There are two or three familiar ways of distinguishing the province of philosophy from that of the other sciences which, though not untrue, conceal an important part of the truth. The most generally prevalent notion of the matter, I suppose, is that philosophers constitute a variety of the human species characterized by a peculiar craving for comprehensive generalizations, for *vues d’ensemble*—that they are men who cannot rest content with fragments, with partially unified knowledge, but demand a synoptic vision of the nature and meaning of things as a whole. According to another account, the philosopher is primarily distinguished, not by the greater breadth of generalization of the knowledge that he seeks, but by its logical priority. The questions which it is most characteristic of him to ask are not the last but the first questions. He scrutinizes long and critically the tools which the special sciences unhesitatingly use and raises more exigent doubts than either science or common sense are wont to face. The trait distinc-

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tive of his intellectual temperament is—to change the figure—conceived to be an obsessing curiosity and concern about the foundations of his structure of belief, and consequently a more far-reaching and resolute skepticism than is natural to the generality of our easy-going kind or is customary with those who build the towering superstructures of science. Or again, the philosopher is sometimes said to have, not, indeed, for his only province, but for his most characteristic and perhaps his only permanently inalienable province, the realm of values, especially of moral and aesthetic values. While the natural sciences represent man's attempt to correct, to systematize, and to extend his judgment of fact, his knowledge of things as they are—or, in the case of the applied sciences, to discover the best means to desired ends—philosophy alone, we are told, is mindful that men also, constantly and irrepressibly, make judgments of worth; that these too require correction, systematization, and extension; that the criticism of ends is not less a part of the life of a rational animal than the intelligent choice of means; and that the question of ultimate human interest is the question how the good stands related in this world of ours to the real, how far values have a basis and a backing beyond the transient likings and dislikings of our feeble race.

One or another, and in not a few cases all three, of these accounts truly enough describe propensities and preoccupations of those whom it has been customary to call philosophers. Yet I think the effect of the emphasis upon these aspects of the philosopher's business, and especially upon the first two, has not been wholly fortunate. That business is made to appear very widely different in kind, and in temper,
and in its pretensions, from the work of the scientific investigator; and the philosopher has often, I suspect, had to his scientific confreres the look of a rather queer fellow, either dangerously disposed to hasty generalization; or else full of barren doubts and hesitancies about things that all other men take for granted, and have so taken for ages with the happiest results; or else so infected with moralistic preoccupations, so eager to find the edifying in the real, that his inquiries into any question about reality are open to the gravest suspicions of emotional bias. However unjust such conceptions of most philosophers and most philosophy may be, they have, I think, some currency; and while I should not wish to see the philosopher abandon these three interests, or abdicate his claim to these provinces of thought, I think it may help to make him more intelligible to other animals of his species, and especially to workers in the natural sciences, to point out another aspect of his business which is hardly made evident by the accounts of the field and purpose of philosophical inquiry that I have mentioned. There is, I suggest, a special class of empirical matters-of-fact which—with one possible and ambiguous exception—none of the other sciences investigates or is, for reasons which will presently appear, in a position to investigate. And this class of empirical matters-of-fact constitutes the starting point and primary subject-matter of the sort of philosophy with which I am here concerned. The philosopher, as I conceive of him, is first of all a man whose interest and desire to understand have been aroused by a certain biological phenomenon, and who therefore becomes a specialist in the study of that type of phenomenon. Doubtless
he should be more than that; but he ought never, I think, to be less; and in any case, that is what many modern philosophers essentially are.

The class of biological phenomena to which I refer is that consisting of making judgments about things, having doubts about them, having knowledge about them. Whatever more knowing may be, it is on the face of it, and in the first instance, a phenomenon sometimes occurring in the life of the organism man, a function of which the featherless biped is capable; and it is as such, and without other preconceptions than those of the man of science, that the philosopher does well to approach it. Its empirical occurrence is at least as certain as the occurrence of any other phenomenon; for being certain of anything either is or purports to be an instance of this phenomenon. Its occurrence is, indeed, more certain than that of any other phenomenon; for being uncertain is also a variety of the same species of biological happening. In other words, knowing is a natural event that is taken for granted by biology and all the other sciences. But it is not investigated by biology, or by any of the natural sciences, with the dubious exception of psychology. The psychologist might but usually does not investigate it with thoroughness. Clearly, then, there is here a class of facts which it ought to be somebody’s business methodically to describe, to analyze, to correlate with other facts. That business has historically fallen, and still falls, to the lot of the persons conventionally described as philosophers; and discussions relating to these matters form pretty certainly, I think, the most voluminous and characteristic part of contemporary philosophical literature.
The primary relation, then, of the philosopher to other men, including biologists or other specialists, is much the same as the relation of the biologist to his infusoria or other organisms, of the geologist to the processes of rock formation, of the astronomer to the celestial bodies and their motions. The biologist observes the infusoria and endeavors to reach conclusions concerning the nature of their activities and what is implied by them; the philosopher may be said to observe the biologist—or any other creature that is supposed to know anything—to ascertain precisely what it is that he is doing when he is reaching conclusions, and what is implied therein—not in the specific conclusions, but in the fact that he reaches them, and that, if there be any science at all, some of them constitute what we call knowledge.

There has, it is true, taken place in recent philosophy a curious revulsion against the customary name of this special inquiry into knowledge, and to some degree, also, a revulsion against the inquiry itself. Epistemology has become a word taboo among certain circles of—shall I say?—epistemologists. A former lecturer on the Mills Foundation writes as follows:

The astronomer, the biologist, the chemist, the historian, the student of literature . . . are all engaged in increasing our knowledge of what our perceptions are and how they are related to one another. Their studies are not prefaced by an examination of how we perceive. They take their material as so much given stuff, and then proceed to tell us what, when so taken, they perceive it to be. If they are invited to examine first the mechanism of perception, they regard the invitation as impertinent and irrelevant. They
have found such an examination unnecessary, and so believe that they can rightfully reject it. . . . The results of modern intellectual inquiry [have been built up] directly from considering the processes of perception, and also the results of those processes, without seeking any epistemological warrant for our procedure.¹

Professor Woodbridge therefore deprecates epistemological inquiry into perception, and presumably into other modes of knowledge. Many scientific investigators, I suspect, have experienced a similar feeling of irritation at the curious preoccupation of philosophers with epistemology—their tendency to loiter in the vestibule of science, to spend their time in looking over the instruments of knowledge, instead of using them.

I refer to this state of mind in order to make it clear that the study of knowing of which I am speaking is not exactly the sort of thing that is referred to in the passage of Professor Woodbridge's which I have quoted; nor are the reasons for engaging in it the reasons which he rejects as invalid. I am not contending here that epistemology is a necessary propaedeutic to natural science, or that an experimentalist ought to await a license from the philosopher before entering upon his own business. Epistemology, as I conceive it, is not a preliminary and it is not a normative science; it is merely one descriptive or analytic science among others. But its results, when reached, will require correlation with those of the other sciences, will supplement and qualify their conclusions, will, perhaps, restrict gen-

eralizations to which we might be led if we considered solely the data of those other sciences. Such a study of knowledge needs no more special or peculiar justification than any other study. Since knowing is an actual phenomenon presented in our experience, there is the same sort of reason for finding out what we can about it as there is for finding out about other things. The prosecution of epistemological inquiries is sufficiently justified by the undeniable fact that their subject matter exists—unless, indeed, it should be maintained that man, and man engaged in the function most characteristic of his species, is an animal less deserving of study than the *paramecium* or the dancing mouse.

