E. A. Ahrens, Letter to Max Fisch on the Introduction to Jordan's *Metaphysics*

Editor's Note: At the request of Professor Max Fisch who was preparing Jordan's unfinished *Metaphysics* for publication, Ahrens offered the following commentary which constitutes a summary of major aspects of Jordan's thinking on metaphysics.

It looks to me that you have put this manuscript of Jordan's into fine shape, and I certainly am of the opinion that it ought be published. Insofar as these essays restate basic ideas of Jordan, I believe they will be helpful to students in gaining a clear grasp of his philosophy. While they are essentially of the nature of such restatement, they are more than that in that much is said in a new way, above all in the fact that certain ideas, notably the idea of science, is here further developed than in any other of his works. As regards this idea of science, I believe it may be said that these essays embody the best statement of its nature and critique of its presuppositions to be found in the whole of philosophic literature.

Regarding this latter point and its evaluation, doubts may be raised by certain philosophers. They will agree with his contention that scientific concepts are no more than methodological devices and do not give reality as most scientists and men in general suppose. But they argue that all that has been said long ago; basically there is nothing new in what Jordan says.

With this argument we do not find ourselves in agreement. If asked why not, I think we should answer simply that, to our minds, Jordan gives a logical account of the instrumental nature of science while others do not. Stated in another way, we say that while others assert science to be instrumental, their account of it is contradictory and unintelligible; they fail to make their case. Perhaps we ought try show what we mean.

It is at once interesting to note that practically all existing criticism of the idea of science as metaphysics is an expression of some form of philosophic skepticism. While various positions may be distinguished, they have essentially the same root and flow into one another at the present time to a point where they are often difficult to disentangle. But an analysis of all variations of the argument is not necessary for our purpose. However, in order to keep the argument tied to its assumptions, we must define the positions we present. We take two, first the argument connecting with the nearest thing to a solipsistic position, next one a step removed, phenomenalism. By solipsism we refer to the conception of mind which asserts that mind has knowledge only of contents within mind, and that objectively valid knowledge is impossible, because it is impossible for mind to determine the correspondence of inner ideas with outer objects in view of the fact that mind can never lay hold of outer things. As over against this, phenomenalism contends that between outer objects and mind a definite relation exists called experience. So objects are said to be known through experience, but it is argued that our experiences are only of the appearances of things, never of the thing as such. The true nature of things, transcending experience, can never be known. Metaphysics is impossible. The question we now investigate is that of the implication of these conceptions of mind and knowledge to science. We begin with the first position.

We then assume the content of knowledge to be ideas in one mind. Among these are ideas of science. Hence the first question is how we distinguish scientific ideas from the non-scientific.

The usual answer to that question is that scientific ideas are characterized by their logical nature most perfectly instanced in the science of mathematics in which all concepts and concept relations are of pure logical form. And it is added that the object systems built up on mathematics accord with innate principles of the mind. Why all ideas in mind are not built up according to these principles is not exactly clear, nor need concern us. What we do note is that, from the point of view of logical nature of mind, from a purely formal point of view, mathematics is described as a system of absolutely valid knowledge. But now the question is the possibility of empirical science. The rationalists of former days saw little difficulty here in that they believed the innate principles of mind would serve to go beyond mathematics to the logical construction of all science knowledge, because of their belief that their mind principles were at one with the principle in the universe. This position has been given up, and we find another approach to empirical sciences well illustrated by modern logical positivists. They argue that, indeed, there is an important difference between mathematics and empirical science. The former is concerned with pure ideal constructs; the latter connects with objects of the outer world. But outer objects are assumed to be unknowable. Then, how is empirical science possible? They answer that although outer objects are and forever remain unknown to us, we can develop logical ideas, devise logical constructs, and can experimentally proceed to determine which one of a number of different ones produced by the mind will prove itself most advantageous in our effort to deal with our environing world. We may find that with respect to the same thing (how we know the same thing they do not explain), several constructs may develop with one proving itself best for one purpose, another for another purpose. That the two are not logically consistent with each other need give us no concern. Empirical science, unlike mathematics, is not a consistent system of ideas. Here the constructs are innumerable and may stand in no logical relations with each other at all. They possess no formal truth; no objective truth; in short, no truth value whatever. They are said to be purely instrumental in nature. Since mathematics is essential to building up science constructs and derives its significance to our life through that fact, we may say that instrumentalism is of the essence of the whole of science.

