

OUR HUMAN TRUTHS

By

The Late

F. C. S. SCHILLER



New York: Morningside Heights
COLUMBIA UNIVERSITY PRESS

1939

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COLUMBIA UNIVERSITY PRESS, NEW YORK

FOREIGN AGENTS: OXFORD UNIVERSITY PRESS, Humphrey Milford,
Amen House, London, E.C. 4, England, AND B. I. Building,
Nicol Road, Bombay, India; MARUZEN COMPANY, LTD., 6 Nihon-
bashi, Tori-Nichome, Tokyo, Japan

MANUFACTURED IN THE UNITED STATES OF AMERICA



F. C. S. Schuller

DEDICATION

To California, which gave him full mead of loving appreciation, and to whose people and places, lavish with wild flowers, he returned year after year, the author would have liked this book to be dedicated.

FOREWORD

DURING his last summer in England (1935) the author of this volume sat convalescent watching the sands and the tides that encircle the island of Jersey, his spirit and mind as always alert. In constant play between pocket and hand was the small black notebook for jottings; while his eyes crinkled with blue delight as a new book began to shape itself around the query "Must Philosophy Be Dull?" The vast contentment that settled over his later years allowed him to play with thoughts that formerly were challenges and battle-cries. Yet that for him the fight was by no means won, the more serious and hard-hitting of these lectures testify.

I call them lectures since, with two exceptions, they were intended for already determined audiences: either his students and colleagues whom he himself addressed; or, after the retirement forced on him by long-ignored illness, similar groups to whom the lectures were to be read for him by others. Each lecture was as carefully prepared and phrased as for publication; all, in fact, were predestined for the printing-press after the platform. Often during the reading of his lectures, which he delivered in beautiful voice and with a slow care meant as both example and reproach to those whose too-rapid delivery spoiled for him so many American addresses—his pencil was busy with commas that the reading had just shown him were needed for further clarity.

Under the pleasant exterior expression which is so usual in his literary style (he often exclaimed, "But it's just as easy to

tell your truth with a smile!"), the careful reader feels firm ground, unwavering conviction, and undying belief in his own rightness. His humour and light touch indicate no superficiality, as is sometimes inferred, but rather an extremely suave and highly civilized universality of outlook. His was a mind of many interests, many abilities—occasionally flashing into thunder and lightning, and sharp riposte, impatient with stupidity, in many places at the same time, fluid as mercury, rushing in upon his truth from many directions.

While some of the lectures have been published posthumously, they are not to be regarded as his last writings: they were delivered as lectures some four or five years before they were printed. He wrote his last articles during the winter before his last long tragic illness. They are "Prophecy and Destiny" and the article requested for the Paris Congress of Philosophy, "How Far Does Science Need Determinism?" Short book reviews, written in half-hour periods, were all he could do after completing the two essays I have just mentioned. But he spoke often of this collection, which he still hoped to be able to bring out, pledging me to it—the book he dreamed of on the Jersey sands.

I wish to thank very sincerely the editors of the various periodicals in which the lectures first appeared, for their ungrudging permission to reprint them in book form. The gratitude of his many friends goes as well to the publishers and to numerous others who have made this book and given substance to his dream.

LOUISE S. SCHILLER

LOS ANGELES

JANUARY 3, 1939

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**OUR HUMAN
TRUTHS**

PHILOSOPHY

BURNING QUESTIONS¹

PHILOSOPHY, at first sight, is a subject singularly lacking in burning questions. Its history cannot point with pride and pity to a long array of spectacular martyrdoms, such as those which adorn the annals of theology and politics. Martyrs to philosophy seem to be few and far between. Indeed, on closer inspection there seem to have been no martyrs to philosophy; for those who have suffered seem always to have suffered, not so much for properly philosophic opinions, as for their interventions in theology and politics. A brief survey of reputed philosophic martyrs, in their chronological order, will sufficiently indicate the truth of this remark.

Pythagoras heads the list of those who may claim martyrdom for philosophy, if we can accept the tradition that he perished when the clubhouse of his adherents at Croton was burnt by the infuriated democrats. But this very story shows also that Pythagoras had intervened in politics on the oligarchic side.

We may next enumerate a series of philosophers who fell victims to the piety or politics of enlightened Athens at the summit of her glory. In each case there is good reason to believe that Athenian "piety" was nothing but politics in disguise.

The first of these philosophers to be convicted of impiety was Anaxagoras, the friend of Pericles, who introduced the ideas of philosophy to Athens and of purposive reason (*nous*) to the philosophic public. When his patron grew unpopular,

¹ From *The Personalist*, XVI (1935), 199-215.

the enemies of Pericles struck at his friends. A charge of impiety was (as we shall see) the easiest and most effective accusation to bring against a new idea: so it was brought against Anaxagoras, together with Aspasia. By humbling himself in her defense Pericles procured the acquittal of his mistress; but Anaxagoras was driven out of Athens. No doubt as a resident alien he had no taste for the hemlock with which the Athenians dosed the "impious."

The next victim of persecution for impiety was Protagoras, the most famous teacher in Hellas and the great philosopher of democracy, whose maxim "*man is the measure of all things*" the Athenians were quite clever enough to interpret as a proclamation of the equal rights of man in the intellectual sphere. So they honored him. He was appointed the lawgiver of Thurii, the important colony the Athenians founded in Italy in 443 B.C. He was also able to amass a fortune by instructing the young men of the wealthy classes how to master the vital art of public speaking and so to circumvent democratic juries and to preserve their life and property intact. Unfortunately, when he was already an old man (either seventy or ninety, according to different traditions), in 411 B.C., the failure of the Sicilian Expedition and the intrigues of Alcibiades provoked a short-lived oligarchic revolution in Athens. Among its leaders was Pythodorus, a knight who is presently found to bring an accusation against Protagoras. For impiety, of course, based upon a possibly harmless and certainly very natural remark in Protagoras's work on *Truth*, which might well have suggested itself to any one who had reflected on the details of Greek mythology. "Concerning the gods," Protagoras had said, "I have not been able to ascertain whether they exist or not: the obscurity of the subject and the brevity of human life have hindered me from finding out." This was more than enough to procure condemnation under an oligarchic régime. But Protagoras, being like Anaxagoras an alien, fled from Athens as did his predecessor.

On the way to Sicily, however, his ship foundered, and with him went down his own copy of the famous book on *Truth*. The other copies were collected by the Athenian heralds from the only persons who would be likely to possess them at first (namely, the young oligarchs who had been attending Protagoras's lectures) and burnt. This drastic persecution appears to have been successful. The book was suppressed, and there is no real evidence that any subsequent philosopher ever read it. Even Plato seems to know it only from hearsay and fails to give the context of the great dictum of Protagoras, of which, in consequence, the meaning has remained in dispute.

In the next, and most famous, case of philosophic martyrdom there was no literature to suppress, and every hearer of Socratic conversations was therefore at liberty to create his own "Socrates," and to mould a Socratic philosophy to please himself. Hence, the one feature common to all the Socratic schools was their oligarchic bias. For only the young men of the wealthy classes could afford to follow Socrates about, mostly, no doubt, in the hope of learning from him the important forensic art of cross-examination. But it is highly probable that they, rightly, detected in the Socratic attitude a definite implication which suited their own politics. When Socrates declared that virtue was knowledge, he was making conduct a matter of science, not merely of custom and tradition; he was demanding also an expert government very different from the happy-go-lucky Athenian device of appointing magistrates by lot. Socrates, therefore, has good claims to be accounted the founder not only of ethical science and of the art of cross-examination but also of skilled government, that is, ultimately, of bureaucracy, rather than oligarchy.

The Athenians, however, were not in a mood to make this subtle distinction. They saw him walking about unscathed during the tyranny of the Thirty, an intimate friend of the worst enemies of the people, and they heard him propound

a doctrine which seemed as definitely anti-democratic in its implications as that of Protagoras had been conducive to democracy. So they thirsted for his blood. Unfortunately they could not strike at him directly, because, when the city surrendered to Thrasybulos, an amnesty had been stipulated. This, however, was no serious obstacle to the vengeance of a triumphant democracy. If we are right in holding that a charge of impiety was the regular camouflage for political rancour, we should expect the attack on Socrates to be launched on this ground. Accordingly, Anytus, the right-hand man of Thrasybulos, appears as the chief accuser of Socrates in the prosecution which speedily followed the return of the Demos. Nor did the charge of corrupting the youth, which was coupled with that of impiety, mean anything more than that any sort of higher education was regarded as tampering with the young and inevitably making them disrespectful to their ignorant parents.

All the world knows the tragic issue, recorded by one of the world's greatest writers, amid the applause of the whole anti-democratic *intelligentsia*. At seventy Socrates preferred death to exile, and his fate has remained the great culmination of philosophic martyrdom. Nevertheless, the democratic majority on the Athenian jury meant to kill the politician, not the philosopher.

After Socrates the history of philosophic martyrology becomes more and more of an anti-climax. No doubt Giordano Bruno's Venetian patron regarded him primarily as a fraudulent alchemist when he delivered him over to the Roman Inquisition to be burnt as a heretic. But Bruno must have been a very trying person, who had made himself impossible all over Europe. He must also have been a good deal of a bore. Doubtless he received harsh treatment, but it should not be assumed that the Church burnt him merely or mainly for his theological opinions. At any rate, Nicholas of Kues, not

so very much earlier, had held quite as unorthodox opinions; yet he flourished exceedingly and died in peace and in high repute as Cardinal Cusanus, a prince of the Church. He had had the prudence to be on the winning side in papal politics.

The expulsion of Spinoza from the synagogue of Amsterdam is hardly worth mentioning as a case of philosophic persecution. It liberated him from the narrow trammels of the ghetto, from which all intelligent Jews had been trying to escape ever since the Middle Ages. He became in consequence a correspondent of princes, and it is very unlikely that a poor little lens-grinding Jew would have had a professorship of philosophy in a first-class university offered him in the twentieth century. For, rightly or wrongly, our merchant princes are no longer interested in our philosophies.

Philosophy has become too technical under the régime of professional professors. The professors have now got safe jobs, but their subject has become obscure and socially unimportant. Even the Bolsheviks, who of all rulers are most sensitive to the movements of ideas, do not trouble to shoot counter-revolutionary idealists.

Under these conditions philosophic martyrdom has naturally degenerated. It is now only an affair of sordid little squabbles and intrigues about appointments to professorships. Those curious to sample them may read Schopenhauer's magnificent tirades against professorial philosophy in the age when the Minister of Education, Altenstein, allowed Hegel to dictate the filling of all the philosophy chairs in the Prussian universities. Altogether it must, I fear, be admitted that philosophers have not shone as martyrs and that the history of philosophy is not illumined by many burning questions.

But, though philosophic questions do not burn, they certainly smoulder. In the limbo to which they are consigned, they smoulder everlastingly. That is why they appear to be very much the same questions that they were in the beginning of

Greek philosophy 2,500 years ago; and at their present rate of consumption, they bid fair to last for another 2,500 years. Let us consider some of the reasons for this situation.

Philosophic questions are not sufficiently ventilated, and are too meticulously shielded from the fresh air of novel fact: moreover, their spiritual fires are too often choked up with the ashes of dead controversies and damped down with rubbish heaps of pedantry.

Nevertheless, I will venture to maintain that there is abundant material in the nature of philosophy to engender burning questions. If certain questions are not at present brightly burning, they ought to be. If they do not inflame the ardour of present-day philosophers, it must be because the philosophers are not sensitive enough to vital issues. I intend therefore to discuss a few specimens of burning questions as such, and to show that no philosophy worthy of the name can afford to quench their flames.

Let me take first the great topic "personality." Its influence is all-pervasive, and this alone should be enough to render personality a burning question in any philosophic context. It will not do for any philosophy to ignore personality. The sciences can do this and can afford to do it, precisely because they are special sciences with no pretensions to cope with the whole of the real. But no philosophy can afford to omit it from the data which it contemplates. If it does, a philosophy at once condemns itself as partial and partisan. Nor again will it do to represent personality merely as a deceptive mirror which distorts the real and generates nothing but error and illusion. Personality resembles not a mirror so much as the atmosphere through which is seen whatever we see; it is necessary to our life as well as to our vision. Thus the first reason why it must be taken into account is that we cannot do without it: any slur that is cast upon it discredits all our knowledge. Secondly, the stimulus to every cognitive enterprise comes from personality,

and no knowing would be attempted or persisted in if it did not appear desirable to somebody.

Finally, it is high time that some one challenged the facile assumption that personality must always be a source of error and failure in our knowing. It seems an unwarranted prejudice, a half-truth based on a superficial analysis of a few special cases of attempts at knowing. Of course if a man is stupid, lazy, enraged, or violently biased, his personality may impede his knowing even the things he desires to know; but whatever success he achieves will still be an item in his knowing. And sheer indifference is probably both a commoner and a greater obstacle to knowing than rage or prejudice. It cannot, therefore, be laid down *a priori* that personal interest in a problem is always detrimental. It may often be the first condition of success. Whether in any particular case it is or is not, may itself be a matter of the personalities concerned.

So it should be frankly recognized (1) that personality has a good as well as a bad influence on knowing and that both aspects need patient study and (2) that in no case is it possible to get rid of personality. Impersonal knowing should be admitted to be an abstraction, a fiction, and an impossibility. Moreover, this impossibility need not be at all regretted. For could impersonal knowledge be attained, it would be neither desirable nor valuable. If it were strictly and truly impersonal, it would be no knowledge we could use or call our own. The false belief that the sciences are full of impersonal truths appears to arise merely from the pernicious habit logicians have of taking "propositions" in abstraction out of their scientific context and calling them "true," without reference to their meaning, use, and function in the science which has engendered them. It is utterly misleading, therefore, to define truth as something indifferent to us. If there were a "truth" in which no human spirit could take an interest, it would sink at once into a truth-claim devoid of meaning for us; similarly a "real"

that was truly indifferent to us would thereby render us so indifferent to it that it could not maintain itself in the mind, even as a subject for debate. We simply must assume that the subjects we inquire into are worth our while.

Nevertheless, I cannot conceal from myself that a recognition of personality such as I have demanded is likely to have devastating effects upon present-day philosophies. This is simply another way of stating that it is a burning question. It will burn up vast accumulations of philosophic rubbish. But we may confidently hope that from their ashes philosophy, purged by fire, will rise again like a phoenix.

Let me proceed to a second example of a burning question, connected naturally with the first. We may call it the "problem of the self." The self has hitherto been nothing but one of the great and conspicuous failures of philosophy. My first reason for this apparently sweeping judgment is that it took Western philosophy over 2,000 years to discover the problem of the self at all. Yet common sense had realized it for untold ages and had everywhere expressed the behaviour of certain important constituents of the real by the use of personal pronouns. We may safely assert, without exhaustive research, that there is not and never has been a language which was not equipped with personal pronouns. Yet it did not occur to philosophers that this fact had any special significance or importance and that "what is the self?" should be a burning question for them all. They waited for Descartes to declare the self a spiritual substance and an impregnable rock on which his system could be built. It is only since Descartes that the self has figured in philosophic discussion, though neither with the fecundity nor with the success which its vital importance deserved.

By common consent the Cartesian account of the self was not a success, and hardly any one now assents to it. It did not deserve to be a success, for it was based on the assumption of the notion of substance. And "substance" was itself a con-

ception prompted by experience of the self. So to explain the self as a substance was logically circular. Moreover, having a choice between two conceptions of substance to apply to the self, Descartes chose the wrong one. Aristotle had laid down two conceptions of substance, which we can distinguish as the *hypokeimenon*, or substratum view, and the *energeia*, or self-maintaining activity view. The first conceived a "substance" as a subject in which attributes inhered and of which predicates were affirmed. This was essentially to use "subject" in two senses and to fuse the subject of predication, a logical problem, with the subject of qualities, an ontological problem—a fusion characteristically enshrined in the ambiguous term "attribute." Thence it was an easy plunge into a sea of difficulties as to how "substances" retained and changed their attributes. From these difficulties modern philosophy has never yet been able to emerge. The subject-substratum theory of substance is still a seething mass of puzzles.

Aristotle's second conception of substance had a psychological inspiration. The *energeia* view of substance originated from the experience of activity, that is, from the very flux of owned experiences that had propounded the problem of the self. It was thus a slightly disguised restatement of the question; but it at least avoided the mistake of explaining the self in terms of some of its own activities, namely, its predications, and of the analogies with itself which it had read into the not-self, namely, "material" substances.

Unfortunately, with a few noble exceptions, such as Leibniz, Lotze, and Wundt, the philosophers did not adopt the *energeia* model for their notion of substance. Descartes's successors quarrelled with his conception of the self as substance, not because it was a substratum, but because it was spiritual.

In Locke substance is attenuated to an unknowable substratum, a something, he knows not what, which supports its attributes, he knows not how. It is really quite superfluous.

Accordingly Berkeley had the happy thought of abolishing material substance altogether. Its attributes, which he called "ideas," could just as well, or better, be said to inhere in one divine mind as in a multitude of unknowable substrata. For their essence was only to be perceived by minds whose essence it was to perceive. Wherefore Berkeley retained spirit-substance, but without developing the notion of spiritual activity.

Not so Hume. Hume was bent on surveying the whole field of philosophy, consistently, from the scientific standpoint of the external observer, and he applied this method also to the internal contents of the mind. So he tried hard to break up the self into a succession of "impressions" and "ideas" like the outside world. He would recognize nothing in the mind but objects.

When I enter most intimately into what I call *myself* [he said] I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception.

He infers that "were all my perceptions removed by death, I should be entirely annihilated," and scoffs at one who would "perceive something, simple and continued, which he calls *himself*," for he is certain "there is no such principle in me." So men are "nothing but a bundle or collection of different perceptions" in whom "there is properly no *simplicity* at one time, nor *identity* in different . . . the successive perceptions only constitute the mind."²

Unfortunately, however, Hume's triumphant analysis had failed to provide one essential. What was the tie that could hold together the "bundle" of fleeting perceptions which made up the mind? How, in J. S. Mill's version of Hume, could one analyze the mind into a series of feelings without having to admit also that it was aware of its past and its future, and

² *Treatise of Human Nature*, ed. Selby Bigge (Oxford, 1896). pp. 252-53.

hence encountering the "final inexplicability" that "something which *ex hypothesi* is but a series of feelings can be aware of itself as a series."³ Hume was also much too clever not to see that the same crux meant the breakdown of his analysis. In the Appendix to the *Treatise*⁴ he admits that "we have no impression of self or substance as something simple and individual," and therefore no "idea" of it. The mind having been resolved into perceptions, its continuity is completely dissolved. But on Hume's principles the perceptions then at once become substantive existences in their own right. He must admit that "perceptions are distinct existences, they form a whole only by being connected together. But no connexions among distinct existences are ever discoverable by human understanding." So it appears once more that a mind which has been dissected into a series of perceptions not only cannot validly conceive itself as a mind but cannot even conceive such a thing as a mind. Hume confessed his failure handsomely, pleaded "the privilege of a sceptic," and avoided the painful topic forever after.

But not all philosophers are so happily constituted that they can lull to sleep their theoretic scepticisms by pragmatically leaving their doubts behind when they leave their study. Hume's scepticism worried Kant considerably. It aroused him from his "dogmatic" slumbers. For, unlike most dogmatists, Kant was too virtuous to take sleeping draughts. So he was deeply distressed by the sad condition in which knowledge had been left by Hume and set himself to cure it. Unfortunately, he accepted Hume's formulation of the problem. He thought that Humpty Dumpty could be compacted together again by a lavish use of synthetic paste and *a priori* principles. It did not occur to him that Hume should have gone *behind* the analysis of common sense instead of starting from it and carrying it

³ J. S. Mill, *Examination of Hamilton*, I, 248.

⁴ *Treatise of Human Nature*, ed. Selby Bigge (Oxford, 1896), pp. 633-35.

to unpragmatic extremes. Any thorough epistemology should start from the undiscriminated continuum of crude experience and trace the motives for the successive steps of analysis. As it is, the result is that Kant stands and falls with Hume and that, as James said, the way to a truly critical philosophy is not *through* Kant but *round* him.

It is now our duty to trace the failure of Kant's conception, both of substance and of the self, alias the transcendental ego, alias the synthetic unity of apperception. Substance, an *a priori* "category" of the understanding, Kant chose to model on the substratum, not of the spiritual, but of the material, substance. He conceived it as the permanent in change and argued that it was necessary to the perception of change, in order to distinguish change (*Veränderung*) from the vicissitudes of phenomena which he called *alternation* (*Wechsel*).⁵ Into the more practical and scientifically important question of how an inquirer was to decide whether he was encountering a change in a permanent substance or only an alteration in the flux, he did not go. Neither did he raise any of the thorny questions about the way in which the changing attributes were attached to the unchanging substrata and the lengths to which change of attributes might go without entailing change of substance. He did not consider the problem of the knife which had first a new blade and then a new handle, and he was, of course, far too much of a Protestant to trouble about transubstantiation. Lastly, he did not explain why he sought for the source of substance in external persistence in space rather than in the subjective continuity of memory. Altogether Kant's doctrine of substance seems to be pervaded by an unconscious materialism.

His discussion of the self is complicated by a dual purpose. On the one hand he insists that the self must be rescued from the psychologically impossible *impasse* in which Hume had

⁵ *Critique*: first analogy of experience.

left it: the contents of the mind must be unified and held together. On the other hand, he will not admit (with Leibniz and Wolff) that from this necessity it is possible to argue to a metaphysical soul as a spiritual substance, which can be simple and indissoluble and therefore immortal. So he propounds a compromise. He conceives the self as the transcendental subject, the highest of his synthetic principles *a priori*, to which all experiences are finally to be referred. It is the subject which is the correlate of all objects; but it is epistemological and neither a "substance" nor a metaphysical entity.

Philosophers have tried hard to persuade the plain man that this compromise offered him, if not an *a priori* proof of immortality, yet all he needed to feel justified in calling himself a self. But if the plain man had not been so overawed by the terrific technicality of Kant's language, he might justly have ventured to object that Kant had utterly failed to provide him with a self he could cherish as his own. For this is the simple truth. The transcendental ego is not a psychological fact but a logical function. If true at all, it is true of all minds whatsoever. Hence no one can own the ego, no one has a right to speak of *my* transcendental ego or *my* synthetic unity of apperception. It cannot, moreover, be regarded as capable of existing in the plural. If it is at all legitimate to turn the results of epistemological analysis into entities of metaphysics—and this the stricter Kantians would deny—it is plainly imperative to recognize only one transcendental ego and to regard our phenomenal selves as its multiple personalities.⁶

This, accordingly, was what the post-Kantian idealists proceeded to do. So philosophic controversy could continue with only a few changes in technical terminology. The subject or ego took up the old role of spirit-substance. By "positing" itself and its "other" it excreted the objective world; it then

⁶ This line of thought conducts, of course, to a unity which has suffered dissociation, and so may be considered mad. Cf. *Studies in Humanism*, ch. xi.

reabsorbed its own secretion and claimed to be somehow much the better for the process.

