embodying an idea of any kind (and permit us throughout to use this word to cover purposes and feelings), or being connected with some existing object, or referring to future events through a general rule, causes something else, its interpreting sign, to be determined to a corresponding relation to the same idea, existing thing, or law. Whether there can be such a universal art or not, there ought, at any rate to be (and indeed there is, if students do not wonderfully deceive themselves) 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. (*EP* 2, 326)

Surprisingly, Peirce emphasizes that signs "bring about a physical result." And he repeats: "certain is it that somehow and in some true and proper sense general ideas do produce stupendous physical effects." The rather naive example he uses is a man's intention to go to his office, in which the intention is a general idea, a sign,

and the fact that the man actually moves towards the office is a physical fact. Peirce's reply to the objection that it is not ideas, but people's beliefs in ideas that have physical consequences, is that ideas are that which create pioneers, courage, develop people's character, and which allows some people to have almost a magical leadership. And he adds that ideas cannot be examined or communicated in and by themselves, but only through their "physical effects," or physical manifestations. This example illustrates that Peirce does not only emphasize the rhetorical evidence, but also the rhetorical *production* of knowledge. It thus becomes clear how Peirce's speculative rhetoric should be read as a pragmatic epistemology.

In his arguments against a narrow view of rhetoric as only an art of argumentation, Peirce points out how speculative rhetoric analyses the reproduction of signs, or "the transmission of meaning by signs from mind to mind." Such a sign reproduction is "common enough," but nevertheless "as mysterious as the reciprocal action of mind and matter" (*EP 2*, 328). Earlier analyses have, however, shown two situations: First that an object, represented by a sign, is itself a sign. Meaning that the object cannot be understood independently from its interpretation, or "its characters are not independent of *all* representation." Second that the process of communication can never create a new sign: "the utmost possible is that a sign already existing should be filled out and corrected" (*EP 2*, 328). Peirce thus underlines the fact that ordinary rhetoric can never offer tools or techniques for creating new ideas. Thus, Peirce points to *the promise of speculative rhetoric*, which highlights the power of signs to *move* agents and to *change* their habits.

THE PROSPECTS OF PEIRCE'S LATER SEMEIOTIC

While strongly rejecting semeiotic formalism, Torjus Midtgarden and Mats Bergman both have explored the learning—theoretical potential of Peirce's later semeiotic. Midtgarden, in reading Peirce's *speculative grammar*, underlines "the virtues of the abstractness of Peirce's conceptual strategy," because such abstractness "secures generality in covering various kinds of learning processes."¹⁵ Bergman, however, reads Peirce's *speculative rhetoric*, which highlights "the *semeiotic effect* that a sign determines in an interpreter — be it of the character of emotion, effort, cognition, or habit."¹⁶ Bergman thus recognises the value of sign actions — the semiotic effect — that may reveal the diverse, complex, and hybrid aspects of knowledge production. A move from speculative grammar to speculative rhetoric thus corresponds to a move from an abstract to a practical outlook, going "back towards the rough ground of human practices in their irreducible heterogeneity."¹⁷ What are the prospects, then, of Peirce's speculative rhetoric for educational theory and research? In what ways may Peirce's later semeiotic carry a promise of a productive theory of the dynamics of knowledge and learning that moves beyond traditional notions of educational processes?

Following James Liszka,¹⁸ the prospect of a speculative rhetoric — which according to Peirce is "the highest and most lively branch of logic" and concerns the relation between the sign and the interpretant — is the analytic study of the establishment of the formal conditions for a universe of discourse, communication, and inquiry (see table, p. 90):

Table Peirce's Speculative Rhetoric

Types Inter- pretant as	Immediate interpretant <i>Sense</i>	Dynamic interpretant <i>Meaning</i>	Final interpretant <i>Significance</i>
Process	A universe of discourse	Communication	Inquiry
Product	Common sense	Information	Consensus
Effect	Sensibility Comprehensibility	Understanding	Establishment of true beliefs

Liszka, *A General Introduction to the Semeiotic of Charles Sanders Peirce*, 81.

In his systematic reading of Peirce's speculative rhetoric — which he claims “permeates Peirce's entire corpus of work”¹⁹ — Liszka reveals how Peirce offers a sophisticated tool for exploring the dynamic relations of knowledge and learning in terms of *processes of communication* (having information as a product and understanding as an effect), *a universe of discourse* or common sense (having community as a product and sensibility and comprehensibility as effects), and *processes of inquiry* (having consensus as a product and reasonableness as an effect). He relates this to the three divisions of interpretants: the immediate, the dynamic, and the final interpretant. Keeping in mind that the interpretant is understood as *process*, *product*, and *effect*, Liszka thus argues that speculative rhetoric offers a sophisticated tool for exploring the dynamics of knowledge and learning in terms of a universe of discourse, processes of communication, and processes of inquiry: To Peirce knowledge is no doubt “a living historic entity” acquired through experience, mediated through signs, and validated by the final consensus. It is exactly these processes of the production and validation of knowledge that belongs to the field of rhetoric.

