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## A PRIORI: A BRIEF CRITICAL SURVEY

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### Introduction

MY AIM HERE IS TO BRIEFLY DISCUSS—or perhaps put better, revisit—some problems and issues connected with the notion of the “a priori.” My own position is what might be termed empirical-rationalistic, realist (not however Platonist) or naturalist. By this I mean that I hold that there are certain propositions about the world that are inescapably true, that is, they are meaningful, not void of content, and assert something about the world as a whole. I also hold that “The laws of logic are descriptions of (certain) universal features of reality; hence, only if reality itself changed in these respects, would a change in logic be warranted.”<sup>1</sup> Whether or not reality could or could not change with such a result is an issue that may also be touched upon. I will consider first the relationship of logic to reality.

There are, I believe, three outstanding versions of the meaning and implications of the “a priori.” The first of these may be termed Aristotelian. It asserts, “The same attribute cannot at the same time belong and not belong to the same subject in the same respect.”<sup>2</sup> I do not think that I would be very successful in restating this position more clearly. I do want to add that I (and, I think, Aristotle) would regard this principle as an ontological one, that is, as a principle that asserts something about the way the world is. Accordingly,

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<sup>1</sup>Leonard Peikoff, *Law of Contradiction in Classical Logical Ontologism* (Unpublished doctoral dissertation at New York University, 1965), pp. 168–69. (The subsequent discussion relies on ideas advanced in the writings of various teachers and students of Naturalism, Realism, Aristotelianism, and Objectivism. They shouldn’t be blamed for mistakes that I may have committed.)

<sup>2</sup>Aristotle, *Basic Works*, ed. & trans. by Richard McKeon (New York: Random House, 1941), p.736.

the law of identity is not simply a law within an artificially constructed formal system but a law in accordance with which the world operates, behaves, etc.

The second version of the a priori may be said to be Kantian. As such it asserts, in essence, that certain laws of thought, inherent in thinkers, determine the way in which the material provided by the senses will be integrated into knowledge. Furthermore, “all analytical judgments depend wholly on the law of contradiction, and are in their nature a priori cognitions, whether the concepts that supply them with matter be empirical or not.”<sup>3</sup> Of course, the law of contradiction is a priori itself, as are all the postulates of mathematics. It would be inaccurate to hold Kant totally responsible for this version of the a priori. Before him, Hume had already placed all necessary judgments into the human mind; i.e., “our idea...of necessity and causation arises entirely from the uniformity observable in the operations of nature...and the mind is determined by custom to infer the one (event) from the appearance of the other.”<sup>4</sup>

Many prominent philosophers have in recent times held the third and mostly conventionalist view of the a priori. This asserts, “[T]he necessity of the a priori is its character as legislative act. It represents a constraint imposed by the mind, not a constraint imposed upon the mind by something else.”<sup>5</sup> Another way of putting this view is that “the principles of logic...are true universally simply because we never allow them to be anything else.”<sup>6</sup> Furthermore, “logic is a formal science... (and) it takes no consideration of real existence or of its relations.”<sup>7</sup> Still another way of characterizing this position is to claim that the principles of logic are not, properly speaking, true or false, because they are stipulative and do not ascribe attributes or properties, or posit entities in reality.<sup>8</sup>

Having given what I believe to be an adequately representative view of each of the major positions concerning the nature of the a priori, I want now to present the nature of the problem that I consider present on account of the diversity with which this historically predominant concept is viewed by contemporary philosophers.

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<sup>3</sup>Immanuel Kant, “A Priori Knowledge...” *Meaning and Knowledge*, ed. Nagel and Brandt (N.Y.: Harcourt, B&W, 1965), p. 187.

<sup>4</sup>David Hume, *Inquiries*, Selby-Bigge ed. (Oxford: Clarendon Press, 1902), p.82.

<sup>5</sup>C.I. Lewis, *The Mind and the World Order* (New York: Charles Scribner’s Sons, 1929), p. 197.

<sup>6</sup>A.J. Ayer, *Language, Truth and Logic*, 2<sup>nd</sup> ed. (New York: Dover Publications, Inc., 1946) p. 77.