These romances were great fun, but they did nothing to solve the problem of the self. The psychologists, however, came to grips with it. William James corrected Hume's cardinal error at the source by recognizing the continuum of experience and graphically describing it as a stream or flux of change. He also emphasized that the flux was owned. It was somebody's experience, and the knower or *I* that "had" it persisted, even though at every moment, on reflexion, each earlier *I* passed into a *me*. To adapt, probably, his exposition to the pluralism of Hume's atomic perceptions, James⁷ went on to speak of a stream of momentary *I*'s, each perishing in turn and passing on its contents to its successor and heir; unfortunately, many have taken this myth too literally. James merely wished to include the owning of the changing stream of consciousness in his psychological description. So, though he seems to reach the conclusion that "the passing thought . . . is itself the thinker," he never forgot that "the identity of *I* with *me*, even in the very act of their discrimination, is perhaps the most ineradicable dictum of common sense."⁸ This identity of the *I* with the *me* he did not think he had explained. It is the final problem which James bequeathed to subsequent psychologists, and it surely deserves to rank as a burning question.

Unfortunately there is not room in this article to give a complete solution of this problem. But I believe it to be quite soluble, if we hold fast to two demands. In the first place, the *I* and the *me* must be shown to be consubstantial and individual, so that each of us can be an *I* that can have a *me* of its own, that is, an *I* which can be one with his experience, can own it, can be relative to it, and can learn from it. Secondly, we must give up altogether the substratum view of substance

⁷ *Principles of Psychology*, I, 401.

⁸ *Outline of Psychology*, p. 176.

and revert to the *energeia* view of Aristotle. For it is only from our inner experience that we can learn what it is to change and yet to remain the same and so can get a model for the notion of permanence in change. As for the way in which this view yields a satisfactory account of substance I can refer to Chapter XII of *Humanism*, "Activity and Substance."

It stands to reason that if space has been lacking to expound in full the burning question of the self, I cannot take up further cases. But I will conclude by suggesting a list of what seem to me burning questions well worthy of the attention of philosophers. What should we mean by God? How are the various "Gods" related? And how proved? What is the problem of evil? And why is it so difficult? Is life worth living; is death worth dying? What about a future life? How is progress possible? Can the human race be improved? Can happiness be attained, or is it an illusion? These are all questions which seem worth asking; but they are not likely to be answered speedily—they are all likely to remain burning questions for a long time to come.

THE HUMANISTIC VIEW OF LIFE¹

I BELIEVE that I can best play my part in this course of lectures by explaining, somewhat fully, why I think Protagoras should be regarded as the first recorded ancestor, not merely of the strictly humanist theory of knowledge, but also of the humanistic attitude towards life in general. Moreover, it will be best to start with the latter problem.

A little reflexion shows that in his dealings with the world man can assume two diametrically opposite attitudes. He can submit to the course of nature, or he can struggle against it and endeavour to control it. Further, if he decides to struggle, he can look for help to sources beyond himself, or he can rely upon his own resources. In the latter case we may call him a humanist. Moreover, plainly he can vary and combine these three attitudes in an endless variety of ways, and can adapt them to a great variety of situations.

But we can also consider each of them in its abstract purity. If so, we may call the attitude of submission to the course of nature that of "naturalism," while that of striving for the control of nature may be denominated "humanism." For several reasons naturalism is not often adopted by man for any length of time. Although he may sometimes flatter himself that apparent submission is the best way of overcoming nature, it does not really suit his active temper. Moreover, it is clear that if he really submits and lets nature take her course, he does not better himself and his situation. Also naturalism is apt to lead to con-

¹ A Library Lecture, Los Angeles, California, May, 1935.

fusion of thought, because "nature" is such a vague and ambiguous notion. So on the whole naturalism is neither a congenial nor a characteristic attitude of man.

When he gets into trouble, he much prefers to cry out for help and as his situation is so often desperate, he is willing to accept help from any quarter and at almost any price. It is this attitude that generates the religions in all their weird and terrible variety. They are all appeals for supernatural and superhuman aid when human powers fail. The primary effect of the appeal to the supernatural appears to be psychological. Whether or not his religion puts him in touch with higher powers, it heartens a man and emboldens him to act more audaciously and to experiment more freely. He may then find that nature supports his audacity, *audentes fortuna juvat*. Although at first sight religion means reliance on another, yet in practice it usually produces self-reliance.

But self-reliance may also be cultivated on its own account. It has been cultivated on its own account almost from the outset, by a few, and on the whole this policy has paid. Such at any rate has always been the belief of the magician and the medicine-man, from whom our scientists and medicos can trace their descent.

Self-help and self-control for the sake of controlling others, then, is evidently our first line of defence against the onslaughts of the manifold ills that beset our life. Also it is the most satisfactory, if we can maintain it, for it is the most invigourating and assured. Its weakness is our own weakness, the limits of our power to defend ourselves against evils. Our power to control our world, happily, has been steadily increasing, and just now it is increasing rather rapidly.

Nevertheless, so long as this weakness continues, Humanism does not suffice. We are tempted therefore to fall back on other attitudes. We are tempted to grovel in the cowardly submission

of naturalism or to put our faith, to the pitch of hoping against hope, in supernatural aid.

I have never been able to see why any one should resent this common human practice. It seems to me quite reasonable. I do not see why a humanist should not turn naturalist or supernaturalist upon occasion, when his human resources have left him in the lurch. For the supreme and over-riding principle to guide our attitude towards life must always be the pragmatic principle, and we should not allow any metaphysical prejudices to stand in the way of our salvation. What is true must work, and anything that promises to work is at any rate worth testing to see whether it does not work so well that it may properly be hailed as true. Common sense has always realized that man's essential business is to effect the best possible adjustment to guard against the evils which beset him; and we are fully entitled to experiment with any hypothesis that looks likely to be effective. It is the merest pedantry to object that the theories we try are logically incompatible. We have merely to conceive them as methods to gain the right to use them all concurrently.

Moreover, it is not usually even true that they are logically incompatible. For theories are usually so vague that they are enormously elastic and can be fitted on to almost any sort of fact. Naturalism is a case in point. For there is nothing to prevent our taking "nature" in so wide a sense that it will include also man and supernature. For man plainly has a nature of his own, and unless the supernatural likewise has a stable nature no dealings with it can be transacted. The most enlightened and elaborated humanism, therefore, will decline to be forced into antagonism either to science and the natural or to the supernatural and religion.

Bearing in mind this outline of the relations of humanism to the other philosophic attitudes, we may next approach the work of the first thinker in whom the humanist attitude becomes vocal and explicit, Protagoras the great Sophist, of Abdera. It found

expression in his famous maxim that man is the measure, the *anthropos metron* or *homo mensura*, or more literally as "man is the measure of all things, of those that are that they are, of those that are not, that they are not." This is the great slogan of relativity, which assures to man the central position in the universe that exists for him and concerns him, and continues to be an unfailing source of scientific insight. As witness Einstein's physics and Heisenberg's Principle of Indeterminacy. It is also the only principle surviving from early philosophy which is anterior to Plato's discovery of the "Idea" and comparable with it in importance.

Moreover it comes, not at the beginning, but at the end of Protagoras's career, so that we must regard it as the fruit of his life-long experience. Now it makes an enormous difference to the value of a principle whether it emerges fresh from the lap of life itself or is painfully extracted, smelling of the lamp, from the disputes of philosophic schools. Moreover, Protagoras's life was a varied and agitated one, and like Odysseus he could say that he knew the cities and the hearts of men.

He lived in one of the great formative ages of human history, the Greece of the fifth century B.C. We know the date of his death, 411 B.C., but there are two traditions about his birth—either 500 or 480 B.C. The date of his death is fixed by that of his flight from Athens to escape from the attentions of the oligarchic government of the Four Hundred, who had accused him of impiety, even as a dozen years later Socrates was accused by the opposite faction, the democratic. In both cases there is every reason to suppose that the charge was essentially political. For the Athenian democrats had discovered that Protagoras was their man, the philosopher of democracy: "man is the measure" meant that everyone was to have the intellectual suffrage and a right to his own opinions. Accordingly they appointed him lawgiver of Thurii, when they founded that important colony. But when the conservative oligarchs got into power, a charge of

impiety was as inevitable as it was against Anaxagoras when Pericles fell from popular favour. And Protagoras had given his enemies a good pretext by declaring that concerning the gods he had never been able to ascertain whether they existed or not: the brevity of human life and the obscurity of the subject had hindered him from finding out. A very sensible remark, if it was a comment on the conflicting mythologies that were current in the various cities of Greece, and one that would naturally occur to a scientific and empirically minded man. We do not know what its actual context was, because Protagoras's book was burnt; but no context would have saved him. For the Four Hundred were thirsting for the blood of the pestilent upholder of democracy. The democrats felt much the same about Socrates in 399 B.C.; for they had realized that his maxim "virtue is knowledge" was not merely a paradox of ethics but meant, politically, skilled government by oligarchs or bureaucrats and the downfall of the Demos. But as Athens had capitulated to Thrasybulos on condition of a political amnesty, no openly political charge could be brought; so Socrates also was accused of "impiety" with the additional accusation of "corrupting the youth" thrown in as a joke. As was once pointed out to me in an examination paper, a man who seriously thought Socrates capable of corrupting a youth like Alcibiades, simply could not have known the youth of Athens.

The difference in the consequences of the two charges was due simply to the fact that Protagoras did not stand trial. He was not an Athenian citizen and did not feel it his duty to die because a partisan jury wanted to condemn him for political reasons; also he knew that his teaching was welcome in every part of Greece. So he took ship for Sicily; but unfortunately his ship was wrecked and he was drowned; and so perished the most distinguished exponent of the new higher education, which was creating a furore among the young men of the wealthy classes throughout the Greek world.

Why? you may wonder. Not because they had been miraculously infected with a pure craving for useless knowledge for its own sake, but for a sound, practical, and pressing reason. The repulse of the Persian invaders had led to important political changes in Greece. The victory of the Greeks had been largely due to democratic Athens, and so democracies largely supplanted oligarchies and tyrannies. But this meant that the old ruling classes were put in a difficult position. If they wished to play a political part it was no longer enough to persuade a small committee: they had to learn to make speeches to the sovereign people in the market place. Nay more, if they wished to preserve their life and property, they had to learn how to defeat a pestilent brood of professional informers, who made their living by hauling the wealthy before hostile democratic juries and appropriating a proportion of their property if they obtained a condemnation.

But why could not the rich defend themselves? Precisely because they had to defend *themselves*! They could not, as now, hire skilled lawyers to perform this vital function for them. For the simple reason that as yet there were no lawyers. The higher education retailed by the so-called Sophists was the first step in the evolution of the lawyer; and, as yet, if you wished to defend yourself or to shine as a public speaker, you had to make your own speeches, however wealthy and well-born you might be.

Hence this enthusiasm of the younger men of the upper classes for the "new education" and the teachings of the Sophists. The young men saw that it was vitally necessary; the old deplored it and grumbled over having to pay the bills for the education of their sons. But the leaders of the new education, like Protagoras, made fortunes because they performed an essential social service which was in great demand. We are told that Protagoras charged high fees, but that if any of his pupils thought the instruction was not worth so much, he could go into a temple and swear how much he felt it was worth, and

Protagoras would accept that amount. Do you think many teachers would make fortunes if such a method were adopted now? The best story, however, to reveal the real inwardness of Sophistic teaching and the motives of those who gulped it down is the story of Protagoras and Euathlos. It comes from the old formal logic, of all places, where it figures as an illustration of the form of reasoning called the "dilemma." Protagoras agrees with Euathlos that he shall pay only half the fees in advance and the other half after he has won his first case. But after he has taken his course, Euathlos does not practise, thus showing that he had wanted instruction only in order to protect himself against the attacks of "sycophants." After a while Protagoras grows anxious, fearing that Euathlos does not mean to pay; so he summons him, and when they come into court addresses him as follows: "Most foolish young man, do you not see that whatever the judges decide, you will have to pay? If they decide in my favour, you will have to pay by their order; if in yours, you will have won your first case and will have to pay under our agreement." Whereupon Euathlos replies: "Most sapient Master, do you not see that in neither case shall I have to pay? If the judges decide in my favour, I shall not pay by order of the court; if in yours, I shall not have won my case, and the money will not be due under our agreement." Of course if Protagoras had been able to employ a modern lawyer, his astuteness would probably have been equal to trumping up a fictitious debt due to Protagoras by Euathlos, equal to or greater than the disputed fee. Then, whether or not the judges decided in his favour, he would have got his money. But, as I said, there were no lawyers, and it was difficult to invent them. Socrates had to bore his fellow citizens for a life-time with his questionings, before he could convince them of the forensic value of cross-examination. Even in Cicero's time, counsel still had to come into court as an *advocatus*, called in as a friend by one of the parties, and was paid for his services

by "presents"; and to this day the English barrister is not permitted to sue for his fees.

Protagoras's profession, then, was to teach the art of effective speaking, that is, rhetoric and elocution, together with any studies related to this central purpose. Accordingly we find that the Sophists had to concern themselves also with grammar, syntax, logic, and theory of knowledge. They, especially Protagoras, are the founders of these studies. Moreover, as he was not salaried by the State or paid out of existing endowments, he had to charge his audience fees. Normally, therefore, his pupils would be found among those who could afford to pay fees, that is, the wealthy. And these, in the fifth century B.C., were strongly oligarchic in sentiment.

This put the Sophists into an awkward position towards the people. They were equipping its enemies with intellectual arms and armour. They had to do this, because they were catering to the needs and tastes of a very anti-democratic audience and knew that they could win applause only by attacks on the democracy. Yet they were also well aware that it was thanks to democracy that they had an audience at all and that if it were abolished their occupation would be gone. So whatever their personal sympathies, they probably behaved as though democracy meant prosperity for them and did not carry criticism to extremes.

The history of Protagoras affords good illustration of all this. I have mentioned that he fled from Athens in consequence of an incautious utterance about the gods to which an invidious turn was given. His remark occurred in his last book, intended probably as his *magnum opus*, which is generally supposed to have been entitled *Aletheia* (Truth) and to have contained also the *anthropos metron dictum*. At any rate, it provoked the storm. According to Diogenes Laertius, not only was Protagoras charged with impiety, but the Athenian government collected

all the copies of the offensive book they could lay hands on and burnt them.

Apparently this persecution was effective. For no one subsequently seems to know anything more about the contents of the book than these two quotations; and no one knew the context of either of them.

Nay more, it is practically certain that even Plato, a boy of seventeen when these things happened, had never read the *Aletheia*. How is this explicable? Very easily, if we remember that the possessors of the forbidden book would naturally be the pupils of Protagoras, in ardent sympathy with the oligarchic régime. So they sacrificed their master's *Truth* to their party allegiance. Protagoras's own copy would go down with him. This hypothesis renders it entirely credible that Plato had never perused the incriminated passages *in situ*; and an examination of his references to Protagoras in their probable chronological order renders this extremely probable.

To begin with, in the brilliant dialogue called the "Protagoras," Plato seems to be entirely unaware that Protagoras could be more than an eminent educator and a decidedly conventional moralist. Not a word about the *anthropos metron* and its logical implications.

Next the *Meno* brings Protagoras into a curious sort of connexion with Socrates. Anytus later, one of Socrates's accusers, is so irritated by him that he threatens to do him in. Whereupon Socrates calmly mentions Protagoras as one who had died in high esteem. Is not this an odd remark to make of a fugitive from Athenian justice? But may we not understand it as Plato's way of hinting that Protagoras and Socrates were both the admirable victims of Athenian intolerance and bigotry?

In the *Euthydemus*, however, Plato begins to smell a rat. He puts upon the stage a couple of "eristics," contentious Sophists who have bettered the instruction of Socratic dialectics, and accuses them of denying the law of contradiction. It will repay

us to go into this charge a little, because it is still brought up against the *anthropos metron* and Protagorean humanism. If A feels hot after exercise and says "it is hot," and B, lolling in a cool cellar, denies it, common sense has no difficulty in apprehending the situation. Each is claiming objectivity for his personal sensations; and both may be right relatively to their respective situations. It is hot for A, but not for B. Moreover, A may make his remark and claim confirmation for his feeling, precisely because he is in doubt whether it is shared by others and whether it is "subjective" or "objective." When B disagrees, it becomes clear that a mere exchange of feelings will not dispose of the question. A and B must consult a thermometer and agree about its reading. There is nothing paradoxical or difficult about this exchange of views.

But this is not how Plato reads the situation. To begin with, Plato takes it out of its natural human context and treats it in abstraction as a fearsome problem about what "it," the objective and absolute temperature, eternally "is." And then, of course, "it is hot" and "it is not hot" are (verbally) contradictory, and whoever says they can be compatible can be accused of denying a primary "law of thought." But may we not point out that the whole difficulty arises from a mere trick of abstracting from the particular context of the conflicting judgments and the persons concerned?

In the *Cratylus*, we come at last upon the *anthropos metron* and a Plato whom it has profoundly shocked. The idea of making any man the judge of truth and reality! Are Tom, Dick, and Harry to decide what is real absolutely for all and not to bow to the authoritative verdict of a Plato? It is an outrage! It is no better than to make a dog-faced baboon the measure of all things! And so forth and so on. Plato shows not the slightest understanding of Protagoras and of the problems that have led to the doctrines of relativity. These were presumably that on the one hand men did in fact disagree in every conceivable

manner, while on the other they nevertheless managed to effect social compromises and to live together.

In the *Theaetetus* finally we get Plato's last and most important reaction upon Protagoras, whom he now definitely recognizes as a formidable figure in the theory of knowledge. The *Theaetetus* is a late dialogue, or rather, I should say, one that received a late revision. Its primary problem is that of "error," and as a solution of this problem it is a flat failure. Flat failure is the fate of every theory of knowledge which abstracts from the purposes which animate all actual thinking and refuses to admit that truth and error are both relative to purpose; nevertheless, the *Theaetetus* remains far and away the best discussion of error achieved on intellectualistic lines.

Among the characters of the dialogue is an old man, Theodoros, who is described as a friend of Protagoras and as a mathematician, but no philosopher. "No philosopher" is almost a technical term used by idealists to describe all who disagree with them, and though actually Theodoros says little, I suspect that he had contributed far more to the argument than Plato will confess. In fact, I regard him as the source of the belated knowledge of Protagoras's meaning which Plato tardily displays. For though Protagoras's book was destroyed, his friends remained and could protest against Plato's travesties.

So Theodoros may still have been alive when Plato wrote the *Cratylus*, say about 380 B.C. Its grotesque caricatures of Protagoras may well have stirred his indignation and moved him to expostulate. Plato listened carefully to one who must have known what Protagoras had meant and could supply the lost context of his dicta. He took notes, therefore, of what Theodoros said, and years later, about 355 B.C., worked them up into the defence of Protagoras which is put into the mouth of Socrates.

But this defence does not look like part of the original draft of the *Theaetetus*. When it comes to Protagoras, the *Theaetetus* first repeats the tirade of the *Cratylus* against the dog-faced ba-

boon. Moreover, the defence itself contains sundry very un-Platonic ideas, as I have shown in my little pamphlet *Plato or Protagoras*?² Lastly, the case for relativity which it puts is never answered in the later part of the *Theaetetos*, though some of its arguments appear to be misapprehended. I incline, therefore, to look upon it as genuinely Protagorean, the only genuine Protagoreanism we possess, filtered through to Plato from the mind of Theodoros, but not completely understood. This would account also for its omission to tell us more. For Theodoros would naturally concern himself only with Plato's errors, and the context of the dicta might not have had any direct bearing upon these.

The repulse of Plato's attacks on Protagoras practically establishes the humanist position. For the remainder are greatly inferior in weight and vigour, as well as devoid of originality. Still I must avail myself of the opportunity to point out the intrinsic merits of the *anthropos metron* as a theory of knowledge, and the absurdity of the calumny copied from one history of philosophy into another that it leads to scepticism.

Surely it is almost too plain for words that when I say "Man is the measure of all things," I am not denying that man can know all things, but *affirming* it emphatically. "All things," of course, are not to be taken absolutely, any more than is anything else. For who knows whether the real can be formed into a whole except by man's imagination? "All things," also, are all things which concern us. What the dictum proclaims is the adequacy of human knowledge to its problems.

It indicates also how, in the main, man renders his problems commensurate with his intelligence. It is by measuring. But "measure" or "number" (which is a closely allied notion) is, not the metaphysical essence of all things, as the Pythagoreans went to the extreme of asserting, but only a human device, a spe-

² *Plato or Protagoras?* (Oxford: Blackwell, 1908).

cifically human procedure. This is fully and profoundly true. Science always aims at quantitative treatment.

What, then, is the reason why humanism is accused of scepticism? Nothing is left in the charge but the assertion of relativity plus the confusions which the notion of absoluteness induces in many philosophic minds. Men do not all perceive alike or measure alike or value alike or hold the same things true and real. Some, moreover, are much better judges than others, as Socrates is made to confess on behalf of Protagoras in the *Theaetetos*.

But this fact is no reason for denying knowledge and does not lead to scepticism. It leads to pluralism and toleration, not to nihilism or absolutism. For theoretically it may be admitted that a plurality of "truths" may co-exist about the same matters in different minds. That is what we find, in fact, in all societies. But even the philosophers get hysterical about it. For practically the situation creates no difficulties. It does not involve a repudiation of objective certainty and social agreement. It requires only a certain amount of further inquiry and a certain amount of *savoir faire* and of social adjustment. If A is colour-blind or shortsighted, we do not despair of discovering what the true colours and the real nature of the distant object are (for us) but we take the proper steps to ascertain them. And everyone co-operates. Those whose natural equipment is so defective that they cannot perceive as normal men are easily induced to recognize their inferiority and to avail themselves of such mitigations of it as the sciences have in the course of time devised. The shortsighted man, therefore, does not refuse to wear spectacles, once he has convinced himself that he can see better with them.

But, of course, without them he still sees as badly as before. It remains true that what he sees remains relative to his powers of perception. So do his spectacles. They are fitted to his vision. We should not, therefore, listen to the Platonist who would en-

deavour to persuade us that there must be found one absolute and objectively valid pair of spectacles, which is the ideal pair best for everyone, and with which alone eternal truth can be perceived. Rather we should turn the tables on the Platonist and show him that it is he who is staggering on the brink of scepticism. It is the absolutist, not the relativist, who invalidates and discards the humdrum and familiar methods of detecting truth and error. For he has no means of proving that his "truths" are not relative to him and to his character, beliefs, and prejudices or that what he calls "truth absolute" can be attained by any human mind. He cannot show that all the truths we can attain are not relative to our knowledge and to our faculties and the conditions of the experiments that yield them. And, in the end, when he is tardily driven to the admission that absolute truth must needs be a prerogative of the Absolute (itself a very human and questionable fiction!), does it not become clear that the notion of absolute truth has the effect of discrediting our human truths? Whereupon, if we are wise, we shall resolutely scrap it.

MUST EMPIRICISM BE LIMITED?¹

IF A dispassionate intelligence could be found and induced to contemplate the ways of philosophers with the icy eye of pure reason, it would encounter no more intriguing problem than that of explaining the universal and well-nigh invincible reluctance of philosophers to trust experience and to accept it, without prejudice and *arrière pensée*, at its face value. For nothing is more difficult to find among the endless varieties of philosophic opinion than a whole-hearted and thorough-going empiricism. Some pragmatists may be able to make good their claim to this status, but for the most part even the most empirically minded, after the fairest promises and the most profuse professions, are constantly to be caught backsliding, and are often found to end up in the shabbiest or most fantastic apriorism or in a wanton and impotent scepticism. Somehow it seems to afford philosophers so much secret satisfaction to arrive at the merely negative conclusion that not all knowledge comes from experience, that they care little whether its origin is more plausibly to be derived from the deity or the devil.

These reflexions occurred to me very forcibly as I read the brilliant paper² on the *Limits of Empiricism*, which Lord Russell read to the Aristotelian Society last April. I was the more impressed because Lord Russell is among the most courageous and clear-headed of philosophers, who has long been known for his sympathy with empiricism and almost every

¹ From *Mind*, n.s., XLV (1936), 297-309.