The inquiry I speak of, then, should begin—where it will end is another question—with a plain descriptive account of what knowing is, what goes on when it occurs. Only it must be an account of *knowing*, and not of something which happens to be associated with it. And here certain obstacles to the serious study of this phenomenon have arisen through entirely natural and comprehensible causes. In the first place, since knowing is, in a sense, the thing we know best of all—since it is what all men are doing, or supposing themselves to do, during most of their waking life—it is difficult to arouse in most men, and, I sometimes think, especially difficult to arouse in men of science, sufficient intellectual detachment from this phenomenon to permit them to feel a philosophic wonder concerning it, or even to observe with particularity just what it is. Many collateral questions are, indeed, often raised with respect to it; but for the prime question: Precisely what am I doing when I know—or what should I be doing if I were correct in supposing myself in
any given instance to know?—for this prime question it is
often hard to get consideration. This is, I think, further due
to two developments in the history of science which have
tended to substitute for this question other questions which
look like it but are not in reality the same. The first of these
—a natural consequence of the legitimate custom of the
physical scientist to forget the knowing he is engaged in
and to fix his attention upon the object—is the substitution
of a description of the physiological conditions of knowledge
for a description of knowledge. I am not assuming at this
point that a physical account of man's cognitive function
cannot be given; I am merely pointing out that you certainly
have not described a case of knowing when you have merely
described the movement of a number of molecules, or still
more minute units of matter, in the animal's brain and
nervous system, with accompanying changes in their electric­
ical charges. These movements may be conditions without
which knowing cannot happen in the human organism; but
to study them is to study the correlates of the phenomenon
of knowing, not to observe and analyze the phenomenon it­
self. It is at least what it is experienced as being, though it
may be more; and it is assuredly not experienced as being
a movement of molecules under your cuticle or within your
cranium. This is an awkward sort of remark to have to make;
for some of my readers are sure to regard it as a truism too
obvious to need mention, and others are likely, in these days,
to regard it as an unintelligible philosophical prejudice. To
the former I make my apologies; to the latter I address the
suggestion that one of the pregnant causes of muddle in con­
temporary thought, especially in the case of some of those
given to taking the name of "science" in vain, is precisely a
tendency to treat things as being what they observably are
not, by substituting a description of their causes or concomitants for a description of the things themselves—especially when the concomitants are readily amenable to the methods of investigation and the principles of "explanation" of the physical sciences, and the things themselves are not.

The other tendency in nineteenth-century scientific thought unfavorable to an appreciation of the nature of and necessity for a direct examination of the organic phenomenon of knowing has been observable in evolutionary, and especially Darwinian, biology and in the vogue of what is called "functionalism" in psychology. It is a tendency in a sense the reverse of the preceding—namely, to substitute the question what knowing does for the question what knowing is or consists in; to offer a description of the thing's effects and uses in lieu of a description of the thing itself. General surveys of organic evolution are accustomed to mention the gradual development of intelligence in the higher animals, culminating in the scientific and technological activities of man, and to point out the new adaptations and new ranges of physical action which this made possible. Such a study of the role of mind in evolution is assuredly of the highest interest and importance; but, once more, to tell how knowledge assists man, and possibly in its rudimentary forms some animals below him in the scale, in the struggle for existence is not to tell what knowing is—any more than giving the clinical picture of a patient suffering from an infection is equivalent to isolating and describing the microorganism responsible for his condition. No physiologist or pathologist would for a
moment fall into the latter confusion; yet a good deal of what is written about the function of intellect as a late-evolved acquisition of organisms is, I think, somewhat affected by an analogous confusion. And one part of that rich melange of incongruous ideas commonly known as pragmatism apparently consists in setting up this confusion as a methodological principle. You are never to inquire what anything is, but only what it does, what its consequences are; pure descriptive analyses of temporal cross sections of reality are to be avoided, and the character of any datum of experience at a given moment is always to be stated in terms of some other experience in which it is to eventuate. The paradoxical consequences of such a program, if consistently carried out, are obvious; but of course it never is consistently carried out. It is used in practice only as a means of evading those particular problems of descriptive analysis, of telling just what is there now, in which some adherents of this school are not interested, or for avoiding consideration of those facts, such as the fact of knowledge itself, which seem incongruous with opinions to which these philosophers incline.

We are, then, to try to describe a case of knowing as such, to make explicit what it is that is happening while a given instance of this phenomenon in the life of the human organism is going on; and we are to avoid substituting for this question any of the collateral questions which I have been mentioning. By "knowledge" here is not meant perception of data immediately and sensibly present at the moment of experience to be considered, but "knowledge about" things not in that manner present; and to make the question more specific, we may take the instance of knowledge about
a no-longer-existing object or a bygone event—whether it be a remembrance of a past experience of the knower, or an inferential reconstruction of a past situation, such as the historian and the geologist are supposed in some measure to achieve. We are not, however, be it understood, concerned with the process and grounds of the inference but only with its outcome. It at once becomes evident, when you examine such a case of knowing, that it is a happening of a highly anomalous sort, when considered from the point of view of the physical sciences, including biology; that it is a type of event which no other science assumes to occur in any of the objects of its study. A knowing of a past object or event manifestly consists in a species of presence, within the experience of some organism at a given moment, of an object which is not at the same moment present in nature—i.e., in the system which the so-called "natural" sciences investigate—though it is present in the system of which those sciences themselves, considered as phenomena, consist. Knowledge, in other words, is a kind of evocation of the absent, and, in the particular case in question, of the physically non-existent. Suppose, for example, you collect a thousand persons of different ages, all of them educated in different places, into one room, and that you first get them all to attend to some present physical object perceptible to their senses. Even in this case it is not strictly true that their percepts of a given state of the object are simultaneous with the existence of that state; but ignoring this slight difference, we may say that the thousand observers are experiencing—whether directly or indirectly—objects and processes now going on in nature, in the space in which their bodies and
organs of perception also are. But now let the thousand persons be called upon to remember each his first school-house and the scenes and incidents of his first day in school. Thereupon there suddenly appears in the experience—that is, in the actual life as organisms—of these persons, a host of objects of memory—elements and aspects, probably for the most part visual aspects, of a thousand differing groups of animate and inanimate bodies and of their movements. But the world of the physical sciences is not at the same time suddenly augmented by this rich, chaotic, fleeting mass of new material. For no physical observation discloses to the investigator, watching the thousand silent human organisms, the presence of these memory-objects; and even if this were not true, the entities which such observation revealed would find no place in the system of physical science. These quasi-bodies, or substitutes for bodies, which have no mass, which are not bearers of energy, which jump about in space—at least in some space—in the most erratic and discontinuous manner, do not and should not as such figure in the analyses of the chemist or the equations of the physicist—even of the physicist since Einstein. True, the scientific investigator will presumably find some difference between the neural processes of the thousand persons in the case when they are directly perceiving an (approximately) coexistent object or event, and the case when they are remembering past objects or events. But what the thousand themselves are experiencing is not the neural processes; and the difference for them between the two cases is not stated, certainly is not exhaustively stated, in terms of the differences between the two neural processes. What they now have present in their
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environments are more or less confused and blurry visual aspects of schoolhouses, teachers, schoolmates. Of their actual environments, of the surroundings with which their organic life is now really occupied, these things are even more certainly a part than are the unperceived though temporally coexistent changes in nerve fibers and cerebral cortex.

The same is true, of course, of all objects, other than immediate sense-data, about which any science claims knowledge, when we consider these objects, not in themselves and as of their own date, but as items in the present experience of the man of science. Dinosaurs are happily extinct upon our globe, and therefore, so far as we know, they are not a part of the environment of present subhuman animals. But they are certainly in some sense a part of the environment of present geologists—in the two specific senses, namely, that the geologists have these creatures actually, though not sensibly, within their present fields of consciousness, are “referring to them,” and that the geologists’ reactions to the sense-impressions which they are at a given time receiving are modified by the presence of these other items in their content of experience. The effect, it is true, is curiously unilateral; the dinosaur, by being known, now makes a difference to the geologist, but the geologist by knowing makes none, or none of the same kind, to the dinosaur; and the kind of difference which the dinosaur makes to the geologist is fortunately very unlike that which he would probably have made, if the two had physically, and not merely cognitively, coexisted. But the significant and anomalous fact remains that, when exercising the function of retrospec-
tive knowing, the organism has to do—and, since knowledge of the past is the guide of practice, has to do in a highly practical way—with things which are not physical realities at the time when the organism is a physical reality and while the knowing is going on. When a knowing animal first appeared in the course of evolution, many prior events and vanished objects, though in one sense remaining as past and irrecoverable as ever, were in another sense rescued from the maw of the all-devourer. In short, then, when you make a valid retrospective judgment, some bit of the past, as we say, comes “before you”; and it is now that it is before you; and nevertheless it is before you as past.

