

## PEIRCE, HARTSHORNE AND WEISS

Throughout his philosophical life, C. S. Peirce had one constant fascination—the triad. Throughout his collected works<sup>1</sup> Peirce spends a good deal of time to articulating and defending his view that the triad is the philosophical instrument par excellence. Having considered the nature and applicability of monads, dyads, triads, and tetrads as philosophical instruments, Peirce notes that although higher—and lower—numbers may present interesting configurations, they “cannot rise to the height of philosophical categories so fundamental as those” that have been constructed triadically (1.363).

It is interesting to note that the two editors of Peirce’s collected works, themselves distinguished systematic philosophers, have appraised Peirce’s defense of triads differently. In agreement with Peirce, Hartshorne asserts that “There is...a deep truth in Peirce’s contention that triads are incomparably more adequate than dyads and in a sense than tetrads, as intellectual instruments”.<sup>2</sup> In another place, he adds that “Peirce showed once and for all that the three categories form an irreducible minimum.”<sup>3</sup>

Paul Weiss, on the other hand, has utilized a tetradic instrument in *Modes of Being*. He argues there that “Being is diversely and exhaustively exhibited in four interlocked, irreducible modes.”<sup>4</sup> We cannot have less than four modes without being confronted by insoluble problems. There are thus “no more and no less than four modes of being.”<sup>5</sup> In partial response to Weiss, Hartshorne has said that Weiss’ tetradic ontology is a brilliant example of “how *not* to build a metaphysical system.”<sup>6</sup> Thus whereas Hartshorne agrees with Peirce, Weiss differs with both of them.

In this article, I would like to examine this disagreement. What does Peirce have to say about and in defense of triads? Why does he reject tetrads and uphold triads? How do triads function as opposed to tetrads? If, as both Weiss and Hartshorne believe, the issue over triads versus tetrads is the fundamental difference between them, what is the nature and what are the consequences of the difference?

My procedure will be, first, to examine Peirce's position. Following that, Hartshorne's and then Weiss' stands will be articulated briefly. In the penultimate section of the article, Hartshorne's use of triads will be examined in relation to Weiss' use of tetrads. The attempt there will be to show that the two kinds of instruments entail fundamental differences—on the formal level—between their philosophies.

### I. Peirce

The architecture of a philosophical theory depends for its cogency and significance on the route we embark upon in constructing our basic categories. For philosophy, and metaphysical philosophy in particular, begins with categorial construction. And if the categories are the elements of a philosophy, then they represent together a scale model of the world we wish to describe. The way in which we construct our categories, the instrument(s) we use, will in large part determine the success of our venture.<sup>7</sup>

The problem Peirce faced in trying to determine how to construct his categories was this: to find a philosophical instrument of utter generality, centrality, and power, with which to construct his system. If one holds, as he certainly did, that "metaphysics consists in the results of the absolute acceptance of logical principles not merely as regulatively valid, but as truths of being," (1.487), then the logical instrument used in constructing the categories must be not merely convenient or conventionally acceptable, but must be definitive of the nature of reality itself—and reality must justify its use<sup>8</sup>. Through the use of the definitive instrument, we should be able to discern the most basic structures of consciousness, achieve generally valid insights, and arrive at systematically arranged statements which codify the nature of reality (cf. 1.522). For Peirce, then, the form in which we cast our categories, the intellectual instrument which acts as our basic "factual finder", is the most important of the methodological tools in theory construction. In short, logic and form may be regarded as the grammar of meaningful metaphysics for Peirce. And of the forms of thought available to us, the most important for Peirce are those forms of thought whose measure is number.

For as is well-known, Peirce argued that of the 'numbers' in terms of which we may think—one (or monads), two (or dyads), three (or triads), and four (tetrads)—only the triad is capable of achieving the aim of metaphysical generality. Before considering Peirce's defense of the triad as normative, we must first consider the nature of the triad itself.

Peirce first of all outlines the 'numbers' that have played a part in philosophical reasoning. Some think in terms of monads, some in dyads (as Peter Ramus), some in triads (as Peirce himself does), and others in tetrads (as in Pythagoras) (1.355). Thus although triads are not the only instrument available to us, ever since Hegel every philosopher has become aware of the fact, says Peirce, that triads are the most powerful instrument (1.368). Even though Peirce claims to have no "marked predilection" for triads (1.568Z), he still held that it is the most suitable philosophical tool.