Already in his early writings, Peirce reveals his discursive conception of “truth” and “reality:”²⁰ “The opinion to be fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real. This is the way I would explain reality” (*EP 2*, 139). Private experiences, syllogisms, or conclusions thus have to be re-examined socially: Beliefs have to be justified in a process in which your beliefs rectify mine, and others rectify ours. Next, the more people involved in these joint processes of validation, and the longer time we spend on this common effort, the greater the possibility of arriving at a reasonable interpretation. Such communal processes of inquiry are generated by a “critical common sense,” rooted in pragmatism, and aim at a discursive making of true beliefs through the final consensus:

These remarks give some idea of what is meant by critical common sense, without which the doctrine of pragmatism amounts to very little. But perhaps a little illustration may aid the comprehension of what I am saying. When one seeks to know what is meant by a physical force, and finds that it is a real component acceleration of defined amount and direction that

would exist whatever were the original velocity, it is possible to press the question further and inquire what the meaning of acceleration is; and the answer to this must show that it is a habit of the person who predicates an acceleration, supposing him to use the term as other do. For ordinary purposes, however, nothing is gained by carrying the analysis so far; because these ordinary commonsense concepts of everyday life, having guided the conduct of men ever since the race was developed, are by far more trustworthy than the exacter concepts of science; so that when great exactitude is not required they are the best terms of definition. (*EP 2*, 433)

Peirce also underlines how knowledge and beliefs are clarified through practical considerations, in the sense that “beliefs are the principles upon which we are willing to act” (*EP 2*, 33). The pragmatic proposal for achieving clarity of meaning thus lies at the heart of his semeiotic. However, due to repetitive misinterpretations of his pragmatic maxim, Peirce finds it pertinent to stress that it is the *conceivable* consequences that helps to make our ideas clear. For example, when underlining that “the real meaning of a purely theoretical statement or word...does precisely lie in the conceivability, quite regardless of the practicability, of such applications” (*EP 2*, 457). Our conceptions and beliefs, then, become clear and meaningful by virtue of an anticipated future. As such, knowledge and beliefs are not only based on former experiences and beliefs, but also on future expectations. Thus, the pragmatic maxim should by no way be read as a “condition for counting anything as true,”²¹ as our beliefs “may be ever so clear without being true” (*EP 2*, 140). For beliefs to be true, they have to be rectified and validated socially, “So the social principle is rooted intrinsically in logic” (*EP 2*, 81).

In sum, a closer reading of Peirce’s later semeiotic may help, not only to bridge the gap between, but also to realize the fruitfulness of the paradoxical attributions of knowledge and learning within a globalized world of change. In taking into account Peirce’s rhetorical turn, these paradoxes are no longer understood as impossible dilemmas, but rather as productive takes on the educational processes embedded in the dynamics of globalized knowledge structures, altered epistemic cultures, and productive learning practices. When reading Peirce’s later semeiotic as a theory of educational processes, Peirce’s rhetorical turn represents a shift of focus from the human consciousness to the *act* of creation, which is here portrayed as a deep-seated reconstruction of the “sensus communis” or “conscience collective” that affects our ways of seeing the world, our ways of making the world, and by implication the ways of the world themselves.

1. Vincent Colapietro, “C.S. Peirce’s Rhetorical Turn,” *Transaction of the Charles S. Peirce Society* 43, no. 1 (2007): 36.

2. Manuel Castells, “Informationalism, Networks and the Network Society: A Theoretical Blueprint,” in *The Network Society: A Cross-Cultural Perspective*, ed. Manuel Castells (Cheltenham: Edward Elgar, 2004).

3. UNESCO World Report, *Towards Knowledge Societies* (Paris: UNESCO, 2005); EU Commission, *Building Knowledge Society: Social and Human Capital Interactions*, Commission Staff Working Document SEC (2003), 652, http://ec.europa.eu/employment_social/knowledge_society/library_en.htm; OECD, *Education at a Glance 2007*, http://www.oecd.org/document/30/0,3343,en_2649_37455_39251550_1_1_1_37455,00.html; and World Bank, *Towards Knowledge Economies: Advanced Strategies for Development* (Washington: World Bank Publications, 2007).