<sup>7</sup>William Hamilton, “Logic”, *Edinburgh Review* (April, 1833).

<sup>8</sup>This characterization was presented by Professor Milton K. Munitz of New York University. I am responsible for this rendition of it.

Assuming that the position presented last is the correct one, it would seem that logic, and reasoning, which employs logic as a tool, is denied its status as the ultimate criterion of philosophical discourse (or of any discourse, for that matter). For if logic, the most fundamental of all the rules of thought, discourse and reality, is an invention of the mind, and/or a set of principles that operate by permission, then we must either give up what is commonly called out “search for truth,” or we must embark on a search for yet another set of principles or rules by which some criterion of discourse, discovery, evaluation of assertions, and of determination of the character and content of our world may be established.

It might be asked, “Why should one consider this a problem at all? Clearly, if this is the way the world is, there is no reason for contesting those versions of logic which characterize it as ‘rules of convention’.” My answer is that the very issue of whether or not the world is this way or that cannot undergo adequate analysis (or be decided upon) within the framework of this point of view. It is, indeed, questionable whether one can call this a “point of view” at all, since it not only makes an assertion about something, but rejects the possibility of ever coming to a decision over the truth or falsity of assertions, in general, including, ultimately, its own. In short, what seems to make this issue a problem is its implication for not only philosophy but also all fields of study. This would seem to warrant the classification of the issue as a genuine problem for philosophy.

Before briefly embarking on a critical consideration of the three major views concerning the nature of the a priori, I want to mention some of the limits I have put upon my task. This paper is concerned primarily with the relationship of the a priori (and logic in general) to metaphysics. Only when it is warranted for purposes of making a special point or presenting some position will I enter into the field of formal (and symbolic) logic. I believe that such delimitation is permissible. Hopefully the content of this paper will contribute to the demonstration of the truth of this belief.

### **The a priori as “law of cognition”**

The essence of the view I will discuss in this section (second on my list of prominent views; p.2) is that the a priori principles of cognition (the law of identity and non-contradiction) are “transcendental,” that is, formal and pure principles of understanding, which are supplied by human reason as methodological (nevertheless, necessary) tools of judgment by which percepts are to be integrated into knowledge of nature would not be possible.

As tools of understanding, a priori to any experience of nature, this theory places the principles into the faculty of understanding itself, that is,

into the mind. Accordingly, there can be no “evidence of” these principles in nature, since before anything is “knowable” in nature, the principles must be ready to work for the understanding, as it were. Hence, “... in one way only can my intuition anticipate the actuality of the object, and be a cognition a priori, namely: if my intuition contains nothing but the form of sensibility, antedating in my mind all the actual impressions through which I am affected by objects.”<sup>9</sup>

It is natural that under this theory the metaphysical notion of an “objective reality” should cease to constitute a proper, justifiable subject matter of knowledge (and philosophy). Whatever identity objects of experience possess their identity cannot be determined. The statement’s (quoted above) own mention of “objects” that presumably affect men by way of impressions also seems somewhat unjustified, wince for all one knows (under this theory) what produces the impressions may not be objects at all. Thus, as regards the “objective world” (in contradistinction to that “world” that is known in viewing the undeterminable causes of impressions—sensibilities—in the self-inframed form of the mind) nothing can be asserted.

In a general way it may be claimed that in accordance with this particular view of knowledge once the knowing organism ceases to be, what remains cannot be known, even in principle—since the principles by which we conceive of possible existence are the same that enable us to integrate into knowledge actual existence. Once the source of these principles, the mind, ceases to exist, it follows that what might remain aside from the mind (and whether or not anything will remain) is logically impossible to determine. What can be answered, however, is what might be experienced if entities with minds would exist. This is a form of subjectivism with only one element of “objectivity” remaining, namely the unknown and unknowable causes or rights of the sensible material that my mind integrates into objects. It follows from this theory, it seems, that whatever can be said to be something (whatever can be identified) is conditional and has no prior existence to being perceived in the form in which it is identified. As far as the principles of logic are concerned, they also exist (or perhaps prevail) conditionally, though not in so far as the active reason is concerned. They exist conditionally only in that, should the understanding be active, whatever understanding ensues must ensue in the framework of the principles of logic (and other categories). Anything that may remain after the mind has ceased to exist remains in a format or way that is unknowable. To put it another way, the order and identity of the universe (or nature) is constructed by the mind—there is no order and identity apart from what is known by mind.

