Graphic instinct: the account of graphic instinct: the account of rhetorical action and its instinctive roots in Peirce's classification of practical sciences

Instinto gráfico: o relato do instinto gráfico: o relato da ação retórica e suas raízes instintivas na classificação das ciências práticas de Peirce

Alessandro Topa*

Abstract: In an article intimately related to the present one, we have shown that Peirce's maturest account of Speculative Rhetoric in Ideas, Stray or Stolen, about Scientific Writing (1904) invites us to reflect on and seize the phenomenon of rhetoric in its totality. Following Aristotelian clues, Peirce-implicitly-differentiates three categorial aspects of rhetorical action, differentiating between (i) its potentiality [δύναμις] and perfection [έντελέχεια] as an instinctive faculty of rendering signs effective in a utopian universal art, (ii) its actuality as a historically effective, normative practical discourse shaping rhetorical practice $[\tau \epsilon \gamma v\eta]$, referred to as ordinary rhetoric, and (iii) its formality, articulated by the purely theoretical investigation $[\theta \epsilon \omega \rho i \alpha]$ of the necessary conditions of the efficiency of signs in general entitled Speculative Rhetoric. As our mode of being with others in a common world of shared purposes, the rhetorical, both for Aristotle and Peirce, constitutes a semejotic form of the *summum bonum*, the cultivation of which is essential for the growth of concrete reasonableness in any political community and civilization as a whole. In the present paper, we start out by reconstructing Peirce's account of rhetoric in the framework of his classification of the practical sciences (Section 2.1), and then show how this account of rhetoric as a faculty rooted in the "Graphic Instinct" confirms the analysis we have presented in the foregoing paper (Sections 2.2-2.3). In the final section we will eventually try to outline in which sense the importance of conceiving of the rhetorical as a δύναμις with a specific έντελέχεια, or "idea-potentiality" of developmental perfectioning, can help us to appreciate the emancipatory historical role Peirce ascribes to the Normative Sciences (Section 3).

Keywords: Aristotle. Art. Communication. Entelechy. Instinct. Normativity. Peirce. Practical science. Rhetoric. Semiosis. Summum Bonum.

Resumo: *Em um artigo intimamente relacionado a este, mostramos que o estudo mais maduro de Peirce sobre a retórica especulativa, em* Ideas, Stray or Stolen, about Scientific Writing (1904), nos convida a refletir e apreender o fenômeno da retórica em sua totalidade. Seguindo pistas aristotélicas,

^{*} Professor at The American University in Cairo, Egypt, and Otto-Friedrich-Universität Bamberg, Germany. Email: arr.top@t-online.de.

Peirce – implicitamente – diferencia três aspectos categoriais da ação retórica, diferenciando entre (i) sua potencialidade [δύναμις] e perfeição [έντελέχεια] como uma faculdade instintiva de tornar signos eficazes em uma utópica arte universal, (ii) sua atualidade como um discurso prático normativo bistoricamente eficaz e que molda a prática retórica $[\pi \epsilon_{\gamma} vn]$, referida como retórica comum; e (iii) sua formalidade, articulada pela investigação puramente teórica [θεωρία] das condições necessárias da eficiência dos signos em geral, intitulada Retórica Especulativa. Assim como nosso modo de ser com os outros em um mundo comum de compartilhamento de propósitos, a retórica, tanto para Aristóteles quanto para Peirce, constitui uma forma semiótica do summum bonum, cujo cultivo é essencial para o crescimento da razoabilidade concreta em qualquer comunidade política e na civilização como um todo. No presente artigo, começamos reconstruindo o relato da retórica de Peirce, no quadro de sua classificação das ciências práticas (Seção 2.1), e depois mostramos como esse relato da retórica como uma faculdade enraizada no "Instinto Gráfico" confirma a análise que apresentamos no trabalho anterior (Seções 2.2-2.3). Na seção final, tentaremos esboçar em que sentido a importância de conceber a retórica como uma δ óva μ c com uma $\acute{e}v$ τ ϵ λ $\acute{e}\gamma$ ϵ μ a específica, ou "potencialidade-ideia" do aperfeiçoamento do desenvolvimento, pode nos ajudar a apreciar o papel histórico emancipatório que Peirce atribui às Ciências Normativas (Seção 3).

Palavras-chave: Aristóteles. Arte. Ciência prática. Comunicação. Enteléquia. Instinto. Normatividade. Peirce. Retórica. Semiose. Summum Bonum.

> Data de recebimento: 03/07/2019 Data de aceite: 26/09/2019 DOI: 10.23925/2316-5278.2020v21i1p132-151

"The development of pure science is the great end of the arts [...] They have ends of their own, not related to my individual stomach or skin. [...] They too, like the beasts and the trees, are living organisms, none the less so for being parasitic to man's mind; and their manifest internal destiny is to grow into pure sciences."

Charles S. Peirce (EP 2:39)

"Realization: opposed to power or potentiality, and nearly the same as energy or act (actuality). The only difference is that entelechy implies a more perfect realization. The idea of entelechy is connected with that of form, the idea of power with that of matter. Thus, iron is potentially in its ore, which to be made iron must be worked; when this is done, the iron exists in entelechy. The development from being in posse or in germ to entelechy takes place, according to Aristotle, by means of a

Cognitio, São Paulo, v. 21, n. 1, p. 132-151, jan./jun. 2020

change, the imperfect action or energy, of which the perfected result is the entelechy."

(Peircean definition of the lemma entelechy in the Century Dictionary and Cyclopedia, Vol. III, p. 1946, 1889)¹

"It is absolutely impossible that the word 'Being' should bear any meaning whatever except with reference to the summum bonum. This is true of any word."

Charles S. Peirce (CP 2.116)

1 Introduction

In a paper intimately related to the present one, (cf. TOPA, 2019, p. 390-414) we have shown that Peirce's maturest account of Speculative Rhetoric in *Ideas*, *Stray or Stolen, about Scientific Writing* (1904) invites us to reflect on and seize the phenomenon of rhetoric *in its totality*. Following Aristotelian clues, Peirce—implicitly—differentiates three categorial aspects of rhetorical action, differentiating between (i) its potentiality ($\delta \dot{u} \alpha \mu \mu \varsigma$) and perfection ($\dot{e} \nu \tau \epsilon \lambda \dot{e} \chi \epsilon \mu \alpha$) as an instinctive faculty of rendering signs effective in a utopian *universal art*, (ii) its actuality as a historically effective, normative practical discourse shaping rhetorical practice ($\tau \dot{e} \chi \nu \eta$), referred to as *ordinary rhetoric*, and (iii) its formality, articulated by the purely theoretical investigation ($\theta \epsilon \omega \rho i \alpha$) of the necessary conditions of the efficiency of signs in general entitled *Speculative Rhetoric*.² As our mode of being with others in a common world of shared purposes, the rhetorical, both for Aristotle and Peirce, constitutes a semeiotic form of the *summum bonum*, the cultivation of which is essential for the growth of concrete reasonableness in any political community and civilization as a whole.

¹ In the second half of the 1880s, Peirce contributed many entries related to mathematics, logic, metaphysics and psychology to the *Century Dictionary and Cyclopedia*. His authorship of the entry to the lemma "entelechy" is confirmed by a draft of this definition published in W 5:404.