A triad, he tells us, is an idea "relative to two regardless of a fourth", (1.292). In his "phenomenology" Peirce presents the experimental basis of his triad, while elsewhere he develops the triad as an ontological matrix. The triad has a dual nature. It is both, one, the form of thought as well as, two, one of the elements of a form of thought. Thus an adequate form of thought must be triadic, but all of its elements need not be triadic as well. For Peirce, the triadic form of thought includes as its elements monads (firsts), dyads (seconds), and triads (thirds).

The idea of a monad, he tells us, is freshness, life, freedom. Whenever we encounter measureless variety and multiplicity, there we find monads dominant (1.302). For monads represent pure qualities without parts, features or embodiment (1.303). Were the world composed solely of monads, no analysis, comparison or process would be possible (1.306). Secondness (or the dyad) is exemplified by any mutual action which has no medium (1.322). A dyad is thus two subjects "brought to oneness" and thus a dyad, unlike a monad, has a variety of features (1.326). Finally, thirdness (the triad as element) is that which acts as a mediating agent or connecting bond between the previous elements.

Exemplification of the triadic element is to be found in : continuity, process, moderation, order, and legislation, while the philosophically important thirds are signs, generality, growth and intelligence ( 1.340 ).

The triad as a form, distinct from an element, of thought is to be found in numerous places. There are three moods to the syllogism, three kinds of signs ( 1.369 ), three kinds of facts ( 1.370 ), three departments of mind ( 3.375 ), three kinds of synthetical consciousness ( 1.383 ), and so forth.

Let us now consider arguments which Peirce advances in favour of the triadic form of thought. These are :

( 1 ) " The fact that the minds of man have ever been inclined to threefold divisions is one of the considerations in favour of them," ( 1.368 ).

( 2 ) " I am forced to confess to a leaning to the number three in my philosophy " ( 1.355 ).

( 3 ) There are three moods to the syllogism, three signs, three kinds of facts, three departments of mind, and so forth. ( cf. *supra* ).

( 4 ) " . . . every relation which is *tetradic*, *pentadic*, or any greater number is nothing but a compound of triadic relations," ( 1.347 ).

( 5 ) Although higher—and lower—numbers may present interesting configurations, they " cannot rise to the height of philosophical categories ", so fundamental as those constructed triadically ( 1.363 ).

( 6 ) Meaning is triadic ( 1.345 ).

( 7 ) While a graph with three tails cannot be built out of two, out of three tails all other tails follow ( 1.347 ).

( 8 ) There can be no higher number than a triad for " the obvious reason is that which combines two will by repetition combine any number," ( 1.295 ). It can thus be proved that no element ( of thought ) can have a higher valency than three ( 1.292 ).

Although some of these arguments belong together, I wish to consider them separately, and in order.

(1) I find it difficult to believe that Pierce in fact considered this an argument in support of triads. In the first case, if we utilize the basic logical distinction between genesis and validity, we realize immediately that the genesis of a psychological inclination to think in triads (or in any other form) is just simply not a reason in support of the validity of that form of thought. In the second case, the existence of different forms of thought, which Pierce admits, is *prima facie* evidence against any one of those forms being capable of supporting claims to its validity. From the intuitive preferability of one form of thought over another, it does not follow that that form is in fact logically preferable. In the third case, although Peirce cannot be faulted for not having had any sociological or anthropological awareness of the role of 'threes' within Western culture, his argument is refuted by the fact that thinking-in-threes is culturally determinate.<sup>9</sup> Since it is the case that in different cultures numbers other than three have played a fundamental role, Peirce's claim is simply false—and the argument without foundation.

(2) This argument states a preference, and is a suitable defense of one's own taste, but like the preceding argument, it cannot rise to the level of generality required of a valid argument.

(3) This argument too is defective; in fact, it cannot stand as an argument for these constitute illustrations of triadity rather than explanations of the principle of triads. To take just one example, the notion that there are three and only three 'departments' of mind is refuted empirically by those traditions which hold that there are four departments of mind.<sup>10</sup> Of course, for logical or conceptual reasons, the tradition of the fourfold mental departments may be as adequate or inadequate as the threefold tradition is.