² In *Proceedings of the Aristotelian Society*, n.s., XXXVI (1935-36), 131-50.

other philosophic heresy, who has striven most unceasingly to achieve the ideals of pure disinterested intellect and perfect exactitude, and has most relentlessly dissected out the weaknesses of man's passion-prompted soul. Moreover, he has nobly preferred being understood to being marvelled at and has usually scorned to enfold himself in the mists of technical verbiage.

Accordingly, it is no trivial thing when a man of such eminence sets himself to determine the limits of possible experience, and it is well worth while to trace the process by which he has persuaded himself that pure empiricism is untenable.

Let me begin by quoting his conclusion (pp. 148-149): "We all in fact are unshakably convinced that we know things which pure empiricism would deny that we can know. We must accordingly seek a theory of knowledge other than pure empiricism. . . . We have found reason to believe:—

"(1) That if any verbal knowledge can be known to be in any sense derived from sense-experience, we must be able, sometimes, to 'see' a relation, analogous to causation, between two parts of one specious present.

"(2) That facts about universals can sometimes be perceived when the universals are exemplified in sensible occurrences; for example, that 'preceding' is transitive, and that blue is more like green than yellow.

"(3) That we can understand a form of words, and know that it expresses either a truth or a falsehood, even when we know of no method of deciding the alternative.

"(4) That physics requires the possibility of inferring at least with probability, occurrences which have not been observed, and, more particularly, future occurrences.

"Without these principles, what is ordinarily regarded as empirical knowledge becomes impossible.

"It is not necessary to maintain that we can arrive at knowledge in advance of experience, but rather that experience gives more information than pure empiricism supposes."

Lord Russell leads up to these conclusions by accepting from an anonymous contributor to the *Encyclopædia Britannica* the definition that "empiricism is the theory that all knowledge is derived from sense-experience," and proceeds that "three questions arise before we can discuss whether empiricism is true or false" (p. 131).

It should here at once be noted that this definition restricts experience to sense-experience and that Lord Russell does not define what he means by "pure" empiricism, but leaves it vague. Nor does he explain in what sense he uses "true" and "false." Apparently in the sense assumed by the "law of excluded middle," that is, as excluding the possibility of the meaningless. He assumes, moreover, that the meaning, truth, and falsity of a "form of words" can be ascertained without knowledge of their context and use (p. 133). I think also, but cannot be sure, that he assumes "true" and "false" to be "absolute" for the purposes of his argument. At any rate he takes them to be unambiguous; for his subsequent argument would go to pieces if he admitted that "true" and "false" were relative to a context and a purpose.

Lord Russell then declares: "we must ask what is meant by 'knowledge,' what by 'derived from,' and what by 'sense-experience.'" Of "knowledge" he says "there is no accepted definition." He might have added that what is to be meant by "knowledge" is precisely the cardinal dispute of the various schools of epistemology.

"Derived from" Lord Russell thinks "may be interpreted either logically or causally." I should like to add, "whatever logically and causally may mean." And the possibility of psychological and biological interpretations should not be overlooked.

"The words sense-experience," we are further told, "are capable of either a wide or a narrow interpretation." But whichever is chosen, an important question is begged. For experience

is restricted to sense-experience, and sense-experience is assumed to be a process to be adequately observed by an external observer. What difference the experiencer makes to the experience is thereby ruled out of court—by the way the question is put. Thus every voluntarist or personalist interpretation of experience is excluded *ab initio*. Whether this exclusion is in Lord Russell's case intentional is not clear, but its consequences will be found to be far-reaching at every stage of the subsequent inquiry.

In the first place, it justifies Lord Russell in starting from the familiar question of academic debate "what are sense-data, and what is the knowledge most immediately dependent upon them? This leads at once to the question: how is this knowledge dependent upon these data? When these questions have been decided, we can go on to inquire whether there is any other knowledge, and, if so, what reason there is for believing it."

Now if the standpoint of the external observer had not been begged (as shown above), the answer to these questions would be easy. Sense-data are fictions of a highly sophisticated philosophic "analysis," for which there is no psychological warrant and for which the practical man has no need. No one therefore has any cogent "reason to believe" in them. It may be that for certain technical purposes of certain sects of philosophy they are convenient for the purpose of avoiding other simpler explanations; but they are to be reached only by devious and dubious ways. At any rate, one may make bold to say that neither the common man nor the practical man nor the scientist has any need to "analyse" his experience in terms of sense-data. What they all require, and assume, is perception of things and of states of themselves in the light not only of their own past but also of that of their ancestors; they all, moreover, believe themselves to be amply justified in their beliefs, which

indeed are part of the great pragmatic interpretation of experience, in which we are all educated and by which we all live.

The first things, therefore, an accurate account of knowing should "eliminate as irrelevant" (p. 132) are the philosophic notion of sense-data and the attendant abstraction from the antecedents, context, and setting of the "sensible occurrence." It amazes me that Lord Russell should not have realized this, for his whole account (pp. 132-133) of the way in which our "sensible facts" "depend upon our interests and past history" is excellent and vastly superior to the traditional epistemologies. I should merely like to add to the remark that knowing is noticing (p. 133), that noticing is always selecting, and that selections are always optional and risky. Thus the volitional side of knowing will not down.

At this point Lord Russell discovers a "logical difficulty." Our most immediate knowledge depends not only on the "sensible fact" but also on our own past history. But how can we know "at the very beginning of empirical knowledge" "about the effect of the past upon ourselves"?

This would appear to be in essence the old Greek puzzle about the origin of knowledge out of previous knowledge, which led Plato to postulate the pre-existence of the soul. A less romantic philosopher, however, might be tempted to ask: Why should not our past affect our knowing without our knowing it? Why should we not gradually discover, from experience, how much our past has, for good or evil, moulded our knowing? And why should we gratuitously commit ourselves to an unexperienceable fiction of a "very beginning of empirical knowledge"? The very notion seems to arise from a confusion between psychological and logical analysis.

Lord Russell, however, prefers to infer that there must exist a "primitive non-verbal sense-knowledge" as a logically necessary basis for other empirical knowledge. He admits, however (p. 134), that it is as yet logically useless and must be made

verbally communicable. He points out that "there are causal relations between words and what they mean: a cat causes the word 'cat,' and the word 'cat' causes expectation of a cat, or perhaps the actual sight of one." Moreover, these causal relations can sometimes be perceived, and he defies any empiricist to deny that "I say 'there is a cat' because a cat (or a sensible appearance resembling that of a cat) is there" (p. 136). This "because" seems to take me beyond what an empiricist ought to know. The word 'because' must be taken as expressing a relation which is, at least partly, that of cause and effect" (*ibid.*).

I have been particularly interested by this doctrine. For I have been puzzled for many years to understand how Lord Russell managed to combine acceptance of Hume's criticism of causation as necessary connexion with his continued references to some sort of causal relation. The present paper plainly proves that he does hold both the doctrine that the necessary connexion between events is not a fact of observation and that nevertheless "the word 'because' . . . must be understood as expressing a more or less causal relation and that this relation must be *perceived*, not merely inferred from frequent concomitance. 'Cause' accordingly must mean something other than 'invariable antecedent,' and the relation of causation, or some relation intimately connected with it, must be one which can sometimes be perceived." (p. 137).

Why not always? Nay more: "problems connected with language are absent in some instances in which the same relation can be perceived, *e.g.*, if I am hurt and cry out. We seem, here, to perceive indubitably a connexion between the pain and the cry" (*ibid.*). Lord Russell will not indeed say without qualification, that we must be able to perceive "causal" relations but only that sometimes he "can perceive *some* relation having an intimate connexion with that of cause and effect" (p. 137 f.).

I confess, however, that *perceived* causal relations of any sort seem to me a plain repudiation of Hume's cardinal doctrine and that I can make nothing of "a more or less causal relation" (p. 137; cf. pp. 146 and 147). If it existed, it should, I suppose, admit of quantitative treatment and would provide a great opening for a new calculus to determine whether a "relation" was 50 percent "causal" or only 25 percent. As for relations which are "analogous to causation" (pp. 148, 149) one would like to see the analogy drawn out.

At the same time Lord Russell's attitude is thoroughly characteristic of the ordinary empiricist's treatment of Hume. He professes the greatest enthusiasm for the reduction of the necessary connexion of causes to regular sequences and then goes on talking about the causal laws of the special sciences exactly as do his unregenerate metaphysical brethren. Nor does he stint himself in the use of the causal implications of ordinary speech. Hence his "empiricism" here reaches one of its limits, simply because he refuses to follow Hume and ceases to be an empiricist at all in the sense he originally claimed.

The reason for this *débâcle* probably is that the metaphysicians, the Humians, and the scientific "empiricists" all get into the same difficulty at this point. They have all begun by making the same unjustified abstraction. They have all assumed (uncritically) that the crude, immediate, personal experience of voluntary action cannot possibly have anything to do with the scientific conception of causality. But the anthropomorphic assumption of the conformity of nature with human nature is much more deeply rooted both in language and in scientific method than they had realized.³

Lord Russell's next difficulty is that of "justifying inferences

³ Hume alone saw the relevance of this experience to the "causal" problem and argued against its admission, in the *Enquiry*, with his usual ingenuity. (See my *Humanism*, ch. xvi.) The question is ultimately whether philosophy and science are restricted to the standpoint of the external observer or may also take into consideration that of the experiencer and the agent.

from facts to facts" (p. 138). He quotes Wittgenstein's account of atomic facts independent of one another: "from the existence or non-existence of an atomic fact we cannot infer the existence or non-existence of another. The events of the future cannot be inferred from those of the present. Superstition is the belief in the causal nexus."

Lord Russell admits that this (authentically Humian) doctrine paralyzes "valid inference," reduces (deductive) reasoning to tautology, and "sweeps away all inferences that have any practical utility." But he refrains from inferring that there must be some deep-seated error in the premisses that lead to such conclusions and contents himself with demanding immediate perception of relations of transitiveness and asymmetry (p. 140). He does not envisage the possibilities that a thoroughly empiricist logic would support Hume by dropping the traditional notion of formally valid inference, by regarding the truth of all inferences as hypothetical and experimental, and by accepting verification by experience as the only possible and actual, though never formal, validation.⁴

At first sight Lord Russell is on safer ground when he argues (p. 140): "That it is possible to *perceive* facts about universals appears also in many other ways. In looking at the rainbow, we can perceive that blue and green are more similar than blue and yellow . . . These things are known empirically in one sense, but not in another. Take the case of blue, green, and yellow. It is only through sense that we know green to be between blue and yellow: when we see all three colours simultaneously, we can also see their resemblances and differences,

⁴ There is, of course, a formally invalid begging of the question in the reasoning (p. 138) that "within one specious present we perceive that A precedes B, and within another specious present we perceive that B precedes C." This is "self-evident" only as an abstract formula. In any actual use the identity of the two B's involves a hypothesis and a risk. Lord Russell here encounters Alfred Sidgwick's objection to the "validity" of the syllogistic form owing to the liability to ambiguity of any middle term.

and we can see that these are properties of the shades, not of the particulars . . . (Hence) attention to the facts of sense can give rise to general knowledge."

But surely a thorough empiricist would here be entitled to point out that Lord Russell has greatly simplified the complicated facts of colour-vision. The terms "blue," "green," and "yellow" are only rough, though practically convenient, references to an indefinite mass of colour hues, shades, and chromas which pass imperceptibly into each other and vary enormously according to the illumination in which they are viewed and the backgrounds and areas on which they appear. Also empirically endless anomalies are to be found in the colour-vision of individuals. Also colour-vision has in all probability evolved somewhat recently, and may be developing further. Under these circumstances would it not require altogether unreasonable confidence in *a priori* (that is, verbal) argument to expect nature to confirm all our expectations about abstract "blue," "green," and "yellow"? I can well imagine, therefore, that a deep shade of (indigo) "blue" in a yellow light will look much less like a yellowish "green" than a pale shade of "blue" looks like a pale shade of "yellow" in a rosy light. In short, the freaks of colour-vision render it a subject eminently unsuited for *a priori* argument.

Lord Russell next considers the sort of empiricism which has sprung up in modern mathematics to cope with the paradoxes of the "infinite" and is known as "finitism," and refers to Miss Ambrose's two recent articles in *Mind*.⁵ Hence it might be prudent, and would be sufficient, for a layman in mathematics to content himself with remarking that there are at present extant no less than three incompatible interpretations of the philosophic basis of the mathematical sciences, of which Lord Russell's is one, and that the present paper seems to exhibit him as retreating before "finitism."

⁵ *Mind*, n.s., XLIV (1935), 186-203, and 317-40.

His arguments against finitism, moreover, seem to rest on the indeterminateness of typically old-fashioned senses of "true" and "false" and on the ambiguity of "certain" (logical or psychological). Lord Russell adduces "it rained in London on January 1, 1066." This is, so far, only the formal truth-claim of a contextless "proposition" about an historical event; it has no meaning or value (truth or falsity) as it stands. It could become a true judgment only if some one interested in the matter found records that would satisfy expert historians that it did rain then and there. But if in a proper context its truth were alleged and accepted, the truth of this judgment would differ in kind from the "truth" of the "proposition." It would no longer be a mere unsupported truth-claim, but would possess, like all historical "truth," a higher or lower degree of probability depending on the value of the evidence supporting it. It could never lay claim to absolute or unconditional truth.

There follow a number of abstract propositions about "integers greater than any yet mentioned," to which it seems hard to imagine any actual context (p. 142). Lord Russell does not yet seem to have realized that for a "proposition" to acquire any actual meaning it must be given relevance to some actual problem and that until this has been done it has neither truth nor falsity, simply because the question of meaning takes precedence over that of cognitive value (positive or negative). If the "finitist" he is arguing against were also enough of a humanist to conceive the number-system as a tool for human purposes of calculation, he could easily dispose of all Lord Russell's puzzles by pointing out that numbers were always formed for a purpose and that the "infinity" of number merely meant that it was possible to form numbers large enough for any purpose, once the "law" of the formation of numbers had been formulated.

In disputing Miss Ambrose's remark that it is logically impossible to run through the whole expansion of π , Lord Russell

retorts that it is medically impossible (p. 143). But why should it not be both medically and psychologically impossible to boot? The alternatives are not exclusive. Anyhow Lord Russell's postulation of an omniscient Deity to reveal the whole truth to a mathematical Moses reads somewhat queerly when one remembers Lord Russell's former contributions to theology. Presumably he meant that his "mathematical Moses," who believed the whole expansion of π had been revealed to him by God, would surely be confined in a lunatic asylum! But I do not see why the finitist should not agree that obstinate persistence in a claim to have had a revelation about the "exact" value of π would in all probability land its asserter in an asylum.

Lord Russell finally admits (pp. 144-145) that: "Outside mathematics, we do not know with any certainty whether classes are finite or infinite, except in a few cases. And even when we think we know, it is no great help. . . . [For] on finitist principles, the form of words 'all men are mortal,' is outside the scope of the Law of Excluded Middle. For my part, I hold that, as soon as I know what is meant by 'men' and what by 'mortal,' I know what is meant by 'all men are mortal,' and I know quite certainly that either this statement is true or some man is immortal." (p. 145).

I devoutly hope that this date, when Lord Russell should have discovered (presumably by revelation rather than experience!) all the meanings, past, present, and to come of "men" and "mortal" will speedily arrive, and that he will then promptly divulge them; but until he does, I see no reason for receding from my contention⁶ that a thorough empiricism can involve both the meaning of "man" and that of "mortal," and the "proof" of man's universal mortality in no slight perplexity.

Finitism is finally rejected, because it rests on "an untenable general principle that what cannot be proved or disproved is neither true nor false." To which the reply is that what can-

⁶ *Mind*, n.s., XLIV (1935), 204-10.

not be proved or disproved is scientifically meaningless and that it is misleading to discuss the very ambiguous terms "true" and "false" without distinguishing between the potential "truth" of a formal truth-claim and the tested truth of an actual allegation. Also, it would seem that finitists would not admit that they cannot give empirically sufficient and empirically verifiable accounts of mathematical "induction" and of the genesis of the natural members.

Upon the important question whether modern science is not becoming wholly empirical Lord Russell bestows comparatively little space. He merely quotes a passage from Professor Dirac's *Quantum Mechanics* and declares it to be incompatible with thorough-going empiricism. "A great deal is assumed that cannot be observed, and cannot be inferred from what is observed, unless forms of inference are admitted which pure empiricism must reject" (p. 146). Presumably Lord Russell means that hypotheses and their verifications never lead to valid "proof," which can never be improved upon; but is not this empirical fact the very reason for the progressiveness of science?

Lord Russell then points out a number of scientific assumptions which he regards as incompatible with pure empiricism. First, the reliance on memory. This is an excellent example—for the empiricists. For we are pragmatically compelled to go on trusting our memory, even though we are constantly finding out, by experience, how little it deserves our trust. But why should not the empiricist be content to recognize the facts, to take all possible precautions, and to hope for the best? What more could all the metaphysics in the histories of philosophy enable him to do? It is no help to him to construe the trustworthiness of memory as a trans-empirical principle.

Secondly, the same is true of the trustworthiness of testimony: a liar's evidence does not become more truthful because it is given on oath. Thirdly, similarly, prediction of the future is in constant use and is empirically found to be possible and valu-

able, even though it is not absolutely certain and does not require us to feel it so.

The thorough empiricist, in short, has recognized that scientific principles are probably all methodological and that the progress of science does not require them to be more; also that they are all elastic and adaptable and can be changed to fit our growing knowledge.

There is no reason, then, to think that Lord Russell has shown a radical and thorough empiricism to be untenable. Or, at most, we may say, he has shown this only if "experience" is limited, by definition, to sense-experience. But this limitation seems arbitrary. It really raises the question whether all experience is to be squeezed into what some philosophers call "sense-experience." The practical man and the thorough empiricist will both be hard to persuade of this; and I can see many and good reasons for agreeing with them. For when we set out to consult experience, we have no business to impose *a priori* limitations on what shall count as such. It is the experience of the whole man as it comes to him that counts, not a doctored selection that some philosophic analysis has distilled from "the senses" and fabricated from "sense-data." The distinction between unprejudiced psychological observation of the actual processes and their *ex post facto* interpretation in terms of philosophic theory should be carefully maintained. If this were done, there would be little left to support the sensationalistic and intellectualistic assumptions which form the *a priori* of so much traditional naturalism.

But we have yet to face the two fundamental objections to any complete empiricism which render it so repugnant to philosophic minds. The first of these raises the ostensibly logical question of what is to be accepted as the empirical validation of a hypothesis. Is it enough that we should wait and see till it actually comes true? Or must we always demand in addition reasons to expect it to be and demonstrations that will prove it

to be absolutely true? I take it that a true empiricist would be content to wait and see, whereas the apriorist and the weak-kneed empiricist crave for further assurance of some sort. The former's position will then be that he claims the right to formulate any hypothesis that his past experience suggests to him and is willing to let the course of events determine his estimate of its value. If the predictions drawn from the "hypothesis" persistently come true, his confidence in its "truth" will grow until it reaches complete psychological certainty; if not, he will modify his hypothesis (unless it is a vitally important postulate) or substitute others, until the consequences observed are in good agreement with those expected. He will also realize that he need not conceive his hypotheses as ultimate facts, but that he is entitled to assume any principle provisionally, experimentally, or methodologically and that most, if not all, the scientific principles in actual use may be taken as methodological. That is, they are primarily assumptions for reaching results not otherwise attainable, or not so easily attainable. Often this methodological function is their primary or only significance. For example, the assumption of a predictable, or more-or-less determinate, sequence of events is needed, if we desire to foresee the future and to prepare for it; but it is unnecessary and superfluous to take "determinism" as more than this, let us say as a universal "law" of nature. Moreover, the use of the determinist principle does not necessitate belief in its truth: its use for the sake of prediction is unavoidable, even though we need not believe that it exactly applies to the case in hand. It is enough that we should be willing to try it for what it is worth and thereby get better results than if we had not attempted any prediction at all.

The true empiricist, then, is one who is willing to test his beliefs by their consequences and to abide by their results. That is, he is willing to accept consequences as having logical value and to permit them to validate beliefs.

Undoubtedly, however, to many minds the suggestion of such empiricism would be unpalatable and indigestible. To convince them that they stand to gain nothing by their recalcitrance we may begin by raising anew Hume's uncannily penetrating question: why should the future resemble the past? Like all Hume's posers this is a psychological as well as a logical question and has practical as well as "theoretic" bearings. But thorough empiricism would admit it to be a good question. It squarely raises the issue whether it is possible to extract from the past any absolute guarantees for the course of the future; and the growth of knowledge is rendering it more and more difficult to answer it in accordance with anti-empiricist prejudices.

As a matter of fact, science has revealed a number of features about our world which should make it decidedly uncomfortable for *a priori* philosophers. (1) Despite the reign of natural "law," the world somehow manages to generate unpredictable novelties, the "accidental variations," of Darwinism. (2) There is no proof that the "laws" of nature are immutable. They may shrewdly be suspected of being only the inveterate habits of things, and the laws in actual use are hardly even that: they are merely convenient formulas for predicting the course of events which are constantly being altered and improved upon. (3) As the real is not static but changes ("evolves"), and as nobody can say where the limits of the possible are laid down, no argument resting on the present order of things can be absolutely cogent. The truth of its conclusion is relative to that of its premisses, and at best the latter are true only, so far as we can tell, up to the present. Hence (4) a "logical impossibility" exists only *rebus sic stantibus*, for minds like ours, arguing from the "knowledge" we have, making our traditional postulates and using terms in their current senses. If any of these conditions is departed from, the former logical impossibility may well decline into a psychological "impossibility" which was only an illusion. Hence, innate ideas and arguments based on the

finality of *a priori* principles *à la Kant* are helpless in face of suggestions that the human mind may continue to evolve and may thereby invalidate reasonings based only on our present "necessities of thought." (5) Quite apart from such anticipations there would seem to be lurking, even in the stabilized order of experience, plenty of opportunities for catastrophes which have not yet come to pass, but are nevertheless not beyond the bounds of possible experience. Can we argue, for example, that the earth will never be destroyed by the sun's collision with another star because it never has been yet? This reasoning remarkably resembles the principle of scientific "induction" as it is often formulated; yet would it not be the height of fatuity to hope to ward off such a cosmic catastrophe by dialectical reasoning based on the meanings words have acquired from experience up to date?

We seem to have, then, no means of guaranteeing that the future we desire will be made secure by any scientific reasoning. All our "knowledge" is but conditional and more or less probable, and its "principles" rest upon hopes and postulates. The factor of doubt, contingency, and probability is not to be eradicated from the course of experience by any amount either of dogmatism or of past experience. But is this any reason why we should cower under this uncertainty and delude ourselves that because we shrink from it it does not exist? Is not the proper attitude, alike of the true man and of the true empiricist, to make every preparation he can undauntedly to meet the dangers and uncertainties of the future and to keep on readjusting his actions while the items of experience gradually accrue? A truly radical empiricism, therefore, will face even an incalculable future without seeking to limit and ward off its risks by the vain incantations of an *a priori* verbalism.