² A rhetorical science qualified as "universal" (W 1:175, 274; 1865), "general" (W 1:304, 1865), "formal" (EP 1:8, 1867; CP 4.116, 1893), "speculative" (CP 2.333, 1895; CP 1.444, 1896; MS 425:0221 ff., 1902; MSS 773-778, 1904; CP 4.9, 1906) or "pure" (CP 2.229, 1897) acts as the third branch of the Peircean semiotological trivium since 1865. Independently of the variety of adjectives qualifying it, this third branch is always taken to thematize the necessary, thus formal, therefore universal or general conditions of the relations of a sign to its interpretant. It is, accordingly, that branch of a semeiotic logic that deals with the interpretive effects of signs. In 1902, however, Peirce apparently started to prefer the term "methodeutic" (CP 2.206, 1900; CP 2.93, 105, 1902; MS L 75/NEM 4:13-73, 1902; MS 1343: 77f.; EP 2:256 f. 260, 272, 1903; EP 2:350, MS 1334:28, 1905; MS 606:16-19, MSS 633, 637, 640; 1909; NEM 3:207, 1911). It is an open interpretive question whether the terms "Speculative Rhetoric" and "Methodeutic" are two terms for the same object, i.e. for the third branch of semeiotic logic, or rather referring to different subbranches of this third branch.

In the present paper, we start out by reconstructing Peirce's account of rhetoric in the framework of his classification of the practical sciences (Section 2.1), and then show how this account of rhetoric as a faculty rooted in the "Graphic Instinct" confirms the analysis we have presented in the foregoing paper (Section 2.2-2.3). In the final section we will eventually try to outline in which sense the importance of conceiving of the rhetorical as a δύναμις with a specific ἐντελέχεια, or "idea-potentiality" (EP 2:388, 1906) of developmental perfectioning, can help us to appreciate the emancipatory historical role Peirce ascribes to the Normative Sciences (Section 3).

2 Peirce's account of rhetoric in the framework of his classification of the practical sciences on the basis of a classification of instincts

In the present section, we will focus on a neglected source for understanding Peirce's views on rhetoric: the MS 1343 (1903) *On the Classification of the Sciences. Second Paper: Of the Practical Sciences* (subsequently referred to as "Of the Practical Sciences").

As for the task of classifying the practical sciences, Peirce, in February, 1902, seems at first to regard it as an irrelevant annoyance for the normative logician and as a technical impossibility for the retrospective scientist (CP 1.243; MS 427:65-67; but cf. EP 2:38 f.). But then, somewhat surprisingly, at the end of the *Outline Classification of the Sciences*, which he composes in the second half of 1903 for the *Syllabus* accompanying the *Lowell Lectures*, Peirce announces that he has completed the task: "The classification of Practical Sciences has been elaborated by the author, but will not here be touched upon" (EP 2:262).³ As MS 1300:014-027 shows that Peirce had come back to the task of classifying the sciences in the last days of 1902—producing sketches of a new approach that starts out from a classification of instincts and develops terminology that will be refined in "Of the Practical Sciences",— we can safely infer that the latter was composed between January and August 1903, most probably, however, in early summer 1903, after Peirce had composed and delivered the *Harvard Lectures* in the winter and spring of 1903.

As "Of the Practical Sciences"—a carefully composed and revised text of roughly one hundred pages—has not, with the exception of a few passages (cf.

³ In our context, it is factually irrelevant that Peirce in MS 602:16 (c. 1906) distances himself from the results he has obtained in his work on the classification of the practical sciences. Still, although it might be quite true that Peirce, as Pietarinen (2006, p. 135), suggests, was "at no point [...] able to settle on any ultimately agreeable classification [of the practical sciences]", it is nonetheless important to note that Peirce's self-criticism in this passage does also testify to the utmost importance he ascribed to this task: "I have bestowed little attention upon the subdivision of Systematic Science, which perhaps would not be difficult; but I have bestowed much more labor upon attempts at classifying the practical sciences that [sic!] on all the others, and have a scheme embracing over three hundred different branches. I do not submit it to the reader's judgment because I think myself that it must be consigned to the long list of my failures." For reasons that deserve a detailed treatment, Peirce's interest in the practical sciences and their classification-constituting both a scheme of the ultimate horizon in which theoretical inquiry can generate practical effects and of the potential trajectories of the growth of practical sciences into pure ones (cf. EP 2:38 f.)—significantly gains prominence in the years after 1902.

CP 7.53-57/MS 1343: 4-10; CP 7.381n19/MS 1343: 21-23; CP 7.58/MS 1343: 75-76), been published, it will be found useful to see a short summary of the structure and contents of the text premised as an introduction to our engagement with it (2.1); we will then proceed to reconstruct Peirce's understanding of rhetoric as a practical science ministering to a specific kind of instinct (2.2), and analyze how the origin of the faculty of rendering signs effective in the so called *Graphic Instinct* determines its nature, purpose and development (2.3).

2.1 "Of the practical sciences": a concise summary of the structure and contents of MS 1343

In the opening section of *Of the Practical Sciences*, Peirce identifies those elements involved in the task of classifying sciences that account for the striking variety of classifications.⁴ Two phases of a classification of sciences are distinguished: the first is, as one might say, moving idealistically 'from above', i.e., from the concept of an idea as a possible purpose⁵ to the general concept of a purpose; the second is moving naturalistically "from below", i.e., from the concept of an instinct to the general concept of a purpose (*Part One*, p. 1-19).

The second part of the text clarifies the meaning of the concepts "instinct", "instinctive conduct" and "instinctive judgement" (MS 1343:23), differentiating between non-purposive and "quasipurposeful action" (MS 1343:26) in order to distinguish the respective kind of unity of universal and particular instincts. Most importantly, however, Peirce defines an instinct—in sharp opposition to the naturalistic psychology of his days—not mechanistically, as "an inherited *reaction*" (MS 1343:20, emphasis added), but as a "natural disposition, or inborn determination of the individual's nature (his «nature» being that within him which causes his behaviour to be such as it is), manifested by a certain unity of quasi-purpose in his behaviour." An instinct, thus, is of the nature of a *babit*, so that "[i]n man [...] this behaviour is always conscious and not purely spasmodic" (MS 1343:21) (*Part Two*: p. 20-34).

The third part of the text contains Peirce's account of his classification of twelve instincts into three groups, each with four elements, which builds up to a—*normatively* justified—categorization of three fundamental kinds of instincts (MS 1343:35-37). Moreover, he provides us with a descriptive characterization, a critical review and a cross-classification of the three main classes of instincts (*Part Three*: p. 34-50).

The fourth part, eventually, presents the classification of the practical sciences. These are divided into the (I) *Sciences of Gratification* (MS 1343:51-78)—*A. Ministrant to the Suicultural Instincts* (MS 1343:51-60), *B. Ministrant to the Civicultural Instincts* (MS 1343:61-66), and *C. Ministrant to the Specicultural Instincts* (MS 1343:66-78)—and (II) the *Sciences of Utility* (MS 1343:78-103). The Sciences of Utility fall into four categories, each reflecting degrees of increasing operational complexity in the manipulation of materials: "A, The Placing and Moving of Considerable Masses; B,

⁴ These elements are the conception of science in general and that which demarcates a science from others neighbouring it, moreover, the guiding interest of the classifier and the modal status of the sciences considered.

⁵ Cf. MS 1343:12: "An idea, so far as it has any relation to life, is a possible purpose."

