

A ROLE FOR PEIRCE'S CATEGORIES?*

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This book arose from the author's recent dissertation written under the Gerhard Schönrich at Munich. It focuses on Peirce's theory of categories and his epistemology. According to Baltzer, what is distinctive in Peirce's theory of knowledge is that he reconstrues objects as "knots in networks of relations." The phrase may ring a bell. It suggests a structuralist interpretation of Peirce, influenced by the Munich environs. The study aims to show how Peirce's theory of categories supports his theory of knowledge and how "question concerning *a priori* structures of knowledge" are transformed within this relational framework. A chief critical target is David Savan's semiotics, specifically the idea that "the multiplicity of development of the categories" is "conditioned by nothing but the indefiniteness of the categories."¹ But in contrast with this, if there is any indefiniteness in the categories, they cannot fully direct their own application, and this is to say regarding them "that our knowledge is never absolute but always swims, as it were, in a continuum..."² If the doctrine of continuity applies to the categories, they also have a continuum to swim in.

The book gives considerable attention to the relationship between Peirce's theory of categories and its precursor in Kant. The Introduction *opens* with this quote: "Now upon the table of categories philosophy is erected,—not merely metaphysic but the philosophy of religion, of morals, of law, and of every science."³ A concern with foundationalist theme marks the central thesis of the work. "It is my task in the present book to demonstrate [a]...dependence relationship," says Baltzer. This is a dependence of semiotic upon the theory of categories. "It is not, as Savan⁴ would have us believe, that signs ground the categories. Instead it is much more the categories which are the foundational element, having their (most prominent) expression in the triad of signs."⁵ The claim is perhaps overly strong. Given Peircean fallibilism, we may wonder if sufficient stress has been placed upon the reciprocal or mutual dependence between the theory of categories and the theory of signs and predicates. Baltzer's thesis requires comparison with Elisabeth Walther's, in her Introduction to the German edition of the *Lectures on Pragmatism*: "Since, however, everything at all which can be said or thought is said in signs, they are the foundation of every other domain."⁶

The book consists of an Introduction, three major divisions consisting of a total of 18 numbered chapters, and a brief concluding Overview or Prospect. Beyond the main text, there is also a listing of abbreviations, a bibliography, and an index of personal names. The strength of this book is the elaboration of the author's themes through discussions of substantial portions of Peirce's work and the secondary literature. This could help to open the discussion of Peirce to wider audiences. If there is a weakness, it is a narrowness on alternative interpretations of fundamental Peircean ideas.

Part I, "The Design of the Theory of Categories in the 'New List'" concentrates on Peirce's early development of the theory of categories, starting with an exposition, in the first two chapters, of Kant's theory of categories and Peirce's departures from Kant. There follows an initial exposition of the Peircean theory, including the start of an interesting emphasis on the idea of levels of analysis in the application of the categories. Part II, "Distinctive Features of the Ramified [*ausdifferenzierten*] Theory of the Categories," looks at the Peircean categories more systematically, including consideration of the value and interrelations of the various definitions Peirce gives to the three categories, the irreducibility theses, the question of the completeness of the categories, and the functions of the distinction between genuine and degenerative cases. Part III concentrates on Peirce's later "phenomenological" elaboration of his theory, where the categories are brought into closest con-

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¹. Baltzer 1994, p. 13.

². C. S. Peirce, *Collected Papers*, Vol. 6, paragraph 175, = (CP6.175).

³. Peirce 1866, cited in Baltzer 1994, p. 11.

⁴. Cf. Savan, David. 1977, "Questions Concerning Certain Classifications Claimed for Signs," *Semiotica* 19, No. 3/4, pp. 179-195.

⁵. Baltzer 1994, p. 11.

⁶. Walther, Elisabeth 1991, *Charles Sanders Peirce, Vorlesungen über Pragmatismus*, "Einleitung," p. xvii.

nection with the epistemological themes of grounds for knowledge and their relational character. Overall this book is a thorough and rigorous treatment of the topic from a somewhat Kantian, and structuralist point of view. It provides an expository basis for discussions of structuralist vs. anti-structuralist and foundationalist vs. anti-foundationalist interpretations of Peirce's work, especially for the German literature, suggesting significant relationships between Kantian and structuralist themes. In the present review, I briefly sketch the author's approach while suggesting an alternative perspective.