4. Karin Knorr Cetina, "Knowledge in a Knowledge Society: Five Transitions," *Knowledge, Work and Society* 4, no. 3 (2007): 25–42; and Helga Nowotny, Peter Scott, and Michael Gibbons, *Re-thinking Science: Knowledge and the Public in an Age of Uncertainty* (Cambridge, U.K.: Polity, 2001).
5. Ulrich Beck and Natan Sznajder, "Unpacking Cosmopolitanism for the Social Sciences: A Research Agenda," *British Journal of Sociology* 57, no. 1 (2006): 1–23; Leif C. Lahn, "Professional Learning as Epistemic Trajectories," in *Learning Across Sites: New Tools, Infrastructures and Practices*, eds. Sten R. Ludvigsen, Andreas Lund, Ingvill Rasmussen, and Roger Säljö (London: Routledge, 2010); Sami Paavola and Kai Hakkarainen, "The Knowledge Creation Metaphor — An Emergent Epistemological Approach to Learning," *Science & Education*, 14 (2005): 535–57; and Rebecca Rogers et al., "Critical Discourse Analysis in Education: A Review of the Literature," *Review of Educational Research* 25, no. 3 (2005): 365–416.
6. Contemporary authors pointing to the fruitfulness of Peirce's rhetorical turn are: Colapietro, "C.S. Peirce's Rhetorical Turn," 16–52; Mats Bergman, "The Secret of Rendering Signs Effective: The Import of C.S. Peirce's Semiotic Rhetoric," *Public Journal of Semiotics* 1, no. 2 (2007): 2–11; Mats Bergman, *Peirce's Philosophy of Communication* (London: Continuum, 2009); Ann Freadman, *The Machinery of Talk: Charles Peirce and the Sign Hypothesis* (Stanford, Calif.: Stanford University Press, 2004); Roberta Kevelson, "C.S. Peirce's Speculative Rhetoric," *Philosophy and Rhetoric* 17, no. 1 (1984): 16–29; James Jakob Liszka, *A General Introduction to the Semeiotic of Charles Sanders Peirce* (Bloomington: Indiana University Press, 1996); James Jakob Liszka, "Peirce's New Rhetoric," *Transactions of the Charles S. Peirce Society* 36, no. 4 (2000): 439–76; Lucia Santaella-Braga, "Methodetics, the Liveliest Branch of Semiotics," *Semiotics* 124, no. 3–4 (1999): 377–95; Thomas Short, *Peirce's Theory of Signs* (Cambridge, U.K.: Cambridge University Press, 2009); and Torill Strand, "The Rhetoric of Educational Discourses" (paper presented at annual conference of the International Network of Philosophers of Education, Madrid, Spain, August 2004).
7. Nathan Houser et al., *The Essential Peirce. Selected Philosophical Writings, vol. 2* (1893–1913) (Bloomington: Indiana University Press, 1998), 154. This work will be cited as *EP 2* in the text for all subsequent references.
8. Aristotle, *Rhetoric*, 1412a 26.
9. Aristotle, *Poetics*, 1458a 24–29.
10. Aristotle, *Rhetoric*, 1412a 33–38.
11. For example Paul Ricoeur, *The Rule of Metaphor: Multidisciplinary Studies of the Creation of Meaning in Language* (Toronto: University of Toronto Press, 1977).
12. Quoted from Joseph Brent, *Charles Sanders Peirce: A Life* (Bloomington: Indiana University Press, 1998), 357.
13. See note 5.
14. Liszka, "Peirce's New Rhetoric"; and Strand, "The Rhetoric of Educational Discourses."
15. Torjus Midtgarden, "On The Prospect of A Semiotic Theory of Learning," *Educational Philosophy and Theory* 37, no. 2 (2005): 239–52.
16. Mats Bergman, "C.S. Peirce's Dialogical Conception of Sign Processes," *Studies in Philosophy and Education* 24, no. 3–4 (2005): 213–33.
17. Colapietro, "C.S. Peirce's Rhetorical Turn."
18. Liszka, *A General Introduction*; and Liszka, "Peirce's New Rhetoric."
19. Liszka, *A General Introduction*, 78.
20. Karl-Otto Apel, *Charles S. Peirce: From Pragmatism to Pragmaticism*, trans. John Michael Krois (New Jersey: Humanities Press, 1995); and Carl R. Hausman, *Charles S. Peirce's Evolutionary Philosophy* (Cambridge, U.K.: Cambridge University Press, 1993).
21. Torill Strand, "Peirce on Educational Beliefs," *Studies in Philosophy and Education* 24, no. 3–4 (2005): 256, n 2.