The same characteristic of the knowing experience is, of course, often put in other terms, which merely express a complementary aspect of the same fact. I have been speaking of the phenomenon of knowing with reference chiefly to the peculiar status of the objects known, as entities not at the moment of knowing to be found in physical nature, yet, somehow, quite unmistakably factors at that moment in a physical organism’s total environment. Stated on the other hand as a function of the organism, knowing consists in a power which the organism has to reach beyond, to transcend, both the place and the date of its own existence as an observable object in nature. It is able to range up and down through time, annulling in some measure the transiency of things; to penetrate also into the world of the unborn and thereby to make it possible for the cognitive animal to be affected by events which have not yet happened and to adapt itself to things that have not yet entered into nature—though, happily no doubt, it possesses a far more limited...
vision in that temporal region than we commonly believe it to have in the region of the past. Whatever the specific content of knowing, in whatever direction of time or space it is, in any given instance, turned, it proves to be generically an organic process characterized by a reference to, an evocation and apprehension of, a spatial and temporal Beyond, to which the physical sciences offer us no counterpart among the phenomena which they describe. This, I repeat, is not presented as a theory or an inference, but as a mere description, and a description of the obvious—but not of the unimportant. If there is any such thing as knowing, then that is what it is; whenever anyone asserts that he has a knowledge of anything more than the blank, momentary, uncorrelated content of his present sensations (which we do not usually term knowledge), he is asserting as a fact the occurrence of the type of organic phenomenon which I have been describing. To recognize this simply as a fact, an empirical datum, and as a fact which constitutes a prima facie anomaly among the phenomena of nature is, as it seems to me, the beginning of wisdom in philosophy; to endeavor to connect the fact intelligibly with other facts, to elucidate and, if possible, to alleviate the anomaly is a large part of the philosopher's task. "Just why and how," writes W. P. Montague, "a system of mere cerebral molecules should have this self-transcending reference is in my opinion the key-problem of philosophy." Though I do not find Montague's very original and ingenious solution of the problem satisfactory, I am entirely at one with him in this emphasis upon the primacy and decisiveness of the problem itself.\(^2\)

\(^2\)Montague observes that in causality there is a similar relation of present and past. A prior event may be in some sense said to be
It will, however, already have been perceived that the apparent anomaly of knowledge of which I have been speaking is really twofold—that there is a lesser and a greater anomaly. These should now be formally distinguished. (1) The lesser anomaly is the one which arises when you view the phenomenon of knowing from the standpoint of physical science; and it consists in the fact that there exists an organism, itself physical, which at some moments of its life has as items in its experience, as factors in its environment, things that are not, at those moments, any part of the sum of masses and motions and forces which for the natural sciences then constitute the physical world. That fact is so queer and troublesome to a good many contemporaries who have been trained in the categories and presuppositions of natural science, that they feel the strongest possible repugnance to admitting it—and in some cases may be seen denying on purely a priori grounds that it is a fact. To the consideration of these bold and simple methods for getting rid of the lesser anomaly we shall return presently. (2) The greater anomaly consists in that peculiarity of knowing which philosophers call "meaning" or "transcendent reference"; that is, in the fact that when we know we appear somehow to have within the field of our experience at a given moment objects which we must at the same time conceive as existing present in its effects; and thus in any organic response the organism is really concerned with past (and with future) entities or events. Finding, then, a certain analogy between knowing and a relation which pervades all nature, Montague boldly identifies cognition and causation. Unfortunately the analogy breaks down at the critical point. A cause is not, as such, recalled or "represented" in its effects in the same sense in which a past experience is recalled in memory. We do not, for example, always remember the errors from which we suffer.
entirely outside of that field—for example, as having their being at a time other than the time of the knowing of them. The anomaly here, at first sight, and so long as the philosopher is able to offer no conceptual device for alleviating it, seems to look much like a logical paradox. It is not merely that, in knowing, some organisms deal with entities which are not physically coexistent with the organisms themselves, or with their present exercise of the knowing function; the greater anomaly is that these entities—at least in the case of retrospective and anticipatory knowledge—must apparently be said not to coexist at all with the organism, or with the particular exercise of the cognitive function through which they are known. Yet how can I in any way have to do today with that which does not exist today, which is not a reality contemporaneous with myself? How can a being whose activities are all in a fleeting present, and the entire sum of whose knowings falls temporally within a brief span of years, really behold that which was ages before it or shall be decades, possibly centuries, after it? When a distant and unperceived object or a past event is known, it seems that it must be present to the knower; but it also seems plain that it is truly known as what it is—namely, as distant or as past—only if it is spatially or temporally absent. It must be content of present experience; and yet what is known about it is that it is not content of present experience. In knowledge, in short, as Dewey has put it—in a phrase which I perhaps quote too often—something must be “present-as-absent.” But that, obviously, is a rather peculiar way of being present which calls for elucidation.

Common sense has, of course, long had its own way of
dealing with these anomalies—a way followed also, until recent times, by many philosophers and most psychologists, but now increasingly out of fashion among both classes. The apparent oddity that a thing absent should, when known, become present (while still remaining absent), and that a thing bygone should in some manner and some degree become coexistent with a living organism, disappears—according to this long established interpretation of the fact of knowledge—when that which is present is regarded as a partial and immaterial simulacrum of a past or otherwise absent object, this shadowy replica being called an “image” or “idea.” The present-ation, or making present, of the absent, in which knowing consists, is declared to be simply a representation—not in the etymological sense of a literal “making present over again,” but in the sense of “effective substitution.” The object is represented by an understudy or deputy or surrogate, not having all the powers or attributes of its principal, but sufficient, it is assumed, for all cognitive purposes. But this simple and familiar way of construing the phenomenon of knowing, as a mere occurrence of what are called “mental images,” manifestly does nothing to eliminate the lesser anomaly; and it has been held by a number of philosophers of different schools that it is incapable of elucidating or alleviating the greater. If “ideas” are conceived of as a sort of psychical stuff indispensable to the organic function of knowing, then the assertion of their existence does but increase the anomalous appearance of that function from the point of view of natural science. That assertion would compel biology to one or another troublesome conclusion. One alternative would be to hold that at a cer-
tain stage of evolution an animal appears which produces a species of intangible, imponderable, immaterial secretion, extended, yet not localizable in any space of which the biologist or even the relativistic physicist takes cognizance; and that this secretion has the extraordinary property of reproducing, with some loss of vividness, past phases of the organism's life, and even bits out of the physical world as it was before the organism's birth. The other alternative, to which biology would apparently be constrained, if it admitted ideas as a feature of the life of human organisms but rejected the conception just mentioned, would be the attribution to all organisms of the power to throw off these imponderable secretions. And the question would arise in either case, but in the latter perhaps more insistently, whether this function could, after all, be supposed to be wholly otiose in the determination of animal behavior or even vegetal response—whether it is reasonable to assume so vast a redundancy in nature as that hypothesis would imply. The hypothesis of ideas, then, would in any event fit into the habitual preconceptions of the biologist, and into the general theory of biological evolution, only with difficulty and at the probable cost of some revision of those preconceptions. Dewey somewhere remarks that such a hypothesis "can be accepted by one who accepts the doctrine of biological continuity only after every other way of dealing with the facts has been exhausted."