(4) If one holds, as Peirce does, that the triad is so prolific in its forms "that one may easily conceive that all the variety and multiplicity of the universe springs from it," (4.310), then it follows that Peirce would hold that all relations higher than triadic ones would be conceived as reducible to triadic relations. But Peirce does not exactly mean that relations higher than triadic ones *can* be reduced to triadic ones, but that such relations can add nothing to our understanding which is not already

supplied by triadic relations. This argument is thus analytic—for if in fact the triad (analytically) exhausts the universe, then (analytically) all relations are reducible to it. But the problem is that there is no warrant for holding the triad to be as exhaustive as Peirce says it is.<sup>11</sup>

It could be argued in support of Peirce that since the triad is the combinatory relation, any combination is interpretable in triadic terms (1.515). For Peirce would argue that the basic reason why we must lay claim to the triad as superior to other instruments is that we wish in philosophy to show that all things are ultimately interconnected, combined. But we may question the notion that combination (which triads supply) is the only or even the most important interconnection there is. There is no a priori reason for holding that can implies ought—that because we can reduce all relations to triadic ones, we ought to do so. (I shall give reasons in support of this in Part IV.)

(5) A number of questions must be raised with respect to the claim that only triadic configurations supply us with fundamentally general categories. For one thing, the metaphors of 'height' and of 'fundamental' are troublesome. The height metaphor invites comparison with a triangle—monads and dyads being the two lower points, with triads as the combining third. This suggests that Peirce places priority on the triad, where legitimately we should not, by his own principles, do so. For if things in the universe are either monads (qualities), dyads (reactions), or triads (combinations), then it is illegitimate to ascribe higher status to triads over monads, dyads, or tetrads. In the second place, the notion of being 'more fundamental than' suggests that a principle of priority is operating here.<sup>12</sup> For it is clear that with the initial claim, Peirce is allowing for the existence of the variety of instruments, while with the second claim he is ascribing priority—ontological priority—to triads. What reason has Peirce for saying that the triad is so basic?

The reason he gives is that "the three categories are supposed to be the kinds of elements that attentive perception can make out in the phenomenon."<sup>13</sup> Thus perception discovers a triadically configured experiential matrix. Supposedly, then, anyone who discovers only a dyadic experiential matrix has not been

attentive enough; while one who discovers a tetradic—or pentadic—experiential matrix is bringing more to the experience than what is to be found there.<sup>14</sup>

But the very fact that triads seem to be basic to the thought patterns of some people(s) and not others, only indicates that one may perceive in the phenomenon what one is ready to perceive.<sup>15</sup> Only a positivist epistemology could warrant the claim that what is given in perception is the phenomenon in its *hic et nunc* purity without any admixture of interpretation. That it is equally plausible and defensible to claim that we may interpret experience in terms of different configurational matrices shows that the claim to find the triad lodged within experience—and by this token fundamental—is a spurious claim.

(6) A Similar set of considerations apply to the claim that meaning is triadic. For the claim here is that an exhaustive matrix for indicating, point out, signifying things, and similarly the matrix in terms of which things present themselves as signifiable is triadic. But from the fact that one may construe the matrix of experience in triadic terms, it does not follow that experience or the signification of things can be carried out only triadically.<sup>16</sup> It is equally (i.e. formally) possible to develop an alternative scheme.

(7) The argument concerning the graphs is not acceptable. If we assume that thought can and must be spatialized, and that (spatial) diagrams (such as graphs) can capture the nature of thought instruments, then this would be an acceptable argument. But in the case where such a possibility is denied, the graphs play none other than a possible heuristic function.

(8) Peirce's final argument is that there can be no number with a higher valency than three. By valency he means value, or the quality which determined the combining capacity of a number. Thus three is for him a quality which by its very nature restricts combinations to triads. But this involves the ascription of value to the number three without any defense of it as a fundamental value. Hence this argument is an empty one—analytic only.

In all of the above arguments, we have seen that Peirce's defense of triads as more fundamental than, more valuable, more basic, more interesting, more experiential, more general, and so

forth, has no basis. As Murphey once asked, "Is it simply an ultimate and inscrutable fact that there are three sorts of experience, or does this riddle admit of an intelligible solution?"<sup>17</sup> The answer, as far as Peirce's arguments are concerned, must be that triadicity remains as inscrutable as ever.

## II. Hartshorne •

I can nowhere find in Hartshorne a defense of triads comparable to that which Peirce presents. If Hartshorne shares Peirce's reasons for supporting the use of triads, then his reasons are as faulty as are those of Peirce.