1. Relational Structure

"It will be shown," argues the Introduction, "that Peirce assumes, for each relatum—whether mental act, state of affairs, or object of the physical world—that it is representable as a more or less complex relational structure and that this constitutes its essential character."⁷ Objects in their "essential character" are analyzable into relations. The interpretive claim is used in an account of the multiplicity of Peircean applications. Because each relation is to be brought back to a categorical model, the ubiquity and variety of the categories would be explained as the various forms of appearance of differently structured relational complexes. Such a process of reconstruction of a state of affairs by means of relational structures is to be called a "categorical ordering" (*kategorische Verortung*). A central concern of this work is to analyze Peirce's theory of categories in terms of categorical ordering as the basic principle of understanding.⁸ The term "categorical ordering," and the relationship of this to Baltzer's theme of levels of analysis involve some innovation and an especially valuable points in the interpretation. (See CP5.223 for a related Peircean discussion.) The idea of relational structure as essential is more problematic.

"From the fact that the categories are fundamental elements of knowing, there follows a particular conception of the knowable object."⁹ "Categorically structured knowledge," argues Baltzer, "cannot do without reference to further objects in the construction of the object of knowledge." That is, categorically structured knowledge "necessarily involves the reference or relation of one object to another, because the categories only structure such relations among objects." Thus, "the objects in question are always only determined [*bestimmt*] relative to the relation." Citing Peirce in Volume II of Kloesel and Pape's *Semiotische Schriften*, the author urges that "in Peircean context, the external reference or relations [*externe Bezug*] of an element are of central interest and not its internal construction."¹⁰

Insofar as these interpretive points reflect Peirce's deep and thorough-going emphasis upon the logic of relations, they stands beyond reasonable question. For example, "Peirce attempts to show the superiority of organization in terms of types of valences or connections over sortings in terms of internal characteristics, by means of the analogy with the periodic table."¹¹ But the contrast put forward between relational or structural characterizations and characterizations in terms of "internal construction" is problematic.

In the first place, Peirce's logic of relations clearly encompasses traditional subject-predicate logic by including monadic predicates. So, holding as he does, with reference to chemistry, that the valences or types of connectivity of the elements are crucial in the period table, this would not forbid consideration of differences between elements of the same valence and nor would it forbid application of monadic predicates in the details of classification or individuation. Baltzer urges that according to Peirce, "it is not in terms of internal characteristics that we can deduce law-like generalizations in chemistry, but instead only (simply? [*lediglich*]) on the basis of external connections to other elements."¹² The proper Peircean point is surely that seeing things in terms of their relations is crucial to understanding them.

But this does not show that we need never consider "internal characteristics," on Peirce's account. In fact the chemical theory of valences came to a further explanation by reference to atomic

⁷. Baltzer 1994, p. 14.

⁸. *Ibid.*

⁹. *Ibid.*, p. 163.

¹⁰. *Ibid.*

¹¹. *Ibid.*, cf. CP 3.469f.; CP1.288.

¹². Baltzer 1994, p. 163.

number and correlated shells of electrons. Knowing the atomic number of an element one can deduce, in chemical theory, the number of electrons in each shell and thus its valence. Would this show that monadic predicates, e.g., ‘x has-the-atomic-number-79’ and “internal characteristics, inside the atom” are really the only considerations of importance? It seems not. But this is just to repeat the point that the author’s distinction between “relational structure” and “internal characteristics” is not clearly suited to make the kind of point he seems to want to make. What is missing is emphasis upon the ways that elements themselves may be better understood in virtue of seeing them in terms of their relations. “Internal character,” may be revealed or more deeply probed, by thorough consideration of the full range of relations.

According to Baltzer, “Peirce’s conception of the categories constitutes the central core of a theory of knowledge which conceives of the objects of knowledge as the limit-value of an unending series of conclusions.” The point implicitly relies upon Peirce’s conceptions of truth and inquiry and their relationship to the infinite community of inquiry. In support of the idea of objects as the “limit-value” of an unending series of conclusions, appeal is made to the 1868 *Journal of Speculative Philosophy* Series. The Peircean point that “There is no immediate intuitive knowledge of states of affairs,”¹³ is, then, equated with the conception of objects of knowledge as the “limit-value of an unending series.”