And to many, as I have said, the theory of representative ideas seems at worst to aggravate, and at best to be unavailing to lighten, the greater anomaly. Some of those who take this view of the common-sense explanation of knowing do
not deny the reality of ideas or images; but they point out that these are insufficient to render the present apprehension of absent objects intelligible. For what we mean by “knowing” evidently is not at all equivalent to what we mean by simply “having ideas.” Human creatures obviously (if they have ideas at all) have many such which do not even pur­port to constitute knowings; and all that do purport to do so seem to involve something more than the simple presence of certain ideas in a given field of consciousness. If the geologist professes to know anything about the fauna of the Jurassic period, he is not merely reporting the emergence in his thought of various “mental pictures” of queer beasts. A poet may be content to tell us of his images as they rise, but not the man of science. A scientific statement is not in­tended to be taken merely as a contribution of the scientist who propounds it to introspective psychology. To know, in short, even supposing that it requires the occurrence of “ideas,” requires also a judgment in which these ideas are recognized as disclosing, or corresponding to, something not identical with themselves in its time and place of exist­ence and in many of its attributes. The present simulacrum alone cannot, for cognitive purposes, take the place of the absent object or the past event. Even its factual correspond­ence with a past event is not enough; the correspondence must be apprehended, the idea must be referred to the ob­ject, before there can be the reality or even the appearance

Some Berkeleian idealists may demur at this remark. Suffice it to say that any of my readers who do not suffer from total amnesia or do not suppose themselves to have been born simultaneously with the beginning of this sentence are realists enough to be committed to a recapitulation of some cases of the kind of knowledge here referred to.
of knowledge. And this means that the absent object also, when knowing occurs, must be within the conscious field of the cognitive organism; that it, as as well as the idea of it, must, as the common phrase goes, be "before the mind." You cannot, it would seem obvious, "refer" an idea to something else of which you say it is a representation without at the same time having the something else present to your thought. And thus it is contended that the hypothesis of ideas, whether well-founded or not, does not serve to remove or even diminish the apparent paradox of the presentness of the absent in the cognitive experience. The ideas do not, it is urged, bring you any nearer to the object; on the contrary, they interpose themselves between the knower and the object and make it more difficult than before to conceive how the knowing function attains its objective.

I now pass on to present some illustrations of the part played by these two anomalies of knowledge in recent and contemporary thought, some specific examples of the diverse reactions of philosophers upon them.

II

No one, I think, ever felt the greater anomaly more strongly nor expressed it more effectively than our own Californian philosopher, Josiah Royce; it seems, if one may judge from the argument of his first book (The Religious Aspect of Philosophy) to have been the difficulty through reflection upon which his own metaphysics was generated. His reasoning on the point is, I am sure, familiar to many
here, but as I cannot assume that it is so to all, it is worth-
while to recall it. A case of knowledge, Royce observes, is
generally defined as a judgment that agrees with its object,
and error as a judgment which fails to agree with its object.
In either case it is assumed that the judgment—the knowing
or would-be knowing—has an object wherewith it can agree
or not agree. This assumption Royce accepts. But he points
out that you get into difficulties as soon as you raise the
question: What is meant by the object of a judgment? If a
judgment is to have an object of its own,

there must be something about the judgment that shows
what one of the external objects beyond itself this judg-
ment does pick out as its own. A judgment has as its object
only what it intends to have as object. . . . But the es-
sence of an intention is the knowledge of what one intends.
. . . So then judgments err only by disagreeing with their
intended objects, and they can intend an object only in so
far as this object is known to the thought that makes the
judgment.

In other words, the absent object, if it is to be discrim-
inated from all other absent objects and now recognized as
the object-now-referred-to—if it is to be “spotted” or identi-
fied at the moment of knowing it—must be compresent with
the thought of it, must be given in consciousness along with
the idea whose recognized as well as actual agreement with
it would constitute knowledge. But on the other hand, it seems
impossible that the object-referred-to should be thus com-
present. For if it were, error would be impossible. I can-
not err with respect to what is actually and totally given
within my present consciousness. Thus it appears necessary
to say that when anyone knows, or even errs about, any
definite object or situation, he must have before him, as a
thing now literally given in consciousness, the actual object
of his judgment, in order that he may recognize it as that
which his judgment is about and at the same time contrast
it with his conceivably erroneous idea of it; and it appears
equally necessary to say that the actual object cannot be
literally given in consciousness, since if it were, his idea of
it could not conceivably be erroneous—and (as we may add)
its true temporal externality to the knowing and to the idea
could not be asserted.

Such is the seeming paradox of knowing which Royce felt
was the primary task of philosophy to remove. But his con­
clusion was that it can never be removed so long as we con­
ceive of knowing only as a temporal event in the life of a
human organism. By no finite knower is the required con­
junction, in a single moment of consciousness, of idea and
object-intended achieved. Only by assuming that there is a
more comprehensive consciousness within which that of
every finite knower is contained, and for which the idea
and its object and the relation which unites them are all
simultaneously compresent, can we escape from the paradox.
And this larger consciousness must, of course, be an eternal,
a nonsuccessive, consciousness. In Royce's own words:

To explain the possibility of error about matters of fact
seemed hard, because of the natural postulate that time
is a pure succession of separate moments, so that the fu­
ture [or past] is now as future [or as past] nonexistent.
Let us then drop this natural postulate, and declare time
once for all present in all its moments to an universal all-
inclusive thought. And to sum up, let us overcome all our difficulties by declaring that all the many Beyonds, which single significant judgments seem vaguely and separately to postulate, are present as fully realized intended objects to the unity of an all-inclusive, absolutely clear, universal and conscious thought, of which all judgments, true or false, are but fragments. . . . Then all our puzzles will disappear at a stroke.

But for whom do they disappear, one must ask. Doubtless they disappear, or have never existed, for the supposed time-transcending and universal Knower, since he by hypothesis has all things compresent to him. But does this make them compresent to me? And if not, does it in the least solve the puzzle how I, temporal creature that I am, can ever know anything, or even be in error about anything in particular? The cases of knowing we are concerned with are knowings which occur at this date or at that, as incidents in the life of this or that human organism. It will not serve to say that all these organisms are, by the hypothesis, fragments of the Absolute, that it is the eternal and all-inclusive Mind that thinks through their poor transitory thoughts. Even if this were true, it would still be in their fragmentariness and transitoriness that men must know, if they are to know at all; and we are assuming that they, and not merely the Absolute, sometimes do know. The problem therefore remains entirely unaffected by the monistic idealist's proposal that—in a homely phrase—we should have all our knowing "done out." So far as the present complication is concerned, the Absolute is not even a god out of the machine; he is a god who remains forever upon the Olympus of his
eternity, helpless to straighten out any of the tangles which arise upon the actual temporal stage of human knowledge.

Whatever, then, be the difficulty of dealing with the greater anomaly within the limits of human experience, it is within those limits, if at all, that the escape from the seeming paradox must be reached; and we may, I think, set it down as a principle on which a large majority of contemporary philosophers would be found agreed, that the peculiarities of knowing are not rendered more intelligible by supposing that organic function to be carried on always with the supernatural assistance of an omniscient and eternal Mind.

III

Contemporary Anglo-American philosophy is chiefly distinguished, as it seems to me, by the number and energy and ingenuity of the efforts made to escape from both the anomalies of knowledge, and by a convergence of the efforts made on the one side and on the other toward a repudiation of the old hypothesis of representative ideas. In other words, motives arising through reflection sometimes upon one, sometimes upon the other, sometimes upon both, of these difficulties, incline several otherwise discordant schools in philosophy and psychology to hold that the notion of ideas, as present "mental," i.e., nonphysical, content through which knowledge of things absent in time and space is mediated, must once for all be given up. Of many it is now undeniably true that, as Dunlap has declared, the "world of representational 'ideas' or 'states of consciousness,'" dim shadows
through which we may look at the objects casting them, or on which alone we may fasten our gaze, attracts no longer faith or interest."