Like Peirce, Hartshorne holds that the triad is the best philosophical instrument. Like Peirce, he holds that the idea of a sign is irreducibly triadic, that there can be no combination without a triad,<sup>18</sup> and that "we think best in threes."<sup>19</sup> But other than agreeing with Peirce on these matters, Hartshorne does not defend the triad *qua* triad as the best thought instrument. Rather, he assumes the validity of Peirce's arguments, and uses the triad as the key instrument in his own work.

Hartshorne argues against dyadists that "though polarities are ultimate, it does not follow that the two poles are in every sense on an equal status."<sup>20</sup> And he defends this claim as follows:

"In general, polar contrasts, such as abstract/concrete, universal/particular, object/subject, are symmetrical correlatives only so long as we think simply of the categories, themselves, as concepts, and not of what they may be used to refer to or describe. The moment we think of the latter, the symmetrical interdependence is replaced by a radical asymmetry. Thus the universal, abstract, or (at the extreme) eternal is the common factor of diverse particulars, and since the latter *also* possess their differences, they are richer in qualities than the universal."<sup>21</sup>

Hartshorne's main point here is that even though object/subject and other pairs are dyadic in form, they are triadic in reality since the subject term refers to a concrete reality which is a third term. And it follows from Hartshorne's argument above that these constitute genuine triads since the polarities in question would not exist, were the reference to concrete reality eliminated.



In similar fashion, Hartshorne argues that synthesis (provided by the triad) brings contraries into unity. Thus becoming is the inclusive term of which being is a component. Hence one pole is always subordinate to the other, they being related asymmetrically. Thus 'God', for instance, is a higher synthesis of the modal coincidence of the one and the many.<sup>22</sup> It thus seems that the unifying term, or synthesis, for Hartshorne, is a being which occupies the apex of a pyramid of beings. Thus Hartshorne would uphold the reality of three modes of being: one, many, and one-many. One-many thus combines the dyadic pair and its combinatory function works in the same way as Peirce's triad does. In terms of the above triple terms, we could say that Hartshorne's "one" might correlate with Peirce's firstness, his "many" with Peirce's dyad, and his "one-many" with Peirce's thirdness.

(As a logical point, it should be noted that if two concepts are being considered, then either X, or Y, or X and Y, or neither X or Y apply. This logically intelligible tetrad is not used by Hartshorne. He does not consider that the logically existing 'neither X and Y' (neither one nor many) might apply, and thus should be considered as a fourth alternative. Rather, like Peirce, he regards the triad as exhausting the logical and substantive alternatives.)

We have established all that is necessary to establish here, namely that Hartshorne utilizes a triad similar to the one Peirce uses. We need not examine Hartshorne's position further.

### III. Weiss

Unlike both Peirce and Hartshorne, Weiss holds that the tetrad is the best philosophical instrument. As we noted at the start, Weiss holds that "There are no more and no less than four modes of being,"<sup>23</sup> and he adduces two basic reasons in support of this claim. What is less than four (for instance, the triad) is incomplete, while what is more than four is necessarily false. He also adds what I consider a spurious reason, namely that for reasons of economy we need have no more than four modes.<sup>24</sup>

We can gather from this that Weiss does not accept either Peirce's use and defense of the triad, or Hartshorne's use of it. By this stand, he recognizes that the problem of the optimum number of ontological categories is a speculative field which cannot be settled once and for all. In addition, he recognizes that perhaps every degree of complexity has its own irreducible features, and that there are some notions, some realities, that require a four—as distinct from a three—pronged view.<sup>25</sup>

How, one might ask, can Weiss be so sure that there are four and not three—or two or five—modes of being, or that a four-pronged (tetradic) instrument is the best? For an answer to such a question, Weiss appeals, oddly enough, to Peirce:

“No student of Charles S. Peirce can avoid becoming aware of the danger of fastening on some finite number and giving this an import denied to all others. . . Any finite reality gives preferential lodgement to some number or other.”<sup>26</sup>

Here, I think, we discern two basic reasons in support of tetrads. As is well-known, try as he might, Peirce, for all his genius, could not, for reasons which may well be more personal than logical, develop a systematic triadic philosophy. True, he presented the outlines of such a philosophy, but he did not attain the comprehensive adumbration of his system that he sought. It may, of course, be possible for a different conception of the triad—Cassirer's or Hegel's for instance—to yield systematic results, but in Peirce's case, this was not so. Hence if we can judge an intellectual instrument by its fruits, we could say that Peirce was not able to adumbrate an adequate triadically based philosophy. This is a *prima facie* basis for someone else to present one on a different basis. A second reason Weiss might advance against Peirce's normative claims for the triad has already been mentioned in passing. It is that some realities may require a different number, a different analysis. In Weiss' case, the fact that human beings cannot fulfill some of their obligations is a 'reality' which can be saved only with the use of a tetradic view.<sup>27</sup> For Peirce, on the other hand, even though he argues that non-triadic systems should be thrown out the door (4.318), he also admits that God may be beyond his three categories (6.455).