So runs the argument, but it fails of its intent. For, clearly the determination of the success or failure of an act involving changes in the order of external fact involves a knowledge of the nature of those changes along with a knowledge of the relation of external effects achieved to our end as imaged in our minds. But by assumption knowledge of the outer and of its relation to our idea is impossible, thus making impossible the determination of success or failure of action. This being impossible, science can have no instrumental value. Since empirical science, as acceded, can have no truth value, at least that portion of science is meaningless and is just nothing at all.

The difficulty we run into here we appear to avoid when we shift our position to phenomenalism and assume an experience relation of mind to outer objects. For when we have an experience of outer changes effected by action we can at once tell whether or not they are in accord with our purpose. But then assuming that relation, there is the question whether we stand in need of any logical constructs to begin with. If we assume that action depends upon a knowledge of the nature of objects given in experience, then logical concepts of them must be formed, and formed, might be tested in experiment. But phenomenologists argue experience cannot be transcended; metaphysical knowledge is impossible. Then there are no logical concepts to begin with and the idea of testing concepts or theories drops out of the picture entirely. But then we ask, what is science?

It is explained that phenomena are given to mind in the form of co-existence and time sequence. Science, it is said, has its being in the search for the recurrent order of phenomenal succession and the relating of orderly changes to each other to the end of achieving predictive knowledge. If from a state of fact given in the present we can form an idea of its future state, if left to itself, if modified by action, it is said, we shall be in possession of valuable knowledge to guide our action with respect to existing things. Science, then, aims at prediction. And predictive knowledge is instrumental merely in that it has nothing to do with metaphysical knowledge of any kind. First we must get a clearer conception of this notion of prediction.

There is nothing unique in the phenomenologist's contention that science predicts; that has always been part of the science idea. What is unique is their peculiar formulation of it; one familiar is the oft-repeated illustration of the rising and setting of the sun, the future occurrence of which we predict with high probability from innumerable past recurrences. That is, the expectation of the sun rising and setting tomorrow has nothing to do with conceptions and theories, but is purely a matter of subjective expectation based upon memory of the recurrence of this event reaching back into the distant memory of the human race. If we ask ourselves whether the science of astronomy predicts that event in that manner, the obvious answer is it does not. The ground of its assertion of the future recurrence of day and night, yearly seasons, and the like, connects with its theory of the earth and solar system. These phenomena experienced are not merely described but explained in terms of that system. The prediction of their recurrence is made to rest upon that system, and are said to recur with necessity from its nature, and will repeat as long as the integrity of that system endures. Not memory but logical constructs are the foundation of science prediction. This is further seen in the fact that the prediction of scientists has nothing whatever to do with numbers of recurrence. A single experiment determining certain connection of fact is as good as a thousand. Also, there is to be noted the fact that expectations of events, based on no more than observation of past occurrence, is not viewed by scientists as being prediction in a true sense. Scientific prediction for them always is one based on understanding of things, hence one proceeding from a knowledge of the why and wherefore. Prediction as defined by phenomenologists is not prediction in the meaning of science.

But they will argue that science is still laboring under metaphysical presuppositions, and is continually professing a knowledge of things it does not have. Once it has freed itself of these to become pure science, then it will find that prediction is of the nature described by phenomenologists, and not a matter of reasons, causes, and inner necessities as they now suppose; a contention which raises the question of its validity. As to that we encounter grave difficulties.