When based solely upon an aversion for the first or lesser anomaly of knowledge, these attacks upon the belief in ideas often take a very simple form. There can, we are sometimes told, be no such things as ideas or mental content or mental states, no nonphysical element in cognition or other modes of what is called consciousness, for the sole and sufficient reason that such things are anomalies from the point of view of the natural sciences. This view is perhaps most often expressed by psychologists of a certain type, with respect to the procedure of their own science. These lay it down as a fundamental rule, primarily for their fellow-specialists, but by implication for all who would make any pretensions to scientific respectability, that no "mental" or "psychical" factors shall be admitted within the purlieus of science. "As long as psychology deals with conscious or mental states of any sort," writes one representative of this fashion 4—so long as psychology does this, "it cannot attain to the dignity of a science, as Kant long ago asserted." (Kant, I may interpolate, has been credited at one time or another with the paternity of many doctrines; at none of his reputed speculative descendants would he have gazed with more amazement and less sense of family likeness, I suspect, than at this latest claimant.) To quote again from the same writer: "Clearly there can be no science which has as its subject-matter intangible and invisible subjectivistic states. . . . If we assume that what is studied in psychology is the development of

4 J. R. Kantor, in Psychological Review (1920).
the complex reaction-patterns and the means whereby they are put into complete or incipient function by various types of stimuli, we need never invoke any mysterious [you observe this word seems here synonymous with 'non-physical'] —any mysterious or inscrutable entities.” To the mere logician, all this necessarily has the appearance of the ancient trick of question-begging definition, done on the grand scale. You first define a “science” in such a way that no study of “consciousness” or “mental states” or activities or content—even if by any chance they should happen to exist—would conform to the definition; you then define psychology as a science. You further tacitly assume that nothing that is not the potential object of a science (as defined) can exist—or at all events be known to exist—and so, by means of these convenient verbal premises, most of the problems of psychology, not to say of epistemology and metaphysics, are settled for you at the outset by a single stroke. You are no longer under any troublesome necessity of examining the facts in each case with an open mind, in order to make certain whether, in some obscure corner of human experience, there may not peradventure be found lurking some “mental thing.”

It is, for example, suggested by psychologists who are still under the influence of what the writer quoted calls the “mentalistic tradition” that the experience commonly called perception is (as Stout puts it) “essentially cognitive,” and that it “involves a reference to an object present to the senses.” The psychologist who uses the a priori premises indicated does not need to analyze perception, as he himself experiences it, in order to assure himself that such a view as
Stout's is mistaken. It is enough for him to note that if that view were admitted it would bring back into psychology those troublesome alien enemies whom he is resolved to exclude from it. If he is to give a description of perception it must be one which "consistently complies with the rigorous canons of natural science," and since those canons expressly forbid him to deal with "conscious or mental states of any sort whatsoever," he knows, before addressing himself to the phenomenon to be described, precisely what kind of elements should, and what should not, be found therein. His account of the facts, in short, must be made to fit a dogmatically predetermined formula. "Only upon the assumption that the perceptual reaction is a natural psycho-physiological response," observes the writer last quoted, "may we hope to escape the arbitrary and confusing concept of a mental content, which is an unavoidable consequence of the presupposition that perception is a knowledge process"—i.e., that it is "the consciousness of an object present to sense."

An investigator who, dealing with a concrete factual question, "assumes" what may be necessary to enable him to avoid a consequence which he "hopes to escape"—is not unlikely to have his hope realized.

This sort of thing—which I mention because there appears to be a good deal of it going on in present-day American psychology—manifestly violates, in the name of science, the most elementary principles of scientific method. "Thou shalt not settle questions lying in the region of empirical fact by

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* Kantor, *op. cit.*, p. 192; the following quotations are from the same article.

* Kantor, *op. cit.*, italics mine.
a priori arguments drawn from definitions”—this first commandment of science, at least, one might have supposed to be sufficiently promulgated; but the writer quoted argues as if he had never heard of it. Yet there is one thing admirable in the passage cited; it is the candor of the admission that if perception—or by implication, any other function of the organism—is regarded as “cognitive,” as a “knowledge process,” then “the confusing concept of a mental content” must be accepted “as a necessary consequence.” In other words, what we have here is a heroic endeavor to escape, primarily from the lesser, but in fact from both the anomalies of knowledge by denying the reality of knowledge altogether. And this is the essence of the view of the school of psychologists known as behaviorists—at least of that straiter sect of them who alone, as it seems to me, have a valid title to the name. The fact is not always so clearly recognized or so plainly expressed as by Kantor; yet, implicitly or explicitly, behaviorism amounts to the proposition that cognitive phenomena are not legitimate subjects of scientific inquiry—a view which inevitably develops, and has as a matter of historical fact developed, into the thesis that those phenomena do not really occur—that there are no functions or “reactions” of an organism which cannot be described in terms of (theoretically if not always actually) observable motions of the portions of matter composing the organism’s body. The best-known representative of behaviorism, seeking some particular motion of matter which can be regarded as the specific “behavioristic” fact corresponding to what has commonly been called “knowing,” finds it in the movements of those muscular mechanisms, chiefly in the region of the
larynx, which are concerned in speech. When you have described these you have, he believes, told the whole story about thought and knowledge. As for “ideas” or “images,” those terms are mere nonsense-words, standing for no fact of experience at all.

But manifestly this is a description of knowing with all the knowledge left out. It bears not the least resemblance to what anybody—including the behaviorist—means by knowing, and claims for himself when he professes to know. It states wholly in terms of alterations of position of physical particles within an organic body a function which, as we have already seen, has for its essence the effective presentation in an organism’s experience of things outside its body and sometimes external to its date of existence and to its entire physical environment as constituted at the moment of the exercise of that function.

Behaviorism, nevertheless, is a phenomenon of much interest to the historian of philosophy and of science, because it brings into perfect sharpness of definition the contrast between two modes of approach to the more general problems of science, and the consequences of one of these, when universalized. It has been the usual custom of the specialist in any of the physical sciences, as I have observed, to forget himself and keep his eye upon the object. The testimony of his senses respecting the qualities and behavior of observable external things and theories, conceptual constructions, suggested and in the end tested by such observations, have constituted the content of his science. And since he has not found it necessary to assume the occurrence of the cognitive phenomenon in any of the objects of his study, he has been
able to ignore the fact that he himself is all the while exhibiting that phenomenon. The historically interesting and crucial thing that has been recently happening in psychology is the attempt to apply this procedure in thorough-going fashion to man himself. It was natural enough that the attempt should be made; it is, perhaps, useful that it has been made. If, as some have hoped, a comprehensive unification of knowledge on the basis suggested by the results of the more "fundamental" natural sciences is ever to be achieved, that unification must include all the functions and processes that make up the life of the organism man. And, as a step toward that ultimate unification, it was inevitable that the experiment should be tried of bringing all human phenomena at least within the categories of ordinary biology—that is, of a biology which begins by disregarding the very fact of knowing which it exemplifies. It is the behaviorist who has performed this logical experiment for us; and the result—which might, I should have supposed, have easily been foreseen—is both conclusive and amusing. What it is I have recently pointed out elsewhere; but I may perhaps be permitted to recall the point briefly here. The behaviorist is faced by an embarrassing dilemma. He must either exclude himself and his activities as a man of science from his generalization as to that in which all animal and human activity consists; or he must include himself and his activities therein. If he excludes himself, he is admitting the occurrence in at least one organism, himself, of precisely the kind of knowing which was described at the beginning of this paper; he is claiming an acquaintance with things that are not present muscular or other movements inside his own body—for example, with his own past movements, with the muscular processes of
other organisms, with stimuli external to all organic bodies, and the like. He is, in short, admitting that there figure in his organic life entities transcendent of both the time and place of his existence as a physical entity. If, on the other hand, he includes himself in his generalization (as in consistency he should) he is thereby disclaiming any pretension to knowledge, and admitting that the utmost that he as an organism can at any time accomplish is to move his laryngeal or other muscles, or other portions of his anatomy, in certain so-called “reaction-patterns.” That is doubtless an interesting exhibition; yet it hardly seems equivalent to the creation or advancement of a science.

Such are the ironic revenges which logic takes upon those men of science who begin by refusing, because of dogmatic methodological preconceptions, to look even one fact in the face—at least when that fact is the nearest at hand of all, and the one in which the conduct of scientific inquiry and the attainment of scientific conclusions themselves consist. But if the behaviorist’s logical experiment is thus a complete though instructive failure, it would seem to follow that what may be called a generalized biology, and a generalized conception of the process of evolution, can be possible only upon condition that the cognitive function be fitted into its place as a biological fact, with whatever supplementation or revision of the rest of the scheme that may make necessary.

IV

I have time to touch upon only one other contemporary attempt to deal with the two anomalies of knowledge; and I
select the most important example of an especially influential and interesting tendency of current opinion on these matters. The tendency is more largely represented among British realists of the present time than in America, though it is not without American spokesmen. My colleague, Professor Knight Dunlap, a distinguished graduate of this University, holds a kindred view, so far as the issues here under consideration are concerned. But the specific example to which I shall limit myself is the doctrine developed by Samuel Alexander in a long series of papers, chiefly in the Proceedings of the London Aristotelian Society, and recently systematically set forth in his *Space, Time and Deity*, one of the most considerable, ingenious, and carefully elaborated contributions to philosophy which the present century has produced.