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<sup>9</sup>*Op. cit.*, Kant, p. 193.

The notional of “a priori” has a distinct meaning within this theory. If one were to use Freudian terms, a priori would qualify as “instinctual”. Since the means and modes of understanding are a part of understanding itself, they are, as it were, the “instincts” of the mind.

Some of the difficulties of the theory lie in its novel interpretation of the concept of “understanding.” If “understanding” is not “understanding of” something or some things, that is, if the mind does not accomplish the understanding of something that exists independently of it, then understanding is not the “understanding of” anything but, instead, the creation or imagination of whatever is said to understood. But, since, “creation,” “construction,” “imagination,” etc., are distinct from “understanding” in that the former group are activities of the subject, while the latter is “object-dependent,” one cannot logically distinguish between anything that constitutes activities of these two separate kinds of processes under this view of knowledge.

It might be objected that, whereas the first group does not take into account the sensible features of cognition but simply employs the memory of hypothesis of some, the latter (i.e., understanding) requires this content (sensibilities). The difficulty that arises here is that of specifying this content apart from its existence in the mind (apart from understanding). How is it possible to identify (discover, determine, etc.) anything apart from the a priori features of the understanding? It is not possible, in terms of the view under consideration (as has been earlier noted).

In order that one can signify a distinction, certain distinguishable aspects (of the objects of distinction) need to be specified. Whatever is distinguishable must be subjected to the principles of understanding—and since these principles are *a priori* to the understanding, the identification cannot proceed apart from the content of the understanding itself. (This difficulty arises also in the distinction between “sense-data” and “perception.”) Subjectivism is the result, once again. Accordingly, questions about “errors of judgment,” “dreams,” “illusions,” etc., cannot be answered from within this theory. If “Objects of the senses...exist only in experience...to give them a self-subsisting existence apart from experience or before it is merely to represent to ourselves that experiences actually exists apart from experience or before it.”<sup>10</sup> And since “objects of the senses” are dependent on the *a priori* tools of the understanding for their identification, there is no reason to suppose that they exist in any manner other than *mentally*.

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<sup>10</sup>Immanuel Kant, *The Prolegomena to Any Future Metaphysics*, ed. L.W. Beck (New York: The Library Arts Press, 1951), pp. 89–90.

Perhaps the clearest way of confronting this theory is by asking for an account of the existence of the understanding itself. If understanding something (consciousness of something) is not the process by which understanding itself is known, then it would be possible to know understanding (consciousness) by observing the consciousness of nothing. But, clearly, “consciousness is unique in that it not only becomes an object to itself but in so doing also becomes aware of the world that is present to it.”<sup>11</sup> Moreover, “consciousness is a necessary condition of the presence of other things and is therefore inseparable from their presence.”<sup>12</sup> The same, it seems to me, is true of understanding, perceiving and conceiving—although I do not wish to enter into a discussion over the last two items. To understand is, therefore, to understand something. If the understanding of something logically implies that there is something to be understood, it also implies that whatever is understood is also *capable* of being understood. This capability, however, must exist prior to understanding itself, otherwise, understanding would not really amount to understanding but, at best, to constructing or creating.

If, however, understanding implies the existence of objects of understanding, these objects (be they material or some other kind—not of issue here) must also be identifiable (since identifiability constitutes at least one, if not the major, feature of understanding). Thus, if by “identification” we mean, among other things, making something clear to the faculty of understanding, that is, discovering the identity of something, then the element of “identity” (the purpose and result of identification), which is in Kant’s view is an *a priori* category of the mind (the understanding), must also exist independently of the understanding which accomplishes the of it. In short, whatever something is, it must be *before* it has been identified as such, that is before its *identity* has been discovered. But little of the Kantian conception of the *a priori* is left once we arrive at this conclusion.