Water, ice, and steam are said to be different phenomenal forms of the same thing. The large oak is said to be the same with the sapling of fifty years ago. Now if we use a bit of logic, we might be able to figure out that we are actually dealing with the same thing in quite different forms, but the appeal here is not to logic but to experience, a fact not to be lost to sight. How on the basis of our experience are we to say these things are but different forms of the same or are phenomenal sequences pertaining to the same thing? Clearly there is not a single phenomenon as of shape, color, temperature, mass that is the same, at least may not be the same. Then on what ground do we assert these experiences to belong together rather than being unique and pointing to so many different facts? The curious fact is that when our experiences have many elements in common we may assert them to point to objects distinct and separate, while again when so unalike we assert

an inner relation between them pointing to the same fact. If we cannot tell this, we obviously can determine no phenomenal sequence; we cannot distinguish between phenomenal co-existence in space and sequence in time. Here is a problem phenomenologists never have solved. And the argument might be pushed farther. It might be pointed out that the same object gives rise to many different appearances, that, in fact, it never is experienced exactly the same way at two different times with the consequence that we do not know whether we are faced with one object or many. If, then, we cannot determine whether different experiences point to a changing thing or point to distinct and separate objects and if the same object gives rise to many different experiences so that we cannot know whether the object is one or many; it appears that the phenomenal position can give us no knowledge of any kind. Predictive knowledge is impossible.

However, it may be argued that all along we are laboring under a misapprehension. The problem is not one of interpreting experiences; they do not point to objects; we do not arrange them. The fact simply is that they are given to mind in a definite space-time order. It is this fact of being so given that is the basis of prediction. As to this matter of water, ice and steam, it is easy to set up conditions and observe the order of transformations. Similarly the tree is observed through months and years of growth, where again we are given a definite time order of experiences.

This is poor reasoning. From his knowledge of objects, their order of qualities and changes, the phenomenologist reasons to an order in our subjective experiences. But he is completely mistaken. We may say there is a simultaneity and succession of impressions, but they are without order.

I watch a specimen of our familiar, noisome cicadae emerging from his beetle shell, and within a short time transforming itself into a winged creature. Here I have an instance of phenomenal experience in time. But while I am observing this event, a neighbor calls, a bird flutters against my window, a fly has made itself obnoxious. All these experiences are intermixed with those of my cicada observation. If that is the subjective complex and sequence of fact, how do I get to the objective as connected with the cicada? Of course, everything is simple if we assume objective knowledge of the nature of things. Then we do say that, however remarkable, the transformations of that thing, they do not include becoming man, bird, fly. As far as my subjective experiences go, that is what happened. But such interpretation is nonsense. All of which simply points to the fact that all our experiences accrue in a world, not in a vacuum. Abstractly or subjectively viewed, experiences are of a togetherness and sequence in time, but they are never given as ordered. Order is a logical concept, not a matter of psychology. If, then, there is no such thing as objectively ordered experience given to mind in the absence of thought, experiences connecting with the outer cannot be distinguished from inner experiences connected with dreams or the most bizarre imaginings. With that we lose all idea of science.

The argument might be extended. Granting the possibility of prediction on their terms, we might ask what we are to say in instances of discrepancies of wide differences in phenomenal appearances to men. Thus we say daily the sun rises and sets. The Eskimo has a different account to give of the sun's behavior. Who is right? Of course, it will be said all this is easily cleared up when we consider the shape of the earth, the inclination of its axis, its movements with respect to the sun. That is, all is easily cleared up if we go beyond phenomenal appearances to the construction of the nature of things. But they are not so easily cleared up in terms of immediate experience. To be consistent with the experience postulate we can best say that phenomenal

appearances are relative to time and space, perhaps also with respect to certain other factors, so that science will differ instead of being universal. Then, on the basis of science many, even opposite predictions may be made of the same thing, an idea which makes scientific prediction meaningless.

Then, one might refer to the science of mathematics, and ask how that is possible on the basis of phenomenological assumptions of the nature of mind. But the problem need be pursued no further. Already nothing is left of the idea of science and prediction. Having found the science idea to collapse in both forms of philosophical skepticism discussed, the question is just why that should be.