TRUTH-SEEKERS AND SOOTH-SAYERS¹

ANY observant philosopher must often have been struck by the enormous ambiguity of philosophic terms and by the looseness of philosophic terminology. Now at first sight it would seem easy to cure these defects by multiplying the technical terminology of philosophy and defining it exactly. Owing, however, to the habits and customs of philosophers this simple cure seems illusory. For no sooner does one philosopher invent and define a technical term than another comes along and incontinently uses it in another sense sufficiently like the older one to breed the direst confusion. Philosophy suffers also from an insufficient supply of distinctions. If, for example, the different senses of words like "experience," "cause," "realism," and "idealism" were distinguished by different names, would not most of the time-honoured controversies of philosophy speedily collapse?

The result is that all philosophic terms are allowed to remain obstinately ambiguous, and philosophic debaters are usually content with long-distance sniping at cross purposes and come neither to close quarters nor to any real agreement. I have long been impressed with these evils, which are not only practically inconvenient but morally discreditable and intellectually baffling. But I recognize also that not much can be done, and even that little only with the most meticulous caution and the greatest trepidation. I shall, therefore, be more

¹ From *The Personalist*, XV (1934), 209-18.

than satisfied if in this paper I can clear up and clear away one very glaring, but very troublesome, ambiguity.

I mean that between the intellectualistic, or absolutistic, and the voluntaristic, or pragmatic, conception of truth. They are plainly different, and the contrast and the gap between them, as it has been developing for the past thirty years or more, shows no signs of growing less. On the contrary the chasm is widening. The crucial question is whether truth is to be conceived of as something characteristically static or as essentially progressive. The believers in absolute truth show no more signs than before of understanding the issues raised by the believers in progressive truth; and the latter are as reluctant as ever to acknowledge the superiority of so-called absolute truth. Pilate's question, therefore, is as good as ever, and as hard to answer.

In the interest, however, of clear thought and honest discussion it seems to me imperative to separate the two senses of "truth" which are concerned in the pragmatic controversy by a sharp and decisive cut. This can be effected only by imposing upon them distinctive names. Only so can both parties know what they are talking about; only so can both parties realize that what they are talking about are quite different things that can be distinguished and ought to be.

There exist, indeed, a number of the sharpest contrasts between the two conceptions of truth. For the votary of absolute truth, whom for purposes of reference we may call the absolutist, truth is the centre of a number of intense emotional associations. He is vague enough, indeed, about the logical significance of "absolute." It wavers tantalizingly between "not relative" (in any sense of relative), "final," "unquestioned psychologically," and "metaphysically all-inclusive"; but no logical perplexities are allowed to weaken its emotional appeal. It is one, absolute, immutable, eternal, static, fixed by no human effort, and completely superhuman. It is the object of a "disin-

terested" devotion and a hopeless passion. For though the absolutist is apt to flatter himself that he possesses some absolute truth and is at any rate absolutely certain that no one else has it, he is not always wholly free from twinges of scepticism, especially when he tries to convince others who share his absolutist creed that he is right and they are wrong. For absolute truth, when it is sincerely worshipped, excludes all compromise and all degrees. It is all or nothing. It is a self-sufficing, self-sustaining, and self-proving whole. You either have it wholly or miss it utterly. Moreover, though it may be attainable, it appears to be incommunicable, at least by the ordinary means of communication. The conviction that you have it gets somehow into your head, and you feel it in your bones; though how you can get so intimate with something so divine remains a mystery.

But whatever embarrassments he may be caused by the dissensions and discrepancies of dogmas, the absolutist is staunch in rejecting the alternative attitude towards truth. He simply cannot think of truth as many, as flexible, as relative to a plurality of persons and occasions, as varying with times and seasons, as changing and growing, as corrigible and improvable, as plastic and dynamic, as interesting and serving human interests and purposes and ministering to human life and human problems. He is merely puzzled, therefore, by the fact that in language "true" admits of a comparative and a superlative, and so, apparently, of "less and more." He is even more shocked by the suggestion that to attain it we must not aim at totality but at plurality; not at grasping the scheme of things entire, but at picking out of the vast surge of being some manageable little bit of a problem, on which we can specialize and concentrate attention. The very idea that any truth worth mentioning may issue from a process of successfully selecting objects of human interest and subjecting them to a number of human manipulations and tests and valuing them accordingly, seems blasphemous. The very ideal of a total truth to be put together, like

the vision of a many-faceted insect eye, out of the separate reflexions of a multitude of special sciences seems a profanation.

But to the voluntarist all these attitudes required from the scientific truth-seeker involve neither paradox nor difficulty. For in his approach the problem of truth arises for him, not in any sentimental context, but in a perfectly matter-of-fact and business-like sort of way, as an ordinary incident in his problem-solving activity. "The truth" is merely the solution of a problem; the right answer to an actual and more-or-less urgent question; the best answer he finds himself in a position to give at a given time. There is nothing therefore mysterious, sacrosanct or indefeasible in the answer he accepts. If he could have found or thought of a better answer he would gladly have taken that, and in a sense he is always on the lookout for something better than the best he has been able to get. Thus he is never irretrievably committed to his accepted "truth"; he is never committed beyond the point at which it serves the purpose which led to its recognition; and it is always valued in part as a stepping-stone to higher things. His conception of truth, therefore, contains no suggestion of finality, but is essentially progressive. It is, moreover, wholly positive and not a veiled negation. It does not confuse logical certainty with psychological. It does not imagine that the road to truth lies through vain attempts to compass the whole; it sees that all our truths are reached by intelligent selection of the partial and the relevant. In short in all its common senses the "absolute" seems a will-o'-the-wisp that leads nowhere and only baffles knowledge.

Now to distinguish these two diverse and discrepant senses of truth, the English language is in a singularly fortunate position. It is rich in the possession of the two words "truth" and "sooth"; and in a general way they both mean truth. But they are not complete synonyms, and it would be quite practicable and easy to differentiate them further. "Truth" is a familiar, humdrum, and vulgar, term; "sooth" is less hackneyed, more

poetic, and much more solemn. Etymologically "truth" is "what a man *troueth*," and perhaps what he can trust. So it seems an apt word to designate the "truth" claimed by the individual judgments which embody a man's opinions and by which he is willing to abide.

Thus the very derivation of "truth" suggests that it is a matter of opinion and that opinions need to be tested. Every truth-claim, and in the aggregate the number of such claims may be large and various, needs to be verified—that is, literally, made true; and it becomes vitally important to know how much verification it has received and may require for our purpose. It cannot ever have received too much or so much that no more can conceivably be added to it. So it can never be proclaimed absolutely true. The truth it claims, from the very mode of its genesis, must remain relative to the amount of verification it has received; it must also remain liable to be refuted, modified, extended, or improved by further relevant experience. It cannot be in principle immutable any more than absolute.

Nor can it be eternal or independent of the time-context which generates it. It is always relative to the state of knowledge at the time when it is enunciated, and it always looks to further confirmation. So it always implies a forward-looking attitude of mind and a reference to a future in which it may receive further verification and which may enhance its value.

Nor, again, can truth be one. It must be relative to times and places and persons and purposes. To ask what is *the* truth is just as absurd a *façon de parler* as asking what is *the* time. We now know that the latter question is unmeaning unless it is further specified where, with what for a standard, and for what purpose "*the*" time is wanted. We know that all the times of the day, and two days besides, always co-exist on the surface of the earth. If we permit our thoughts to stray beyond that privileged sphere, we encounter an infinity of times, and "earlier" and "later" become utterly relative and hopelessly confused.

We habitually assume that the biggest and most impressive clock in our neighborhood gives us *the* time. And for our purposes we may be right. For if in crossing the Atlantic we fail to notice that the ship's clock is our measure and is to be put forward three quarters of an hour, we shall be late for breakfast next morning. If we know a little astronomy, we learn that astronomers observe, manipulate, and use three or four different sorts of time and that even before "summer time" was invented and enacted the "standard time" of ordinary life was an artificial product of human conventions and agreements. And the accuracy of time measurement is plainly relative to purpose. For most purposes we no more need to know "the time" to a second than "the distance" to a millimetre.

The case of truth is quite analogous. *The* truth in point of fact is always *a* truth relative to the place where and time when it is pronounced. It is a truth relative to its asserter and to his listeners, to the purposes of both, to their problems, and to their state of mind. "True" is always *true-for*, just as "good" is *good-for*. The notion that truth can be "absolute" and independent of its occurrence and its use, seems fantastically to ignore every item of its genesis and of its actual function.

The implications of "sooth" seem very different. Etymologically "sooth," though a good old Germanic word like "truth," which did not drop out of vulgar use till the seventeenth century, has some curious associations. In the first place it comes from a root which also means "being" and so exemplifies the distracting confusion of truth and reality which has haunted the topic of truth so persistently. Secondly, "sooth" is connected with "soothe" and so seems very appropriate to designate one of the most important functions of truth. For if, as I mean presently to suggest, we should appropriate the term "sooth" to the loftier, more elevating, and less sordid uses of the general notion, the connexion of "sooth" with "soothe" should be extremely welcome. It would serve to indicate the very impor-

tant sentimental function of absolutist truth as a sort of "paregorical imperative," and would distinguish it very neatly from its humdrum everyday uses.

May I then venture to suggest that the term "truth" should be restricted to these latter—to the scientific and practical uses—while the more solemn and less banal word "sooth" should be reserved for the more spiritual and metaphysical contexts?

It seems to be imperative, then, to distinguish between truth and sooth. To fix this distinction in the mind it may be well to have recourse to the poetic art. Accordingly I have with the aid of kind rhymesters compiled a few easy mnemonic verses:

Let Sooth be Sooth whate'er befall,
The same for each and good for all.
But let Truth be whate'er you trow,
Deem Truth to be that which you know.
Safely to Truth then pledge your troth,
To Truth, not Sooth,—you can't have both.

A good case can be made out also for distinguishing between those who pursue these diverse aims. Let us allocate therefore the terms "truth-seeker" to the pragmatists and "sooth-sayer" to the absolutists, calling the former "truth-seekers," and the latter "sooth-sayers."

It will, I believe, appear further that this distinction expresses not only a verbal improvement in technical terminology but also a real and profound distinction among philosophic temperaments. Some philosophers are naturally truth-seekers; others, as congenitally sooth-sayers; and philosophy would not be what it is if it did not harbor both.

Truth-seeking and sooth-saying demand, however, very different attitudes of mind and different equipment. The former requires a keenly analytical mind, quick to see distinctions and to formulate them clearly, together with inexhaustible fecundity in devising hypotheses, endless patience in observing and revising, and unwearying open-mindedness and willingness to accept

correction from experience. Plainly the truth-seeker leads a hard life, though one not devoid of austere satisfactions.

Sooth-saying, on the other hand, appeals rather to the synoptic eye that can roam over the whole cosmic landscape, and to the musical ear that can take in the hidden harmony of the spheres. It does not shrink from the abysses and will not fight shy of a great and soul-distending thought merely because it sounds obscure. On the contrary it will take pleasure in developing the oracular side of philosophy.

Now there is and always has been much oracular philosophy; also, there are more oracles in philosophy than there are mansions in the skies. Indeed, there are so many that it may fairly be suspected that they are really hermitages, and that there is really room for only one on every philosophic standpoint. As the Indian sage said: "of masters there are many; the trouble is to find a true disciple."

But this plurality of oracles will not do much harm unless it is incautiously assumed that they are all oracles of the same god and are engaged in retailing vulgar or scientific truth. If such rash assumptions are made, sooth-saying may indeed prove a disastrous practice and deserving of interference by the police. But if it is treated merely as a by-product of cognitive activity, it will do but little harm.

I cannot help thinking, however, that something more might be done by professional teachers of philosophy to put the student of philosophy on his guard. He should be warned that there are many gods or demons who infest philosophy and inspire or delude its votaries. There is therefore need for the greatest caution in accepting oracular responses. For he is not usually in the position of Croesus in the story of Herodotos. He cannot go round to all the oracles and ask them severely testing questions and then compare their answers. He has not either the riches or the standing of King Croesus. Perhaps the best advice to give him under the circumstances is to bid him be

very cautious how he deals with oracles. After all they ruined also Croesus, despite his critical endeavours. Delphic Apollo trickily gave him the ambiguous response that by crossing the river Halys he would destroy a mighty empire. And it is by no means difficult for a student who accepts an oracle thereby to destroy his mind. He is sure at any rate to get an ambiguous response from his philosophic oracle, and he may not have logic enough to know that ambiguous responses are strictly meaningless.

MUST PRAGMATISTS DISAGREE?¹

GRANTING that the various brands of philosophers do, and must, disagree, how far must such disagreement go among philosophers who have consented to wear the same labels? Professor C. W. Morris's extended review of my *Must Philosophers Disagree?* in the last *Personalist*² seems to raise this question and affords me a welcome opportunity to discuss what must, to outside observers at least, seem very marked divergences between the pragmatists who drew their inspiration from William James and those who obtained their training in the Chicago School headed by Dewey. For some reason, not easily apparent, the latter often seem anxious to differentiate themselves from the former. But they never seem able to explain what precisely are their grounds for dissent. They content themselves with rehearsing a few rather obvious platitudes and ancient *clichés*, the application of which to the objects of their criticism is never specified. Strangely enough their attitude does not seem to be reciprocated by the former. These gulp down every extension or new application of pragmatic principles made by Professor Dewey with relish and without a qualm and appear to be merely puzzled why a line between the sheep and the goats should be drawn right through what appears to them to be essentially the same body of doctrines.

It is upon this paradoxical situation that, with the help of Professor Morris's review, I hope to throw a little light. For in

¹ From *The Personalist*, XVII (1936), 56-63.

² XVI (1935), 388-90.

it what I cannot but call the grievances nourished by the Chicagoans against the Jacobbeans (or Jacobins?) come out much more clearly than is usually the case.

1. To begin with, there is a reiteration that "Chicago has stressed the social element in experience, meaning and knowledge" and a profession of exclusive "devotion to the concept of the social"; but I find it difficult to attach to this the enormous importance claimed for it. I cannot accept it as a *differentia* among pragmatists, because ever since Aristotle declared that man was a social animal it has been the merest commonplace shared by practically all philosophers. But after some two thousand years of philosophic endorsement, is it not time that philosophers got busy and set about showing how precisely man's social nature reveals itself in human activities and affects his thinking and knowing in concrete detail? Moreover, is not this just what every form of pragmatism may be said to have attempted ever since it was hatched? Has it not proclaimed that "truth" always emerges from a social context and is relative to social uses? Has it not pointed out the enormous difficulty, nay the impossibility, of completely extirpating all the effects of social bias and human psychology? Has it not shown also how these apparent drawbacks might be turned to cognitive advantage?

I myself have always felt particularly innocent when wild charges of ignoring society were flung about. For though I had never shut my eyes to the undesirable effects on human truth-seeking which social intolerance and stupidity so frequently have (effects which in the present vogue of dictatorships should hardly need emphasizing) I had pointed out from the outset³ how important was the difference between a truth-claim and a

³ Cf. *Humanism* (London, Macmillan and Co., 1903), "man is a social being and truth indubitably is to a large extent a social product. . . . Truth has to win social recognition, to transform itself into a common property" (p. 58); "social usefulness is an ultimate determinant of 'truth';" (p. 59). See also p. 55 for the way in which personal truth-claims acquire social currency and *Studies in Humanism* (London, Macmillan and Co., 1907), ch. vii.

fully authenticated truth and how necessary was social approval to develop the one into the other. It is apparently the implications of this distinction between truth-claim and truth which so many of the Chicagoans have either not observed or not understood; this failure has led them to imagine that I had denied the social environment of truth-seeking. Moreover, I had adopted with alacrity Carveth Read's charming wolf-ape theory of the genesis of social co-operation, just because it seemed to fill in the vagueness of Aristotle's "devotion to the concept of society" and to suggest how man's nature had grown social. For it is clearly to anthropology rather than to metaphysics that an empiricist should look for light upon such matters. So I feel entitled simply to dismiss this count of the indictment, or at least to demand chapter and verse in support of it.

2. At any rate the social nature of knowing is so obviously a commonplace, to be taken for granted by any pragmatist, that the charge of denying it could not possibly be important if it were not made the basis for a further charge of taking meaning as a wholly private affair and overlooking its social aspects. I should admit that the question of meaning would provide a more substantial grievance if it were true (as Professor Morris assumes⁴) that personal meaning is exclusive of social.

But a moment's reflexion should convince even the naïvest that such an assumption is absurd. For no one wishes to keep his meaning to himself: all crave to communicate it to others if they can. Only the critical pragmatist has observed also that this is by no means an easy matter; he has been convinced by long and painful experience that communication of meaning is one of the major problems of philosophy, which has been woefully neglected ever since Gorgias despaired of it twenty-four hundred

⁴ He does not seem to be aware that the modern discussion of meaning started with Lord Russell's paper in *Aristotelian Society, Supplementary Volume II* (1919), 1-43, under title "On Propositions: What They Are and How They Mean" and with the Symposium in *Mind*, n.s., XXIX (1920), 385-414, on the "Meaning of Meaning" (for which I supplied the title and the first paper).

years ago. He is not content therefore to be told that "meanings are in intent intersubjective"; or that "it is possible in principle to find objectively the meaning of any symbol used by any person." He wants to know in each case of actual knowing whether the meaning intended has been successfully conveyed, and whether the abstract principle that symbols have discoverable meanings finds exemplification in the actual case. Accordingly, he investigates how meanings are in fact communicated. He observes that every meaning is, to begin with, personal; that is, that some one wishes to convey his meaning by the verbal meanings of the words he employs. But he does not rashly assume that it is therefore "private and subjective," nor that what is so is therefore utterly unintelligible to everyone else. He insists merely that a claim to "objectivity" and communication shall not be mistaken for the accomplished fact, and that an inquiry may always be opened whether a personal meaning and a verbal meaning have coincided and have been correctly understood.

3. He thus begins his inquiry at a point which the Chicagoans would seem never to have reached. I may be mistaking their (surely personal) meaning, but they do not seem to me to have got clear about the relation of the objective to the subjective. The former they seem to treat as a self-evident given fact, and not as a difficult social achievement, while the latter is used merely as a term of abuse. Presumably this means that they have not noticed the basic subjectivity which underlies all our objectivities, and it is surprising that charges of "fuzziness" should be brought without any attempt to meet the argument for its existence. I had intentionally stated his argument,⁵ in order to challenge all the ordinary brands of "realism"; but although my essay was read to about a dozen philosophic audiences and then published, nowhere has this challenge been taken up. I can only continue to hold, therefore, that the objective realities

⁵ *Humanism* (second edition, 1912), pp. 55-56.

of the sciences are in every case selections out of a much larger mass of crude appearances and experiences. If we inquire what determines these selections our only possible answer is, "the various interests and purposes of the inquirers." These interests and purposes, moreover, are in all cases "subjective" in the sense held to be opprobrious.

4. I pass to the charge of "animosity to mathematics and formal logic." Here I must distinguish. Animosity to mathematics (or any science) would be a serious charge to bring against a pragmatist, seeing that pragmatism claims to be essentially the philosophic appreciation of scientific method. But all I have ever criticized is the philosophic habit of taking "pure" mathematics, in abstraction from "applied," as if it were the whole story. But the existence of pure mathematics does not mean that the nature of mathematical abstractions can be grasped apart from their use. It is due only to an accident of academic organization, like the assigning of the grammar and the literature of a language to different professors. It is true that pure and applied mathematics usually have different professors; but this does not mean that they are different sciences. In short, to cherish animosity towards pure mathematics is about as impossible as to show disrespect towards the equator; what is fit to make angels weep is the way philosophers have misapprehended their scientific functions for some two thousand years.

5. Formal logic is in a totally different position. I admit that I have long argued that it is a pseudo-science (or, alternatively, a game with words). But I have given three convincing reasons for this belief, and no formal logician ever tries to meet them. I wish that Professor Morris would attempt a rational defence of formal logic, but I fear he will not. My reasons are briefly these.

(1) Alfred Sidgwick has shown for the past thirty years or more that, owing to the potential ambiguity inherent in all terms, the notion of formal validity is untenable. (2) The basic unit of all the formal and symbolic logics—the proposition—

appears to be non-existent. It is essentially a confusion and a conflation of a linguistic entity, the propositional function, and a psychological entity, the (personal) judgment, and so can provide only a fictitious basis for logic. Moreover, this confusion leads to a systematic and incurable ambiguity in formal logic's use of the conception of truth. (3) I infer from this situation that the fundamental fact about formal logic is that it rests on an abstraction from real (that is, personal) meaning, and thereby becomes an artificial and unreal game with verbal meaning.

From the fact that these changes have been before the philosophic public for anywhere between twenty and thirty years and that no one has attempted to rebut them, may it not justly be inferred that they are not answered because they are unanswerable? Of course nothing short of completely universal neglect can stop logicians from cultivating their pseudo-science; but they are not, surely, entitled to pride themselves on the degree of scientific contempt which they have already earned.

6. I will next take up a minor point. Professor Morris finds it difficult to reconcile my saying that scientific method abstracts from personality with my pointing out that it does so for the purpose of arguing from one particular case to another; has it, then, never occurred to him that in order to obtain a general formula that can be transferred from case to case the particular circumstances of the first case (place, time and personality) must be abstracted from? Of course this procedure imparts an element of fiction into the use of "universals," "laws of nature," and the like; but this in no wise invalidates scientific procedure, and it should be remembered that it was the astronomers who first discovered the "personal equation," of which the latest scientific instance has cropped up in the famous principle of Heisenberg. What is truly deplorable, and has been so since Plato's day, is the preposterous interpretation philosophers have sought to put upon a legitimate scientific procedure. I am truly

sorry that Professor Morris has not been able to apprehend what seems to me the simple and straightforward argument of pp. 56-57.⁶

Having now cleared away the motes which have long been floating about in the philosophic fog and which appear to have blurred Professor Morris's vision of my doctrine, I will endeavour to display the beams upon which his case appears to me to rest.

7. He still seems to regard Peirce as the exemplar and standard to whom pragmatism should conform; yet the recently published fifth volume of Peirce's *Collected Papers* seems to show that this tradition stands in need of radical correction. In the first place Peirce himself reveals that James had exaggerated his (Peirce's) share in the founding of pragmatism, and that many other members of the Harvard Metaphysical Club besides Peirce and James deserve part of the credit. It appears moreover that Peirce himself had greatly changed his interests in the twenty years that elapsed between 1877 and 1899; he did not exactly withdraw what he had said, but he became very unwilling to sanction any further extension or application of his own principle. Particularly, he had fallen completely under the spell of the old elusive ideal of mathematics, that of "exactness," and reprobated any attempt to carry pragmatism beyond the point he himself had formerly reached. So it is not surprising that he had no appreciation for Dewey's work, and bestows only one contemptuous mention upon Dewey himself. But it is surprising that so many of those who profess to be Dewey's disciples should think it possible to combine Deweyism with formalism. For Dewey's greatest discovery and the core of his specific doctrine is surely that of the need for constant reconstruction of beliefs. It is for this reason that science is progressive, and no truth is absolute. But how is this insight compatible with the old ideal

⁶ *Humanism* (second edition, 1912).

of pinning down for all eternity the meaning of every idea by an exact "analysis"?⁷

8. How it is possible to combine belief in formal logic and in probability is a further puzzle. Formal logic has always longed for absolute truth and irrefutable demonstration, scorned probable reasoning, and twisted scientific reasoning into an alleged conformity with its prejudices. Just as persistently, probability has remained the guide of life; and scientific reasoning has remained probable and content with, at most, "practical certainty." Even the hypothetical reasoning of pure mathematics reduces to probability so soon as its application to reality is contemplated. Moreover mathematical probability admits of an infinity of degrees. Absolute truth (or error), therefore, becomes an ideal which is never reached; in effect the notion becomes otiose. At the Prague Congress I succeeded in extracting from the chief German authority on probable reasoning, Professor Hans Reichenbach, an admission to this effect. I do not remember whether Professor Morris was present; but whether he was or was not, it is high time he ceased to take it for granted that probability and demonstration are compatible, and addressed himself to their reconciliation. When he has failed to meet my arguments on these eight points, it will, perhaps, no longer seem necessary for pragmatists to disagree.

