AN APPROACH TO GOD

BY PROFESSOR KARL SCHMIDT

THE following pages sketch an argument which is really the culmination of a whole philosophy. To present it without the columns and rafters that support it, is a hazardous enterprise. To carry it out properly would require the literary genius of a Plato, a Descartes. Yet I attempt it, if only to show that such an argument can be made today by methods designed primarily to account for our mathematics and physics.

As a general orientation may I say that my thought moves in the line of the "Great Tradition," by which I mean that fundamentally consistent mountain range of thinkers which is characterized by its high peaks: Parmenides, Heracleitos, Plato, Descartes, Leibniz, Kant. These great thinkers no doubt often seem in direct opposition to each other; yet they are fundamentally agreed, and each illuminates the others. Whatever results I have reached, can, I think, be stated in their terms and be presented as their meaning. This is particularly true for that strange doctrine of the "separation of problems" which plays an important part in my argument; Plato had it in his mind; it is the key-note in Kant's *Critique of Pure Reason.* However these things did not dawn on me until, after a study of the great masters, I became absorbed in the work of modern logic, and the recent work on the "postulates" of mathematics. Nothing more important has happened in the history of thought than the work of these men, mathematicians and physicists, most of them, not professional philosophers. This is the background from which I view the problem of religion. I am not a theologian; I am not even very familiar with their theories; and am therefore glad to be corrected and instructed. But an approach to God is an intensely personal matter. The older Plato was quite right in saying that the exist-

ence of God could be proved; but quite wrong in thinking that all atheists should be locked up and taught by the wise men of the state until they saw the light. This forcible method would have made a confirmed atheist of me. I was brought up in a Christian Church, baptised and confirmed in it. I received instruction in the Christian religion until I was eighteen. I always listened open-mindedly and with interest. My teachers in religion were good and wise men. But long before they were through I had stopped praying, I had stopped going to church, I had stopped believing in God. When the childhood picture of God the Father left me, nothing took its place. The question: where is He, had lost all meaning when I found that He was not in the heavens. Whatever explanations were given seemed mere quibbles. My mind avidly seized upon mathematics, physics, chemistry, biology; and it did not take me long to discover that, whatever they might think they believed, these teachers of science did not believe in a God. As I developed I sensed more and more the *antagonism* between the scientific man and the man of religion: religion had been the enemy of modern science, it had, vainly it is true, but with brutal force, attemped to block the progress of scientific thinking. And I was for the men of science; their intrepidity, their honesty, their freedom from personal bias, their steadfast devotion to clarity and truth and complete disregard for any personal advantage to be gained out of their research made me align myself with them. I went to the university as a student of mathematics and natural science.

Even, some years later, after I had been irresistibly drawn to philosophy, it was the scientific problems and those of ethics, which attracted me most. When I first read Kant's *Critique of Pure Reason* I *felt* a *scientist* speaking to me; when I went to study with Hermann Cohen at Marburg it was his emphasis on the relation of Kant to *Newton* which impressed me most.

I am not writing an autobiography. But on some questions we cannot speak in a brief paper without stating in the beginning our personal bias.

And quite clearly my own personal experience was, on the whole, typical for most of those who went to the University thirty or forty years ago; it is still, though in the higher strata the winds are blowing in a very different direction, the frame of mind of most of us to-day. The attempt of the "humanist" school of theology to