The source of the difficulty lies in the identical assumption both make regarding the nature of reality. Of course, both declare that reality cannot be known, a declaration which does not in the least interfere with making the most positive kind of assertions about it. Most immediately, while proclaiming the impossibility of knowledge concerning the nature of things, they speak with authority on the nature of mind and thought. Since no account can be given of these without reference to the world logically implied in any and every mind conception, they speak with like authority of reality as a whole. Reality by them is seen to be divided into two spheres different in kind, the sphere of mind, the sphere of outer things. Perhaps one may say that they assume two realities in that they view mind to constitute a unique entity or sphere existing apart from and in addition to objects. While unique, mind does appear to possess a point of similarity with the outer in that like the latter, it too is spatial. Within the world of mind are objects called ideas or experiences, again viewed as quite different in substance from outer objects. Though being marked off in substance and space from outer objects, some sort of relation between inner and outer is assumed, even though valid knowledge of the true nature of that relation is denied. It is this metaphysical assumption that underlies the failure of philosophical skepticism to maintain the idea of science. And the reason for it is that, under this assumption of the nature of mind and world, as often demonstrated, no knowledge whatever is possible. There is no knowledge possible of outer things, not even of things posited as being in the mind. But that argument need not be restated.

But pushing farther to the root of things, we observe that their construct of mind, world, and the mind-world relation is in terms of the space, time, change, cause, etc., categories of science. Instead of rejecting the metaphysical of science, it permeates all their thinking, and is at the base of their mind construct. They would have us believe that all thinking begins and ends with mind. Actually their conception of mind derives from the science assumption of the nature of reality. Their argument is purely circular. From their conception of reality they argue to the nature of mind, and from the nature of mind they argue back again to the nature of reality. And it becomes completely self-contradictory in the fact that their mind conception, an implicate of their metaphysics, is a complete distortion of the mind idea. Actually, the logical implication of their science metaphysics is to the complete unreality of mind and thought, a fact they do not see because they shut their eyes to the implication. But then even this caricature of mind left avails nothing. No science is to be got out of it; its implication is the unreality of thought, ideas, and world.

At this point it may appear as though our own argument is running counter to itself in that we argue philosophical skepticism fails because it does not connect with the logic of science, then

say that its fundamental error is thinking in terms of science metaphysics. But this misconceives the argument. We are trying to say that philosophical skepticism presumes to give an account of the nature of science in its pure form as scientific thinking freed of all metaphysics, and that it fails to do so. We are asserting that science is something other than they say it is. We are asserting that its essence is logic, and that it transcends experience to the end of determining the nature of things. But as already implied by our argument, and as we shall develop further, logical thinking directed to the nature of things is true thinking; then how can the metaphysics of science be considered the source and cause of philosophic skepticism with all its self-contradictions? This problem must be clarified.

The crux of the problem here is what is meant by the "nature of things," obviously a problem concerning the nature of reality.

As to that, the fundamental contention of Jordan is that no isolable object exists in the universe. If such a thing, existing in and for itself, were assumed to exist, he argues that it could not be known, since things are known only in and through their relations. This idea that all things in the universe do stand in connection with one another is also asserted by the causal theory. But, according to this theory, objects are in mere external relation with each other, so that we remain with the conception of absolute entities existing in and for themselves. The causal relation is a mere external impact of one such entity upon the other, having nothing to do with the nature of the objects themselves. Stated in another way, our assumption here is that object and relation are independent entities. The object is what it is regardless of relations; relations exist separate from and in addition to objects. So our language is that of objects and relations. It is at this point, according to Jordan, that we touch the crux problem of metaphysics. We cannot here enter upon the argument but can merely indicate the direction of Jordan's thoughts. He asserts that object and relation are not separate things, rather that an object is constituted by its relations, or that the object has its being in relations. Every object he says is what it is by virtue of its relation to other objects and to the world to which it belongs. That is obviously true of an idea. Every idea is what it is by virtue of its relation to other ideas, to the whole of thought in which it stands. One idea enters into the other, is part of the others, logically implies the other. The same is true of words, of acts of persons, and of all things, Jordan says. Accordingly, when speaking of the nature of things, the reference is not to a metaphysical inner essence of the object as is often supposed, but to the being of the object in the totality of its relations. To speak of the nature of things is then one and the same with speaking of the mutual interdependence and implications of things to one another; it is speaking of things in terms of the world to which they belong.