Operations upon Special Materials; C, Operations involving Special Non-mechanical Forces; and D, Operations involving Living Organisms" (MS 1343:81) (*Part Four*: 78-103).

2.2 "The science of impressing people's minds:" rhetoric as a practical science ministering the specicultural graphic instinct

In a passage in *Of the Practical Sciences*, Peirce reflects on the question whether "[t] he science of Advertizing" ought to be considered a practical science satisfying the desires arising from the "Getting-Instinct", or rather a science rooted in the "Graphic-Instinct" (MS 1343:58). At first sight, the relation of advertising to the Getting-Instinct, being "the instinct which causes men to amass treasures [...] and pursue self-interest with earnestness and energy" (MS 1343:39), seems as strong as direct. Nonetheless, to focus on the specific economic instrumentality this practical science has acquired in our present living world would mean to neglect its origin in our faculty of drawing and directing attention.

This origin Peirce refers to as the *Graphic-Instinct*, defined as "the instinct that prompts to the awakening of ideas in energetic forms of action" (MS 1343:70), i.e., "the disposition to work energetically with ideas and to wake them up" (MS 1343:40). Insofar as "an idea awake is an idea expressed" (MS 1343:41), the energetic work referred to here, embraces both the work of envisaging and the work of expression (i.e., an author's constant effort "to struggle with his idea to drag it out of its hidingplace"). This then reflects the aspect of $\pi o i \eta \sigma i \zeta$, as it is "precisely that struggle that makes art to be Art" (MS 1343:73), whereas the aspects of vision (implied in the metaphora of awaking an idea), or rather: of a revelatory discovery, reflect the origin of the art of rendering signs effective in a *capacity to see* (cf. TOPA, 2019, p. 406 ff.). Consequently, in order to understand what drives and constitutes the art and practical science of advertizing, we need to distinguish the secondary purpose operative in advertizing-indicating a contingent reference to the Getting-Instinct (due to the general organization of economic activity in our present living-world)from its primordial communicative character: "The science of Advertizing has, as it is actually conducted, an indirect reference to the Getting-Instinct; but it is a branch of the science of impressing people's minds, and, as such, ministers to the Graphic-Instinct." (MS 1343:58, emphasis added).

Advertising is, thus, classified as a branch of rhetoric, here referred to as "the science of impressing people's minds", which, by having a more or less definite purpose as its "object of practice" (CP 6.392), aims at gratifying desires originating in the Graphic-Instinct (cf. MS 1343:63-74). As this instinct belongs to a class which is categoriologically different from that of the Getting-Instinct, it would have been a category-mistake to conceive of advertising as an outgrowth of the Getting-Instinct.

And indeed, Peirce classifies the Getting-Instinct as a *suicultural instinct* (MS 1343:37 ff.), which, as such, belongs to the "lowest instincts" that "are no doubt centered in self" (MS 1343:35) (and are thus called 'suicultural'). As Peirce's "Lewiscarrollesque ambiguous derivation" of the term from "either [...] *sui*, of oneself, or from *suis*, of a swine" (MS 1343:35) indicates, the suicultural instincts are taken to be rooted in the basic instinct for individual preservation "concerning food and the getting of it" (MS 1343:34). The Graphic-Instinct, on the other hand, is classified as

one of the *specicultural instincts* (cf. MS 1343:37). Together with the lower sociopolitical *civicultural instincts*, the *specicultural instincts* representing the noblest class of instincts, are not to be rooted in the basic instinct for food and individual preservation, but rather in the instinct for reproduction (cf. MS 1343:34).

Whereas the instincts of self-preservation "govern man's treatment of *things*" and are, as such, "physical", the instincts of reproduction "govern man's [...] dealings with *fellow-beings*" (MS 1343:34) and are, therefore, "psychical". Furthermore, the psychical instincts could be assumed to naturalistically subdivide themselves into the two branches of civicultural and specicultural instincts, so that the latter, although originating in the psychical instinct, become specialized with ideas, inasmuch as "[s] uch instincts as that for Art and Scientific curiosity do not deal with persons so much as with ideas" (MS 1343:34 f.).

The justification of there being a third *general* class of instincts besides the two basic instincts of food and reproduction, however, is far more complex an argument than may appear at first sight; the existence and causality of specicultural instincts both have a common root in their "concern [for] ideas" (MS 1343:37) and a common aim in making "the human race worthy of preservation." Thus, they ultimately depend on the supposition that the development of mankind has taken on the form of a history (cf. CP 2.111ff.) in the course of which we are witnessing and capable of contributing to "the vitalization of ideas" and the "rationabilitation of things" as those ultimate ends which the creative evolutionary process we are part of seems to aim at accomplishing (MS 1343:36). The reality of the specicultural instincts, thus, in the final analysis, depends on the possibility of semeiotic causality, i.e., on the possibility that we can engage in another "way of conceiving Being" besides its conception as "that which manifests itself" or as "that which produces effects" (CP 2.116, 1902); on the possibility that we can justify the necessity of a third mode of being beyond "the being of positive qualitative possibility" and "the being of actual fact" (CP 1.23, 1903); on the possibility that there is another kind of connection besides "the determination of Matter by Form" and "the blind reaction of Matter with Matter" (NEM 4:297, c. 1904); on the possibility, thus, that the modes of being can be regarded as "elements of cooperation toward the summum bonnum" (CP 2.118) inasmuch as there is a third "[mode of] being of law that will govern facts in the future" (CP 1.23) and is constituted by the "Entelechy", "the third element which is requisite to acknowledge besides Matter and Form, [and] is that which brings things together" (NEM 4:295), not however "in an act of bringing it about", but rather through something that "only exists in replicas" and "has its being in being represented" (NEM 4:300): "Signs, or *Entelechies*" (NEM 4:299). The reality of the specicultural instincts thus depends on the assumption that "the very being of the General, of Reason, consists in its governing individual events", so that "the essence of reason is such that its being never can have been completely perfected" and must, therefore, "always [...] be in a state of incipiency, of growth" (EP 2:255, 1903), the processual form of which *is* of the nature of a sign.

> The civicultural instincts, then, will form the second group. And what is the use of the state or the race? Is the mere swarming and multiplication of human beings to be regarded as a good in itself? Many moralists say it is the *summum bonum*; but then these are

men who regard mere gratification, as such, as a good in itself;—a doctrine not easily matched for its bold logical absurdity. Let us prefer the apparent opinion of Nature in her evolution. [...] Let us *glance through all creation and ask ourselves* what, in a word, it would seem to have been at, what has it been accomplishing? Is it not, on the whole, the vitalization of ideas, the rationabilitation of things? Or, *let us ask our own hearts* what if anything, makes the human race worthy of preservation. The answer would seem to be, its promise of ultimately developing ideas and of rendering the arrangements of its sphere of influence reasonable. Are not the words 'worthy' and 'reasonable', in the perfect sense of each, synonyms? If so, the third group of instincts will be those that concern ideas; so that the division of Instincts will be into the Suicultural, the Civicultural, and the Specicultural. (MS 1343:35-37, *emphases added*).