Presumably, if our relational reconstruction or analysis is never finished, we can only know objects “as they appear,” i.e., as relational complexes, and we would only know the “object itself” if the limit-value were to be reached. Baltzer’s Peirce seems very Kantian. This impression is reinforced by his juxtaposition of Peirce on indeterminacy of objects and vagueness, with a discussion of Peirce on the “absolute individual.”¹⁴ Following Peirce (CP 3.93), the author argues that “An absolute individual can neither be thought nor perceived. It can not be perceived, because each of our senses only covers a partial domain of perception, so that many aspects of the perceived are not determined.” Further the absolute individual cannot be thought, “because its determination in thought presupposes the definition of all conceivable, i.e., infinitely many predicates.”¹⁵ The problem is that Peirce’s discussion is plausibly seen as grounds for rejecting anything very similar to Baltzer’s quasi-Kantian distinction between relational structure and internal structure. Or, to put the point in a slightly different way, we need not know everything about an object in order to know anything about an object.

Peirce takes a similar stance on this issue when he says, in his review of Frazer’s edition of Berkeley’s works, that for many questions, the final agreement is already reached.”¹⁶ The point is expanded on in Peirce’s draft review of Royce (c. 1885).

...upon innumerable questions, we have already reached the final opinion. How do we know that? Do we fancy ourselves infallible? Not at all; but throwing off as probably erroneous a thousandth or even a hundredth of all the beliefs established beyond present doubt, there must remain a vast multitude in which the final opinion has been reached.¹⁷

Neither infallibility nor complete knowledge is required in order to know something about particular objects or domains of objects. Maintaining this point is crucial if we are to make the Peircean distinction between what is problematic and what is not problematic, in avoiding versions of ontological agnosticism, and in the Peircean rejection of the Kantian “thing-in-itself.”

2. Irreducibility of the Categories

According to Baltzer, the foundational function of the categories “is to be grasped in the domain of philosophical semiotic.” His argument for this is partly that the “sign is a paradigm for one of the three categories.” But he seems not to allow for a dependence of the theory of categories on semiotic. Clearly, for Peirce the categories are metaphysical notions which play a methodological role in inquiry. It would be an error to view them as absolutely *a priori* instead of being epistemically supported via fruitful applications. For example, if we found no compelling application for triadic rela-

¹³. Peirce quoted in Baltzer 1994, p. 164.

¹⁴. Baltzer 1994, p. 169ff.

¹⁵. *Ibid.*, p. 171.

¹⁶. Peirce 1871, CP 8.12.

¹⁷. Peirce, CP 8.43.

tions, in results of semantic inquiry, this would call the category of Thirdness into question. The point can be illustrated by reference to Baltzer on the irreducibility of triadic relations.

This theme is central in the second Part of the book, running through two chapters on “The Strict Conception of the Irreducibility Proof,” and “The Broad Conception of the Irreducibility Proof.” The distinction depends on the point that aspects of the thesis of the irreducibility of Thirdness are built into the logical system which Peirce makes use of in the strict proof. Thus Baltzer uses a broader conception of the Peircean proof as the context appropriate for evaluating presuppositions of the “strict” proof.

Though it is possible to express what could be said using three-placed predicates by means of two-placed predicates, in the standard predicate logic, this is accomplished by means of a bound variable with three occurrences within the analysis, something that Peirce’s system does not allow. In Peirce’s system, this use of the bound variable would be replaced by the explicitly three-placed relation of “teridentity.”¹⁸ To put the point in another way, thinking of Thirdness as a matter of plurality beyond two, the standard predicate logic confirms Peirce’s emphasis upon plurality, since it implicitly allows identity between any number of elements of a domain, via the cross-reference of bound variables. But obviously, it does not favor 1, 2, and 3, in quite the way that Peirce does. I suspect that there is a question here about the usefulness of the standard predicate calculus in cases, where we are less confident of our understand of particular relational notions.

A similar point arises in discussion of the broad conception of the irreducibility proof.¹⁹ Though chiefly drawing on Peirce’s reaction to the work of A. B. Kempe,²⁰ and replying to Christopherson and Johnstone’s “Triadicity and Thirdness,”²¹ the argument also casts a critical light on Quine’s “Reduction to A Dyadic Predicate.”²² The idea involves the analysis of three-placed relations or rhemata as ordered triples. The Peircean paradigm of ‘A gives B to C’ $\langle A, B, C \rangle$ can then be analyzed in terms of ordered pairs, either $\langle A, \langle B, C \rangle \rangle$ or $\langle \langle A, B \rangle, C \rangle$. Thus, “the triple is dissolved into an ordered pair of an element and an ordered pair, and this, on first sight, seems not to presuppose any element of Thirdness.”²³ Baltzer objects as follows:

As against the situation at the start which works directly with the three indices A, B, and C, the representation with the help of ordered pairs requires the creation of an *ens rationis*, namely the ordered pair of B and C or of A and B. The result thus combines, in either case, an *ens rationis* and an index. This shows that in such a method of representation, we cannot do without Thirdness in an adequate analysis of the state of affairs.²⁴

The reduction would only go through, if one allows both that an ordered triple can be analyzed in terms of ordered pairs, and that the further analysis of ordered pairs into two elements is not relevant to the irreducibility thesis. But Baltzer objects that this is “not an adequate analysis of the state of affairs.” In Peirce’s words, replying to Kempe, “The diagram fails to afford any formal representation of the manner in which this abstract idea (or *ens rationis*) is derived from the concrete ideas.”²⁵ Thus, the irreducibility thesis seems to rest on an semiotic anti-nominalism on what is to count as “adequate analyses” of states of affairs. Yet this threatens to beg the question in favor of Thirdness, unless we are able to appeal to an independent assessment of the value of results in applications. This point allows a guiding function for the categories in inquiry. But it suggests that a guiding function or “fallibilistic foundation” (“a tarmac on the road of inquiry,” in a phrase once suggested to me by Cathy Legg), is subject to a holist assessment in light of the fruitfulness of its applications; the categories cannot fully determine either what to count as fruitful results or their own ultimate validity. The suggestion is, then,

¹⁸. See Baltzer 1994, p. 115.

¹⁹. *Ibid.*, p. 116ff.

²⁰. Peirce CP 3.424.

²¹. Christopherson, R. and H.W. Johnstone 1981.

²². Cf. Quine 1954, p. 224. Quine aims to prove that for any interpreted theory, formulated in the notation of quantification logic, with interpreted predicate letters, that the theory is translatable into another quantificational theory with only one predicate letter, “and it is a dyadic one.” This implies the reduction of any theory containing triadic predication to another which does not.

²³. Baltzer 1994, p. 120.

²⁴. *Ibid.*, p. 120.

²⁵. Peirce CP 3.424.

that the standard predicate logic is better suited as a “logic of inquiry,” (or logic of research) as contrasted with a logic suited to the statement of established results of science or inquiry. Peirce’s logic can be understood to suppose that (paradigmatic) triadic relations will never be adequately analyzed in lower terms, and that we will never need any relational predicates of n -places, ($n > 3$) which cannot be adequately analyzed, or explained by use of predicates of 1, 2, or 3 places. I suspect that the devil is in the details here, since “adequate analysis” is something we may only achieve after prolonged inquiry. Nor should we suppose that such inquiry will remain unaffected by empirical developments.

3. The Structure of Firstness

Fallibility is a persistent theme in Peirce, just as Firstness and chance are persistent themes. Thus whatever the foundational element we may find in his work, it must be subjected to a fallibilist therapy. I emphasize this theme, though it is somewhat external to Baltzer’s approach in his book, because it is especially worthy of attention at present.

Baltzer’s treatment of Firstness is particularly illuminating. For Firstness seems to most resist formal definition or any formalistic interpretation. The unexpected, that which breaks down our preconceptions and constrains our reconstructions, is to be expected in the world that Peirce envisages, and if the category of Firstness did not allow of a certain vagueness, and resistance to *a priori* or structuralist treatments, then it is difficult to see how there would be any plausibility at all in the view of Peirce as an “evolutionary realist.”²⁶ Yet in his discussion of the expressions or developments (*Ausprägungen*) of Firstness,²⁷ Baltzer disputes the idea that “Peirce’s categories are at once formal and material concepts.”²⁸ This contrasts with Peirce who equates “Firstnesses,” with positive internal properties of the object in itself.²⁹ This point relates to the author’s closing acknowledgment of the need for further work on Peirce’s concept of reality in connection with the categories. “In regard to Peirce’s conception of the structured character of all knowledge, states of affairs, and things of the physical world,...the concept of reality possess quite obviously a fundamental (foundational?) character.”³⁰ In his scholarly and clearly written work, Baltzer thus prepares the way for further discussions in the German literature and beyond.

²⁶. Cf. Hausman, Carl 1993, *C. S. Peirce’s Evolutionary Philosophy*.

²⁷. Baltzer 1994, p. 97ff.

²⁸. *Ibid.*, p. 98.

²⁹. Peirce 1907, ms. 318, in Kloesel, Christian and Helmut Pape (eds) 1993, *Semiotische Schriften*, Vol. 3, p. 278.

³⁰. Baltzer 1994, p. 226.