define religion in terms which do not involve God seems significant. Let me take, for example, Professor Haydon's formulation "the joint quest for the good life."[1] It is clearly an attempt to save of religion what can be saved at a time when a "God" seems quite out of reach, inaccessible if existent, but most probably merely a myth, a poetical figure. The humanist school abandons God openly, honestly, sincerely; and this should command respect. It recognizes the fact that the faith of many of our educated people is corrupted or wavering; not because they do not want to believe, but because they do not see how they honestly can believe, what is presented to them by our religious leaders. "I will *show* you God and thus *prove* to you His reality," said a prominent minister to a large college audience; and then pointed to the "World," which, he said, was God's body. "And as your and my bodies have souls, why should not the World?" The speaker, it was clear, was in the clutches of a "naturalistic" philosophy; there was no reality for him except the reality of natural science. And in this, whatever their differences, he and his audience were at one. He used the "common sense" criterion: for anything to exist means: you can lay your hands on it. So, naturally, if God were to "exist," he must be "body," or at least "have" a body; and here was his body, the World! The humanist school, no doubt, feels that that kind of God is not good for much when it comes to religion; with that I agree. And as long as they have nothing better to offer, they prefer to get along with a religion that omits God altogether. Does this not leave us a noble task, they might ask? Is there not still an enterprise in which a man may enlist his best endeavors?—Yes! Yes! A proud challenge; I am all for it. But it is *ethics,* let us be clear about it, nothing less, nothing more. We may ornament it with religious poetry, it still is ethics. And if we can get no more, we will have to get along. And it is the counsel of despair; despair of any hope of finding *"room"* in this world or out of it for a God. This is our dilemna to-day. The physical sciences fill all possible space with *their* entities and their laws; and the physical sciences are triumphant. We seem to have at best the choice: cleaving to God, forsaking all physical science; or, accepting physical science, admit that the "Götterdämmerung" has come: a hope, a dream, a fairy tale is at last recognized for what it is: a mere myth whose historical origins we can now see clearly, whose psy-

[1]Haydon: *The Quest of the Ages.*

chology we begin to understand, but nevertheless a myth. And we, having at last come to the full stature of men, will put away childish things.

It does no good to insist, as some do, that science is too arrogant in its claims, which to a large extent are more like promissory notes, rather than cash payments; that it proclaims "laws," but surely cannot yet explain *everything* by its laws; and that science itself (here they want to let it be known that they are au courant in things scientific!) is in a great turmoil at present, and not as cock-sure as it was a little while ago: Newton is proved wrong to-day, (they say). Einstein may be proved wrong tomorrow. And thus the cause of religion is not yet quite hopeless!—A futile endeavor, it seems to me, to build a nest for religion in the crags and crevices of the wall which science is erecting. Think of the enormity of having one's religious needs prompt one to pray for the miscarriage of the scientific enterprise! No, if things stand as they say, let us make our choice and abide by it.

Nor does it do any good to say: a God may be mere poetry and yet be of great *benefit* to the believer. I think religious poetry and, still more, religious music, are a great asset for any civilization; no sermon ever stirred me so profoundly, and none, I believe, ever will, as an adequate performance of Bach's Mass in B minor, or Beethoven's Missa Solemnis. But this confuses the question. To say: God is mere poetry(i. e. a mere fiction), and yet say: *believe* in Him, because such believing is very beneficial for you, is something like saying to a man: No woman exists whom you can love, but *imagine* one and love her with all your heart, and it will be very beneficial for you. It is ridiculous! God *may not* exist; then do not invite people to *believe* in Him as if He existed. The philosophy of the "as if" does not apply here. No, when we begin to count up the benefits which the belief in God has brought (and, I suppose, the harm which it has wrought!), we show that the belief has *gone;* "he has not heard yet that God is *dead.*"

My position is, quite simply: (1) Religion necessarily involves God. (2) Science and religion do not exclude each other: there is *"room"* for *both.* (3) My philosophy of nature not only *"permits"* God, but *demands* Him.

I shall not spend time on the first point; I presume we would all like to agree with it, if only we could find a way to God. For that

is the important issue: does God "exist." And my argument consists of the steps enumerated above as (2) and (3): science leaves *"room"* for God; and science demands *God.*