It is worth quoting this passage extensively, as it demonstrates that the differentiation of a third class of instincts-one that cannot be reduced to the two other instincts of the survival of the individual and the stock—is justified with reference to a specific form of *self-interrogation*. This self-interrogation is clearly expressive of a stance which is not that of a practically and emotionally disengaged observer, but rather of a second-person-perspective aimed at comprehending that which constitutes the unity and intelligibility of another agent's conduct: her deepest intentions, that which she really is after and why. Or, put simply: that which moves her. The particularity of this Peircean self-interrogation, however, is not grounded in a personification of the evolutionary process, nature or the human race—although it is, of course, very true that Peirce "attempts to re-enchant nature by portraying her as expressive", as Colapietro (2013, p. 716) aptly diagnoses,⁶—but rather, in the conception of a world that, whatever else it may be, must be such so as to render our engagement with it intelligible. It is this which gives the Peircean self-interrogation its specific character: a philosophical self-interrogation in which the interrogating self does not conceive of itself as the center of its world, but rather as the fruit of its practical engagement with it. The assumption of a general evolutionary, historical and personal directedness toward the *summum bonum* of those instincts that minister to the human species as a whole, thus, has to be anchored in the dialectic of agency and reality. Consequently, we can here, in this complex passage, see the summum bonum to be understood as something that, in its naturality, allows for and, in its historicity, aims at rendering signs effective inasmuch as "the two great tasks of humanity, Theory and Practice" (EP 2:304, 1904) consist of "ultimately developing ideas and of rendering the arrangements of its [i.e. humanitie's; A.T.] sphere of influence reasonable", i.e., in modes of rendering signs effective and thus furthering "the development of concrete reasonableness" (CP 5.3, 1902; cf. 1.602 and 1.615, 1903; 5.433, 1905).

The "pragmaticistic deduction of the specicultural instinct" of this passage confirms that rhetoric, a practical science rooted in a specicultural instinct, needs

⁶ For a thought-provoking and dense account of the historical and systematic perspectives that could *justify* such "re-enchantment", see BILGRAMI, 2010.

to be understood as one of three semeiotic forms of the summum bonum. And, as we had seen in the foregoing paper (cf. TOPA, 2019, p. 406ff.), this understanding has a long tradition: It is the δύναμις περί ἕκαστον τοῦ θεωρῆσαι τὸ ἐνδεχόμενον $\pi \iota \theta \alpha v \delta v$, i.e. the faculty "of observing in any given case the available means of persuasion" (*Rhet.*, 1355 b 26-27), which ultimately constitutes the human modes of togetherness in the common-sensical care for and the common experience of the expedient, the just, the praiseworthy and the true (Cf. *Rhet.*, 1358 a35-1359 b20). But there is also another reason to interpret the deduction of the specicultural instinct and the grounding of rhetoric in the specicultural graphic instinct as proof of its conceptions as a semeiotic form of the summum bonum: After all, Peirce's derivation of three irreducible human instincts, emerging from-but not being reducible to-the two basic biological instincts of preservation and reproduction, results in a distinction that clearly mirrors Peirce's recurrent division of "Ways of Life" (cf. MS 604, n.d.; MS 407:1, 1893; MS 14:6, 1895; MS 477:1, 1903; MS 1334:16 ff., 1905), which is a division of archetypal modes of practical identity, ultimately referring back to the Aristotelian three Bíou or 'designs of life' that the Stagirite interprets as apprehensions of εὐδαιμονία and the μέγιστον ἄγαθον embodied in the praxis of those devoting their life primarily to pleasure, politics or theorizing (EN, 1095 b14-1096 a5). In this sense, the Graphic Instinct, being a specicultural instinct, is an instinct we should expect to be particularly conspicuous in those that devote their life to an idea, though not as an end to itself, but rather as a means to an end exterior to the idea as such.

Leaving all explorations of the argumentative landscape of the deduction of the specicultural instinct at our back, we should, however, first of all reaffirm that as a result of this deduction, the Graphic-Instinct is classified as belonging to the highest, i.e. to the specicultural class of instincts. To this class the other two major classes of suicultural and civicultural instincts are merely subservient, whereas the specicultural instincts are concerned with ideas and, therefore, reflect fundamental attitudes toward phenomena of meaning and the horizons of relevance in which these are experienced, such as: the—sentimentally egotistic—Garb⁷ Instinct, which "leads to the awakening of ideas into naïve sensuous forms" (MS 1343:70); theinstrumentally tuistic-Graphic⁸ Instinct, "that prompts to the awakening of ideas in energetic forms of action" (MS 1343:70); and the-mediatically *id*istic-Gnostic Instinct, which is "the disposition to look beyond the ideas themselves to their upshot and purpose, which is the truth" (MS 1343:42) and consequently acts as "the cause of all purely theoretical inquiry" (MS 1343:70). These instincts are those in which the desire for and the attraction by the beautiful, the good and the true in ornamentation, design, rhetoric, fine arts and science "makes the human race worthy of preservation" (MS 1343:37). Worthy of preservation, however, not primordially because of an intrinsic worth of our species, but because of a purposiveness we thus

⁷ The term "garb-instinct" associates both the English noun "garb," used in reference to a distinctive clothing acting as an "adornment" (cf. MS 1343:46), and the Italian noun *garbo*, denoting elegance and refinement in social interactions.

⁸ Etymologically rooted in the Ancient Greek verb *gráphein* which denotes the act of inscribing signs on a surface, the term "Graphic-Instinct" connotates stylistic vividness and colourful detail aiming at stimulating "excitement" (MS 1343:48); cf. also footnote 26.

acquire as 'co-creators'. This train of thought is articulated with particular perspicuity in a passage of the "Andirondack Lectures" of 1905:

But the *heurospudists* [i.e. the scientists striving for discovery; A.T.] look upon discovery as making acquaintance with God and as the very purpose for which the human race was created. Indeed as the very purpose of God in creating the world at all. They think it a matter of no consequence whether the human race subsists and enjoys or whether it be exterminated, as in time it very happily will be, as soon as it has subserved its purpose of developing a new type of mind that can love and worship God better. (MS 1334:20).

The specicultural instincts—and the sciences gratifying the desires arising from them by the accomplishment of determinate purposes—are thus seen as semeiotic modes of apprehension of the *summum bonum*; as such, they enable practitioners of the arts and sciences to minister to them with varying degrees of awareness of the ultimate *purpose of communing*.

In accordance with this, it should be noted that the three specicultural instincts (Garb-, Graphic-, and Gnostic-Instinct) correspond to the three aspects of the first mode of specialization of the taxonomy in "Ideas, Stray or Stolen, about Scientific Writing" (cf. EP 2:329), i.e. to feeling, resolve and thought as the possible generic subject matters of communication, inasmuch as, in both contexts, the purpose of communing is specified. The reason for this parallelism is the directedness toward the *summum bonum*, which is specified in accordance with the respective mode of being of the *summum bonum* and apprehended as being *of the nature of* a feeling, a resolve/deed, or a thought, i.e., as having the mode of being of a quality (possible form), reaction (actual event) or law. The matter of communication, instantiating the object of the sign-relation in communicative semeiosis, therefore, has its ratio *divisionis* in the trichotomy of the relation a sign has to its immediate object, which "may either be a sign of a quality, of an existent, or of a law" (SS:33, 1904). Accordingly, Peirce, in the definition of the sign he gives in "Ideas, Stray or Stolen, about Scientific Writing", speaks of the object of a sign as that which determines an interpreting sign to refer to the same "idea, existing thing, or law" (EP 2:326).9

Inasmuch as rhetoric, however, adopts the brute instrumental mode of realization typical of the "instincts of human reaction"—which it shares with the voracious "Getting-Instinct" and the martial "Gore-Instinct"—it tends to realize its purpose mechanically "through guidance of blind impulses of human reaction" (MS 1343:49). Hence, rhetorical action tends to limit its capacity of rendering signs effective to the production of immediate and dynamic interpretants.¹⁰ Consequently, it is the *realizational mode* of the Graphic-Instinct to which both rhetoric and the fine arts minister that accounts

⁹ Why the first mode of specialization must have its *ratio divisionis* in the trichotomy of the relation of the sign to its immediate object is an important question, we cannot address here in detail. It could be argued, however, that the communicative sign's reference to its immediate object constitutes a general horizon of relevance in which something can in the first place become thematic in human communication as its matter.