And we said science speaks of the nature of things, but does so in a different way and means something different by their nature. Following Jordan's account, science approaches objects from a special point of view, namely that of an interest in effecting modifications within them or within their relations to one another. To effect some transformation in an object calls for an understanding of it. In that connection much about the object may be of no concern to me at all. The tree within its lush greenery, a home for birds, a shady bower for man and beast, an object of worship and of fond memories, is of no concern to me when I view it with respect to the possibility of yielding lumber for my house or faggots for my fireplace. Clearly, I am then viewing the tree with respect to human purposes and not with respect to its concrete relations to the natural cultural world in which it stands. My practical view abstracts the tree from all these qualities and relations leaving me little more than a certain volume of wood. It is that I now deal

with, and it is the nature of that as seen with respect to processes of action as lifting, splitting, planning, storing, etc., that I define it. Hence, over against the concrete and true nature of things as given in their relations to the world, there is this nature of things as defined with respect to our acting with and upon them. It is the nature of things under conditions of practical purpose that constitute the objects of science. If the nature of things in their concrete relation to the world constitutes their true metaphysical nature, the question is whether the nature of things in the second sense has any reality at all. Obviously it is not purely imaginary. And Jordan would say it does possess a degree of reality. The object of science, while far removed from concrete reality, does connect with the abstract skeletal frame or structure of reality. Science is not imaginary nor a purely blind and arbitrary construction of objects. However, there are certain things to be noted.

In the first place, though Jordan connects science with reality as described, he will also argue that it often assumes forms wherein it compounds and recompounds abstractions to a point where it loses every trace of connection with reality to become pure fabrication. Thus the accounts of present-day astronomers respecting speeds of distant constellations and dimensions of the universe might be viewed by him to be on the same level with Jules Verne fiction.

In the second place, and most important, he argues that the constructs of objects and world as built up by science must not be confused with our constructs of objects in the totality of their relations. The first gives us the dead, gaunt world of science; the second the concrete, substantial, living world of meaning and value. One of the great errors of modern thought has been to take the former as real and to view the latter as unreal. Exactly the reverse of this is true. Science, being an abstraction from reality, being but a partial view of it cannot make pronouncements on the whole of it. It cannot replace metaphysics.

Science, then, is instrumental because it directs itself to the defining of objects with respect to dealing with them in action. All concepts and categories of science are principled by this purpose. So one understands Jordan's argument that the familiar science system of categories as of space, time, movement, mass, cause, etc., are not the natural and self-evident principles of mind and world as has been commonly supposed. They are categories of mind only under the special condition of our interest in understanding of things with a view to dealing with them. They are not universal categories as defined by science, and the effort to universalize them issues in the falsification of mind and world. How that is we briefly illustrate, since it connects with the conception of mind with which already we are familiar. Every conception of mind giving to it an entitative status as separate from and in addition to objects points to a thinking in terms of space and time, and is infested with the fallacy of that thinking. Most potently this is demonstrated in the mind conception of empiricists.

For them mind is a receptacle of ideas. It is a spatial thing, must at least be that, since only things possessed by space-time attributes have reality. At first, mind is empty, only gradually acquiring content through contact with the outer world. But what mind can mean minus all content is hard to make out. Obviously it is but an empty abstraction, is just nothing at all. But then mind is seen to fill up with ideas and is said to have a content. But ideas are things in themselves separate from each other and from external objects with which they may or may not be assumed to correspond. In either case, the idea, as such, is a thing in itself, which means it is an idea of nothing. And being an idea of nothing also is an empty abstraction. The content of mind is

illusory. But allowing substantiality to ideas, the difficulty does not end. For the reality now turns out to be mind plus ideas, that is, two minds, one as a sum of ideas, the other as container separate from and in addition to them. Since ideas are not of mind, there are no meaningful relations between them. Hence, their relations can only be described in space, time, and causal terms. But all this merely adds up to substituting mind terms for physical terms for we are not talking about the reality of mind at all. The whole account is a false and empty abstraction. The space, time, movement, and causal categories cannot make mind intelligible. But neither the world.

And this is what Jordan shows. According to scientists, the world receptacle is space and time or space-time. Just like the empty mind, space-time is posited as reality, as world. And like it, a world without content is no world at all. Then objects are added to fill out the space-time container which then gives us a space-time world plus objects. The objects are not of the world, and the world does not have its being in objects, with the result that thinking everywhere issues into empty abstractions.