The lesser anomaly is a good deal attenuated but not altogether abolished in Alexander’s theory. Whenever knowing occurs, a “mental event”—an event which *in a certain sense is* not physical—admittedly occurs; without this, Alexander holds, there can be no such thing as knowing. This event consists in an activity apparently peculiar to some organisms, and in its higher forms to man—called generically “mind” or “consciousness” or “awareness.” It is always directed upon objects; the name of it, indeed, is not complete unless followed by the preposition “of.” And these objects in no case owe their existence or their qualities to it. With this unique activity Alexander thinks we have an immediate or “inner” acquaintance which he calls “enjoyment”—a term, however, which is not to be understood as implying that all awareness is accompanied by agreeable feeling. We “enjoy”
our own consciousness, then, and—by what Alexander seems, at least at times, to regard as a radically different type of activity—we "contemplate" objects; more precisely, consciousness itself is a contemplation of objects. But the residuum of the distinctively "psychical" thus left in Alexander's universe seems, at first sight, to be decidedly scanty. For, first, consciousness itself is declared to be "identical" with certain physiological phenomena. Since we discover, "partly by experience, partly by reflection, that a process with the distinctive quality of mind or consciousness is in the same place and time with the neural processes," we are "forced to go beyond the mere correlation of the mental with these processes, and identify them. . . . That which is experienced from the inside or enjoyed as a conscious process is, as experienced from the outside, or contemplated, a neural one." But it is not clear that this "identity" is not compatible with a very large measure of difference—though I confess that Alexander's exposition of his views on the point seems to me extraordinarily elusive. At times he goes so far in the direction of pure materialism as to suggest that "mental process may be expressible completely in physiological terms," though, of course, in distinctive physiological terms, which would not correctly describe a "non-mental" physical process. It appears, in some passages, to be suggested that what "chiefly" differentiates those neural

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\[ \text{The attempt to show that there is a different activity, and a distinct relation to the entity apprehended, and not merely a different kind of entity, in "contemplation" and "enjoyment" appears to me wholly unsuccessful; but as Alexander attaches great importance to the distinction, it is best to use his terms in explaining his position.} \]

\[ \text{Samuel Alexander,} \] 

\[ \text{Space, Time and Deity (1920), II, p. 7.} \]
processes which can also be named “psychical” is their “locality in the nervous system” or their high degree of physiological complexity and organization. Elsewhere the language of the identification theory is abandoned, and we are told merely that the neural process “carries thought” — which last, therefore, can hardly be the neural process. And Alexander expressly argues against the view of some American neorealists that consciousness can be adequately represented merely by conceiving of “an environing world of things provoking specific neural responses.” Such a doctrine appears to him “to fail to account for a vital feature of the cognitive situation, namely, that in being aware of a fire, the fire is before me, it is I who see it.” There is, in other words, not merely the fire and the neural response, however complex, but also “an act of consciousness” whereby the response “is something which experiences itself.” This “experiencing of itself” would appear to be something quite distinct from what is usually understood by a neural process, viz., a particular type of molecular motion or an electromagnetic transaction between electrons. Unfortunately Alexander fails to face this issue definitely, and his position consequently remains hard to define; he does not tell us plainly whether “consciousness,” or a “mental act,” is a motion of molecules (of a complex sort and in a special portion of the brain), or whether it constitutes an event of which no description of even the most complicated molecular movements could give us any true notion. The impression one gets, however, is, I think, that the author of Space, Time and Deity, if he should deal expressly with this question, would answer that “mental processes” are not merely movements
of particles—that the "enjoyment" of a given neural process (viz., of the change of position of a group of particles moving at a given velocity) is not literally the same occurrence as either that change of position, or some other change of position of some other particles, taking place at the same time. If this interpretation is correct, there is an irreducibly nonphysical element in the process of knowing, as conceived by Alexander, though that element is only one side of a two-sided fact: a cognitive act is, as "contemplated," truly a physical phenomenon in the nervous system, though as "enjoyed" it is not a physical phenomenon, nor in any respect similar to one. As regards the objects of knowing there is, happily, no such obscurity in this author's presentation of his doctrine. The objects of awareness, he tells us, are exclusively "non-mental or physical realities," "some part of the whole world of Space-Time." The act of knowing merely, so to say, illuminates what is there entirely independently of it; that which is "before the mind" is not composed, either in whole or part, of nonphysical "ideas," but of a selection out of the actual content of the physical world, apprehended without mediation or representation.

Whatever be the precise measure of the nonphysical element in this philosopher's world, it seems, at any rate, sufficient to exclude that "biological continuity" which I have quoted Dewey as desiderating. The evolutionary process is here conceived as literally creative. There are sudden transformation scenes in it; new types of reality "emerge," to use a favorite word of Alexander's; and "consciousness" is, at all events on this planet, the latest of these saltatory innovations, though we have no reason to suppose that it will be
the last—indeed we are offered a “speculative assurance” (on what real grounds it is difficult to see) that it cannot be the last. So far, then, as the first anomaly consisted in the implication of such biological discontinuity by the phenomenon of knowing, it still stands. The content of experience and the world of objects contemplated have, indeed, been purged of everything mental or subjective; but knowing itself, at least as it is “enjoyed,” apparently remains (in spite of its so-called “identification” with neural processes) a sheer external addition to that world, having no attributes, beyond presence in the same time and space, in common with its processes.

But what precisely does Alexander mean when he asserts that—for example, in the specific case of memory—consciousness is conversant exclusively with “physical realities”? What and when is the physical reality upon which memory is directed? Is it the actual past object or event? And if so, does the assertion that the object apprehended is always “physical” mean that the past object is now a part of the physical world? Alexander’s language at times might lead one so to construe him. He observes, for example, with reference to his own view, that it doubtless “seems in the last degree paradoxical to ascribe to the image of a landscape regained in the memory—and still more to one which one has never seen—an existence, in this case physical, independent of the mind. . . . Images appear to be patently psychical, to be mere ideas and in no sense realities.” Now the principal reason why memory-images have appeared to most philosophers and psychologists of previous generations to be psychical is simply that there does not seem to be
room for them, at the moment of their being experienced, in a present physical scheme of things; and the air of paradox which to such persons might seem to invest Alexander's conception might be due to the supposition that he declares this imaginal content to have a place in the present physical world. But it turns out that the adjective "physical" is used by Alexander in a temporally unbounded sense. It does not imply presence in any particular physical system synchronous with the act of knowing. The remembered object, he writes, "is physical insofar as [it] behaves according to the laws of physics." A remembered friend "does not speak now, but he is remembered as speaking, or, to vary the example, the memory object is the physical man cutting physical trees yesterday." In short, the object of my retrospective knowledge is not declared to be any part of my present physical environment; it is asserted to be "physical" only in the past tense. In so far as Alexander affirms the physicality of the remembered object merely in this innocuous sense, he will hardly be charged with paradox.