¹⁰ We here agree very much with PETIT, 2018, p. 96-98.

for its difference to both the lower practical sciences of ornamentation and the higher theoretical sciences serving the Gnostic-Instinct, which, being the highest of the "instincts of growth", tends to realize its ends "through development of mind" (MS 1343:49).

It is interesting to note that the cross-classificational distinction of *realizational* modes of instincts, which function as the mark of differentiation of instincts within the same class of sui-, civi-, or specicultural instincts, corresponds to the second mode of specialization in the taxonomy of "Ideas, Stray or Stolen, about Scientific Writing", according to "the special class of signs to be interpreted" that constitutes "the special medium of communication" (EP 2:329). While the realization of the general ends of the three main classes of instincts that works "naively [...] through instrumentality of feeling, or personal consciousness" (MS 1343:49) necessarily requires signs that have the specific materiality of *qualisigns*, which are "of the nature of an appearance" (SS:32, 1904), the realization of ends "through guidance of blind impulses of human reaction" (MS 1343:49) can only rely on signs the dominant characteristic of which will consist of their being "an individual object or event" (SS:32) and can thus as a sinsign stand in dyadic relation to that which it aims to constrain to form an interpretant sign of itself. The realization of purposes "through development of mind" (MS 1343:49), finally, must be mediated by signs the material nature of which allows for replication and thus are "of the nature of a general type" (SS:32) or legisign.

The following table represents Peirce's classification of instincts, which are horizontally ordered in accordance to degrees of generalizability or unrestrictedness of purpose (to a self, a community, or a sapient life form) and vertically ordered in accordance to their *praxeological mode of realization* (personal, competitive, cooperative). Additionally, the second row expresses the general character of each of the three classes of instincts and thus highlights a third classificatory respect insofar as we can see the *generalizability of purpose* correlate with increasing *degrees of complexity* of interaction and the integrative power of its outcome, leading us from individual awareness (the Gamboling Instinct, integrating phases of the self) and social interaction of particular limited communities (Governing Instinct, integrating individuals) to a universal history of reason (Grouping Instinct, integrating communities). Note that these differentiations correspond to the third mode of specialization in the taxonomy of "Ideas, Stray or Stolen, about Scientific Writing" insofar as we are, in both cases, concerned with quantitatively specifying the degrees of an *involvement achieved as* the effect of an activity due to the degree of its relational complexity. Thus, the third mode of specialization in "Ideas, Stray or Stolen, about Scientific Writing", which is working "according to the nature of the class of signs into which the interpretation is to take place" (and emphasizes the special interest in "signs to be translated into human thought", cf. EP 2:329), has its ratio divisionis in the distinction of three kinds of interpretants,¹¹ the diversification and theory of which, however, Peirce will improve significantly in the years to come.¹²

¹¹ Cf. SS:33 f., for an account of the three trichotomies of the "signified", "dynamic" and "immediate" interpretant which is chronologically close to the date of composition of ISSSW.

¹² Cf. EP 2:398-433 and 477-502. An excellent account of Peirce's theory of the interpretant is offered by SHORT, 2002; cf. also JAPPY, 2018, and BELLUCCI, 2018, p. 285-352 for a fine-grained account of the development of Peirce's Speculative Grammar after 1904.

	<u> </u>		Ci : 1: 1.7 .: .
Mode of realization of ends		Civicultural Instincts	Specicultural Instincts
Indifferent	The Gamboling	The Governing	The Grouping
	Instinct ¹³	Instinct	Instinct general
			intellectual instinct
	general egotistic	general social instinct	"tending to () the
	instinct "tending	"tending to () the	awakening and
	to personal well-being"	ordering of society"	blossoming of ideas"
	(49)	(49)	(49)
Personal	The Gust Instinct ¹⁴	The Ghost Instinct ¹⁵	The Garb Instinct
Instincts of Feeling:			
"through	"is the instinct which	"is that ingredient of	"instinct that leads to
instrumentality of	causes us to take	human nature that	the awakening of ideas
feeling or personal	pleasure in sensations,	brings the emotions to	into naïve sensuous
consciousness"	such as agreeable eating	the service of society."	forms"
(49)	and drinking, smoking	(39-40)	(70)
	and other sensual		
	gratification." (38)		
Competitive Instinct	The Getting Instinct	The Gore Instinct ¹⁶	The Graphic
of Reaction:	8		Instinct ¹⁷
"through guidance	"is the instinct which	"(is) the instinct of	"the instinct that
of blind impulses of	causes men to amass	combat and ruthless	prompts to the
human reaction"	treasures"	destruction"	awakening of ideas
(49)	(38)	(40)	in energetic forms
<->>	(a =)		of action" (70)

- 13 Peirce does not state his rationale for exclusively using denominations for instincts starting with the letter g. It is, however, quite probable that this is meant to indicate their being modes of gratification, inasmuch as "every purpose has its root in a desire, and every desire is a phase of an instinct" (MS 1343:18). Etymological playfulness and speculations (cf. MS 1343:73) are very much part and parcel of the somewhat Joycian atmosphere of MS 1343.
- 14 The denomination 'Gust-Instinct' connotates Italian gusto and Latin gustus, thus the faculty of taste.
- 15 The term 'Ghost Instinct' seems calculated to allude to atavism as the essential ingredient of ideologically motivated narratives of collective identity: "[The Ghost Instinct] has impressive rites, and clings to scraps of primeval philosophy which have outlived their nationality and which the nationalist would throw upon the garbage-heap of exploded superstitions, if this instinct did not rescue them and turn them [the emotions; A.T.] to the service of society" (MS 1343, p. 40).
- 16 The denomination "Gore Instinct" invites us to associate both the English noun gore, denoting the blood that has been shed in consequence of excessive violence, and the verb to gore, which denotes the act of piercing something.
- 17 As Peirce briefly indicates in the final draft (cf. MS 1343:47) and as the pages of a first draft of "Of the Practical Sciences" show, Peirce was initially conceiving of the Graphic Instinct as the "Play Instinct, [by which] is meant, pretty nearly, Schiller's Spiel-trieb", which "prompts men to all their energizing and strenuous labor for the love of ideas" (MS 1343:0164). On the next developmental stage, we then see Peirce operating with a triad of "menticultural instincts" (the later specicultural instincts), which are (i) the "Clothes–instinct, [by which] is meant the lowest, most sensual and most personal spirit of expression, as it is exhibited in dress, personal adornment, and other pettiness of vanity and pretension", (ii) the "Play-instinct, [by which] is meant the most energetic part of the cultivation of ideas" and (iii) the "Conversation-instinct, [by which] is meant [...] a more elevated form of menticulture" (MS 1343:0166). What the three menticultural instincts have in common, however, is that each one of them is an "impulse to expression" (ibid.).