⁷ At the recent Prague Congress of Philosophy I had an opportunity to put this point to no less a personage than Professor Carnap, who very candidly admitted that no finality could ever be claimed for any analysis. But does not this admission destroy also the greater part of its *utility*? Why torment ourselves to devise an "exact analysis" which may be antiquated next day by the growth of knowledge?

HUMANISMS AND HUMANISM¹

IT IS NOT EASY in four short papers to survey the place of the philosophy I have called "Humanism," in the whole field of reality or even in the whole field of philosophy. The field of philosophy and the field of reality are far from coinciding: there are philosophies which lie very remote from anything real, and there are realities which the philosopher's eye either disdains to notice or shrinks from in alarm; the obvious also often blinds it by excess of light.

Grave difficulties beset also the title I have chosen. "Humanism" is a highly ambiguous word, and before it can be used with safety its ambiguities must be elucidated. This is an initial duty which is commonly neglected by the philosophers. They are as fond of technicality as other learned men, rather more prone to appropriate the technical terms of others, and much more negligent about explaining their own. Moreover, it has taken the logicians a long time to discover that every word should be regarded as "ambiguous," simply because it is useful. It is capable of being used in several senses, and the better the word the more frequently will it be used for the various purposes of its employers. This sort of ambiguity, however, is potential, and should never be allowed to degenerate into usages which leave in doubt in what sense a word is actually intended. When such real ambiguity occurs, the public must demand explanations and should obtain them.

¹ From *The Personalist*, XVIII (1937), 352-68.

Now this is the situation which has arisen over the word "humanism." "Humanism" is a very good word, and many have found it convenient to use. It is, in fact, too good a name, a fact which has tempted many to use it somewhat unscrupulously, without justifying their use of it and without explaining how it was related to other and earlier uses. The result has been wide-spread confusion in the public mind, and this is the first obstacle a writer on humanism has to surmount.

It renders particularly difficult the first duty of a philosophic writer, which is to be intelligible. For the philosopher cannot really avail himself of the excuse for technicality which may pass in the other sciences. He cannot claim that his subject-matter demands elaboration by special terms; for his subject-matter is not special. He should not conceive of himself as a specialist, but rather as a liaison officer between the sciences and as a mediator between them and the natural demands of human life. Historically the function of philosophy has been variously conceived; but its truest function is to be the central organ of synoptic vision in which the whole of knowledge may find its focus.

In essence, therefore, and in the widest sense of humanism, all philosophy is humanistic; the need for it springs from the very nature of human knowledge. The things to be known are too various and too multitudinous and the powers of the human mind are too limited for anyone to master all knowledge. So division of labour is imperative. We work by cutting up the field of knowledge into manageable areas and by each cultivating his own little slice of it. Moreover, as knowledge grows, these slices grow ever smaller, for there is more to know in each. This is the reason for, and the meaning of, scientific specialization. It would result in a total comminution of knowledge if there were no one who could soar above the interscientific barriers with which the specialists are forever hedging themselves round and could take a bird's-eye view.

Now the methods by which each science cultivates its own field are very similar, indeed identical at bottom. Every science arises by first cutting off a convenient portion of the total field of knowledge, and, as it were, staking out its claim. This process is usually quite easy, for we have merely to follow the obvious lines of demarcation between the different aspects of the real. Thus the difference between the animate and the inanimate is soon perceived and gives rise to the sciences of the living, such as biology, zoology, physiology, psychology, on the one hand, and mechanics and physics, on the other. Nor is it hard to concentrate attention on the spatial relations of things and to abstract their form and so to get the science of spatial relations or geometry.

Not infrequently, however, in this process a certain amount of disputed territory will be left over on the borders of two or more different sciences. Now these regions will usually be ambiguous or ambivalent, that is, intrinsically such that they can be treated in more than one way and viewed from more than one standpoint. As a rule these alternatives will belong to different sciences, and if each of these puts forward an exclusive claim to control the subject, there will arise an interscientific quarrel. For example, a living body is both a body (and as such a subject of inquiry for mechanics, physics, and chemistry) and also, as living, a something more (to be described by ascribing to it what is quite vaguely but significantly called "life" or "soul").

Now in itself the existence of disputed territory does no harm. Indeed, it rather stimulates the competing sciences, which, after all, can share in exploiting it. Indeed, their rivalry may be a good thing, if it impresses on us not only that there are many things to know but also that they have many aspects and that in consequence there may be many ways of knowing for us to choose from. All these ways may be legitimate and valuable and so need not occasion interscientific quarrels.

Furthermore, interscientific dispute may do good, also, in another way. It may lead to the institution of a court of appeal, or rather of arbitration. The decision of such disputes should be regarded as one of the main functions of philosophy. But, to appreciate this very important function fully, we shall have to proceed with our sketch of the making of a science.

When a science has more or less mapped out its territory, it proceeds to organize it. This means that it tries to find principles, or methods—which are practically the same thing, because principles are really methodological in their use, whatever may be their pretensions in the abstract—for treating its subject-matter; it also looks for points of view from which it can survey its domain and decide which of its phenomena shall be phenomena for it, that is, relevant to its interest. The crude phenomena usually suffer severely in this process. So many of them are discarded as illusory and unreal that the “facts” which survive scientific scrutiny are only a selected fraction of the initial “facts.” Moreover, the crude phenomena are often so ambiguous in status and character that they are bandied about among the sciences and no science wants to recognize them. This is true, on the whole, of the portion of the phenomena called, roughly, “psychical,” though they clearly fall within the province of psychology. However, most psychologists are still afraid of them and will not look at or into them. Similar cases are far from rare. For example, when an astronomer looks at the disc of Mars through a good telescope under specially good conditions of visibility, he may see a network of straight lines, the famous “canals of Mars.” Is the physical reality attested by this observation? By no means. They may be optical illusions, because the eye at the limits of visibility has a trick of importing regularity into what it sees and so will interpret a number of irregular markings as a pattern of straight lines. Does the phenomenon then belong to astronomy or to psychology? The matter is still in dispute. A still simpler case

is the seeing of what is called the "green flash" of the setting sun at sea. If the sky is quite clear and cloudless, the last bit of the sun's disc, as it dips below the horizon, turns a vivid green. This is a fact, though I have always found some people who could not see it. But the explanation of this fact is in dispute. Is this green objective or subjective? A physical and a psychological explanation may both be given. Either there is a selective absorption of rays in the atmosphere such that those which reach the eye turn the sun green; or else the green is merely a contrasting colour due to the redness of the surrounding sky. Both interpretations seem possible, and the actual effect may be due to both, for they may reinforce each other. Hence there is plenty of occasion for philosophy to offer its mediation in connexion with ambiguous phenomena and the disputed territory on the border of several sciences.

Nor are these the only troubles in which the philosopher can act as arbiter. The sciences all grow out of one another; they arise out of big problems which are gradually subdivided and articulated further. As each science grows up, it declares itself independent of its parents. It sets up for itself and becomes "autonomous." It can then manufacture its own laws to suit itself and to handle the phenomena it has consented to recognize.

But this procedure evidently contains no sort of guarantee that taken collectively the sciences will result in a coherent and intelligible account of reality. If each science thinks only of its own interests and chooses principles and makes assumptions only to please itself, why should their various deliverances finally agree? Will not each be speaking, as it were, its own language and pursuing its own ends? Will not the natural result be chaos and confusion, because all power and authority to co-ordinate and harmonize their results will be lacking? Every scientist may believe in his own science, but none will be able to believe in science as a whole.

At this point the philosopher should come to the rescue with an offer to interpret the conflicting deliverances of the various sciences into a coherent and intelligible picture which it is possible to accept and believe. Nor will he be claiming too much. He has the power to make good his offer, because he can so reduce the claims of the conflicting principles that they cease to be incompatible. He can take the principles of the various sciences, not as absolute and ultimate truths, but as working principles of method; if so, they may remain good for the immediate purposes of the particular science in which they occur, and yet may properly be required to undergo re-interpretation in the interest of a more complete scheme. Moreover it will follow, from his duty to take account of every thing, that he has a right to add to the material which the sciences have collected—to the truths of the sciences, considerations which, for various good or insufficient reasons, have been overlooked or excluded by all the sciences. For he may be able to show that they are attested by immediate experience and that they prove themselves extremely valuable by providing principles which will connect up and transfigure scientific results. In this way the philosopher may claim the duties of completing the system of the sciences, of making sense of human life, and of vindicating the possibility of knowledge of the whole and as a whole.

If we accept this conception of the function of philosophy—and it seems to me far more satisfactory than the rival conception which regards science and philosophy as having nothing to say to each other and allows philosophy, any, every philosopher, to excogitate a metaphysical system which professes to deduce all reality *a priori* from some fantastic principle without regard to experience—we can fitly compare the relation of philosophy to the sciences to an insect's compound eye. As is well known, the insect's eye is constructed in quite a different way from ours. Instead of having a single lens which can be moved about and accommodated variously, it is composed of

hundreds of lenses, each fixed and capable of forming an image only at a certain distance from the lens. So before a mosquito "sees" her victim she has received hundreds of images, and yet she somehow contrives to fuse them into a perception of a single object. To judge by our trouble when the images we get from our two eyes refuse to coalesce and we "see double," this must be a very distracting experience; yet it does not seem to impede the mosquito in the pursuit of her various ends, in detecting her prey, and in finding a loophole in the best mosquito net. What this proves, however, is not so much the diabolical ingenuity of the mosquito, as her power of combining the images mirrored on each facet of her compound eye and of interpreting the sum-total of her images into a perception of an object. Without this the most malignant mosquito would be harmless; for she could not find her way to her prey.

Now the idea suggested by this illustration is that the combining and interpreting function of philosophy is closely analogous to the function of the insect's eye as a whole, while the image mirrored on each ocellus or eyelet of the compound eye is comparable to the contribution of each special science. It need not be claimed, of course, that philosophy is as yet capable of fulfilling this function perfectly. It cannot as yet utter the last word about truth nor pronounce the last judgment on the real. The sciences are still growing and have not yet reached any final conclusions; so the material they pass on to philosophy is still full of discords and of gaps. Nevertheless, it is in this way that the relation of philosophy to the sciences is best conceived.

When the function of philosophy is conceived in this way, it is easy to see why "humanism" suggests itself as a good name for a typical philosophic attitude. If the central problem of philosophy is how to make sense of human experience, how to reconcile our various sciences, all at sixes and sevens, or at best fragmentary and often misleading, how to fit together into

a significant picture the bits of a great world jig-saw puzzle, what name could be more suitable? Till we have done our utmost to put together our knowledge, it would be presumptuous and premature to guess at the meaning of the maker of the cosmic riddle.

With this conception of the work of philosophy, we have, then, good reason to wish to use the word "Humanism" for our attitude, for which we can make out an ancient pedigree. It serves admirably to describe the contention of Protagoras that "man is the measure of all things" and, more vaguely, the whole tendency of Greek thought in the fifth century B.C. to turn from physical speculation to detailed study of human nature. But, for similar reasons, a good many others have wished to use the word "humanism" and have generated much confusion in the popular mind about its meaning. It becomes imperative, therefore, to cast a critical eye upon the other "humanisms" and the senses assigned to them. We may discuss them in chronological order.

In its first and earliest sense "humanism" denotes an episode in the history of literature. All through the Middle Ages Christian civilization enjoyed a great advantage, which we have lost. It possessed an international language which was written and spoken by all learned men, indeed, by all who could write and read at all. This was the language of Rome—Latin, which had survived the Roman Empire because it was the language of the Christian Church. However, in the course of time the written Latin had developed considerably, largely in order to accommodate the theological subtleties of the mediaeval Schoolmen, and had become much less elegant than classical Latin. For the mediaeval Schoolmen were plainly pedants. Perceiving this, the Italian scholars of the fifteenth century began to cry out for a return to a purer Latin. Under the leadership of Laurentius Valla they called themselves "humanists" and raised the cry, "back to Cicero." So they tabooed all words and phrases

for which no classical precedent could be quoted. The effect was, of course, to fossilize Latin, to forbid it to develop, and to kill it as a living tongue. In the sixteenth century this movement spread to the rest of Europe, and the Reformation completed the ruin of Latin by encouraging the local vernaculars everywhere. The masses started to read the Bible in their native tongues. The learned also began to write books in their vernacular, and, even when they spoke Latin, pronounced it as if it were French or English or German, et cetera. Naturally, they soon ceased to understand each other, and Latin became a really dead language. We are now compelled to experiment with artifices like Esperanto when we feel the need for an international language. It is a remnant of this mediaeval attitude that in the Scotch universities the professor of Latin is called "professor of humanity" to this day. But it would be a calamity if on this account his subject were taken to be really co-extensive with humanity.

Seeing, then, how very accidental has been the first use of the word "humanism," we can hardly consent to restrict it for all time to the history of literature and to prohibit its employment in philosophy. The very fact that the contexts are so different minimizes the danger of confusion. It is only where the senses are closely allied that they are likely to be confused. But literary and philosophic humanism are so far apart that there should never be a doubt as to which sense is intended.

For the first philosophic sense of humanism the present writer must take the chief responsibility, though at a pinch he might take shelter behind several philosophic predecessors who have used the adjective (though not the noun) "humanist" sporadically to describe the attitude which stresses human problems as the central concern of philosophy. But I deliberately chose Humanism as my designation in order to express alike approval of the famous dictum of Protagoras, emphasis on the human value of philosophy, and systematic antagonism to two

other philosophic attitudes which at the time (1902) pretty well divided the field between them. Both had, and have, many aliases, but we may call them "absolutism" and "naturalism" (which now most frequently calls itself "behaviourism").

Absolutism springs from the human desire for absolute and final truth and for contact with ultimate reality and strives for it by hook and by crook. When by dint of constant disappointments it is tardily forced to realize that absolute truth is not within our reach and that ultimate reality is not dealt in by any science, this human craving seeks consolation by sublimating its absolute into an "ideal" and then ascribing to it all the perfections we have to go without. Accordingly the absolute is represented as the possessor of all truth and of absolute truth, while *ex officio* it is ultimate reality. Why? Simply because in the "absolute" philosophy possesses a technical word for the totality of reality. Yet it may be merely a creature of the imagination, and no attempt is ever made to establish its existence. There is no proof that the real is really such as to form a totality, while several insuperable objections may be urged against this belief. For instance, the infinity of space and time and the indefinite plurality of centers of experience seem to forbid any strict unification of the real. Hence all the absolutist philosophies really beg their first principle. They all operate with arbitrary definitions of the meanings of words, and all their "proofs" are merely verbal. They thus turn philosophy into a word game with arbitrary definitions, and this procedure should leave cold any critical mind.

Naturalism, on the other hand, springs from a more respectable source. It is essentially an attempt to expand procedures which have proved successful in one or another of the special sciences into an answer to the whole riddle of existence. At the time when Humanism was introduced, thirty years ago, the fashionable form of naturalism had been mechanistic for several centuries; but since then the rapid progress of physics has re-

vealed that the old mechanism was never scientifically adequate. Hence it was unscientific to explain the world by a mechanistic philosophy. The old naturalism is now disposed of; but naturalism is sure to recur in other forms. All of them, however, will always remain open to the objection that naturalism is essentially partial. It is always an attempt to substitute a part for the whole; it can never afford to recognize the integral demands of human nature, and it is always embarrassed to say whether they are to be included among the facts of nature or to be explained away.

In its proper sense "nature" plainly includes man and should be construed thus *inclusively*; but naturalism perpetually hankers after excluding man and tries to subject him to an inhuman, or rather dehumanized, order of nature. It fails, moreover, to observe that the notion of order is itself a human importation into nature, and that we can choose whichever conception of nature best suits our purposes.

Humanism, on the other hand, does not overlook the human attachments of our theories; nor does it try to disavow them. It was intended as a happy mean between absolutism and naturalism; but I thought it could have a further use. It seemed to be an excellent term to describe the new philosophy which William James and John Dewey were then beginning to develop under the names "pragmatism" and "instrumentalism." I had soon found out that "pragmatism" was a very bad name and apt to hang any dog that bore it. For one thing, it took half an hour just to explain the word. For another, it was a misnomer and a malformation. One had to disclaim the relation to "practice" with which it was commonly credited, or discredited. For the Greek *pragmata* means "things" rather than "acts." James had taken over "pragmatism" from his friend Peirce, who was far from sharing his literary felicity and who did not by any means approve of the use to which James put his word. But when I wrote to James and proposed the substi-

tution of "humanism," he replied that it was too late. The word "pragmatism" had caught on and could not be uprooted. Of course, the enemies of the new ideas had joyfully taken it up, for they saw at once what a bad and stupid word it was.

But they treated "humanism" quite differently. Having none of James's chivalrous scruples, they adopted it themselves. Not long after the appearance of my *Humanism* (in 1907) a noted absolutist, Professor J. S. Mackenzie, took the name *Lectures on Humanism* for his own version of the absolutist doctrine, and subsequently (1922) Lord Haldane also gave the name *The Philosophy of Humanism* to one of his books. Thus a third use of "humanism" came into being.

The fourth arose some years later, in America. Some of the younger Unitarian ministers discovered that in their teaching God had been so much attenuated and had grown so impalpable and colourless that He might just as well be dropped altogether. So they gave up theism and called their purely human doctrine humanism. In itself this use was quite appropriate and legitimate, but under the circumstances it led to much confusion with the second sense, to my great annoyance. Intrinsically, however, these two uses should be easy to distinguish. The Unitarian "humanism" inhabits a theological context, mine a philosophical; and mine is not concerned with theology at all, but only with logic and the theory of knowledge. The Unitarian sort is anti-theistic, mine is anti-absolutist and anti-naturalist, but not anti-theistic. Indeed, it will be seen that its personalistic implications render it inherently favourable to theism.

The fifth use of "humanism," on the other hand, harks back to the first. It, too, is of American *provenance* and of recent origin. Its sphere of application is educational, for it is the flag under which Professor Irving Babbitt and Professor Elmer More are rallying their followers on behalf of a more classical and less modern type of education. So it may be regarded as a legitimate development of the "humanism" of the Renaissance.

One's only fear is that outside America (if this movement gets outside) there may be some little confusion between Professor More's Babbitt and Mr. Sinclair Lewis's.

Lastly, I had to review recently for *Mind*² a book called *The New Humanism*, by Leon Samson, presumably a higher synthesis of the original Samson and his former enemy, the lion. This showed no knowledge of philosophic humanism, but was written by an American communist, who may have got the idea for his title from the Unitarian humanism. It hardly seemed, however, to justify either this title or the absurdly optimistic view it took of the prospects and ideals of Russian bolshevism.

Our survey of the many and various senses of "humanism" has yielded ample proof of the utility and value of the word and should help us to appreciate the provisional definition of philosophic humanism, which we shall next consider. A philosophy is justly called "humanism" when it regards as its central concern the problems of human life and experience and of the real world with which we believe ourselves to be in contact. As has already been explained, this definition brings Humanism into antithesis with absolutism and with naturalism. The latter does not recognize the full scope of these problems and tries, vainly, for a partial solution. Absolutism consoles itself for its human failure by dwelling imaginatively on the super-human perfections of an imaginary absolute. These it defines as humanly unattainable. When asked to explain how, then, the absolute can be humanly relevant, how its enjoyment of absolute truth and absolute reality is to help us struggling mortals, it is apt to lose its temper and to become abusive. Not infrequently it charges Humanism with scepticism.

Needless to say, this charge is groundless; but the reputation may be instructive. For it may lead to reflexion on the ambiguity of "scepticism." Scepticism may be understood first as a

² *Mind*, n.s., XL (1931), 256-57.

downright denial of the possibility of attaining truth. In this sense scepticism clearly cannot be universal, and if it tries to be, it is easy to refute. It has merely to be pointed out that the truth of scepticism itself is at any rate one truth which is not denied but is implied in the very statement of scepticism. But scepticism is much more fairly taken as universal doubt or, better, as the theoretic possibility of doubting everything. Now, this is certainly a theoretic possibility, though it is not a practical possibility. So it is irrefutable, if we assume that its practical impossibility is not to count against a theory or to detract from its truth.

Now, so far as theory goes, there is no harm in universal doubt. If anything, it is beneficial. For doubt is the chief stimulus to inquiry, to research, and so to discovery. Only, of course, the humanist will add two things: (1) that we never doubt all things, but only such things as we purpose to investigate (so our doubt is only methodological and only potentially universal) and (2) that our doubts need not and should not diminish our confidence in the truths we accept or take for granted. For doubt sets in only when an alleged truth has ceased to satisfy us. It goes on till we have come to a truth which seems to satisfy us. So at any given time there is not much that we actually feel in doubt about, and we are always buoyed up by the hope that every doubt now felt may be set at rest by our discovery of something better than our actual belief. With this hope and in view of the progress of our knowledge, the power to doubt becomes a stimulus and not a curse.

As to the relation of Humanism to Pragmatism, something has already been said. But it is now possible to carry the story a little further. When William James refused to alter the official name of Pragmatism, I contented myself with denoting by Humanism the special brand of pragmatism which I advocated. This not only emphasized one of its distinctive features but helped to recognize the great variety of pragmatisms. For theo-

retically there can probably be as many pragmatisms as there are pragmatists.

The relation of Humanism to the modern doctrine of Relativity in physics is a rather more difficult question. Both are, of course, forms of relativism in the wider sense, and Humanism naturally sympathizes with Relativity in so far as it breaks away from the naïve absolutism of Newtonian physics, which ascribed absoluteness to space and time and barely conceded the relativity of motion. It applauds, also, the experimental theory of meaning, that is, the principle that a scientist has no business to allege meanings (other than explicit postulates) that cannot be verified by observation or experiment. For it holds that every truth-claim should be tested.

On the other hand, it does not think that the physicist's present recognition of relativity goes anything like as far as it is logically possible to go. It looks forward, therefore, to a time when the relativity lurking in the data of psychology will invade physics. At present, Relativity has broken down the unity and objectivity of space and time, and endowed every percipient with his own space and his own time, to which all his experiences are relative and of which, thanks to the ineradicable velocity of light, he can never be stripped. But it has not yet gone all the way with Protagoras. It has not yet openly proclaimed that "man is the measure of all things; of the things that are, that they are, of the things that are not, that they are not." This not only completes the principle of relativity, by taking into account all the psychological differences between man and man, but authorizes the search for invariant formulas which would be expressive of each man's case and yet would be transferable from one subject to another, instead of simply ignoring individual differences like our present "laws of nature." Nothing short of this would satisfy the principle of Humanism. But in this ideal Relativity and Humanism would

coincide and fuse. Together they would deprive absolutist demands of all meaning, and nonplus them by the simple question: Why should not all our truth and all our knowledge be relative to us, seeing that all our reality and our whole life are also relative to us? What can we wish for more?

HAS PHILOSOPHY ANY MESSAGE FOR THE WORLD?¹

ONE sometimes wonders whether in these days privileged persons like capitalists, theologians, and philosophers do not feel that they ought to do something to justify their status in the eyes of the world. Accordingly we get plenty of attempts to show that the economic or the moral order would dissolve if the world tried to get on without capitalism or theology. But the philosophers would appear to be much less sensitive to social criticism, either because they are naturally callous to it or because they do not see how it can be met. At any rate they scarcely ever attempt to show that philosophy performs a valuable social service or contributes anything to the enlightenment of mankind.