Earlier it was pointed out that Hartshorne's triad is not of the logically intelligible form which requires that of two applicable concepts there are four possible applications. In Weiss' case, on the other hand, we do have a logically intelligible schema. In terms of the concepts of the one and the many, one could interpret Weiss as holding that : ( 1 ) Actuality is one, not many; ( 2 ) Existence is many, not one; ( 3 ) Ideality is one and many, while ( 4 ) God is neither one nor many, but a unity, as distinct from a combination.<sup>28</sup>

The key to Weiss' difference with Hartshorne ( and Peirce ) lies in the fact that whereas the triad combines, the tetrad unifies; whereas the triad obliterates the difference between concepts ( and realities ), the tetradic mode of togetherness is not a new entity.<sup>29</sup> It could thus be said that whereas the triad is monistic, the tetrad is pluralistic. Triadic thought, based as it is on the combinatory urge to unite opposing pairs, is monistic in that 'higher reality' is ascribed to the resulting combination. Tetradic thought, on the other hand, is based on a principle of parity; it is illegitimate to ascribe higher reality to one mode of being than to another. Thus in Weiss, all four modes of being are together without thereby being confirmed by a higher reality which combines them. If Peirce were right in his claim that combination of pairs ( the triad ) is the only mode of togetherness, and that higher numbers can be reduced to combinations, then there could be no mode of togetherness which did not involve a combination. In the final section of this essay, I wish to examine some of these claims.

#### IV. Pluralism versus Monism : Parity versus Priority

The fundamental issue dividing Peirce and Hartshorne from Weiss is twofold, Peirce and Hartshorne defend a triadic thought instrument, which, I shall argue, entails monism; while Weiss defends a tetradic instrument which entails pluralism. And for the second part of this issue, the triad not only entails monism, it is also based on a principle of priority, while the tetrad entails pluralism and is based on a principle of parity.<sup>30</sup>

The differences noted above have divided philosophers for ages. Faced by fundamental dualities—such as permanence/change, one/many, and so on—and faced by the question : ' What is real ? ' Philosophers have given different answers. Those who

utilize a monadic instrument will end up asserting that one or another of the terms of a duality is unreal—*pace* Parmenides or Cratylus. Those who utilize a dyadic instrument will ascribe priority to one or another of the two terms (as change has lesser reality than permanence for Plato), or may attempt the Manichaeian trick of arguing for the fundamental reality—without combination—of both terms. Since monadists and dyadists do not concern us here, we need not deal with them further. We can now pay attention to triadists and tetradists.

We need, first, to distinguish various species of triads, of which there are three—which we may call the triplet, the trinity, and the (genuine) triad. The triplet is simply the threefold repetition of a single reality. Three items of the same kind—or three tokens of the same type—form a triplet. A trinity, on the other hand, distinguishes between the different individuations of the same being. The God-head in Christian thought is a trinity: three-in-one. A genuine triad, finally, distinguishes three beings which are individuated in three different ways. In order to grasp the nature of Peirce's and Hartshorne's triad, we have to add that one of the three beings combines the other two as its mode of being, and as its mode of individuation. Hartshorne's triad is thus a cross between a triad and a trinity. It distinguishes on the formal level between three beings and three modes of individuation, but materially, one of those three beings is the synthesis, the unifying principle, of the other two. Hence on the formal level, Hartshorne holds a triadic conception of the three modes of being, while on the material level he holds to a trinity where one mode of being is superordinate to the other subordinate to some.