Cooperative Instincts of Growth:	The Gentleman Instinct	The Gamic Instinct ¹⁸	The Gnostic Instinct
"through development of mind" (49)	"is the instinct of reasonable suiculture. One wishes to place oneself, enjoy one's own grandeur." (39)	"is the instinct which causes the production, rearing and training of children and other pets." (40)	"is the disposition to look beyond the ideas themselves to their upshot and purpose, which is the truth." (39)

2.3 "The awakening of ideas in energetic forms of action": Rhetoric as a realizational mode of the Grouping Instinct

According to Peirce's analysis in "Of the Practical Sciences", rhetoric is a science ministering to a specicultural instinct that in its highest form—"The Gnostic Instinct, or curiosity" (MS 1343:75)—deals exclusively with ideas, while the Graphic Instinct, which has "two varieties"—namely "the instinct of the artist" and "the instinct of the teacher" (MS 1343:42) —does neither exclusively nor primarily deal with ideas, but rather with things or men. Considered as a categoriological stage of the Grouping Instinct, i.e., as this very instinct in its secondness, Rhetoric in its totality—as an art, as a practical normative discourse and as a theoretical science—reveals itself to be (and to be concerned with) one of three modes of the expression of ideas "by visible and by audible signs":

The Grouping Instinct is the greatest of the instincts. It is the very atmosphere of life, penetrating into everything that man makes or does. The greatest of the Arts that subserve it are those of representing ideas by visible and by audible signs and of making visible signs to correspond to audible signs. Naturally, so important and peculiar a matter becomes the object of purely theoretical inquiries. But intermediate between the arts, which are entirely practical, and the theoretical sciences, there are practical sciences which inquire how those arts can best be developed and seek to guide them. (MS 1343:66).

Accordingly, the particularity of the rhetorical mode of communication comes into view as soon as we conceive of it as one of three modes of realizing the general purpose of the "Grouping Instinct", which, being "the general intellectual instinct" (MS 1343:40), is "tending to the awakening and blossoming of ideas" (MS 1343:49) in three modes: Either (i) "in naive sensuous forms, thus ministering to the *Garb Instinct*; or (ii) by the "awakening of ideas in energetic forms of action", thus ministering to the *Graphic Instinct* (MS 1343:70); or (iii) by "the disposition to look beyond the ideas themselves to their upshot and purpose, which is the truth" (MS 1343:42), thus ministering to "the Gnostic instinct, or curiosity" (MS 1343:75). As a consequence,

¹⁸ The term "Gamic Instinct" is etymologically rooted in the Ancient Greek noun gámos, denoting the lawful union of man and woman for the sake of procreating and rearing offspring.

ordinary rhetoric is a practical science that ministers to the highest form of instinct, but it does so in a realizational mode that is "tending to realize ends through guidance of blind impulses of human reaction" (MS 1343:49) and is thus determined by the operativity of instincts in their reactional secondness that ultimately relies on brute force and the bringing about of individual events, but is not truly capable of engendering communicative processes that develop a transgenerational life of their own. The reason for this failure, ultimately, is the lack of something that can truly function as a *real* attractor of semeiosis and which—as the object of a true symbol—has "[t] he very entelechy of being [which] lies in being represented" and "is endowed with power of growth into the very truth" (EP 2:324, 1904).

The brute element of secondness by which Peirce sees characterized rhetoric is last, but not least, highlighted by the nature of the other instincts preceding it, namely the thing-related Getting Instinct, which causes men to "pursue self-interest with earnestness and energy" (MS 1343:38), and the men-related Gore Instinct "of combat and ruthless destruction" (MS 1343:40). We might, therefore, say that rhetoric, for Peirce—who is clearly echoing central elements of the Platonico-Aristotelian critique and philosophical 'domestication' of rhetoric (Cf. Gorgias, Phaedrus, Rhet., 1354 a1-1355 b25)—is fundamentally determined by the *competitive nature* of its underlying Graphic Instinct, which, moreover, is the root-cause of the instrumentalizing tendency to deal with ideas as if they were things or men. Being "the instinct that prompts to the awakening of ideas in energetic forms of action" (MS 1343:70) or "the disposition to work energetically with ideas and to wake them up" (MS 1343:41), the Graphic Instinct ultimately causes men to produce and use signs to overbear, compel and subdue their hearers with the consequence of thus bringing about only immediate and dynamical interpretants. The *efficiency* of signs on this level is thus neither rooted in the fleeting iconicity of imitation and ornamentation nor on the growth of ideas in the continuity of scientific inquiry using all kinds of signs as parts of symbols, but rather on the capacity to bring about beliefs, actions and emotions in the here and now of a communicative situation that—far from being an end to itself-is experienced as an interruption: an interruption of a normal state of affairs (characterized by a consensus engendering cooperation) to the reinstitution of which it is subservient and to which it is thus ironically urged to contribute by aiming to make the further rendering of signs effective superfluous. The general borizon of relevance in which something can, in the first place, become thematic in human communication as its matter is here thus conceived of as being of the nature of a reaction and does, thus, not have the intellectual development of thought as its desired outcome. With a view on the openness and continuity of processes of communication we have, therefore, to observe that rhetoric-ordinary rhetoric we might say-carries in it the aim of annihilating communication. It aims at its end, though never beyond it, because what it wants, ultimately, is to bring about action and get things done.

Moreover, as the graphic instinct has two varieties, namely "the instinct of the teacher who burns to inculcate and propagate ideas with which he is entirely satisfied" and "the instinct of the artist who endeavors to awaken and bring to expression ideas that strike him forcibly yet that he cannot easily seize" (MS 1343:42), the *struggle* with ideas rooted in the Graphic Instinct might either take the form of exerting effort in the act of producing signs that represent them, or the form of

communicatively imposing ideas upon others. In the first case—reminding Peirce of "a sort of Blindman's Buff" (MS 1343:42)—there is a heuretic lack of synthetic logicality, (if invention is taken to be a proto-abductive process); in the second case, there is a lack of analytic logicality in the process of representation (if *apodeixis* is taken to be that which makes persuasion superfluous). Both the fine arts and rhetoric are thus—in a somewhat Hegelian fashion—conceived of as degenerate modes of the realization of the end of the Grouping Instinct, consisting of "the awakening and *blossoming of* ideas" (MS 1343:49; emphasis added).

4 The growth and entelechy of rhetoric

Our path has led us from the reconstruction of the main conceptual axis of Ideas, Stray or Stolen, about Scientific Writing in the foregoing paper, to Peirce's account of the instinctive roots of rhetoric in the context of his classification of the practical sciences. As we have seen, rhetoric is contextualized and classified in two fundamental dimensions. It is, on the one hand, and with a view on the nature of the purpose animating it, contextualized and regarded as continuous with the ornamental sciences, the fine arts and theoretical sciences. This is because rhetoric, in its ministering the Graphic Instinct, ministers a specicultural instinct and thus partakes in the general aim of this class, which consists of "the awakening and blossoming of ideas" (MS 1343:49). On the other hand, and with a view on its general mode of realization, rhetoric is put in a series with arts originating in instincts, the common feature of which is their competitive nature and tendency to irrationally "realize ends through guidance of blind impulses of human reaction" (MS 1343:49). These instincts are the Getting Instinct and the Gore Instinct, being respectively "the instinct which causes men to amass treasures" (MS 1343:38) and "the instinct of combat and ruthless destruction" (MS 1343:40).