Now it is charitable to suppose that the reason for this apparent indifference lies in the very real and great difficulty of assigning to philosophy an independent function in the realm of knowledge, and the consequent confusion of most philosophers concerning the vital question of what philosophy is about. This difficulty may best be illustrated by considering the conceptions of philosophy most prevalent at Oxford, Cambridge, and Moscow and exhibiting their weaknesses.

At Oxford the function of philosophy is conceived of as "reflexion"; but it is left vague what philosophy is to reflect about

¹ From the *Hibbert Journal*, XXXIV (July, 1936), 592-601.

and how it is to do it.² As it is not supposed to have any vital or necessary connexion with the sciences, it can at most reflect on itself—that is, on its own past history. But the history of philosophy reveals at best a succession of more-or-less ingenious guesses, all of which have undergone or are in process of undergoing refutation. So it is not reflexion upon any stable or progressive truths, but only reflexion upon errors. According to this view, reflexion can start anywhere, but it leads nowhere. Philosophy, therefore, begins when we realize that we are in a bit of a muddle about some things, and it culminates when we realize that we are in no end of a muddle about all things. It is, however, difficult to see how this view should commend philosophy to the rest of the world.

At Cambridge philosophy is not thought to aim at an independence of the sciences which really renders them irrelevant to philosophic truth, but it seems to lapse into the opposite extreme of subservience to the sciences. It emulates science and aspires to the "exactness" of the abstruser aspects of mathematics. By rivalling them in technicality it hopes to raise itself to an equality of scientific rank and so to escape accusations of being pseudo-science. It remains, however, difficult to say how philosophy differs from science, what additions it can make, and why it should be needed at all. For the "analysis" on which it prides itself seems to be a wholly verbal and ephemeral thing, liable to be superseded at any moment by the discoveries of the sciences.

At Moscow, finally, philosophy is regulated by the State, like everything else. Its sole function is to advocate the truth of the

² As *Mind!* said a generation ago,

"To deepen our consciousness Green

At Oxford appeared on the scene:

'Oh thinker obscure,

Why don't you make sure

That you know what you think that you mean?'"

In philosophy the great tradition does not change!

dialectical materialism which is part of the State religion, and its sanction is a trip to Siberia at the public expense. In other words, it is treated by the authorities very much as by the Church of Rome and ordered to arrive at a foregone conclusion acceptable to them. But the Soviet philosophers cannot fairly complain that they are treated differently from other scientists and discriminated against. For they are all told what topics they may, nay must, inquire into, and what conclusions it is socially imperative that they should reach. This mode of guiding research may look like an exaggeration of the pragmatic; but it cannot be denied that the Moscow authorities are exploiting a genuine gap in the academic theory of pure research for its own sake. For it cannot be gainsaid that even the purest scientist is confronted by a theoretic problem he has not hitherto attempted to solve. He encounters far more subjects for research than he can possibly undertake and has to select out of them those which he actually takes up. He should be grateful, therefore, for the help which social authority offers, which prescribes for him the subjects he is to investigate, and correlates them with his society's whole mode of life. Actually he is perhaps more disposed to be resentful of any restrictions upon his liberty to do as he pleases; but that does not enable him to answer the question "why should society endow the philosopher (or the scientist) or even tolerate him?"

Inasmuch as Oxford, Cambridge and Moscow have failed to justify the pursuit of philosophy, it seems unlikely that any other intellectual centre will be more successful. Yet the question whether philosophy has any message for the world remains a good one. Like other questions it has both a theoretic and a practical aspect. Theoretically, it concerns the co-ordination of human activities; practically, it concerns the problem whether useful employment can be found for philosophers, whether they must be ranked among unemployables, or whether they should

be given institutional care. In short, the question is evidently a burning one and will have to be discussed.

Moreover, if the question whether philosophy has any message for the world is to be discussed in any sober and matter-of-fact way, it will, I fear, have to be admitted that its message is neither very audible nor very intelligible nor very cogent. This is to say that the world has to listen to many louder, more imperious, and more seductive voices than those of the philosophers. It would therefore seem to be unreasonable to expect the still small voice of reason not to be drowned by the clamour of the passions, the harsh clangour of the machine, and the sweet enticements of the radio. Nor can it be maintained that philosophy is easily intelligible: it usually prides itself rather on being the fruit of a long, painful, and arduous initiation, not to be attained by the busy or the vulgar. Nor, again, can the world fairly be expected to yield to the cogency of arguments that notoriously fail to impress their own authors. There is no agreement among philosophers, and no one who can speak with authority on its behalf. So soon as a philosopher comes forward with pontifical pretensions to be possessed of final and absolute truth, all the others set upon him and pull him to pieces.

Nor, lastly, can it be seriously contended that philosophy can vie with the sciences in progressiveness. The latter keep us breathless with the novelty and importance of their theories and are continually transforming the life of man by their discoveries. But in philosophy progress is hard to discern: to the naked eye philosophers appear to be discussing, interminably and without prospect of advance, essentially the same questions they discussed two and three thousand years ago. Such progress as there seems to have been has been only verbal; philosophic disputes grow steadily more technical and less popular, until finally the inventor of a technical dialect so involved that no one else dares flatter himself that he understands it enough to

criticize it, is raised to so inaccessible an eminence, so impregnable a position, that the discussion has perforce to stop; after which its lessons, if any, are promptly forgotten, and either new issues must be raised or at any rate a new terminology must be devised.

Now of course I am very well aware that it is very easy to evade the force of this realistic and matter-of-fact estimate of the value of philosophy by pointing to the aspirations and ideals of philosophy, and gushing about their loftiness: in fact this practice yields one of the many meanings of "idealism." But I greatly doubt whether this procedure is really effective in the long run and conducive to the prosperity of philosophy. It certainly tends to disgust the honest and hard-headed and to encourage sloppy-mindedness and deception.

If philosophy is to be rescued from the fate of becoming a somewhat fœtid and insalubrious factory of hot air, or of sinking into an abstruse amusement for little coteries of pedants, it would seem to be incumbent on philosophers to do something about the situation. If nothing is done to galvanize philosophy into some sort of meaningful activity and to bring it into relation with the problems of life, I do not see how it can support its pretensions to have a message for the world, or how it can maintain itself, even as an instrument of discipline or torture in the crowded curriculum of a modern college.

On the other hand, I can see no difficulty in making out a perfectly good case for philosophy, if the philosophers so choose, and in assuring to it an intelligible and indefeasible position in the realm of knowledge. I still hope and pray that the professional expounders of philosophy may realize this before it is too late; and that they may see that it would be to the advantage, alike of themselves and of the world, to make philosophy socially useful. But I am becoming more and more sceptical. However, I will try one more argument, though I have found few philosophers pervious to argument.

Let me begin by observing that to save the reputation of philosophy, a place must be found for it alongside the sciences, distinct from them, but not incompatible with them. Philosophy must vindicate for itself a definite place in the field of knowledge and must do so without either coming into conflict with the sciences, or duplicating their work more feebly or more vaguely. Now the sciences are all, without exception, special sciences, that is, devoted to the special study of some aspect of the real or to some special way of regarding it. Thus geometry, as its very etymology implies, is the collective term for a number of hypothetical ways of treating the spatial aspect of the real; while biology means the consideration of its living aspect. Psychology, on the other hand, is not thus restricted to a selected aspect of reality: it rests on a special attitude toward its objects and is concerned with an all-pervasive feature of the real. It may claim to handle all events in so far as they are experienced or are objects of awareness.

Now what inferences may we draw from this easily observable character of the sciences? If the objects of every science are products of a selection from the totality of reality, it clearly follows that every science must be based upon an abstraction. No science will attempt to treat all about everything, every science will restrict itself to its own chosen field and will keep trespassers out of it. Its objects will be for it the only things that exist, and it will ignore all else. Moreover, its autonomy demands that in making its selections and abstractions it should be free and unhampered: it should consider, primarily or exclusively, its own interest and its own field and not that of any other science (except in so far as it is conceived as subsidiary to another science), and still less that of the whole. Hence the special sciences as they grow out of the main trunk of the tree of knowledge, will in general develop, like branches, in divergent directions, and there will not be anything to guarantee either that the deliverances of the different sciences will agree with

each other, or even that they will appear to be relevant to each other. For example, a colour, let us say red, is for physics a matter of wave lengths, or "frequencies" of vibration; for physiology, it is a matter of processes of the decompositions and recompositions of the living tissue in the eye, called the "visual purple"; while all along psychology stoutly declares that red is just a "simple sensation." It is not easy at first sight to discern what these definitions have in common.

The greater, therefore, the liberty accorded to each special science to develop on its own lines, the more urgent becomes the need for something more than science, namely, for a comprehensive or synoptic treatment that will combine the partial views of the various sciences and will instruct us how to think of reality as a whole and how we can read a single coherent sense into the whole of our experience. Here then is an important task, an indisputable domain, to which philosophy might devote itself. It has always asserted that it is somehow concerned with the whole; and the further the sciences progress, the greater the need for some attempt at their synthesis and unification.

But this idea, however sound, would remain pretty sterile, if it could not be supported by a more explicit conception of the manner in which philosophy is to set about synthesizing the sciences. So we ought to consider more in detail (1) what expedients philosophy can use to combine the results of the sciences into a concordant account and (2) what additions it is entitled to make to the scientific data for this purpose.

(1) When two sciences have severally employed principles which, taken as descriptive of scientific fact, are discrepant and incompatible, it is often open to a philosopher to reconcile them by recommending a simple change of logical attitude. He can take one or other or both of the conflicting principles as merely "methodological assumptions" or perhaps even as fictions. For example, when a physical science, desirous of dealing

with a predictable course of events, has postulated determinism (as *primâ facie* every science is disposed to do) and a social science, let us say ethics, has insisted on indeterminism enough to render man a responsible agent, it is philosophically legitimate to trace the underlying motives for these assumptions and to point out that neither assumption need be understood metaphysically or as descriptive of ultimate fact. If, therefore, the scientist is content to understand determinism as a postulate of scientific method, he is in no way interfering with the ethical postulate of freedom. Or, again, if a question has arisen as to why no map is even geographically accurate and no "line" or "figure" in nature ever comes up to Euclid's specifications, it is quite in order to point out that all the mathematical "ideals" are strictly "fictions" and have meaning and value only in so far as they prove themselves conveniently applicable to our real physical world.

In this way nearly all the sharp conflicts between the principles of different sciences can probably be assuaged. It would therefore be unwise to seek to limit *à priori* the re-interpretations of scientific principles undertaken by philosophers, much as it is nowadays admitted to be unwise to limit the freedom of the scientists in framing their hypotheses. The latter are no longer terrified even by abstractly logical objections based on the so-called laws of contradiction and excluded middle. Rightly, for the sciences are becoming aware that these principles are primarily conventions about the use of words and that all the "contradictions" and exclusive alternatives alleged rest only on verbal definitions, and that these can always be amended when the facts render it expedient. The philosopher is surely entitled to claim a similar license. Knowing that the sciences are progressive and are continually adding to their stores of knowledge, he need not be arrested by their present limitations; he may postulate suitable filling for their gaps and thereby suggest to them lines of research. But of course he

should always remain acutely conscious of the difference between speculation and knowledge: he should not get conceited or dogmatic and should always remain willing to accept from the sciences whatever corrections his speculations may require.

If philosophers consent to adopt this attitude towards the sciences, there is no reason why the relation of philosophy and the sciences should not become one of amicable co-operation. Nor is there any reason why philosophy should not become as progressive as science and be logically on a par with it. For both philosophy and science will be subject to the same great law of selection and abstraction from the irrelevant, which is exemplified in all human activities. Only, philosophy will exhibit its selectiveness by abstracting from the (for it) irrelevant details of the sciences; while the sciences abstract from the problems of the interconnexions and interrelations which they leave to philosophy. The false ideal of all-inclusiveness will be disowned by both alike and will cease to haunt and confuse the discussion.

(2) Once it is admitted that the data passed on by the sciences to the philosopher are necessarily incomplete, because if they were not the sciences would have ceased to add to the sum of knowledge, it follows that the philosopher has a right to fill in gaps hypothetically and to supply missing links and re-interpretations. But this will not exhaust his functions. It will also be his duty to take into account any material that is deliberately excluded from the scientific view of reality. Now there appears to be such material, though its existence has been very generally overlooked. Yet the method of science is such that some very important matters are systematically ignored and excluded from scientific consideration, and the consequent omissions should, of course, be made good by philosophy. But at present neither the sciences nor philosophy recognize their duties in this respect.

I will mention three such victims of neglect. In the first place

the sciences are plainly purposive structures. But they are not aware of this for the most part, because they take their purposiveness for granted and regard it as extraneous and unrelated to their contents. Also, because few of them at present use teleological methods of explanation within their subject matter, they are inclined to condemn all teleology as unscientific and to overlook their own teleological basis. Hence they all (and this remark applies to the philosophic sciences as strongly as to any) tend to lose any definite aim and to wander off into the unmeaning and unprofitable, or in other words to become pseudo-sciences. They would all be revolutionized if they always kept in mind the purposes for which they are cultivated.

My next two cases have suffered from the real exigencies of scientific method in the one case and from supposed exigencies of this method and the real prejudices of philosophers in the other.

It is a curious fact which is rarely observed that the sciences all seem to abstract from the personal context in which all scientific data are acquired. Actually all scientific data and observations are in the first instance personal affairs. They arise from the personal observations of those who attest them and have experienced them under particular conditions at particular times and places. But before they are admitted to the status of scientific data this item in their history is always ignored. They are feigned to be revelations of objective reality, and they figure as independent entities which owe nothing to anybody. Why are they thus transformed? Because the sciences shrink from swamping themselves with infinite masses of personal detail, and prefer to take each person as representative of an indefinitely numerous but uniform class. So the personal side of events is simply abstracted from; and, for the authentic observer who actually experiences his actual objects in his personal way, there is substituted a standard observer apprehending the universal object as it is supposed to be always and

everywhere for all observers. But both such observers and objects are fictions constructed for the purposes of science.

Now as a scientific fiction, found useful and helpful in all the sciences, this procedure is legitimate enough. It is certainly the procedure which yields us all the "objective" and "independent" realities we talk about so much. They are fabricated out of an infinite chaos of personal experiences, and scientifically no one need scruple to approve of the process. But philosophically it seems indefensible. It falsifies and ignores an enormous number of facts and substitutes outrageous fictions. No philosophy, therefore, which accepts the scientific abstraction from personality can possibly be complete. No philosophy which rests upon fictions can claim to reproduce facts. The undoing of this scientific abstraction from personality, therefore, ought to be recognized as one of the first duties of philosophy as such. At least philosophers might have shown themselves to be as much enlightened as the astronomers who were the first to detect and evaluate the "personal equation" of observers.

The third omission which the philosophers may properly be summoned to make good does not seem to be rooted in the actual procedure of the sciences so much as in the erroneous conception thereof which the philosophers have formed. They have failed to observe that the sciences are mostly desirous of arguing from one particular case to another and that they use "laws" and "universals" merely for the purpose of mediating this transition. In this procedure the vital risk lies in the assumption that both cases are examples of the same universal and that the individual differences between them may safely be ignored. In actual reasoning this assumption is always a hypothesis to be verified; and not infrequently observation gives the lie to theory and disappoints expectation. The scientist thereupon corrects his formula or his estimate of the cases, or both, and no harm is done.

But in the philosopher this situation engenders a hoary super-

stition and a fatal misapprehension. He interprets it as meaning that science is concerned only with the universal and disdains the particular case. This error was launched upon the philosophic world by Plato in the *Theætetos* (209) and has haunted and vitiated philosophic accounts of the relations of particulars and universals ever since, and has turned them into pernicious and profoundly irrational nonsense.

But the actual procedure of the sciences has never given any countenance to this doctrine. The astronomer has never, as Plato wanted him to do, studied the abstract laws of celestial motions without recourse to empirical observations. The doctor has not usually succeeded in forgetting that his patient is, not a mere case of a universal disease, but a suffering individual. Even the mathematician has sometimes remembered that his ideal fictions must be exemplified in fact and that pure mathematics cannot be wholly severed from applied. It is only the benighted philosopher who has imagined that science cannot take cognizance of the individual case. The truth is rather that the whole apparatus of classifications, definitions, universals, laws, and principles is at bottom one vast mass of fictions which aim at coping with particulars and controlling and predicting their behaviour.

Philosophy, then, should emancipate both itself and the sciences from subservience to the mechanisms and manipulations which have been found serviceable in the discovery of truth. It should keep us mindful of the essential human purposes we aim at in the pursuit of truth. And if it thus recovers contact with the problems of human life, it need no longer fear to meet its enemies in the gate.

MUST PHILOSOPHY BE DULL?¹

THE QUESTION whether philosophy is dull is plainly not one for us as philosophers to debate: we must abide by the verdict of the public. Whether philosophy ought to be dull and must be dull are much better questions: they seem to merit serious consideration, and we are all entitled to discuss them. But even here it may be wiser not to attach too much importance to the opinions of philosophers. For it seems probable that many philosophers, perhaps a majority, would honestly consider it beneath their dignity to discuss such questions; they might even contend that the duller philosophy was the better its chances of attaining truth.

With all deference, however, to such academic dignitaries, I will endeavour to express my partial disagreement with this attitude and to state some of the objections to which it seems to be open. I do not recognize the duty of dullness, and I am even sceptical of the dullness of duty. Nor can I see any reason in the nature of things why philosophy must be dull, though there may be good reasons why philosophy should be rendered dull. They lie in human nature and in human institutions.

But I shall not attempt to prove my thesis either deductively by prying into the causes of philosophic dullness and proving them all to be avoidable, nor yet inductively by enumerating all the species of philosophic dullness. Such procedures could easily be made to seem overwhelming but they would them-

¹ From *The Personalist*, XVIII (1937), 28-39.

selves be abysmally dull. On the other hand, I am well aware that whoever tries to dispel this widespread conviction of the necessary and obligatory dullness of philosophy must have the temper of a desperado. He must be prepared to encounter the intolerant bigotry of fossilized beliefs and the brute block-headedness of the natural man. There are many environments, both academic and non-academic, in which it is not safe to cast a doubt on the convictions of a majority, without a firm assurance of police protection; and so a prudent heretic will always beware of disturbing dogmatic slumbers.

Let us, then, begin our discussion of this momentous question by trying to inject a little clearness into its terms. To ask whether philosophy must be dull should mean to ask whether there are logical reasons inherent in the nature of philosophy which necessarily conduce to dullness; to ask whether it ought to be dull is to inquire whether these reasons are moral, and whether, say, the dignity of philosophy demands dullness.

Both these questions deserve examination. But they are dwarfed in importance by the prior questions "what is philosophy" and "what is it about?" These, I regret to say, are questions about which philosophers are in woeful disagreement, and if we discussed them at all exhaustively, we should get nowhere. But as I was recently privileged to take part in a symposium in an English college which raised the question whether philosophy had any message for the world at all, I will take it from my colleagues on that occasion that there are at least two outstanding functions of philosophy. The first of these may fairly be considered the Oxford view. It considers the deepening of consciousness to be philosophy's primary function. The philosopher sits down, if possible in a chair, a comfortable arm chair, and "reflects" on the cosmos. But his reflexion does the cosmos no harm. It does not solve any cosmic problem. It only increases the philosopher's appreciation of every problem's ramifications. He goes on philosophizing until his reflexion has

permeated all things. So it does not seem unfair to say that according to this view philosophy begins when we perceive that we are in a bit of a muddle about some things and ends when we realize that we are in no end of a muddle about all things!

The second view, which is typically "Cantab," is troubled about the sadly unscientific appearance of philosophy. It is anxious that philosophy should be received into the highest scientific society and thinks that this ambition might be realized if only it would consent to imitate the technicality and aloofness of some of the older and abstruser sciences. Now it is not difficult to see why both these conceptions would render philosophy dull, inevitably and irremediably. They seem also to be wanton and unnecessary.

I should prefer therefore to reject them both. I should prefer to assign to philosophy a useful and important function and an independent standpoint and status of its own, which enables it both to benefit by the work of the sciences and to benefit them. Why should we not recognize that all the sciences are special sciences and say that they all rest on abstractions and selections of special aspects of the field of the knowable, and admit also that philosophy participates in the abstractive and selective activities of the human mind, but with a difference? For whereas the special sciences all pursue their own ends, each without regard to the interests of any other, philosophy is mindful of the whole and uses the results of all the sciences as material to be moulded into a congruous whole. Thus the relation between the sciences and philosophy will be essentially one of symbiosis. The sciences will need philosophy to complete the picture of reality, and philosophy will need the sciences to provide material for its pictures.

This conception of the function of philosophy has many advantages. It justifies philosophy in abstracting from the details, the dull details, of the special sciences, except where these may prove to be relevant and may lead to the reconsideration of

questions about principles which every established science sometimes tends to take for granted in a somewhat stupid way. It justifies also exploration of the field of metaphysical speculation, that is, of philosophic poetry, in order to find hypotheses that may be capable of knitting together the divergent assumptions of the special sciences. And, lastly, it justifies the taking into account of those parts or aspects of reality which the sciences exclude for methodological reasons.

Now of such omissions there are plainly a great number. In the first place, the sciences have become quite oblivious to the plain fact that they are, one and all, purposive structures, selected out of a mass, or rather mess, of phenomena, by the personal, economic, and social interests of the scientists who cultivate them. The scientists usually overlook this obvious fact, because they take it for granted and treat it as extraneous and unrelated to the contents of their science, as in a manner it is. However, it renders the structure of the sciences inevitably teleological. Geometry, for example, is organized for the purpose of exploring the nature of space as defined by Euclid or some non-Euclidean geometer; biology is organized for the purpose of exploring the phenomena of what the biologist chooses to regard as living beings. The fact that within these (and other) sciences teleological reasoning may not be in order, in no wise detracts from the all-enveloping teleology which determines the aims and structure of the science.

Secondly, the dispute about teleology is, however, only one illustration of a much wider principle. All scientific phenomena are relative to the human faculties by which they are apprehended and known. Neither colours nor temperatures could exist for totally colour-blind percipients devoid of temperature sense; nor would logical contradictions irk a mind that was not painfully affected by them. In fact, sense perceptions and logical necessities are just as relative to man as are the values, which are usually admitted to depend on human valuations. Hence,

there is no getting away from the old dictum of Protagoras: man is the measure of all things; and to man are referred all the things he knows or can know. Whatever cannot be adjusted to human measures and human capacities is a scientific nullity. From this anthropomorphism, or better, humanism, there is no escape. It affects our sciences as much as our religions and formulates and pervades the very principles which claim to transcend it. Thus "mechanism" is quite as surely a human ideal of explanation as is theology, and it is, moreover, very serviceable for some purposes and in some contexts. The same is true of "law," "cause," "uniformity," and "universals."

Thirdly, the last of these, the universal, is simply a product of a widespread desire to argue from one "case" to another, to predict the future and thereby (in a measure) to control it. It is a methodological device and a fiction. Moreover the "case" itself is a gross fiction—for these same purposes. It is filtered out of a flux of happenings by a human fiat. Having taken it out of its natural context, we then decree that it shall be a "case" of some "law" or "principle," or "universal," which infuses some recognizable and rational factor of stability and permanence into the flux. Armed with the postulate that every "case" is a case of some "law," we proceed to apply it to the next case of the same law with the utmost assurance. But this procedure is by no means infallible, and it runs risks at every step. It rests upon a theoretically indefensible abstraction from the particular circumstances of the two cases. It is assumed that these may be taken to be irrelevant and that they will not affect or defeat the argument. But if there is any unobserved or neglected peculiarity in either case, which makes it something more than a specimen of the universal for the purpose in hand, the whole reasoning may fail. So whoever takes a particular as a case of a universal, should always be on his guard against such possible failures and be ready to learn that it is better taken as a case of a different universal.