My work began with a whole-hearted investigation of systems of mathematics and physics. I wanted to examine and establish their *validity:* in what does it consist, and on what does it rest? The propositions which I shall presently state were obtained to answer this kind of question, not to find a way to religion, which was then still "below the horizon." I do not establish these results in this paper. I shall have to state a few that have a direct bearing on my present problem, even though I am aware how thin and abstract they must appear to my readers. They need the background of the concrete work in Modern Logic, of the details of the investigations on the Postulates of Mathematics. But no! Fortunately I think of Professor Eddington's book *The Nature of the Physical World,* his delightful humour, his inimitable clarity and concreteness. Let him present my first point. He wants to determine the "nature" of the exact sciences. To do so he says: let us take one of the more intelligible examination questions in physics; "An elephant slides down a grassy hillside." Pray read the whole paragraph yourself (1. c. p. 251) and when you are shaking with laughter, remember that back of all this humour and madness is the clear and methodical thought of a great mathematical physicist: the special examination question is transformed, the "elephant fades out of the problem," so does the "grassy slope," until at last there emerges a *typical* problem, which is *characteristic* of physics. That it is stated in terms of "pointer-reading" is important, but irrelevant to our present purposes. Our first point appears: at the basis of our systems of mathematics, of mechanics, of physics, lie certain *"problems"* (I called them "generating problems" in an early paper),[2] which are *characteristic* of these sciences. The second point is that these generating problems determine the *"universes"* in which the propositions of these sciences are respectively "true"; whether they have any "truth" outside their own universe is not settled by the fact of their being true within their own universe. The third point (and here may I refer again to Eddington's book) is that problems can be *"separated";* he does this for ethics and religion; they deal with problems which are important, but entirely *distinct*

[2]Cf. Studies in the Structure of Systems, No. 1, 2, 3, 4. Journal of Philosophy Vol. IX, No. 8. Vol. IX, No. 12, Vol. IX, No. 16, Vol. X, No. 3,

from the problems about "pointer-readings." In other words, the separation of problems establishes the separation of the respective universes. It limits the validity of the laws of physics, and provides room for totally different universes in which the laws of physics may be false or irrelevant; and vice versa. But to establish this we require the further point; namely, that, though every theorem of mathematics, etc. is *proved true* by showing that it follows from certain "axioms" (or "postulates" as E. V. Huntington calls them, or "hypotheses" in the Platonic manner of speak-which Riemann adopted in his famous dissertation "Über die Hypothesen welche der Geometrie zu Grunde liegen), the "postulates" themselves (by no means "evident-and-therefore-needing-no-warrant") derive their validity from the fact that they are *"necessary for* the solution of their respective generating problems."

These propositions suffice to make room for religion. Show that you are dealing with a legitimate problem, distinct from the generating problem of physics, and postulate whatever is necessary for the solution of this problem, paying no attention to the propositions of physics which are irrelevant, being limited in their validity to the generating problem of physics.

The next concern will be to state the criteria by which the postulates and theorems are *tested.* They are already vaguely referred to when we speak of the postulates as *"necessary."* My early paper on *Critique of Cognition and Its Principles*[3] is in some respects antiquated, but on the whole still states the case correctly. There are two features of it which are essential here. One is that "truth" applies only to "systems," and thus to propositions only as integral parts of systems, but not to propositions in isolation. Some such feature is made necessary e. g. by the existence of the "non-Euclidean," "non-Archimedean" etc., geometries, and it is of fundamental importance. The second is that the criteria determine "truth", even in physics, without assuming "objects and their properties" as given. The philosophy which William James has called the "philosophy of comon sense" (cf. Pragmatism, lecture V) is characterized by this latter assumption, and by its criterion of truth of propositions in terms of "agreement with its *object."* Our procedure is thus fundamentally different from this philosophy, which is nevertheless the philosophy of the man in the street, and

[3]Cf. Journal of Philos. Vol. VI, No. 11, May 27, 1909.

our own when we are not philosophizing. For, whilst fundamentally inconsistent and inadequate, it has a simplicity in handling some situations which a better philosophy can express only with an almost ridiculous complexity. (Please read the delightful passage in Eddington's book[4] about the difficulties encountered by a modern physicist trying to enter an open doorway.)

Next we must give our definition of "existence." This definition incorporates a considerable amount of "metaphysical" theory, and requires therefore careful justification. I omit the justification and state the definition: by *"existence"* we understand what is "meant" by a *"true"* proposition; or, what a true proposition is "about." This seems to put things up-side down; we usually define truth in terms of existence; or rather the "philosophy of common sense" does!