I do not want to prolong this discussion by mentioning all of the difficulties that might arise within my objections (which are none too original), and by providing what I consider the proper answers to these difficulties. Suffice it to note here that if designating the so-called tools of understanding *a priori* categories of the mind eliminates objective existence from the realm of the knowable (a curious goal of any inquiry, I must say), then the recapture of this objective existence might have relevance for the characterization of these so-called tools also.

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<sup>11</sup>Robert R. Ehman, “On the Possibility of Nothing”, *The Review of Metaphysics*, Vol. XBII, No. 2, p. 211.

<sup>12</sup>*Ibid.*

## Conventionalism

The second version of the *a priori* to be considered is that which has been attributed to C.I. Lewis, A.J. Ayer (of 1946), Wm. Hamilton, K. Britton (not mentioned above), etc. Let me now restate this view more directly by using the words of the theorists who propound it. Also, I'll present some of the arguments meant to prove this view as correct, in contradistinction to both the psychological *a priorism* presented in the previous section, and the ontological *a priorism* to be presented next.

Lewis, an early American pragmatist, states the issue very clearly:

The traditional rationalist conception that metaphysical first principles can be shown to be logically indispensable or that what is logically prior is thereby proved to be certain or self-evident, is one to which the actual structure of logical and mathematical systems lends no support. In genuinely rigorous deductive systems, as these are understood today, "logically prior" means only "deductively more powerful" or "simpler." The supposed necessity, or logical indispensability, of presuppositions most frequently turns out to be nothing more significant than lack of imagination and ingenuity. The plurality of possible beginnings for the same system, and the plurality of equally cogent systems which may contain the *same* body of already verified propositions but differ in *what else* they include, dispel the notion of indispensability in what is logically prior.<sup>13</sup>

Another kind of support for this theory comes from J.O. Urmson, one of the major ordinary language philosophers. He writes, in defense of the contentions that "necessary truths are conventional," that "we have several alternative geometries, and commutative and non commutative algebra, that is to say, there is an algebra in which ' $a \times b = b \times a$ ' is a necessary truth, and an algebra in which it is not."<sup>14</sup> Ernest Nagel has formulated this contention yet another way.

... [T]he assertion ( that a penny has a diameter of both 11/16 of an inch and 12/16 of an inch) in effect maintains 'the same attribute' to belong and also not to belong to the same object... (therefore) it is absurd. But let us press the question why, if the penny has the first of these attributes, it cannot have the other... The impossibility arises from the fact that we use the expression 'length of 11/16 inches' and 'length of 12/16 inches' in such a way—in part because of the manner in which they may have been defined in relation to each other—that each formulates a different outcome of measurement. We may be sure that no penny will ever turn up with

<sup>13</sup>*Op. cit.*, Lewis, pp. 204–205.

<sup>14</sup>J.O. Urmson, Second contribution to the symposium "Are Necessary Truths True by Convention?" *Proc. of the Aristotelian Society*, Supplementary Vol. XI, p. 108.

the diameter having both dimensions, because what it means for the diameter to have one of the attributes of dimensions is specified in terms of the absence of the other attribute.<sup>15</sup>

In Nagel's view logic serves the purpose of "formulating and regulating the pursuit of human ideals ... (and)... the relative success of a system of logic in doing these things is the sole identifiable and objective basis for measuring its worth."<sup>16</sup>

These characterizations and elaborations of what may be terms the "conventional" version of the *a priori* should suffice for the present. I want to mention that from my knowledge of contemporary philosophy (especially in the U.S. and Britain) it appears that many prominent philosophers hold this view. In fact, it seems that some have accepted it so firmly that they deny a hearing to those who offer challenges to the view. The Wittgensteinian motto (that "it is either raining or not raining" has no factual content whatsoever) is still widely repeated.

Let me offer some remarks concerning this view. Most of these have been made by others, some, however, are original.