Fourthly, if he is too exacting and desires to know too much, he will always encounter cases which defeat him. For each case is infinitely particular, individual, and unique, and if he trenches too hard upon these features of its being, it will always baffle him. It will baffle him in the same way, and for much the same reasons, that as he is baffled by the fact of personality, from which also all the sciences make abstraction, with the exception of the inchoate and doubtful science of individual psychology.

Now personality has been officially taboo in conventional philosophy, ever since Plato decided, in the *Theaetetos* (209), that between two individuals, let us say Socrates and Theaetetos, there was no conceptual difference; and servile logicians were allowed to decree that the individual was unsusceptible of definition. Yet personality (with its preparation in individuality) is unquestionably a fact which pervades all nature; and if the sciences are forbidden by their constitution to take note of it, this renders it only more urgent that it should be accommodated elsewhere. If, therefore, the sciences will not, philosophy must.

Philosophy, then, will have the duty of tracing out the consequences of personality in all our knowing. Now as regards the philosophies, this task is easy enough: they all testify aloud to the often highly romantic personality of their makers, and the more original they are, the plainer it is that this is what has determined their every detail. But with regard to the sciences this is not made clear. They all try to depersonalize themselves and to present a show of impersonal truths about objective fact. It is only when we pry into their genesis and history that we perceive how deceptive this appearance is. It is only then that we realize how ephemeral scientific truths are and how continuously they are evolving into more valuable forms. It is only then that we realize that all scientific truths and facts have had a past and are designed to have a future. They are all at the outset per-

sonal affairs. They were launched upon the scientific world by the personal observations, exertions, experiences, and experiments of those who sponsored them, and arose in a context of particular times and places. That these particulars may be abstracted from is always an assumption and may be a risky one. In either case the ideal of a self-sufficient, depersonalized, and inhuman science is plainly one of "the fairy tales of science," which is very remote from its actual procedure and need not be believed unless we will have it so.

Now what is there to necessitate dullness or even to conduce to it in this conception of philosophy? Does it not give the philosopher the amplest field for the exercise of his imagination and for indulgence in his genius? It seems to assign to him the biggest and most interesting questions and to permit him the fullest liberty in answering them, with the sole proviso that he should be willing to propound a real answer. And any answer may be a real one, provided only that it can be verified, even though no verification can be absolute. Clearly it is not possible to make out any logical case why philosophy should be, or must be, dull.

But this, alas, does not quite settle the question. For the logical point of view is not the only or, socially, the decisive one; nor are philosophers amenable to logic alone. There may, therefore, yet be psychological and sociological (moral) reasons why philosophy, or at any rate what passes for philosophy, should be dull.

Academic philosophy, for example. Academic philosophy has a double aim and is doubly relative. It has the aim both to instruct and to impress—and these are by no means always compatible. To instruct, it should have recourse to transparent lucidity; but bombastic technicality and impenetrable obscurity produce far more impression upon many minds which draw their spiritual sustenance from reverent listening to the blessed word "Mesopotamia."

Again, academic philosophy is relative to its place in an academic curriculum, and its expounders have a traditional place in academic life and are likely to behave accordingly. Hence academic philosophy is far more likely to assume the aspect of a part of what is assumed to be a liberal education than of a free inquiry into the ultimate problems of life. Actually it is apt to become a somewhat severe discipline for the exuberance of youthful minds, like mathematics. But it proceeds by a very different method. Instead of abstracting from all uses, juggling with unexplained concepts, and declaring its results to be absolute truths, it devotes itself mainly to the study of exploded errors. It conscientiously rehearses all the errors into which speculative philosophy has fallen in the past when it had not sufficient means to solve its problems. The more pedestrian of philosophers wander about in them with their heads in *culs de sac*; the more dashing pursue dead issues into dead ends—in both cases because their predecessors have omitted to post “not a through street” signs. Hence they leave behind them litter, but not literature. This is called the “history of philosophy.” A few of these errors are entertaining or instructive, but most are meaningless and dull; and as a whole the process is so long and so difficult that few lovers of philosophy are able to survive it and to attempt the real present-day problems of philosophy.

There are also other reasons why academic philosophy should be dull. It is often considered essential that academic philosophy should not arouse and inflame the minds of the young: it should be “safe,” and dull men are safe. This proposition is all too apt to be converted simply. So, in the eyes of the authorities who appoint professors, those are preferable who can be trusted not to ignite the Thames or other larger and perhaps more inflammable rivers. When they do this they condemn philosophy to dullness, but they are evidently thinking neither of the interests of instruction nor of the tastes of the taught.

However, the desire for safety and the routine of instruction are far less potent generators of dullness than is the desire to impress each other which fills the souls of pedants. These also play for safety and find that it is most easily attained by obscurity, technicality, and the invention of a new terminology. For what one cannot be sure he understands he cannot confute and does not dare to criticize. So the creator of a new branch of "learning," pseudo-science, or metaphysics can easily pose as the hierophant of ineffable mysteries and enjoys practically complete immunity from attack.

It is sometimes quite amusing to watch an encounter between two such grandees of the learned world. They take their stand firmly on their dignity and never emerge from the protective shadow of their "systems." Each speaks pontifically in his own language, each probably in a jargon which pretty perfectly conforms to the German wit's definition of philosophy as "nothing but the systematic misuse of a terminology invented expressly for this purpose"—and, moreover, a jargon which he has constructed by misusing or perverting the similar jargon of one of his predecessors, of whom, as likely as not, he boasts himself a disciple. So they never understand each other, and they rarely even try to do so. They just gibber at each other!

This is one reason why ordinary philosophic discussion is so sterile. A further reason may be identified with that which leads to the dominance of small talk in ordinary conversation. Just as people usually prefer to talk about trifling and indifferent matters rather than the subjects which are nearest to their hearts, so philosophers shrink from their big and thrilling problems and confine themselves to a number of technical questions about which they can discourse harmlessly and endlessly with a show of erudition. "*What is thought without a thinker?*" "*What is mind without consciousness?*" "*What is the difference between realism and idealism?*"—when neither is defined, and nobody has any idea what anybody else may mean by either. "*What is*

the difference between sensations, sense-data, sensa, perceptions and thoughts?”—when left in a similar condition of vagueness. “*What does a proposition mean?*”—when it is taken out of its context. “*What is truth?*”—when no one will look for the answer in places where it matters whether it is truth or falsity that he gets. “*What did Plato mean by the ‘number’ of his State or his ‘theory of forms’ or his ‘Socratic dialogues’*”; or “*what did Aristotle mean by his criticisms of Plato?*” And so forth and so on!

Such subjects of debate persist, not because they are important, but because they are insoluble and because it pays the ordinary professor of philosophy in a variety of ways to take a hand in such discussion. Moreover, they can be rendered abysmally dull, and usually are.

Here, then, are potent causes of dullness which infest philosophy regarded as a social institution. In pointing them out I have made no attempt to achieve exhaustiveness of enumeration (nor even exhaustion): probably every one could add to the number from his own observation. I hope also that I have not given any personal offence. For, though I have as usual tried to vindicate personality, I have endeavoured to eschew personalities; and after all, no one need confess that the dunce’s cap fits him perfectly, even though he may remember that Duns was a typical and eminent philosopher of the severely academic sort.

We seem, then, to be driven to the conclusion that if the reasons for philosophic dullness are social and psychological rather than logical, the philosophers can pretty well make of philosophy whatever they please. Philosophy may be dull; but it need not be dull unless philosophers prefer to have it so and make it so.

Moreover, it seems to me that it is just here that the shoe pinches. The actual situation appears to warrant some anxiety. Neither socially nor academically can philosophy claim exemption from the struggle for existence; nor can it survive, if it will

not take the necessary means to that end. The philosophers, therefore, have it in their power to extinguish both themselves and their subject. If they so desire, they can extinguish both, either by committing *hara kiri* on the doorstep of the Temple of Truth, or by "sitting *dharmā*" outside its gate. But I see no reason to think that by so doing they will either be benefiting themselves, hurting their foes, or performing a signal service to humanity.

IS IDEALISM INCURABLY AMBIGUOUS?¹

PERHAPS the most useful of the functions which a technical journal is called upon to perform is that of enabling the experts in a subject to discuss their differences, especially the meaning and appropriateness of their technical terms. This remark applies particularly to philosophy, which has long been suffering from the manifold ambiguities and scandalous vagueness of its leading conceptions. Accordingly, the enterprise of Professors Pratt, Barrett, and Brightman in trying to pin down the elusive term "idealism" to something like a definite meaning is worthy of all praise,² and as their dispute is not a private one, but concerns us all, I hope that some further comment on their efforts from a somewhat different standpoint will not be unwelcome.

My own sympathies have long been with Professor Pratt. Already when I wrote the last chapter in *Studies in Humanism* it seemed to me that the development of the problems and the personal vagaries of the philosophers who used the terms "idealism" and "realism" had rendered both of them unfit for the description of any live issue in philosophy; and the confusions, so deftly dealt with by Professor Pratt, which have resulted from their continued use fully seem to have justified my attitude. In view of the present chaos Professor Pratt's demand for a clear distinction between what is called "idealism" and what is called "realism" is a demand for clearness and honesty of thought. On

¹ From the *Journal of Philosophy* (Nov. 23, 1933), XXX, 659-64.

² *Journal of Philosophy*, XXX, 169-78, 421-29, 429-35.

the other hand, the papers of Professors Barrett and Brightman also seem to me to provide valuable materials for an answer to Professor Pratt's question. I assume that he will answer them effectively and that we shall all be instructed.

But I fear that unless I intervene it is unlikely that any of the present parties to the discussion will treat it, in future as in the past, from the broadest and most fundamental point of view of which it is susceptible, the point of view from which alone the whole dispute can be reduced to order and room can be found for all its possibilities. I would call this the "humanist" or "Protagorean" point of view, and trace it back to the dictum that "man is the measure of all things." This is surely not only the earliest but also the most thoroughgoing affirmation of the philosophic importance of man, which bears in its bosom all the later idealisms as partial, one-sided, and more-or-less misconstrued developments. It leads up naturally to the simple, sweeping, and one might hope non-contentious definition that any view which realizes that some reference to man is always implied in any world with which man is concerned, and can never be expunged from it, is fit to be called "idealism."

If, then, we disabuse our minds of traditional but groundless prejudices which construe relevance to man as absolute relativity and relativity as subjectivity and subjectivity as solipsism and/or scepticism, it is not difficult to see that the dictum of Protagoras is in no wise a denial of any "reality" which can be of human interest or importance and that, as a methodological principle at least, it carries the completest assurance of a possible harmony between man and the world he inhabits. It rules out from human measurement none but realities which are alleged to be unknowable, unmeaning, inoperative, fictitious, or absurd. If (1) Humanism therefore be idealism, it is an idealism to satisfy all human demands and to which humanly no exception can be taken. It is the first, both logically and chronologically, the most comprehensive and complete; and all the

other "idealisms" can easily be developed out of it by various restrictions.

Thus (2) solipsism (for which, paradoxically enough, Professor Brightman finds no room among his four historic forms of idealism) is easily fabricated out of it. For if abstraction is made from the fact that man's activities are not only "theoretic" but also "practical," solipsism at once becomes a very obvious and obstinate consequence of the relativity of all experiences to an experiencer.

(3) Berkeleian "idealism" also is easy to arrive at, if attention is focused exclusively on the dependence of perceptions on a percipient.

(4) Out of this, as history showed, Humian "atomism" (a second form of idealism for which Professor Brightman's classification has no place) springs up, if an attempt is made (however unsuccessfully) to resolve the percipient into perceptions.

(5) A place can be found also for the enigmatic doctrines of Plato, which abstractly might just as well be labeled "realism" as "idealism," though for linguistic reasons they cannot be expelled from the pedigree of idealism. What, precisely, Plato meant by his "Forms" and "Ideas" at various epochs of his thought will always probably remain a subject for dispute; but something like agreement may perhaps be reached at least on this, that they arose in the context of what we should call a "logical" problem, and in order to justify the practice of predication. If so, it may be said that Platonic "idealism" arises from taking man as a logical creature, just as Berkeleian arises from taking him as percipient.

(6) Professor Brightman's description of "Hegelian" idealism, "reality is organic—wholes have properties which their parts do not have" (p. 432)—is easily deducible from "man is the measure." For all its constituents—"reality," "organism," "whole," "part"—are plainly human constructions based on human ex-

perience, and their adequacy and "truth" are still being worked out and tested.

(7) Professor Barrett's somewhat divergent version of "Hegelian" idealism leads to the same conclusion. According to Professor Barrett (p. 423) "Hegel pointed out that all perceptive activity requiring a subject-object relationship, implies a more inclusive synthesis. Subject and object alike depend upon his higher synthesis for their being, and finally upon the unconditioned synthetic unity of the world order, of which they exist as organic parts. This world order, being absolute, can not participate as an infinite Mind in the relational activities of consciousness; that is, it can not itself be conscious, or a perceiving agent." This omits the important claim of the *Dialectic* to predict the course of history but plainly postulates a large number of human notions, the superhuman validity of which remains problematic, viz., subject-object, higher synthesis, world order, unity of the universe, the unconditioned, the absolute, the infinite, mind, and relation. Whether (and if so, to what extent) these notions are applicable to human life and helpful in understanding it, is or should be a matter for philosophic inquiry. But their status and value can hardly be taken as independent of human purposes and as *a priori* certain.

(8) From Professor Barrett's summary of the other orthodox or "objective" idealists it would appear that they all agree in substituting a relational for a perceptual dependence of the world on "mind." But is this a vital difference? Does it dehumanize the world completely? Does not this interpretation still leave "idealism" dependent on the nature of the human mind and its conception of "relation"? And does it not still leave the transition from the human mind to the absolute a *salto mortale* which no idealism has accomplished by legitimate means and which it cannot accomplish without discrediting itself as an instrument for cognizing reality? Surely the sceptical

ending of F. H. Bradley's "idealism" has sufficiently revealed this unavoidable dilemma.

(9) Professor Brightman makes recognition of value pivotal for one of his sorts of "idealism" (p. 432) and credits it to Plato.³ But it is not at first sight obvious why an assertion that "value is objective—its meaning and origin lie beyond the human knower"—should be labeled "idealism" at all, especially when one remembers that the analogous assertion that reality is objective and independent of man is usually regarded as the basis of "realism." It is no doubt highly important for philosophy to recognize how all-pervasive values are and that conceptions like those of "higher," "lower," "adequate," nay of "reality" itself, involve value-judgments; but this would appear to be quite a modern discovery. Moreover, whatever "objectivity" values may acquire socially, they certainly *start* as personal valuations, so that their "objectivity" rests in ultimate analysis on the practical agreements and conveniences of persons—very much like the "independent reality" of realism. "Value" then is plainly Protagorean rather than Platonic.

(10) Professor Brightman's "Lotzean" "reality is personal—only persons or selves are real" (p. 432) comes nearest, of all his "idealisms," to a recognition that unmutilated man is the true measure. For man assuredly (and also any "mind" we know) is personal, and personal idiosyncrasies underlie all philosophies. But that "only persons are real" remains a hypothesis, to which it does not seem necessary for man to commit himself *a priori*.

There remain two sorts of "idealism" to which neither Professor Barrett nor Professor Brightman has made reference, namely, (11) the use of "idealism" in a moral sense. This derives, not from "Idea" nor from "idea," but from "ideal." This

³ This attribution is presumably based on the mention of the Idea of the Good in the *Republic*. But the Good there plainly stands merely for the principle of teleological interpretation, which is admittedly *ex analogia hominis*. Moreover, it had cosmic significance in Plato's eyes, not *qua* "Good" (value), but *qua* "Idea" (true reality).

sense of "idealism" is highly popular, and it seems doubtful whether it can ever be eradicated. For if it were discarded, it would become ever so much more difficult for "idealists" to get themselves appointed to professorships, simply as such. So the human motive underlying this sort of idealism is sufficiently obvious.

Lastly (12) it has not been mentioned either by Professor Barrett or by Professor Brightman that there is a profound difference between *a priori* and empirical idealisms. Yet any idealism may jump from the fact that a conception can be formulated to the conclusion that it is *valid* in the sense of applicable to life or reality; or it may recognize that its conception still stands in need of verification in experience and by its working. Historically the more notorious and typical idealisms (especially Nos. 5, 6, 7, and 8) have all been conceived as belonging to the first class: that is, they have been based on the "ontological" argument and have argued *a priori*, even though they might perhaps have stated their case empirically and submitted to confirmation from experience. Yet it hardly follows from the fact that a conception is desired (and perhaps desirable) that it is also applicable and true of the real. Moreover, empirical idealisms have a distinctive argument of their own: they can argue from the existence of dream-worlds as psychic facts. Finally, it should be observed that no empirical idealism, since it admits the need of verification, can acquire more than some degree of probability. Hence the requirement of empirical verification incidentally strips idealism of its chief charms; it rules out of order the claim of idealist systems to "necessary" truth. Even if these systems could make good their claims to be necessities of thought—and their numbers would seem to discredit such claims—it would remain open to question whether necessities of thought could control the real and so whether the systems were actually true.

What is left, then, of the *apologia* for idealism? According to

Professor Barrett (p. 427), "Objective idealism relies upon the final cosmic significance of value, coherence, and systematic completeness." But all of these are human ideals, which have to be accommodated to the other human ideals and cannot be allowed to negate them without further discussion. According to Professor Brightman (p. 432), idealism is more than mentalism, because it includes "the problems of value and of mind" (p. 433). So for him there are four sorts of idealism, and "any system is idealistic which affirms one or more of these four propositions, provided Hegel's be included" as the "minimum idealism" (p. 432).

Actually, however, we have seen that there are a round dozen of "idealisms" which can be or are maintained. And Professor Brightman's "definition" covers only four of them. Is it well, is it fair, is it safe, to withhold official recognition from the rest? It would no doubt be a counsel of perfection to devise distinctive names for all of them and to enforce consistent recognition of these distinctions; but in default of this ideal, will it not have to be confessed that "idealism" is an incurably ambiguous term? And, if so, ought it not to be dropped as mischievous and unscientific from our philosophic vocabulary?

Lastly, I may be asked "But what about realism?" Is it any better? If so many sorts of idealism are recognized, what place is left for realism? Will it not be merged in some of your idealisms? And then our hoary academic dichotomy between realism and idealism may have to be scrapped altogether and cast upon the dung heap.

I should be sorry to give needless offence to any form of realism, which seems to me by far the less tricky and pernicious sort of dogmatic metaphysics. But as a complete or Protagorean idealist, who is glad to think that man may be an adequate measure of *his* experience, who holds that he has no right to torment himself with unmeaning problems about what cannot be related to human experience, and who is glad to find that

actually a reference to man lurks in all the "objective" realities commonly recognized, I should be far from inconsolable if it turned out that adequate accommodation could be found for most "realisms" in my *Humanism*. I would venture also on the suggestion that all the realisms that seemed plausible and reasonable could find a place in one (or several) of the pigeon-holes provided for idealisms. As for the rest, for which no place could be found, might they not be dismissed as perverse, superfluous, and unprovable? But this is not of course to imply that there would be no philosophers who insisted on "believing" in them nor to deny that animal "faith" may frequently get the better of human "reason."

LITERARY CRITICISM

THE ULTRA-GOTHIC KANT¹

WHEN I take up the *Critique of Pure Reason*, I always feel as though I were approaching one of the wonders of the world, entering a Gothic cathedral, vast and venerable, reared at a prodigious cost of human ingenuity and labour and now unfortunately fallen into a grievous state of decay. No wonder; for its site was badly chosen, not on the firm rock of a breezy hilltop, but in the foggy marshes of an unhealthy valley. Its foundations were insecure and badly laid. Its plan was not fully thought out in advance, but added to and modified as the work proceeded, very much at haphazard. It was built of materials of very unequal value, of the ruins of earlier buildings, of soft stone that disintegrated under the stress of wind and weather, of hard rocks that stand out among crumbling masses, of sheer rubble that the veriest jerry-builder should have shrunk from employing. Its taste is ultra-Gothic: every inch of its surface is laden with quaint, profuse, and unmeaning ornament; but its gargoyles are superb. To complete its wreck, its towers have been used as observation posts in a silly siege by warring tyrants; so it has suffered severely from bombardment. All this happened one hundred and fifty years ago; the building is hopelessly out of repair and no longer fit to use. It is, in short, a ruin.

But it happens to be also a great national monument and the chosen sanctuary of a great people. As such it is mentioned

¹ From *The Personalist*, XVII (1936), 384-96.

in all the guide books and has become a noted place of pilgrimage. So we enter it with bated breath, hush the voice of criticism, and admire all we can.

I have described, very inadequately I fear, the mental attitude in which students of philosophy are trained to approach Kant's work. And I should be the last to deny that for some purposes this attitude is legitimate and salutary. But it may easily degenerate into idolatry and lend itself to nationalistic delusions. I suppose, also, that when I undertake the task of putting the whole truth about the *Critique* into the nutshell of a single article, I shall be expected not merely to summarize and praise but also to disport myself on a fine field for the iconoclast and the devil's advocate. The latter functionary, I would remind you, is an essential part of the Catholic machinery for making saints; he should always be heard also before a philosopher is deified and his doctrine is pronounced essential to salvation. I propose therefore to perform this vital function for Kant, conscientiously and not, I hope, unfairly.

Let us raise, however, a few preliminary questions before we attack the *Critique* itself. First, what was Kant trying to do in it? He was, of course, trying to be relevant to the situation in his subject, as he conceived it. Now at this time the field of philosophy was dominated by Hume, a great man of letters as well as a great philosopher, who had devastated the traditional schools by his demand to be shown an authentic example of the necessary connexions which were supposed to hold the universe together. The reverberations of Hume's bombshell had spread even to sleepy Königsberg and roused Kant from his dogmatic slumber in the hotbed of rationalism which academic Germany was then, as now.

Essentially, the problem for conservative philosophers, therefore, was to find an answer to Hume, and Kant laboured at it faithfully for years. If he failed, it was because he had uncriti-

cally accepted too many of Hume's premisses and because the conclusions he desired could not rest on them.

The next thing to grasp is that Kant's *Critique* belongs to a class of book the existence of which was brought home to me very early in my philosophic career. I had become the unsolicited recipient of a somewhat cranky work, written in a strange lingo, and had incautiously acknowledged it, with some comment on the language. The author accepted my suggestion of a glossary with enthusiasm and speedily sent me a second edition, in which he explained that his first aim had been "to render his essay intelligible to himself. Hence," he continued, "the selection of such terms as *Architectonic Entelechy* and *Sensuous Entelechy*; they have been adopted in order to make the comprehension of the work less arduous." This artless confession I have ever since found to be a sovereign clue to the history of philosophy: it is full of works which may be suspected of a similar origin. It is most charitable, therefore, to suppose that the *Critique* also was written to render its author intelligible to himself. Unfortunately Kant did not equip it with a glossary or even an index; and the veneration for him is such that even after one hundred and fifty years it is still the rule for German editions of the *Critique* to have neither. But what is really wanted is a concordance.