Let us now define Weiss' tetrad. A quadruplet is the tetradic counterpart of a triplicity and is of no concern here. Similarly, a quaternary being is the tetradic counterpart of a trinity. A quadratic being will be taken to refer to any view of the foursome where one of the four is the ontological and epistemological ground of the other three—as Plato's *noesis* is the fourth level of the line. A genuine tetrad is one where there is a fundamental distinction between the being and the individuation of a reality, and where the connectedness between these realities is not itself a new entity (as is the combining triad) but part of the nature of the members of the foursome.<sup>31</sup>

One could argue that one cannot decide on the basis of abstract number complexes alone whether a philosophy is successful or not. One might argue that one must evaluate a philosophy on the basis of how it illuminates our world, not on the basis of its tools. This sort of an argument, I would hold, is not a cogent one. For it is apparent that different thought instruments entail fundamentally different conceptions of the procedures to be used in trying to illuminate the real. That is, they are based on fundamentally different modes of discrimination. No matter the 'reality' to which it is applied, it is clear that Hartshorne's triadic instrument will yield significantly different insights than those that Weiss' tetradic instrument will.

The two thinkers, first of all, are guided by two fundamentally different questions. These are not necessarily explicit, but are inferentially derivable from the nature of their instruments. : Hartshorne's triad is no more a "neutral" instrument than is Weiss' tetrad. The concept of the triad noted earlier suggests that users of triadic instruments have the following inclinations : (i) combinations of partial or one-sided realities are sought; (ii) by the principle of unity, that which combines lesser realities is held to be 'higher' in status than the lesser realities; (iii) to seek a 'higher' combination is already to presuppose that realities are hierarchically ordered in terms of priority; and (iv) these imply that there is a monistic tendency in triadic thought.

All monistically inclined thinkers seem to hold that the fundamental metaphysical question is—"What is real?" This implies that of the 'realities' we encounter, monists believe that some are of lesser reality than others, and that our quest is for the 'really real'. And whatever our criterion of the 'really real' happens to be, it is clear that if we ask the question, 'What is real?' our only legitimate response must be—what is highest, more general, more pervasive, etc. than anything else.

A tetradic thought instrument is based on an entirely different question. As we have seen, the combination of realities is not an end sought for. Rather, realities are accepted for what they are—and how they are discerned to be—and the guiding question for tetradists is not 'What is real?' but "Of the realities that are, *how* are they together?" Even if we acknowledge that some

realities are more general and more pervasive than others, the very nature of tetradic analysis does not require the ascription of higher reality to one reality over others—all are equally real. Hence the tetrad does not entail that one reality is 'more real' than another.<sup>32</sup> Tetradists seek to ascertain not the status of realities, but to determine *how* they are together.<sup>33</sup>

Counterposing the two fundamental questions to each other, we realize that the question 'What is real?' operates with a hidden premise to the effect that some realities are ontologically prior to others. The question 'How are the realities together?' operates on the basis of a different premise namely, that realities are on a parity. And as Justus Buchler has argued most cogently, the issue of priority versus parity is the most fundamental metaphysical issue.<sup>34</sup>

The issue over the best intellectual instrument, whether it be Hartshorne's triad or Weiss' tetrad, thus reduces to the question—priority or parity? Weiss emphatically upholds the principle of parity by arguing for the equal reality of his four modes of being.<sup>35</sup> Hartshorne, on the other hand, operates with a principle of priority and seeks to ascribe reality-status to the things that are.

Personally, I do not believe that metaphysics must choose between parity and priority. In any adequate metaphysics both parity and priority must be operative. But this is not the place to argue this point.<sup>36</sup>

My basic aim in this article has been to articulate the nature of and the consequences for philosophy of the adoption of one or another of the two thought instruments we have discussed. I have operated on the assumption that the formal consideration of intellectual tools yields significant insights for work in metaphysics.

## NOTES

1. Charles Hartshorne, and Paul Weiss, Editors. *The Collected Works of Charles Sanders Peirce*, Cambridge, Mass.: Harvard, 1929 ff. All references to Peirce will be given in the standard manner in the body of the text.

2. Charles Hartshorne, *Creative Synthesis and Philosophic Method*, La Salle: Open Court, 1970, p. 100.

3. Charles Hartshorne, "Analysis and Cultural Lag in Philosophy", in *Southern Journal of Philosophy*, 11, 1-2 (Spring-Summer, 1973), 105-112; p. 108.

4. Paul Weiss, *Modes of Being*, Carbondale: Southern Illinois, 1958, p. 16.

5. *Ibid.* p. 514.