It seems to me that the fundamental feature of the principles of logic is the law of identity, which, in turn, specifies the notion of distinction as the most basic property of meaning. All of what human beings claim to know is based on this element of distinction. Distinction and similarity are interdependent concepts. To know something is to be able to know it as a distinctive something—otherwise, if no distinction between it and something else prevailed, it would not be possible to identify the something as not another ("different") something. Conversely, to be able to distinguish something from something else, it is necessary to recognize some element of similarity between it and other known things. The very fact of something's being something, as opposed to nothing, provides us with a similarity. Nothing cannot be known—nothing is not another kind of something, it is *nothing*. It is this element of similarity that warrants the general class of "existent things," while it is the element of distinction that warrants the particularization of certain specific things. The *formalization* of these empirical features of our world seems to me to be the foundation of the principles of logic. It is the fact that the universe consists of distinct but objective (existent elements that makes it possible for us to know, and it is this fact that avails us of the foundations of the *principles* of knowledge. (There is a lively debate afoot about whether something might, after all, come from nothing, in

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<sup>15</sup>Ernest Nagel, "Logic Without Ontology," *Readings in Philosophical Analysis*, ed., Feigl & Sellars (New York: Appleton-Century-Crofts, Inc., 1949), p. 194.

<sup>16</sup>*Ibid*, p. 210.



relation to the theory of the Big Bang. The initial entity referred to as the singularity is, in that theory, believed by some of the proponents of it, to have emerged out of nothing. Others reject this and hold out for the cosmological-physical principle of the conservation of matter and energy.)

All the arguments for conventionalism seem to fail dialectically when an alternative system proposes to eliminate the law of identity (the law of excluded middle is another issue, though here again a confusion seems to prevail when it is denied). Lewis claims that

if one (should) deny a principle of inference, but inadvertently reintroduce it in drawing conclusions from his statement, he will indeed find that he has contradicted himself and admitted what originally he denied. But if he denies a principle of inference and consistently reasons in accordance with his own statement, he need incur no self-contradiction.<sup>17</sup>

The crucial term here seems to me to be “consistently.” The very appeal to consistency and the implicit rejection of contradiction admit of the indispensability of the rules of logic—only if all the elements of logic could be evaded (rejected), including consistency, would we have a genuine or pure case of “conventionalism.” That is, if one were to claim that ‘ $\neg(p \wedge \neg p)$ ’ does not constitute an element of the system (or, to stick to my original claim, ‘ $p \wedge p$ ’ or  $A$  is  $A$ ), and then construct a system by systematically evading any traditional logical principle, would the example be appropriate. But this would seem to fail at the outset. For if we are to accept it as a true statement that “it is the case that  $A$  is not  $\neg A$ ,” the first question that arises is “which  $A$  is the  $A$  and which is the not- $A$ ?” If it is true that “ $A$  is not- $A$ ” then it is also true that “ $A$  is  $A$  and that  $A$  is not- $A$ , and not- $A$  is not- $A$  and not- $A$  is  $A$ ”, in which case the very application of the *letters* would be subverted, that is, made impossible to systematize. In other words, if a logical contradiction serves as the foundation of reasoning, anything can be anything at all, or nothing whatsoever. As Marie Collins Swabey remarks,

What [Lewis] fails to notice... is that in the original premise which denies the law of contradiction [in Lewis’ exemplification of his above quoted assertions], we presuppose its validity (thus appealing to a more basic logic; that is, that  $X$  means  $X$  and not non- $X$ , that  $A$  means  $A$  where it occurs and not non- $A$ , and so on; in short, that no term is both itself and not-itself at any given point.<sup>18</sup>

Let me now turn to some of the recent criticisms of the conventionalist view. None of these necessarily accept the type of analysis I have presented

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<sup>17</sup>*Op cit.*, Lewis, p. 207.