And this is what Jordan seeks to show. We summarize the argument. From the viewpoint of the doctrine of the subjectivity of knowledge, science is metaphysics in that it transcends experience to describe the nature of objects. Attempts to cleanse it of "metaphysics" proves itself a failure. It is the failure of this argument that allows science to continue in its belief that it is describing reality and is replacing philosophy. Its failure permits and encourages scientists to set themselves up as philosophers and to develop science philosophies. But Jordan argues all "science metaphysics" is false. While science goes beyond experience its concern is not reality, but only the abstract frame of objects and world which must be understood if we are to build with them. Of this frame of things science gives an account. To it the space, time, mass, and cause categories apply, but not to reality. And every attempt to think of them as true categories of mind, society, and culture results in their distortion and negation. To the development of categories, of the concrete realities of life and world Jordan dedicated his life.

But if the science categories are purely instrumental and false to reality, there is the question of why they have, and throughout the whole of modern civilization, have had, such a hold upon the mind as being true and real. The answer to that appears to be that modern thought is caught up in subjectivity, and is unaware of the nature and source of its confusion. It seeks objectivity. While all is confusion in religion, ethics, art, politics, and law, science is seen marching on with growing scope and certitude of knowledge. While in the sphere of culture all is a matter of opinion, in science men know and are in agreement with each other. Seeing all this, modern thinkers have become convinced that scientific thought is the only valid form of thinking. The questioning of the validity of this idea will appear to most men of today as sheer madness. All sail under the banner of science. No matter which direction they go, even the most diverse and opposite, it is all science. To destroy this idea will leave modern thinkers with nothing to hold on to. They cannot let it go.

But, Jordan argues, they are mistaken. They are seeking to escape subjectivity by science but completely fail to do so. On the one hand, they may move into a naturalism whose implicate is to the unreality of mind, value, and action. Then reeling back from that, they are again lost in the subjectivity of psychology, subjectivist philosophies, and the social idea. So the modern mind moves from pillar to post, back and forth, and becomes ever more deeply buried in

contradictions and confusions. And the more lost it becomes, the more abstract, mystical, the more life and reality removed it becomes. Modern thought no longer connects with culture, no longer feeds and supports it. On the contrary, it is destroying its vitals. Such life as there is left to it is there not because of our intellectuals but despite them.

Negatively, the thought of Jordan may be summed up as an opposition to modern subjectivism and its false notion of objectivity. Ultimately, as was indicated, the two are bound up with each, are different aspects of the same thing. Since the two pretty well sum up what we call modern thinking, it means that Jordan stands squarely against it. His works embody a devastating critique of it. Often it is said that Jordan's language is difficult, the lack of comprehending what he means being blamed on the language used. Something of this may be allowed. Jordan wrote primarily to clarify his own thinking rather than with the idea of communicating his thought to readers. However, basically the trouble is not that of his language. Jordan is possessed of a phenomenal ability to say precisely what he means. The real trouble is that Jordan does not move in the sphere of ideas familiar to all men. These ideas he rejects as inadequate and false, and moves on into a thinking not familiar to us. Once his ideas are grasped, following his language offers no particular difficulties. In fact, one discovers that what he says requires the language he uses. He was not trying to obfuscate ideas with rhetoric; on the contrary, he labored hard clearly to express ideas more adequate to the realities of our life and world. The thing not often recognized in Jordan is his renunciation of the false abstractionism of modern thinking for a thinking in terms of concrete realities. Also, what is overlooked is that talking in terms of empty abstractions is easy, and to make concrete realities intelligible is extremely difficult. Then stated positively, Jordan's effort is directed to the re-building of a thinking of realities, central of which is the reality of culture. Perhaps one may simply say that all of Jordan's efforts are directed to developing valid knowledge of culture.

While Jordan's basic ideas about science and the relation of science to culture are stated in these essays, they are incomplete. His strength and time did not suffice for a fuller analysis and critique of the recent philosophies of science. Beyond that lies the task of carrying the argument into the language of science itself, the task of a critique of it from full knowledge of the whole science argument. These are tasks that await the doing.

Such, then, are the few ideas I throw into the gist of suggestions for an introduction by you to the manuscript. A statement about Jordan and his philosophy would fit well as a preface to his last work.