Two more definitions and I am done with the assembling of the necessary apparatus. By *"reality"* I understand *objective* existence (or: existence as object); and by *"actuality"* I understand existence as *subject.* I will here take "object" and "subject" for granted, merely adding that the two are, for us at least, always understood to be linked together. It is well to bear in mind that actuality and reality are here *not* equivalent terms; they both mean existence, but existence of differing (and contrasted) kinds. It is hardly necessary to emphasize that the above statements and definitions lead to different *kinds* of existence (and reality), according to the respective *universes* in which the propositions which "mean" existence are true. At least it leaves this as a possibility; and thus it becomes possible to distinguish mathematical existence from physical existence, ethical existence, etc.

We begin with the "empirical self," i. e. I begin with *my* experiences, which as such are "merely" subjective; and I ask myself: are there any which *also* "mean" an *existant,* and what are the conditions which the latter must satisfy. (This, at bottom, is Kant's problem in the *Critique of Pure Reason;* here emerges "experience" in the *new* meaning given to it by Kant.) Propositions which are parts of systems embodying solutions of generating problems, and not found wanting when tested by the criteria of truth, these are the stepping stones by which I proceed from "my experiences" to "reality" in its various aspects: cosmological, ethical, aesthetical

[4] V. l. c. p. 342.

reality. In each case we must state the generating problem, and show that each is distinct; thereby establishing each in its own *sovereignty*: the conditions necessary for the solution of its problem, tested by the criteria of truth, are the laws of the land. Whatever laws are valid in any of the other universes is "irrelevant."

It will be noticed that "religion" is not mentioned above. Is it, after all, to be omited from reality? Even though there may be "room" for it? I will admit that at first I expected to find the generating problem of religion on a line, so to speak, with the other three. Nothing more was necessary to establish it in its own right than to state it, and to separate it from the others. And I thought this a simple matter, if I held to the fact that religion involves God. None of the others does. God is not an hypothesis in physics. Neither is He in "ethics"; nor in "aesthetics." These are established autonomously *before* we come to God and religion. This point is important. Yet the fact remained that traditionally religion is supposed to have a very close and special relation to ethics; undoubtedly a good part of all sermons preached *is ethics*. On the other hand we should not overlook its close relation to art, and even to cosmology. I do not mean primarily the fact that at a primitive stage religion may be also a cosmology. "In the beginning God created the Heaven and the Earth." But a good part of the speculations of Plato, of Descartes, deserve careful attention here; as well as the fact that all the great scientists, from the pre-Socratic giants down, were upheld in the *search* for laws of nature by their *belief* in the *existence* of such laws, which was based ultimately on *religious grounds*. The intimacy of these relations (quite distinct from the "interpenetration of distinct generating problems in "concrete" objects) called to mind the corresponding closeness in the case of the *psychological* problem. I do not wish to discuss this here, but for me it is concerned with the *subject*-relation of the entities of mathematics, physics, etc. Be that as it may, it made me realize that, absorbed in the "aspects of *reality*," we had quite left out of account the *"subject"* to which "reality," i.e. *"objective* existence," is related.

What *is* this subject? Not the "empirical I" with which we started. Yet the subject we are looking for "states" propositions, "makes" assertions, "joins" them into systems, "tests" them by criteria of truth which it had stated and tested. The subject appears

thus as an "active," "spontaneous," "creative" I; as the creator of *true propositions;* and thus as the creator of *"reality!"*

This is *inescapable*, if one defines reality as "objective existence," and existence as the meaning of true propositions. It thus becomes imperative to examine those definitions with the greatest care. The only escape would seem to be the assumption of "things in themselves," in the form of the philosophy of common sense, or at least in Locke's modified form. But even if things-in-themselves could be made intelligible, they seem to have no bearing on the procedure of the experimental scientist. No physicist compares propositions with "things-in-themselves." He makes observations, examines his data, makes hypotheses to account for the data, checks them by rules which are the criteria of truth. "Pointer-readings" and their "connections." The scientist does not take "reality" as *given;* it presents a very serious *problem*. It is an interesting fact that the president of the American Chemical Society in his recent presidential address[5] raises this *problem* of reality, and answers it in part by a method which corresponds very closely to our own. He does not *assume* reality. Let us say: Reality emerges as the sciences progress, as new laws are stated, new facts discovered.