According to Peirce's analysis in "Ideas, Stray or Stolen, about Scientific Writing", the historical development of rhetoric (as an art and practical science) has been determined by this two-fold categoriological determination of the art of making signs effective, insofar as it is practiced and conceived of as a communicative endeavour dealing with ideas in their secondness, i.e., as if they were things or men to be manipulated and not entities that have a life and *ratio* of their own to be realized "through development of mind" (MS 1343:49), i.e., in accordance with *their own* processuality and purposiveness.

There is, thus, *an implicit grasp of the nature of signs* and of *the ideas guiding its mode of realization*, which rhetoric has acquired in its genesis as part of the "historical evolution of human thought" (EP 1:364). To be more precise, we might say that *ordinary rhetoric* as a practical science governing communicative habits and practices has been the product of an "agapastic development of thought" in its second, anankastic mode (cf. EP 1:364). It is neither purely mimetical, nor purely logical, but rather something that is up to us steering in the proper direction by "look[ing] beyond the ideas themselves to their upshot and purpose, which is the truth" (MS 1343:42); a truth, however, that "mere contemplation can [not] be adequate to embracing", but rather is "a thing to be lived" (MS 1343:43) once the "Gnostic Instinct, or curiosity" (MS 1343:75)—in the guise of its offspring Speculative

Rhetoric, to be precise—takes possession of it and transforms it by rebuilding it on the proper notion of "Signs, or *Entelechies*" (NEM 4:299, 1904) and "of the word "Being»" as impossibly "bear[ing] any meaning whatever except with reference to the *summum bonum*" (CP 2.116, 1902).

As the history of science—originating in the emergence of the method of science on the basis of the integrative transformation of the other methods of fixating belief through the growth of the social impulse (cf. EP 1:115ff.)—indicates, however, there is already an operative tendency in history that must be based on a transformation of the Graphic Instinct through its integration into the Gnostic Instinct. There was, we might thus say, a *Speculative* Rhetoric in the making, in which rhetoric was *felt* to contribute to the Gnostic Instinct's entelechy in rather becoming part of Logic, instead of becoming a part of warfare. This manifestation of Speculative Rhetoric in its firstness made its appearance in the esthetic vision of the unity of the trivium:

In the Roman Schools, grammar, logic, and rhetoric were felt to be akin and to make up *a rounded whole* called the *trivium*. *This feeling was just*; for the three disciplines named correspond to the three essential branches of semeiotics [...] (EP 2:327, *first and third emphases added*).

Peirce's Speculative Rhetoric is here represented as a logical interpretant of the idea underlying the organization of didactic communicative practices beginning in the early Middle Ages. Rhetoric grows. It grows out of its seed as the $\delta \dot{\nu} \alpha \mu \alpha \pi \epsilon \rho \dot{\nu}$ ἕκαστον τοῦ θεωρῆσαι τὸ ἐνδεχόμενον πιθανόν (i.e. as a capacity of seeing in any given case what possibly speaks for something, cf. Rhet., 1355 b 26-27); it grows out of its "embryonic reality endowed with a power of growth into the very truth" (EP 2:324, 1904) qua universal art *in posse* of rendering signs effective; it grows out of the historical context of its emergence in a world in which words and deeds, λέξις and $\pi\rho\tilde{\alpha}\xi_{1\zeta}$, were considered to be the modes of immortalizing in the $\pi\delta\lambda_{1\zeta}$. (cf. ARENDT, 1957, p. 22-28, 35-37, 56). On its final developmental stage, mediated by the advent of Speculative Rhetoric, it would eventually have accomplished the full idea-potentiality of the universal art. It would have transformed the way we appear to each other in communicative practices just as much as Bacon's Novum Organon has transformed the face of the earth (cf. EP 2: 326ff.). But independently of how far it will factually develop, it will never cease to be rhetoric, i.e. never cease to look at this world from the point of view of beings whose interests ultimately guide their semeiosis and for whom sharing a world of purposes constitutes their only anthropomorphic way to be. And in this sense, the graphic instinct, far away from ever being capable of being completely *aufgehoben* by the gnostic instinct, is that instinct which reflects our essential dependence on others that neither animals nor gods share with us. "It is perfectly true that we can never attain a knowledge of things as they are", Peirce writes in 1911, partially rehabilitating Kant's Ding an sich, and adds: "We can only know their human aspect. But that is all the universe is for us" (SS:141). Indeed, the Pragmaticist is factually deeply convinced of the truth of anthropomorphism:

And what do you think of Humanism? Pragmaticist. Why if you had said Anthropomorphism, I should have replied that I heartily embrace most of the clauses of that doctrine, if some right of private interpretation be allowed me. I hold, for instance, that man is so completely hemmed in by the bounds of his possible practical experience, his mind is so restricted to being the instrument of his needs, that he cannot, in the least, mean anything that transcends those limits. [...] For much the same reason, I do not believe that man can have the idea of any cause or agency so stupendous that there is any more adequate way of conceiving it than as vaguely like a man. Therefore, whoever cannot look at the starry heaven without thinking that all this universe must have had an adequate cause, can in my opinion not otherwise think of that cause half so justly than by thinking it is God. (CP 5.536, 1905; cf. CP 8.262)

Rhetoric reflects the *conditio bumana*. The clarification of this hermeneutic situation at the beginning of the 20th century, and the historical task corresponding to it, is the subject matter of *Ideas, Stray or Stolen about Scientific Writing*. Only a task of this kind can make us understand why Peirce can refer to Speculative Rhetoric as the "the highest and *most living* branch of logic" (CP 2.333, 1896) and to the Normative Sciences it is part of as "the greatest need of our age" (CP 7.239, 1904); it becomes clear why Peirce can claim that it is "above all the normative sciences, esthetics, ethics and logic that men are in dire need of having severely criticized, in their relation to the new world created by science" (CP 5.513), and why he can thus conceive of them as "sciences [that] deal with subjects not only lying in the very bottom hold of the ship of civilization", but which do also "go to the heart of every one of us" (MS 675:43, 1911). Indeed, the fate of rhetoric is the fate of mankind.¹⁹

References

ARENDT, Hannah. *The human condition*. Chicago: The University Chicago Press, 1957.

ARISTOTLE. *The basic works of Aristotle*. Introduction of C.D.C. Reeve. MCKEON, R. (ed.). New York: The Modern Library, 2001.

BELLUCCI, Francesco. *Peirce's speculative grammar: logic as semiotics*. New York: Routledge, 2018.

BERGMAN, Mats; PAAVOLA, Sami, et. al. (ed.). *Ideas in action*: proceedings of the *applying Peirce* conference. Helsinki: Nordic Pragmatism Network, 2010. (Nordic Studies in Pragmatism 1).

BERGMAN, Mats; GAVA, Gabriele. *Introduction*: Peirce's rhetoric and methodeutic. *Semiotica*, v. 2018, issue 220, p. 217-219, 2018.

¹⁹ The author kindly thanks the two anonymous referees for carefully pointing out structural imperfections and empathetically identifying concepts and argumentative strands that were in need of a more elaborate exposition.