<sup>18</sup>M.C. Swabey, *Logic and Nature* (New York: New York University Press, 1944), p. 381.

above. To restate this particular version once again, let me cite Urmson's characterization of it. He claims that the conventionalist would like to hold that "necessary truths are man-made and the reason why we cannot be forced in any possible circumstances ever to recognize their falsity is precisely because their truth or falsity, or perhaps their use or abandonment, is in our power."<sup>19</sup> He himself states that if this is what conventionalism aims to claim "then conventionalism seems a monstrously difficult theory to maintain."<sup>20</sup> Indeed, it seems, it is impossible to maintain it, if by "maintain" we mean "carry it through successfully in argument."

William Kneale addresses himself to Urmson's earlier argument concerning alternative geometries, etc. The conclusion of his considerations of the case of alternative geometries is that

the moral to be drawn by philosophers from the development of non-Euclidian geometry is nothing like conventionalism, but simply the cautionary remark that propositions which are not self-evidently necessary may sometimes appear so because we have not tried hard enough to conceive alternatives.<sup>21</sup>

Actually, Euclidian and non-Euclidian geometries are not at all alternatives to each other; they are entirely different and, in significant areas, cancel each other out.

As regards alternatives that pertain to algebras, Kneale says the following:

...there is no inconsistency whatsoever between our old statement 'a x b = b x a', where 'a' and 'b' mark gaps for the symbols of numbers of any type up to and including complex numbers, and our new statement 'a x b ≠ b x a' where 'a' and 'b' mark gaps for the symbols of hypercomplex numbers (e.g. quaternions). Since the mark 'x' does not mean the same in the two different contexts, there is no sense in talking as though we had discovered necessary truths that were alternatives to each other. What we have found are only alternative uses of the same mark.<sup>22</sup>

Another point made by Kneale (and Paul Weiss)<sup>23</sup> is that alternative logics are not alternate in the fundamental sense in which conventionalists would like to interpret them.

<sup>19</sup>*Op. cit.*, Urmson, p. 108.

<sup>20</sup>*Ibid*, p. 109.

<sup>21</sup>William Kneale, "Are Necessary Truths True by Convention?" *Clarity is Not Enough*, ed. H.D. Lewis, (London: G. Allen & Unwin Ltd., 1963), p. 139.

<sup>22</sup>*Ibid*, p. 140.

<sup>23</sup>Paul Weiss, "Relativity in Logic", *The Monist*, Vol. 1928, p. 547.

[R]elativity in logic is thus seen to be relativity in notation or in the definition of implication. The fact that the familiar laws of logic (contradiction, excluded middle, etc.) are invoked to permit the discrimination between elements, values, functions, etc., points to an absolute logic over and above the symbolic statements.... Relativity in logic does not mean, therefore, a Schillerian skepticism, but simply a freedom in choice of expression.<sup>24</sup>

For Kneale, intuitionist logic

contains no symbol equivalent to 'not' and therefore cannot contain the law of excluded middle or any other logical principle concerned with ordinary negation...it is a fragment of a well known system of modal logic rather than an alternative to classical logic in the strict sense of something incompatible with the latter.<sup>25</sup>

This characterization would give some support to my own belief that intuitionist logic is psychology-oriented, dealing with the status of our knowledge, as opposed to dealing with the formal status of propositions. It is difficult for me to conceive of the existence of an objective status of "maybe" or "perhaps." It is not difficult for me to see that *in so far as we are informed*, to various degrees of completeness regarding the existence or non-existence of "x" (truth or falsehood of 'p'), we may characterize this state by "values" of "maybe" and/or "perhaps."

In the final analysis the conventional thesis seems to fail on dialectical grounds. If it is true that "the law of contradiction is conventional," how then is it not true that "the law of contradiction is *not* conventional?" If it is conventional that it is true, then it could be false, for "conventional" implies that "it could have been otherwise." It can be seen that it is the distinction I discussed earlier that is missing once the necessity of the law of identity and non-contradiction is denied. And if there is not distinction between the assertions that "the laws of logic are true by convention" and its opposite, then there seems to be no reason why one should accept the assertion in the first place. *If it is true, it denies its own juxtaposition over-against its being false.* And, if so, what is there to be understood by it?<sup>26</sup>

It seems, therefore, that conventionalism has not succeeded in eliminating the element of necessity from the principles of logic. Thus this version of the *a priori* does not seem to warrant maintenance. Whether our third alternative does or does not, will be examined in the following section.