"I" am the creator of reality: the position is *inescapable*. It is the proudest thing that can be said by man of man. It expresses the spirit of the present time. We have created so many "things;" let "reality" be added unto them.

And yet, though inescapable, it is utterly *incredible*. Not only is it sheer arrogance; it is absurd.

But how can we escape this absurdity? It is not just our personal dilemna. Take Kant. The interpretation of his language in the *Critique of Pure Reason* has varied widely. Kant, the fastidious in point of veracity and exactness, who *can* write delightfully clear German (his earlier papers prove it!) but who develops an elaborate, not to say clumsy style, expanding each sentence so as to make it express *all* the truth and nothing but the truth! Why, then, was not his meaning plain to the careful reader? Why have whole libraries of books been written about him? Why, after more than a century of keen and intensive study of his works, is there yet no

[5] *Irving Langmuir*: Modern Concepts in Physics and their Relation to Chemistry. The Journal of the American Chemical Society, Oct. 1929, Vol. 51, No. 10. My attention was called to this interesting paper by my colleague of the chemistry department, Professor A. T. Lincoln.

general agreement on their meaning? But consider; is not the *'object"* insisted upon throughout? And yet, by taking its *coërcive* function as the characteristic condition which distinguishes the objective from the purely subjective; by recognizing that coërcion is *necessity,* and grounding all necessity in the *a priori* (which comes to mean "necessary and of universal validity"), have we not thus landed in the subjective, more subjective even than our sensations? And when he proclaims as the key-note of his new "method of thinking": "we know of things *a priori* only that which we ourselves put into them", and yet invites us to distinguish this from a mere fiction, "andichten" as he says, *the paradox is complete. "We ourselves"* the ground and source of *objectivity!* (May I be permitted to call attention to Eddington's repeated similar statement: "in the discovery of this system of law the mind may be regarded as regaining from Nature that which the mind has put into Nature." (l.c. p. 244)

And did not Descartes call such things as the sun of astronomy, and the mathematical entities (which are the only reality in things,) did he not call them "idées innées?" We are not trying to interpret him; we emphasize the paradox, which ultimately goes back to Plato's Doctrine of Ideas, does it not?

How shall we solve the paradox?

Not by looking *towards reality* and *beyond* it to a super-reality, an "epekeina", to an "ens realissimum": there is nothing beyond reality.

By a *"conversion,"* a turning around, away from reality, *away from the objective,* and *towards* a *subject, beyond* the empirical Ego, beyond even Kant's transcendental I, towards the ultimate *"actuality," "activity," "creativity."* Our pride collapses, is stricken down: *We* the creators of reality, we? *No! God* is the creator! *Through us He* creates reality. But it is He! Man the measure of all things, man? No, said the mature Plato, not man, but God is the measure.

Great scientists have always felt this, when they explored nature and through law created cosmos out of chaos: it was God working through them. Great artists have always been aware of it: Their creation? No! God's handiwork. However deliberately they planned, however carefully they wrought, whatever effort and labor they spent on mastering the technique: the creation occurred

under the spell of "inspiration." And the prophets who come to reform and save a sinful world, in olden times and in new, do they not feel themselves the "servants of God," doing His will, carrying out His bidding?

This is the *religious* point of view. These are attempted answers to religious questions; thus to conceive reality, thus to labor, to create it in this spirit, is to be religious. It is a new and imperative problem. Physics, ethics, art give no relevant answer to it. They necessarily disregard the subject; "actuality" does not enter into their discussions. The only security to be found here is stateable in terms of generating problem and conditions necessary for its solution. All their necessity, all their truth is contained in their laws. To them we must appeal, by them we must justify, with them we demonstrate and deduce. But when once the problem of the *subject* is raised, when we ask: who creates these true propositions, who warrants them, who is the guarantor, the sanctuary of reality, in which it finds its last security, then there is no stopping: Reality cannot be left suspended from a mere point, the "I"; not even the "creative I," still "I." It is firmly grounded when it is grounded in "actuality," in the ultimate active existant. "Our heart is unquiet until it rests in Thee." Reality seemed at first to be the meaning of true propositions which "I" proposed; but God spoke through me when I spoke *truly;* and reality is *His* meaning. God is the measure of all truths.