BERGMAN, Mats. *Reflections on the role of the communicative sign in semiotic. Transactions of the Charles Sanders Peirce Society*, v. 36, n. 2, p. 225-254, Spring 2000.

BERGMAN, Mats. *Peirce's philosophy of communication*: the rhetorical underpinnings of the theory of the sign. New York: Continuum, 2009.

BERGMAN, Mats. The highest branch of logic? On a neglected question of speculative rhetoric. *Sign Systems Studies*, v. 43, n.4, p. 463-482, 2015.

BERGMAN, Mats. Methodeutic and the order of inquiry, *Semiotica*, v. 2018, issue 220, p. 269-299, 2018.

COLAPIETRO, Vincent, OLSHEWSKY, Thomas (ed.). *Peirce's doctrine of signs*: theory, applications, and connections. Berlin & New York: Mouton de Grutier, 1996. (Approaches to Semiotics, 123).

COLAPIETRO, Vincent. Portrait of an historicist. An alternative reading of Peircean semiotics. *In*: WILLIAMSON, R.; SBROCCHI, L. G.; DEELY, J. (ed.). *Semiotics 2003*: semiotics and national identity. New York, Ottawa, Toronto: Legas, 2003. p. 3-12.

COLAPIETRO, Vincent. The historical past and the dramatic present. *European Journal of Pragmatism and American Philosophy*, v. 8, n. 2, p. 31-70, 2006.

COLAPIETRO, Vincent. C. S. Peirce's rhetorical turn. *Transactions of the Charles Sanders Peirce Society*, v. 43, n. 1, p. 16-52, Winter 2007.

COLAPIETRO, Vincent. Neglected facets of Peirce's 'Speculative Rhetoric'. *Educational Philosophy and Theory*, v. 45, n. 7, p. 712-736, 2013.

DE CARO, Marco, MACARTHUR, David (ed.). *Naturalism and normativity*. New York: Columbia University Press, 2010.

GAVA, Gabriele. *Peirce's account of purposefulness*: a Kantian perspective. New York: Routledge, 2014. (Routledge Studies in Nineteenth-Century Philosophy).

GAVA, Gabriele. Peirce's "Ideas, stray or stolen, about scientific writing" and the relationship between methodeutic, speculative rhetoric, and the universal art of rhetoric. *Semiotica*, v. 2018, issue 220, p. 221-234, 2018.

HEIDEGGER, Martin. Gesamtausgabe, II. Abteilung: Vorlesungen, vol. 18: *Grundbegriffe der aristotelischen Philosophie* (Sommer 1924), Frankfurt am Main, 2002.

JAPPY, Tony. Speculative rhetoric, methodeutic, and Peirce's hexadic sign-systems. *Semiotica*, v. 2018, issue 220, p. 249-268, 2018.

KROIS, John Michael. Peirce's speculative rhetoric and the problem of natural law. *Philosophy and Rhetoric*, v. 14, n. 1, p. 16-30, 1981.

LISZKA, James J. A general introduction to the semiotic of Charles Sanders Peirce, Bloomington & Indianapolis: Indiana University Press, 1996.

LISZKA, James J. Peirce's revolutionary concept of rhetoric. *In*: BERGMAN, Mats; PAAVOLA, Sami, et. al. (ed.). *Ideas in action*: proceedings of the *applying Peirce* conference. Helsinki: Nordic Pragmatism Network, 2010. p. 118-133. (Nordic Studies in Pragmatism 1).

LISZKA, James J. The problematics of truth and solidarity in Peirce's rhetoric. *Semiotica*, v. 2018, issue 220, p. 235-248, 2018.

LYNE, John. Rhetoric and semiotic in C. S. Peirce. *The Quarterly Journal of Speech*, v. 66, p. 155-168, 1980.

PAPE, Helmut. Charles S. Peirce zur Einführung, Hamburg: Junius, 2015.

PEIRCE, Charles S. *The collected papers of Charles Sanders Peirce*, volumes 1-6. Edited by HARTSHORNE, Charles and WEISS, Paul; volumes 7 & 8, edited by BURKS, Arthur W. Cambridge: Belknap Press of Harvard University Press, 1931-1958. [Cited as CP followed by volume number, paragraph, and year].

PEIRCE, Charles S. *The essential Peirce*: selected philosophical writings. HOUSER; N, KLOESEL, C.; The Peirce Edition Project (ed.). Bloomington: Indiana University Press, 1992-1998. 2 v. [Cited as EP followed by a number refers to volume, page and year].

PEIRCE, Charles S. *The Charles S. Peirce Papers*. 32 microfilm reels of the manuscripts kept in the Houghton Library of Harvard University. Photographic Service. Cambridge, MA: Harvard University Library, 1966. [Cited as MS followed by a number refers to manuscript, and page].

PEIRCE, Charles S. *Semiotic and significs:* the correspondence between Charles S. Peirce and Victoria Lady Welby. HARDWICK, Charles S.; COOK, James (ed.). Blooming: Indiana University Press, 1977. [Cited as SS followed by the number page].

PEIRCE, Charles S. *Contributions to the Nation*. COOK, James E.; KETNER, Kenneth L. (ed.). Lubbock: Texas Tech Press 1975-1987. 4 v. [Cited as CN followed by volume number and page number].

PEIRCE, Charles S. *The new elements of mathematics*. EISELE, C. (ed.). The Hague/ Paris: Mounton Publishers, 1976. 5v. [Cited as NEM followed by volume number and page number].

PEIRCE, Charles S. *Writings of Charles S. Peirce*: a chronological edition. FISCH, M.; KLOESEL, C.; et al. Bloomington & Indianpolis: Indiana University Press, 1982-2010. 8v. [Cited as W followed by volume number and page number].

PETIT, Arnaud. The universality of Peirce's rhetoric. *Transactions of the Charles Sanders Peirce Society*, v. 54, n. 1, p. 84-104, Winter 2018.

PIETARINEN, Ahti-Veikko. Interdisciplinarity and Peirce's classification of the sciences: a centennial reassessment. *Perspectives on Science*, v. 14, n. 2, p. 127-152, 2006.

PLATO. *Werke in acht Bänden Griechisch und Deutsch*. EIGLER, G. (ed.). Darmstadt: WBG, 1977.

ROBIN, Richard. *Annotated catalogue of the papers of Charles S. Peirce*. Amherst: University of Massachusetts Press, 1967.

ROBIN, Richard. The Peirce papers: a supplementary catalogue. *Transactions of the Charles Sanders Peirce Society*, v. 7, n. 1, p. 37-57, Winter 1971.

SANTAELLA, Lucia. Methodeutics, the liveliest branch of semiotics. *Semiotica*, v. 124, n. 3-4, p. 377-395, 1999.

SHORT, Thomas. Interpreting Peirce's interpretant: a response to Lalor, Liszka, and Meyers. *Transactions of the Charles Sanders Peirce Society*, v. 32, n. 4, p. 488-541, Fall 1996.

TOPA, Alessandro. The general secret of rendering signs effective": on the Aristotelian roots of Peirce's Conception of Rhetoric as a Dynamis, Téchne and Semeiotic Form of the *Summum Bonum. Cognitio: revista de filosofia*, v. 20, n.2, p. 390-414, jul./ dec. 2019.