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<sup>24</sup>*Ibid*, p. 547.

<sup>25</sup>*Op. cit.*, Kneale, p. 143.

<sup>26</sup>I have benefitted much from Professor Blanshard's discussion of this issue in his *Reason and Analysis* (Open Court, 1962). Morris Cohen makes no less a powerful point of this in his *Preface to Logic* (Meridian Books, 1956).

### Logic as the a priori of being

The third version of the *a priori* to be investigated is fundamentally different from all the others. Accordingly, the laws of logic are “the definition of being qua being,”<sup>27</sup> that is, the fundamental, scientific definition of the nature of reality. For Aristotle, the “First Philosophy is the ‘metaphysics’ growing out of his logic and biology: it provides a set of distinctions in terms of which he conducts his formal analysis of things as they lend themselves to discourse and demonstration...”<sup>28</sup> Since the aim of science “can be stated as the attempt to answer the question, ‘What is it to be a certain kind of thing?’—the kind that is the distinctive subject matter of that particular science,”<sup>29</sup> the aim of First Philosophy, as science, is to answer the question “what is it to be being itself?” Since “terms and propositions without reference to content are empty: logic is more than verbalism.”<sup>30</sup> While logic is in its formal format, it is not metaphysics—one reason why logicians need not have anything to do with philosophy as such; but the study of being requires logic. “It constitutes ontology and ontology is not the study of verbal logic although it implies verbal logic, provided it employs language, which, of course it must.”<sup>31</sup> Aristotle, in Book IV, Ch. 3 of the *Metaphysics*, states explicitly that he who studies the subject of “existing things *qua* existing must be able to state the most certain principles of all things.”<sup>32</sup> This principle is, of course, that “the same attribute cannot at the same time belong and not belong to the same subject in the same respect.”<sup>33</sup>

It is clear, up to now, that logic, for the proponents of this third version of the *a priori*, is neither a category of the mind, existing independently of objective reality, nor a linguistic convention that may be dispensed with at convenience. As Morris Cohen puts it,

the founder of logic as a special study treated it not only as an organon, or, as we should say, a calculus, but also as a part of metaphysics or ontology. Its fundamental laws, those of identity, contradiction and excluded middle, he formulated as laws of being: whatever is, is; nothing can both be and not be, etc.<sup>34</sup>

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<sup>27</sup>Robert Masters, “Can Aristotle Defend His Logical Laws Against Modern Conventionalism?” *IREC Review*, Vol. 1, No. 13, p. 7.

<sup>28</sup>J.H. Randall, Jr., *Aristotle*, (New York: Columbia University Press, 1960), p. 110.

<sup>29</sup>*Ibid.*

<sup>30</sup>F.S. Haserot, *Essays on the Logic of Being*, (New York: The MacMillan Co., 1932), p. 25.

<sup>31</sup>*Ibid.*

<sup>32</sup>*Op. cit.*, Aristotle, p. 736.

<sup>33</sup>*Ibid.*

<sup>34</sup>M.R. Cohen, *A Preface to Logic* (New York: Meridian Books, 1956), p. 49.

It must be remarked at this point that I will make no attempt to actually “prove” the position held by this third group. The reason is that properly speaking, it need not be proven at all since *every conceivable process of proof presupposes the position held by it*. A. C. Ewing puts this contention very clearly:

I must warn... that I shall not provide a rival *explanation* of a *priori* knowledge. I have no explanation of a *priori* knowledge to offer, nor do I think that it requires one, any more than empirical knowledge... Or do we know a *priori* the synthetic proposition that we cannot know a *priori* any synthetic propositions?<sup>35</sup>

Perhaps not all those who entertain the ontological view of logic as an *a priori* set of principles would go along with Professor Ewing. Whether they would or not, it does seem to me that this version of the *a priori* could not itself be demonstrated to be true since the version *is* the characterization of the fundamental principles of demonstration itself. To ask for the proof of the validity of the principles of logic is, strictly speaking, an acceptance of a view of logic that is fundamentally different from the present one. It (the requirement) implies that first principles are not first principles, and those principles that are by many considered first principles are themselves to be validated by others, and so on, *ad infinitum*. That this process of validation is *ad infinitum* is precisely what the proponents of the present version of the *a priori* want to deny.