There is, it is true, a real and, as I think, fatal paradox in his doctrine; but it is precisely the reverse of the one suggested. It consists, not in putting the known past event or object into the present physical order, but in leaving it in all its pastness and providing no present substitute for it—in giving to the act of cognition nothing whatever that is synchronous with itself to deal with. Here, however, we pass again from the lesser to the greater anomaly of knowledge; and we must now consider some observations of Alexander's which have the look of being intended as his solution of the latter difficulty.
He often writes, namely, as if he had framed a way of conceiving of the cognitive situation which eliminates the anomaly of transcendent reference altogether. "The relation of the conscious subject to an object which transcends it," he declares, is not "unique"; it is, on the contrary, merely "an instance of the simplest and most universal of all relations," that of "compresence within one space and time." There is no mystery about the compresence of two physical things, and just as little about the compresence of a "mental process" with "some existent of lower order." But it presently appears that "compresence" here does not mean simultaneity; it means merely the existence of two things at any two times and in any two places within the entire range of an assumed single Time-Space system. This meeting is compresent with the first meeting of the Philosophical Union which I ever attended, thirty years ago; George Washington is compresent with Mr. Harding, and the fiftieth President of the United States is compresent with both. In this large and liberal sense, undeniably, compresence can be asserted equally and univocally of all objects or events, whether mental or physical. It happens, however, that in knowledge of the past or future, there empirically occurs a compresence of quite a different sort. The relation between George Washington and my "consciousness," when I am thinking of him, is scarcely the same as the relation which subsists when I am thinking, not of him, but of something else; yet in both cases my "consciousness" and the Father of his Country are equally compresent, in Alexander's sense. Nor—leaving the temporal difference aside—is my consciousness of the things in front of me, which I see, the same relation as my mere
compresence with the things behind my back, which I do not see. Alexander thus finds himself constrained to recognize that "there is nothing in the relation of two material finites comparable with the situation" exemplified by genuinely cognitive consciousness, and, in particular, by the remembrance of a past experience, and only imperfect analogies with it among noncognitive organic phenomena. This being the case, his remarks about "compresence" seem to have no relevancy to the actual anomaly of transcendent reference.

Alexander, op. cit., II, pp. 83-84. On this point also, however, Alexander's language seems to me obscure and wavering. He manifestly desires to minimize the difficulty by "using 'knowing' in an extended sense for the relation between any finite and those of lower empirical order," i.e., for all cases of compresence where there is a difference of grade between the entities compresent. Thus, "just as objects [e.g., sensible qualities] are to our mind partial revelations of the thing from which the object is selected," so to an amoeba inanimate things "are revealed in their material characters," and to one inanimate thing are "revealed" the primary qualities of another. This at first sounds like panpsychism. But we are at the same time told that the paramecium reacts to stimuli "without, it would seem, the vaguest consciousness of any object." In short, in its "extended sense" the word "knowing" lacks precisely the signification which is of its essence when we speak of our "knowing"; we are, indeed repeatedly warned to "remember that the 'mind' of a [merely] living thing is not conscious mind, and has not the empirical character of consciousness at all." In short, as Alexander grants, the "extended use" of the term is merely a metaphor; and the things to which it is figuratively applied are avowedly without the specific characteristic which the word connotes when it is applied literally. Thus, to lend support to the proposition that "all that knowing" (i.e., admittedly "conscious" knowing, or awareness) "implies is the compresence of a mind and an object at a lower level," "knowing" is given a new meaning from which awareness is expressly excluded.
His real procedure with respect to that anomaly is, if I have understood his meaning, to accept—though not always unambiguously—one of the two horns of the dilemma in which it consists. The believers in ideas, as we have seen, have held that belief largely because it seemed to them evident that, when they thought of the past, they must necessarily have—and also, as an experienced fact, did have—in their consciousness some present content which could not be considered identical with the past object simply because of the difference of date between them. It has, in short, usually been assumed that when, to use Alexander's word, I "contemplate" something, that which is directly contemplated must exist simultaneously with the contemplation. Alexander, however—and this is his real paradox, to which I referred a moment ago—appears (in common with several other contemporaries) to reject this assumption and to maintain that a present act of knowing may be directed immediately upon past or future objects. He writes, for example, in what seems to me his most definite passage on the subject: "The truth is that remembering and expecting do occur at the present moment, but we are not entitled therefore to declare their objects simultaneous with the present." The word "object," to be sure, is even here not wholly free from equivocality. There is a sense in which anyone who supposes us to have any knowledge of past or future at all might subscribe to the sentence just cited. But I do not suppose the statement to be intended in this truistic sense. I take it to mean—and this seems the only meaning congruous with the doctrine as a whole—that when you remember, as I now invite you to do, the appearance of the Tower of Jewels at
the Panama-Pacific Exposition in 1915, there occurs an act or state of being conscious which is entirely distinct from anything that you are conscious of, and is an existent of the present date; but that on the side of experienced content—of that which you have before your thought—there is nothing whatever which can be said to exist at the present date, but only things existent in your past experience, and, in the chronology of the physical world, belonging to the year 1915 as reckoned in the local time-system of this planet.\footnote{Here too, however, it is difficult to be quite sure what Alexander means; and the view mentioned should perhaps be described rather as a possible than as a certain interpretation of his position.}

And just here, as it seems to me, we come upon the crucial issue concerning the anomalies of knowledge, and upon one of the crucial issues in contemporary philosophy. If this conception of an act of consciousness with no simultaneous content of consciousness is tenable, the greater anomaly ceases from troubling, and a long step is taken in the argument against the existence of representative ideas. Knowing, so conceived, would reach the object in all cases directly, and no intermediaries would be necessary. But is such a conception tenable? I am unable to think so. It seems to me to conflict both with the observable facts and with the logical necessities of the case. I cannot recall having myself ever enjoyed a state of cognitive consciousness in which there was nothing simultaneously before the mind. When I think of past or future events I always find myself confronted with present images. To remember, as common speech testifies, is to recall—to give present (though not physical) existence
to some of the characters of a bygone item in experience. Nor can I so much as conceive how the sort of long-range yet unmediated knowing—a kind of cognitive *actio in distant*—which Alexander’s theory implies, could take place. That an activity of apprehending, which of itself, it must be remembered, is entirely distinct from anything that may be apprehended, should occur at a given date and have nothing at that date, nor within that moment of experience, to apprehend—that the process of knowing should operate, as it were, *in vacuo*—is a notion to me totally unintelligible. If it is asserted that the only existent given in memory, when we think of a Philosophical Union meeting of thirty years ago, is the original meeting, that this remains fixedly in the year 1892, and that there now occurs no manner of revival or presentation of it, even of the most fragmentary sort—then the second half of this assertion appears to me expressly to deny what the first half assumes, namely, that we are now remembering that bygone meeting. I recognize that Alexander and others who are of his way of thinking have been driven into this paradox through the pressure of the greater anomaly of knowledge, that they have sought in this conception a way of escape from a genuine difficulty. But in no such absolute temporal sundering of the process and the content of thought or knowledge can, I think, any real escape be found.

With respect to the greater anomaly, then, we seem driven upon the horn of the dilemma alternative to the one apparently chosen by Alexander; in other words, we must conceive of all the content or material of an act of knowing as temporally present along with the act. To use one of Alexander’s
terms in a sense perhaps not quite his, what I contemplate—what is “immediately before the mind”—when I bethink myself of yesterday’s events is not something existent yesterday, but something existent today. But is not this horn of the dilemma, it will be asked, as impossible as the other? For what, in the case supposed, I know about—if there be any knowledge involved in the matter at all—is not today, but yesterday. And how is such a knowing of things past conceivable, if the only content of present consciousness is present content? Is not the alternative proposed tantamount to a denial of the possibility of knowledge? If we were compelled to answer this question in the affirmative, our conclusion would necessarily be that the problem is insoluble—that neither of the conceivable alternatives is tenable, and that the very idea of knowledge is thus involved, for reflective thought, in an irremediable antinomy. The past or otherwise absent object of knowledge, we should be obliged to say, cannot in fact be absent, or external to the content of present consciousness; for in that case it would not now be known. But on the other hand, it must seemingly be absent—for it is of past or otherwise not-present objects that we are supposed to have knowledge. But in truth, I believe, we are not forced to accept so strange and disturbing a conclusion. The two sides of the seeming antinomy are not of equal logical force; one of the alternatives is meaningless, the other,