6. Hartshorne, *Op. cit.*, p. 100.

7. Peirce is an advocate of the architectonic approach to philosophy. I have dealt with and developed this view of philosophy in "Architecture as a Philosophical Paradigm", forthcoming in *Metaphilosophy*.

8. I have dealt with this issue at greater length in "Metaphysical Directives in Husserl's Phenomenology", *The Modern Schoolman*, XLVIII, 1 (November, 1970), 1-18.

9. This point has been investigated by several people. Cf. Alan Dundes, "The Number three in American Culture," in Dundes, Editor, *Every Man his Way*, Englewood Cliffs: Prentice-Hall, 1968, pp. 401-423. See also the fascinating study by Georges Dumézil, *L'idéologie tripartite des Indo-Européens*, Brussels: Collection Latomus, 31, 1958. See also John Dewey, "From Absolutism to Experimentalism," in G. P. Adams and W. P. Montague, Editors, *Contemporary American Philosophy*, New York: Macmillan, 1930, II, p. 19: "There were, however, also 'subjective' reasons for the appeal that Hegel's thought made to me; it supplied a demand for unification that was doubtless an intense emotional craving...Hegel's synthesis of subject and object, matter and spirit, the divine and the human...operated as an immense release, a liberation." For an empirical study of the role of three-perception, see Jules Glenn, "Sensory Determinants of the Symbol Three," *The Journal of the American Psychoanalytical Association*, 13, 1965, 422-434.

10. C. G. Jung is well-known for his defense of the notion of four departments of mind. Cf. Jung, *Analytical Psychology*, New York : Vintage 1968.

11. Peirce holds that his list of categories is complete because once we have elements and combinations, anything can be built (1.363).

12. Cf. Justus Buchler, *The Metaphysics of Natural Complexes*, New York : Columbia, 1966, pp. 32 ff.

13. Letter of June 8, 1903, quoted in R. B. Perry, *The Thought and Character of William James*, Ch. ii, p. 429, Boston : Little, Brown, 1935, vol. ii.

14. M. G. Murphey, in his book *The Development of Peirce's Philosophy*, Cambridge : Harvard, 1961, p. 368 has this to say : "It is impossible to regard Peirce's phenomenological treatment of the categories as anything more than a quite unsuccessful sleight of hand."

15. Peirce, like Husserl, seems to me to have made the mistake of believing that we can attain to a 'presuppositionless' philosophy basing oneself on the givens of immediate experience.

16. Murphy, *Op. cit.*, p. 91, says, and I agree with him, that : "Peirce's strategy is now clear : he will elaborate his system first as a system of signs, and then define reality in such a way as to prove that the three references of the sign are real."

17. *Ibid.*, p. 319.

18. Cf. Sidney and Beatrice Rome, Editors, *Philosophical Interrogations*, New York : Holt, Rinehart and Winston, 1964, p. 349.

19. Charles Hartshorne, "The Formally possible Doctrines of God," 336-357, in John Hick, Editor, *Readings in the Philosophy of Religion*, Englewood-Cliffs : Prentice-Hall, 1970, p. 342.

20. Hartshorne, *Creative Synthesis*, p. 99.

21. Charles Hartshorne, "Ontological Primacy : A Reply to Buchler," *Journal of Philosophy*, LXVII, 23, (Dec. 10, 1970), p. 980.

22. Hartshorne, *Creative Synthesis*, p. 100.

23. Weiss, *Op. Cit.*, p. 518.

24. *Ibid.*, p. 17.



25. *Ibid.*, p. 13.

26. Rome, *Op. Cit.*, p. 287.

27. Weiss, *Op. Cit.*, p. 17.

28. *Ibid.*, p. 374; 501-503.

29. *Ibid.*, p. 514.

30. The issue of parity versus priority is nicely juxtaposed in two articles by Buchler and Hartshorne. Cf. Justus Buchler, "A Strain of Arbitrariness in Whitehead's System," *Journal of Philosophy*, LXVI. 19 (Oct. 2, 1969), and Hartshorne, "Ontological Primacy..." noted above.

31. Weiss, *Op. Cit.*, p. 517.

32. Cf. Buchler, *Metaphysics*, p. 31.

33. Cf. Weiss, *Op. Cit.*, p. 277, 89.

34. Cf. Buchler, "On a Strain..." p. 592.

35. Cf. Weiss, *Op. Cit.*, p. 277.

36. I have defended this point in "Reflections on the Medicine-Wheel", forthcoming in *Darshana International*.

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