Our troubles are not ended. How can we *know* God, actuality, the ultimate subject? Do we not inevitably, in the knowing process, make Him an object?[6] And does not this exclude knowledge of Him? Yes, and no! We do *not* know Him as "object," i. e. we do not know Him as "reality." God is not "reality": He is not a physical reality; He is therefore not in space, not in time; he is not eternal in a temporal sense. But He is not even an ethical or aesthetical reality; he is not good; he is not beautiful. It is to me a refreshing confirmation of the correctness of our results that I am thus able to understand those who teach a *"negative"* theology. If we are right, we confirm their statements.

But we can say *some positive* things about God. It is true, I think, that I am the only subject with which I have direct acquaintance. But there *are* other "subjects," you for instance, of whom I

[6]This question was raised by one of my students in Carleton, Miss Edith Watson.

may have knowledge. Not the way I know about "reality" (excepting your "bodies," of which we are not speaking now); but I can know a great deal about you from your acts, your behavior, your responses of all kinds. And so with God: we know about Him, in so far as we know His creation, reality; we learn to know His "ways," when we study mathematics, physics, ethics, art. And this is the only way.

Above we said: cosmological, ethical, aesthetical reality is established, and must be established autonomously, before even the *problem* of God can be raised. Laws hold in physics, in ethics, in aesthetics in their own right. They are not dependent on God. A law is not a law in physics *because* God "thought" it; an act is not good *because* He commanded it; a work of art is not beautiful *because* He inspired it. We have no direct knowledge of God's thought, will, or feeling. It is the other way around: we recognize this law, this good act, this beautiful work of art as *His,* because it is true, good, or beautiful. That is: having found it true, good, or beautiful, when we tested it, now, when we raise the *religious* problem (not incidentally, but inevitably) and make the fundamental hypothesis *"God"* as *"actuality,"* we recognize Him *in* the true, the good, the beautiful, their creator, their guarantor. (In other words we never, not even here, abandon our methodological procedure that guided us throughout, and which may be termed indifferently the Platonic method of the hypothesis, or Kant's transcendental method.) This implies,—does it not?—that those who want to know Him, are invited to study "reality." But we should add: there are many ways; and you may be *"wise"* without necessarily being *"learned."*

In the foregoing, two points have clashed with traditional theories so much that it may seem doubtful whether we had any right to call this "actuality," this "creator," *God.* We said He was not a "reality" (though of course He *"exists";* "actuality" implies that); and He was not necessarily 'good." To the second I might retort, that "good is as good does"; but that is flippancy. Is it not better to say: what, you puny creature, you want to measure God by *your* standards of ethics? I think this *is* the true answer. But what of the first? Has not God been *defined as* "ens realissimum"? He has. But rightly? Better: *why* was He so defined, if not to *guarantee reality*: He *"bestowed",* whatever of reality things had. And it

seemed that He could not bestow reality, unless He had it Himself in the highest degree.—But this would not elevate Him; it would degrade Him, put Him with physical entities, as a sort of primus inter pares. No; *no* reality can *bestow* reality. His must be a *different* kind of "existence." It is easy to recognize in this "ens realissimum" the Platonic idea of the "good," "which *imparts* truth (*"reality"* in A. E. Taylor's better translation) to the object and knowledge to the subject" (Rep. Bk. VI, Jowett's translation); but the "good" is *"beyond"* reality; it "far exceeds essence in power and dignity." A puzzling statement to every student of Plato; on which our theory seems to throw some light.

We have spoken of religion in a purely intellectual manner, as behooves a philosopher. He must be blind, who does not see that this is only part of the story: profound emotions are linked up with our religious ideas, beautiful imagery is woven around them. What we have tried to do is to *justify* them, not to replace them. And it is interesting that our argument gives a philosophical reason for those definitions of religion which, like Schleiermacher's, characterize it by "feelings of *dependency*."

Not to convert the "infidel" and the "skeptic", but to sustain the believer, to help him clarify and purify his ideas of God, has been the moving purpose of this paper.