Instead of demonstrating the “validity” of the ontological first principles, I will attempt to describe a situation that might be analogous to that in which we, human beings, find ourselves *vis-à-vis* the principles.

Let us take the game of Monopoly. In it there are certain man-made rules of procedure that the players must observe in order that they may be said to be playing the game. Let us now take away the inventors of this game, and the human beings who are playing it, but let us not remove anything else. Let us also imagine that little human beings evolve, after a while, to find themselves confronted with their world (Monopoly). They have only that which the “game” (from *our* frame of reference, a game) contains; that is their universe *is* “the game.” This universe is already structured in a certain way so that the little people find themselves within a universe that is a *particular kind of universe*, that is, it is what it is, *a priori*, to their evolution. They themselves, however, are not “outsiders” to this universe but are part of it; they have no alternative, as it were, but to *see* the universe as it is, *or to refuse to see it* (assuming a kind of freedom of the will for them). If they refuse to acknowledge the nature of their universe, any aims, goals, purposes they

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<sup>35</sup>*Op cit.*, H.D. Lewis’ *Clarity is Not Enough*, A.C. Ewing, “The Linguistic Theory of *A Priori* Propositions.”

might want to pursue would, of course, be contradictory to the ways, aims, goals, etc., that are *possible* in that universe (except in case of accidental coordination). They are not “determined” to view their universe as it is, with the kind of laws and rules that are implicit within it; that is, they have no *a priori* categories in their cognitive faculties to assure them of a particular kind of reasoning operation. Neither can they impose their system of rules, definitions, etc., (except, of course, the names—sounds and symbols) by the names—sounds and symbols—by which to express definitions on this universe, since it is already what it is, independently of what they might choose to legislate it to be. They can do two things only; either they refuse to deal with this universe—which would mean that they refuse to think about it, since thinking would require of them the acknowledgement of its particular nature; or they choose to consider it and then they *will* discover *what* it is. In so far as these little people are “stuck” with their universe (Monopoly), they cannot escape its nature, and, of course, they cannot escape their nature either, which, having evolved within this universe, is also subjected to the nature of things (of this universe)

I think that the above is a fairly accurate *characterization* of the situation within which human beings find themselves, as propounded by those who hold this third version of the nature of the *a priori*. It might be fruitful to investigate all the details of this theory. That, however, would involve much more than has been my task to accomplish. Implications of this third view are at times obvious and at other times less so. I will not confront this version with the criticisms, as I have confronted the previous versions. This is because those previous versions were, in fact, criticisms of this view. Any further confrontation between the former versions and this one would only be a case of repetition.

## Conclusion

In conclusion, let me quote Masters again because what he says and the way in which he says it seem quite on the mark.

...to deny the law of contradiction (is to) deny the basis of any knowledge of any human act whatever... if the law of contradiction were false, men would be triremes, and triremes would be walls. There would be no reason to avoid walking into a well or over a precipice, for falling would be “alike good and not good.” All scientific theories would be false; they would also be true.<sup>36</sup>

As we have seen, it seems very likely that the conventionalist view of the *a priori* nature of logic allows for the so called “denial” of the law of

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<sup>36</sup>*Op cit.*, Masters, p. 9.

contradiction (i.e., if it is conventional, it could be both true and false, according to what we decide it to be). If the psychological view of it is true it seems very likely that a version of solipsism is true. Only this third, basically Aristotelian, view of the *a priori* seems to assure us both of an objective world and of ourselves who know it to a greater and lesser degree. This is no argument, of course, but after all the arguments, it is certainly what might be called a “happy ending.”

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