11 This does not mean that, when not engaged in philosophical or psychological reflection upon the point, I necessarily think of yesterday's events as existing as today's content of consciousness. The observation that the content is in fact present, not past, arises only when the question here dealt with is raised, and is not explicit in ordinary memory experience.
though it undeniably offers some difficulties to our ordinary habits of thought, is nevertheless capable of intelligible formulation, and is, in fact, simply an accurate description of the common natural event called knowing. To speak of a present awareness of things blankly absent, of known past events that, in being known, undergo no recall or translation into the present tense, is, as we have seen, a mere self-contradiction; it is to say that one has now before one’s mind something which is at the same time declared not to be now before one’s mind—since it is declared to have now no sort of existence at all. The content or make-up (I do not speak of the causes) of a concededly present experience cannot without absurdity be described in terms of past events. But if, on the other hand, we begin our account of knowledge by recognizing the invariable and indispensable presence therein of content existentially synchronous with the act or event of knowing, we can then, I believe, find within such content all that is necessary to make knowledge of the not-present comprehensible. For the content given in memory, in other retrospection, or in anticipation is not a simple, flat, one-dimensional thing. Temporal perspectives are contained within the limits even of a single “specious present”; elements which are presented simultaneously are nevertheless also presented as not simultaneous, either with one another or with the present in which they are experienced. The present images without which, as I have already maintained, it is impossible to “recall” the events of yesterday, have two dates—their date of existence in consciousness, which is today, and what may be called their date of reference, which is yesterday. But the pastness of their date of reference is
itself a present quality of the memory-images. It is something which I directly experience as one of the attributes of the now given content; and I do so without performing the miraculous feat either of actually turning backward time in its flight, or of being aware of an object without having any present content of my awareness. In other words, we apprehend the various elements of our present content as fitting into a framework of conceptualized temporal relations—which in fact appear in consciousness largely in the form, or by the aid, of spatial imagery, as of a calendar or a timetable. And this temporal framework in which our images appear has a curious twofold relation to our present consciousness. As a datum for psychological observation, as an existent now given in consciousness, the framework is included in the present moment's content; but at the same time, as a conceived scheme of relations, it logically includes the present moment and its content as a single unit in the larger system represented. The solution—as it appears to me—of the anomaly of the presentness of the absent in cognition lies precisely in this dual and (to use a term of Royce's) “self representative” character of thought. A given moment of thought may consist in a representation of a whole world of objects in relations of many kinds—temporal, spatial, logical—in which it is itself, as represented, a mere fragment. Thus it is that a given thought, e.g., a memory, can, and does, cognitively or representatively transcend itself, without any existential self-transcendence. The memory-image which I am at this moment evoking exists as a transient bit of reality now, and at no other time; but that which does thus exist now is a representation of a more com-
prehensive whole in which the now is an element consciously distinguished from the not-now. Because our thought has this obvious peculiarity, we can see how it is not only possible but necessary that an act of rational cognition should be conversant with a Beyond, while yet as a natural event it is limited in its existence to the here-and-now; we can see how it is conceivable that a bit of present content should "mean" the past and future without being past or future, and how the experience or awareness of such a meaning is not any sort of removal into the past or the future.

And we can now also see precisely what is meant when it is said that the content of a cognitive experience—of memory, for example—is "present-as-absent." That content (the memory-image) is present in the literal sense; it is an existent contemporaneous with the event of knowing. But it is presented "as absent" in the sense that, in the conceptual scheme of temporal relations which is also now presented, the memory content is assigned a position external and prior to that occupied in the same scheme by the present moment. And there is no contradiction in this; for the presentness and the pastness are not predicated of the same content in the same sense. The content has a date and it also includes or represents dates; and the date which it has is not necessarily the same as the dates represented. It is true that such an account of the matter implies that all knowing of things remote in time or place is indirect and substitutional. The conceptual pastness of my memory-image is not an experience of pastness; and the bygone event remembered does not itself now enter my experience. If it did it would not be what we mean by a remembered event, namely, one
which has ceased before the remembering of it occurs. Pastness is never—and from its own nature cannot be—experienced at all; it figures in experience only through a present peculiarity distinguishing certain present data from others. We have a meaningful idea of it, but no “acquaintance with” it; and the idea means it partly because it is one of those ideas which present themselves in consciousness saying: “I stand for something not myself; the thing that I am is not the thing that I mean.” The same is, of course, true of the idea of the future; but the two are differentiated, they have distinctive present values, through their utterly dissimilar relations to our volitional and affective life.

There are, however, some minds which appear to have an unconquerable repugnance to such a conception of knowing as indirect. Nothing less than literal and complete possession of the object known will satisfy them. They wish to transact their cognitive business only with principals, never with deputies, however extensive the powers of attorney these may exhibit. If it is a question of dinosaurs, they would presumably insist upon meeting the original reptiles in the actual Jurassic period, before admitting that those monsters are “known” at all. Such a craving for immediacy in cognition, however, is simply a rebellion against the limitations of

12 This is said without prejudice to the view, held by some psychologists, that in a single “specious present” we directly experience a small lapsing bit of the past. For a past which is admittedly external to a given present (e.g., a remembered past) is obviously past in a very different sense from one which is supposed to be contained within a so-called present experience, and is thus somehow both present and past. It is only with pastness in the former and more rigorous sense that I am here concerned.
our human powers—limitations arising chiefly from the fact that man, the knower, is himself a temporal creature, whose existence is meted out to him in successive drops persisting each but for a moment. Because his life is of such a sort, he can never enter into actual present possession even of his own past—nor of his own future, so long as futurity is intelligibly predicable of it. His knowledge, therefore, of aught that is not present, or not his own experience, is inevitably vicarious; the objects which he often would most wish to make fully his own—his lost youth, an expected good fortune, his fellows' thoughts and feelings—keep their distance, preserve inviolate the distinctions and reciprocal exclusions which make up the order of the world. Knowledge thus, in Santayana's admirable phrase, is a salutation, not an embrace. Instead of denying these unescapable limitations of our knowing, we do well, while recognizing them, to fix our attention upon the other half of the story. Indirect though knowledge is, it is yet a presentation, within the limits of the passing moment and the individual consciousness of things apprehended as transcending those limits. Within the microcosm of my present thought is reflected, as in a mirror, a macrocosm of other objects and other thoughts—and they are known to be other simply because their images bear the marks of "otherness" upon them. And this means nothing mysterious or "metaphysical"; it merely names a fact of the commonest everyday experience, namely, that data which are immediately and indubitably present—which offer the conclusive evidence of present existence which consists in actual givenness in this moment of conscious life—yet carry with
them familiar, though not infallible, *indicia* of pastness or of futurity or of presence in the conscious life of others.\(^{13}\)

Such, then, I suggest, is the solution of the chief paradox of knowledge. But such a solution is obviously impossible except upon the assumption which I have throughout been making in expounding it—the assumption of the existence of representative ideas. In other words, the only available way of escape from the greater anomaly seems to require us cheerfully to accept the lesser. The content synchronous with a given act of knowing by means of which alone temporally or otherwise absent objects can be brought “before the mind” clearly cannot be assigned to that public, coherent, measurable, ponderable world of moving masses or particles with which the physical sciences have to do. And if we mean by the adjectives “mental” or “psychical” simply “existing but not as a part of the simultaneously existing physical world,” then, aside from other considerations which have been intimated, the occurrence of mental entities in nature has been sufficiently demonstrated by the result of our analysis of the phenomenon of knowing.

I am well aware that the positive thesis concerning the greater anomaly which I have presented stands in need of a more elaborate formulation than it has here received, and that some difficulties may still naturally suggest themselves. So large a theme can hardly be adequately dealt with in a single hour’s lecture; and I must here be content but to have

\(^{13}\) The question how tests of validity in our knowledge of not-present objects can be applied in accordance with the general view here indicated lies beyond the scope of this lecture.
sketched a way of thinking about this strange activity of ours which seems to me at least worthy of consideration, in view of the apparent failure of the other attempts to rid our knowing of the paradoxical look which it wears when we take the trouble to reflect upon it. For the rest, this discourse will have perhaps served its purpose if it has done something, first, to make a little more vivid to some of my readers, the queerness of knowing, its distinctiveness among natural processes; second, to trace some conflicting tendencies in contemporary philosophy to a common source, and, what is more, to a common and genuine difficulty in interpreting an indubitable and familiar fact of experience, and thus to render these conflicts a little more intelligible, to make it more understandable why philosophers are so; and lastly, to suggest some reasons for suspecting that funeral orations may have been pronounced prematurely over the hypothesis of representative ideas. For I will conclude by repeating the confession that, in spite of the ingenious reasonings of many contemporaries, I am still much inclined to believe that I have ideas, and that without them I and other men would know even less than we do—would, to be precise, know nothing at all.