A third point to state at the outset is the nature of Kant's bias. Every writer has a bias, and he usually conceals it, if he can. But Kant was not very skillful. His bias was evidently that of a naïve rationalist, who revelled in technical terms, though he could never learn to handle them consistently, and who delighted in complex classifications for their own sake. As Norman Kemp Smith says,² he was "a rationalist by education, temperament and conviction," and Hume could not do more than disturb his slumber. The *Critique* is a consequence of

² Norman Kemp Smith, *Commentary on Kant* (Second edition, London, Macmillan and Co., 1930), p. xxxii.

the resulting nightmare. He had, moreover, a thoroughly Gothic mind, to which simplicity and classic clarity were utterly alien.

Fourthly, he had no literary talent, and his influence on philosophic writing has been entirely disastrous. He has probably ruined German as a vehicle of philosophic enlightenment, and spoilt the style of his admirers everywhere. And in view of the intrinsic difficulty of philosophic problems, that is surely a grave disservice to philosophy.

Now let us tackle some of the actual doctrines of the *Critique*. Kant's answer to Hume does not consist of confuting his arguments. He does not deny that necessary connexion is not an observable fact. He does not deny that it is an addition which, rightly or wrongly, the mind makes to the facts. Neither does he repudiate the presuppositions of Hume's psychology. Like Hume, he conceives the problem of knowledge to be that of connecting atomic data by some principle of synthesis; for him, also, causality is a means of tying together into a bundle a series of discrete events. He has no idea, therefore, of repudiating Hume's atomistic psychology, and of taking causal analysis as a means of dissecting a continuous flow of experience. In short, he builds throughout on Hume's psychological basis. He stands and falls with Hume.

His answer to Hume consists merely of two things. He shows that Hume's account of knowledge was a failure. Now of this Hume himself had long been well aware. It had been the reason for his scepticism, and he could easily have shown that it doomed Kant's constructions to a similar failure. Secondly, Kant showed that subjective additions to the given were not confined to the causal postulate. The mind's contributions to the working up of the object of knowledge were far more extensive. He elaborated them into an intricate system of *a priori* forms which were "the work of the mind" in constituting knowledge. Causation was merely one of twelve "categories." And besides categories there were other synthetic principles

galore, pure forms of perception, space, and time, a transcendental ego or synthetic unity of apperception, plus unavowed and uncriticized assumptions like the antitheses of form and matter, "pure" and empirical, phenomena and noumena, the absolute truth and finality of formal logic and of the mathematics of his time, the existence of things-in-themselves and of faculties.

To all this epistemological machinery he gave a perverse, obscure, misleading, and ambiguous name, "the *a priori*." Until Kant wrote, an *a priori* argument had meant one that argued from cause to effect, and the apparently non-empirical factor in knowledge had been credited to the "innate idea." True, there had been some confusion as to how such ideas were inborn; but this confusion was only aggravated by Kant. The *a priori* became the central mystery of his system. It claimed to be logical, not chronological; but the *Transcendental Aesthetic* is full of passages which make no sense unless "priority" is understood as temporal.

And really Kant's whole enterprise was caught in a dilemma at this point. If the priority is taken temporally, the *a priori* reduces in principle to the innate idea, and, what is more, its existence becomes a question for psychological inquiry. Kant's new science of epistemology perishes still-born. If the *a priori* is completely severed from all reference to the temporal order of events, then it is never psychic fact at all, but only a factor in a peculiar logical analysis and a valuation which unjustly exalts it above an *a posteriori* which is no less indispensable. Moreover, any such analysis must remain relative to the particular conceptions it chooses to set out from. Hence there may be any number of such analyses, and the choice between them can be only on aesthetic grounds. So there is no *a priori* necessity to prefer Kant's version of the *a priori* to any other.³

³ Cf. my "Axioms as Postulates," secs. 13-23, in H. Sturt's *Personal Idealism* (London, Macmillan and Co., 1902), pp. 73-83.

A further Kantian perversion of an older term is to be found in his use of the term "category." According to Kant a "category" is a pure concept of the understanding imposed *a priori* on the matter of sensation and transforming it into a knowable object. He enumerates one dozen categories, all derived, very unconvincingly, from the forms of judgment, that is to say really of propositions; this process, with the aid of an equal number of temporal *schemata* and a portentously obscure transcendental deduction *a priori*, is supposed to guarantee both the applicability and the exhaustiveness of the classification. This last allegation, however, is glaringly false. Why, for instance, should causality be a category and teleology not? The relation of means and end is surely just as legitimately employed to interpret events as that of cause and effect. Kant, however, relegates it as an afterthought to the *Critique of Judgment*. And a large number of Kant's favourite distinctions, like "form" and "matter," "sensation" and "thought," are used even by him just in the same way as "categories," which as Kemp Smith remarks⁴ "he constantly mixes up with his 'schemata.'" Not that their applicability is any guarantee of certainty. "Causality" may be an *a priori* conception, but this in no wise helps us to assign the right cause to any given effect: in every science the scientist has to take the responsibility for the choice of a suitable category and to observe the empirical consequences of his choice.

Another tantalizing feature in Kantian terminology is its systematic ambiguity. There is not a technical term in the whole *Critique* which does not have at least two meanings! My time will permit me to mention only one notorious case; but it occurs very early and concerns a very vital point. In his "Introduction" Kant makes much of the contention that although all knowledge begins with experience, it does not arise *from* experience. But he does not seem to have noticed that he is

⁴ *Commentary* (second edition), p. 239.

using "experience" in two very different senses. The first "experience" means experience as understood by Kantian apriorism, namely, as composed of empirical data, formed by "categories" into objects; the second means experience as it seemed to an empiricist like Hume. And the whole dictum states how Kant thought he had improved on Hume. But, alas, these were not the sole alternatives. Both were only theories about an underlying "experience" as it psychologically is for the ordinary man. This too, perhaps, is not a primitive datum; but it has at least gained authority by growing up in the course of ages and developing pragmatic value. In any case, it seems very desirable to distinguish clearly between the common-sense experience which is given as the *explicandum* and the philosophic endeavours to interpret it.

The greatest and most fundamental crux which the student of the *Critique* encounters is perhaps that known as the problem of the thing-in-itself. It arises thus. After it has been laid down that the antithesis between a *posteriori* and a *priori* can be developed from that between the datum and the work of the mind, and ultimately reduced to that between matter and form, a number of questions still remain unanswered. How does the form form the matter? Why does the matter submit to be formed? Must there not be a sort of pre-established harmony between them which transcends their dualism? None of these questions has any obvious answer on Kantian principles. But the difficulties they involve are child's play compared with those which arise when a further question is put to Kant. The fatal question "whence the matter of experience which is formed by the mind?" Kant was not idealist enough to answer by alleging that it too was created by the mind; so he answered "it comes from the thing itself," taken apparently in the good old realistic way as that which underlies appearances to us.

But having made this realistic postulate, Kant proceeded to whittle it away. The thing itself could never be known, be-

cause every object of knowledge must be permeated by the work of the mind. So, though it was necessary to hold that it existed (if Kant's theory was to stand), it was impossible to say what it was. This corollary was very stimulating; it was enough for a generation following Kant to set every philosophy professor in Germany guessing at the thing-in-itself and trying to find a way of lifting Kant's taboo. It would have been more logical, but much less fun, to point out into what troubles the thing-in-itself plunged as Kant's argument proceeded. Since he had insisted that objects of thought must be categorized and that the categories sprang *a priori* from the mind by a sort of virgin birth, they could not be applicable to the thing-in-itself, which provided the matter of experience. It was not possible, therefore, to speak of the thing-in-itself without using the category of unity, nor of things-in-themselves without the aid of the category of plurality, nor to regard it as the cause of phenomena without the sanction of the causal category, nor even to assume its existence without recourse to the category of substance. Clearly if the thing-in-itself was to continue to figure in the Kantian doctrine, an extensive "transcendent" use of the categories must be permitted. Yet how could that be? Had not Kant expressly and vigourously forbidden just this expedient? And could he withdraw this prohibition without giving up the critical philosophy's whole claim to supersede dogmatic metaphysics? In short, the thing-in-itself had involved Kant in inextricable confusion and flagrant contradiction. It was no wonder that his younger contemporary, F. H. Jacobi (1743-1819), could sum up the situation very neatly by remarking, "Without the Thing-in-itself I cannot get into Kant's philosophy: with it, I cannot stay there!"

I have endeavoured, so far, to make clear a few of the major defects that vitiate Kant's work; but I am now seized with a fear lest I should have overshot my mark. I may have led you to despair of understanding Kant and to wonder how a writer

who has committed all the literary and logical atrocities with which he is charged could ever have risen so high in the ranks of famous philosophers and have become a pivotal character in European thought. I feel, therefore, that it is incumbent upon me to explain why and to what extent these inferences need to be qualified.

First, as for understanding Kant, I am convinced that no one has ever achieved this completely. No one has ever assimilated Kant so completely that he could swallow all the things that Kant has maintained. Not even Kant himself, who had a curious knack of preserving, like flies in amber, old trains of thought which he had long outgrown at the time his book was published, and who never took the trouble of revising his manuscript to make sure that it expressed a consistent view. To illustrate this habit Professor Adickes has pretty well proved that one particularly obscure line of thought arose simply from an accidental transposition of a couple of pages in Kant's manuscript.

Clearly with an author of this kind one must be a good deal more Kantian than Kant to flatter oneself that one can find consistency in Kant and swallow him whole. What, in fact, all the various sorts of Kantians have done is to compile a credible Kant, a Kant they can believe in, by judiciously selecting the passages and doctrines which fit in with their general view, and to ignore what does not. The whole material no one could possibly accept, and the minute criticism of the modern "Kant-philologists" has conclusively shown that not even Kant ever held simultaneously all that he published together. Taken in the mass the stuff is simply a vast muddle; and if by "understanding" one means to take it all in as it stands, then no one can understand Kant without reliving his mental history and getting into the same muddle. But if by "understanding Kant" is meant analysing his reasonings, noting his ambiguities and hesitations, detecting his mistakes, unravelling his confusions—

then "understanding Kant" means reaching a higher critical level than ever Kant himself attained.

Now this may well be a possible achievement; but it does not seem likely that the quickest and easiest route to such critical understanding should lie through the jungle of the Kantian literature. Rather we shall be inclined to accept William James's great dictum that the best way to a truly critical philosophy leads, not through Kant, but round him.

Or, more specifically, why not let us start our critical epistemology further back, with Locke? Locke has got the idea of a critical inquiry into knowledge quite as clear as Kant and he is much less complicated; and from Locke it is easy to go back to common sense and to appreciate its pragmatic value. That will enable us to understand that knowing is, not merely an intellectual parlour game, but also a really vital activity, and that its various stages are to be understood primarily with reference to its purpose. So we shall finally arrive at a far more adequate theory of knowledge which is founded, not upon the abstractions and fictions of the traditional intellectualism, but upon the unmutilated, integral functions, the needs, aims, and ideals of the whole man.

The indisputable fact that in spite of its logical defects Kantian philosophy has proved a great terminus from which a great variety of trains of thought have taken their departure, is not really the paradox it seems. To an observant student of the history of philosophy it should occasion no surprise. It is only a case of a phenomenon which has occurred over and over again. It is not the more consistent systems that are the most stimulating. It is rather those whose inconsistencies are sufficiently obvious and appear to be fairly superficial that inspire others with the ambition of removing them and setting them right. A perfectly consistent and clean-cut system would not challenge emendation. As with an indisputable objection, there is nothing more to be said about it. You must take it or leave

it: for it leads on to nothing beyond itself. Fortunately, perhaps, no such perfect system has yet been devised to adorn and close the history of philosophy. On the other hand, a thoroughly ambiguous, inconsistent, and incoherent system, which tries to hold together and to unite a variety of divergent lines of thought, is capable of development in many directions. Hence it attracts disciples, each of whom imposes his own peculiar interpretation on it and starts his own development, with vigorous polemics against his fellow-disciples as to which is the right interpretation of their common master, so soon as he is dead.

It is for this reason that Socrates, who had not committed himself by anything on paper and therefore could say what he liked on each occasion to each of his admirers, has been such a prolific founder of "Socratic" schools. Not only the Platonic but also the Cyrenaic, the Cynic, and the Negarian schools could claim Socratic inspiration and puzzle us with their divergences. Similarly Locke's sensible compromise between rationalism and empiricism cried out for development, as did Descartes's artificial and unstable adjustment between the claims of spirit and matter. Plato, also, has proved a perennial fount of philosophic inspiration just because no one could turn his dialogues into a single system. Hegel could enlist an army of disciples just because no one could tell from his cryptic and ambiguous utterances whether the innermost *nisus* of his system led it to the right or to the left. On the other hand, the systems which have been relatively consistent have been poor in developments. Who can remember the disciples of Hobbes or of Schopenhauer or of Nietzsche and the developments they effected? Aristotelianism was so complete that Aristotle's followers soon dwindled into insignificance; it revived only when it was grafted on to the thoroughly alien body of Christian dogma. Berkeley's system could lead only towards Hume, but by an illegitimate development.

Now the Kantian system certainly lent itself to a great variety

of interpretations. It could be interpreted realistically or idealistically or sceptically, logically or psychologically or metaphysically, rationalistically or voluntaristically, or even, I almost blush to say it, pragmatically. Moreover, all these interpreters can make out a case. They can all quote, quite adequately and even abundantly, from the master's words for their interpretations; and they can dispute endlessly about the relative importance of their various quotations. There cannot be any finality, therefore, about Kantian exegesis. The *Critique of Pure Reason* is eminently one of the books of which it is true that

Hic liber est in quo quaerit sua dogmata quisque,
Invenit ac pariter dogmata quisque sua.

From this point of view Kantian philosophy seems a great open-air mine, in which anyone may quarry according to his taste. Many will get only rubbish out of it—the wherewithal to feed their pedantries—and tricky questions with which to trip up and torment examinees. But there is also some precious ore there, which it may pay to extract when the labour costs are not too high. A pity only that the ore should be so recalcitrant and that the rock in which it is embedded should be so tough and hard to work!

GOETHE AND THE FAUSTIAN WAY OF SALVATION¹

OF ALL MEN who have so far lived, Goethe has probably come nearest to incorporating in his own person the Platonic ideal of the philosopher-king. Now this ideal need not be construed as demanding incorporation in a person: it can also be conceived as incorporated in an office. Thus a good case can be made out for regarding the Pope as the philosopher-king after Plato's own heart, and the Platonic ideal of a kingdom of philosophy as finding its terrestrial realization in the Catholic Church.

But if we prefer to construe Plato literally and to look for a man who has interested himself in all knowledge and then tried his hand at ruling and the practical governance of mankind, I do not know where we shall find a man who made more of a success of his job than Goethe, for so many years the friend, minister, and right-hand man of the Duke of Saxe-Weimar. Moreover, Goethe has this additional appeal for the Platonist that, like Plato himself, he was a poet as well as a philosopher and a ruler. A greater poet than Plato, no doubt, and a more successful ruler, because not so pedantically devoted to his philosophy and willing at the proper season to descend from the ideal world to the level of prosaic common sense. One cannot imagine Goethe perpetrating the absurdity of setting the philosopher-king to establish the perfect State

¹ Library Lecture, Los Angeles, California, 1935.

by driving the whole population above the age of ten out of the city and then undertaking the care of the remainder, or of treating the Duke of Weimar as Plato appears to have treated the tyrants of Syracuse.²

It is, however, quite in accordance with the spirit of the poet-philosopher-king that he should collect his impressions and embody his reflexions on life in a philosophic poem; and the world assuredly owes Goethe an imperishable debt of gratitude for having found the time and energy to conceive the great philosophic drama which is *Faust*, to work at it all his life, to complete it in old age, and to bequeath to mankind this maturerest product of his thought as a possession for all time. The *Faust* is far more than a poem, far more than a philosophy; it is also the authentic message of Goethe the man—of one of the greatest men of the ages.

Faust, moreover, is largely a revelation of his maker, Goethe, and has absorbed so much of his creator's spirit that we need not too meticulously try to separate their characters when we endeavour to depict their attitude towards life. Goethe's attitude was largely Faustian, and the Faustian attitude is very near the core of Goethe's vital creed. Nor should we ever allow ourselves to forget that Goethe was not only a poet and the brightest star in the Weimar-Jena constellation of German literature; he was also a practical man. Indeed, not only was he able to handle men and affairs, but philosophically also he was a good deal of a pragmatist, inclined at times to exaggerate the essential pragmatic insight that thought needs action to rouse it to its highest flights. The dictum *Was fruchtbar ist allein ist wahr*, though probably intended merely to express distaste for the sterile activities of some of the academic pedants in the neighbouring university of Jena, is technically ultra-pragmatic. It does formally imply the false conversion of "all truth is use-

² If Plato's *Letters* are genuine. The modern Platonists do not appear to realize that, if they are, they utterly discredit Plato as a practical politician.

ful" into "everything useful is true," against which strict pragmatists have unceasingly protested. But it is a mistake to look for strict pragmatism before the end of the nineteenth century, and Goethe's dictum is at least impressive and quotable. It is doubly precious in a country like Germany which has groaned so long under the heel of the academic pedant, the drill sergeant of the soul, and it confirms the suspicion that when Faust is represented as revolting against the sterile learning of the Middle Ages he was to a large extent expressing Goethe's own reaction to the German university of the eighteenth century.

It would, however, be an example of the pedantry just condemned to take Goethe merely as a pragmatist and the *Faust* as propaganda for the gospel of salvation by action or by work. It is immensely more than this, a many-sided work of genius, and many meanings can be read into and out of it. Some of these may no doubt have floated before its author's eyes during the long years of its incubation and so may have been to some extent intended. Others will seem to be demanded by the logic of the situation of the whole work regarded from certain points of view. So I would guard myself in advance against the imputation of asserting that I can provide the only tenable interpretation of the *Faust* and can exhaust its philosophic and poetic meaning. I am quite ready to be told that my interpretation is far-fetched and does little but reflect my personal bias.

Let me begin, however, by pointing out that we do not here, any more than elsewhere in philosophy, start from a basis of agreement about the Faustian method of salvation. There are several candidates for this title, and there may be scepticism about the claims of all of them. Probably the greatest favourites are those which may be described as the gospel of salvation by love and that of salvation by work. The former would seem to be the lesson implicit in Part I of *Faust*; the latter, in Part II, with the exception of the final scene, which seems to revert to the former theory.

As against both these theories, however, I would contend that the whole lesson of Faust's career cannot possibly be brought under either heading. It is doubtless true that at the end of Part I Gretchen's love and her expiation win pardon for her sins, and at the end of Part II her love for Faust draws him upwards to the celestial spheres; but still the love theme was not part of the original plot. It entered neither into Faust's pact with Mephistopheles nor into the latter's wager with the Lord. In the one case Faust undertook to consider himself damned if he ever declared himself satisfied; in the other, Mephisto was to win his bet if he could alienate Faust from the divine source of his being. "Zieh' diesen Geist von seinem Urquell ab." But as Mephisto and the Lord are both well aware that the former is only an instrument of the latter and a part of the force that ever wills evil and creates good,³ and that his independent agency is but appearance,⁴ the Lord's victory is never seriously in jeopardy.

Neither does the salvation-by-work theory, in the style of Voltaire's *Candide* "mais cependant il faut cultiver notre jardin" adequately fit the facts. No doubt Faust in the final phase of Part II appears to settle down to the duties of government and to working for others. But it should be pointed out that ostensibly, at least, it was just the success of this work that led him to express his satisfaction with life and brought the devil down on him, to claim fulfillment of his pact. So the success of his work, so far from saving, nearly damned him.

Furthermore, it should be observed, as still more plainly to the point, that it is quite untrue that Faust had never worked for others until he was created a prince of the Empire in Part II. Even before he ever met Mephisto he had not led a purely theoretic life, amassing learning as a miser hoards up gold. He

³ "Ein Teil von jener Kraft
Die stets das Böse will
Und stets das Gute schafft."

⁴ "Du darfst auch da mir frei erscheinen."

had studied not only philosophy and theology, which are often conceived as purely theoretic sciences, but also law and medicine.⁵ Moreover, he had actually practised medicine with signal success in the opinion of his patients. True, he deprecates his services and says "ich habe selbst den Gift au Tausende gegeben; Sie welkten hin, ich muss erleben Dass man den frechen Mörder lobt." But as Wagner assures him, he undoubtedly did his best, like the Western organist, and nobody shot at him.

Inasmuch as neither the theory of salvation by love nor that of salvation by work will work, let us try another. Let me suggest that the character Goethe wishes to ascribe to Faust is much more consonant with the traditional Faust legend than either of these. Why should not Goethe's Faust also be fundamentally intended to be the magician, that is, the man who pursues knowledge as the avenue to power? Historically the magician is a well-known type and has a long, and if antiquity confers nobility, a noble pedigree. He appears already, horribly arrayed with horns and hoofs, in paleolithic caves and if, as seems probable, the Mousterian cave paintings had food-magic for their aim, the magician was the first artist. If he was the first to study nature, he was the first scientist; if the first to make his living by his wits, the first politician. That the magician was the first medicine-man is admitted in his name. Incidentally magicians when they grew respectable and prosperous, often became founders of religions.

In short, from the first, magicians were the devotees of the knowledge which is power. In this they were probably right, for the other sorts of knowledge are either camouflage or spurious. Moreover, there was not supposed to be any other knowledge in those simple days. For no caste of lazy or ineffectual magicians had as yet set up useless knowledge for the adoration

⁵ "Habe, nun, ach, Philosophie,
Juristerei und Medizin
Und leider lauch Theologie
Durchaus studiert."

of the ignorant. In almost every country the earliest literature is magical, and those who could read and write were magicians *ex officio*. So early literature is literally a department of magic. Spells were a part of spelling, and glamour was the efficacious part of grammar. Incantations (magical chants,) and imprecations (curses,) could turn the hearts of gods and men and draw the heavenly bodies from their orbits. Words were literally "words of power" and could act as open sesames and could cast mountains into the sea. The *logos*, which was "the word" long before it became "the reason," was naturally considered essential to the creation of the universe; and Faust had abundant justification for passing from the translation "word" to that of "deed." Lastly, the mere name of Allah could confine spirits in bottles so securely that the boldest bootlegger opened them at his peril. In short, the notion of a merely theoretic learning that is impotent, useless, and harmless, and is nevertheless worthy of respect, is quite modern. It is the belated invention of a feebler and degenerate age, in which the M.A. has ceased to inspire awe and even the Ph.D. is failing to charm.

Now I submit that it is the magical study of letters and geometrical figures which is depicted in the opening scenes as Faust's original pursuits. He is represented as inhabiting a laboratory fully equipped with all the apparatus deemed necessary for the pursuit of physics and chemistry and even, may we add, of psychology. Its biological equipment was at any rate sufficient to enable his disciple, Wagner, subsequently to concoct a synthetic man, the homunculus, an achievement which has never since been equalled. So Faust clearly was not suffering from the lack of facilities for research.

He was suffering from something much more serious, deep-seated, and hard to cure, a spiritual disease brought on by his unnatural mode of life. For magic is not man's natural vocation, and exceptional men pursue it at their peril. Moreover, for all the greatness of its vogue and the splendour of its achieve-

ments, it does not work invariably any more than does science or even medicine. Also the magician's life is a hard one, full of self-denials and the severest discipline. His magical powers or claims estrange him from the common man and the common life, and at times he may feel this painfully. Also, he is likely to be sensitive and puffed up with conceit and to take disappointments hardly.

Accordingly, we should not be surprised either that Faust should have over-rated his spiritual powers and his hold on the spirit-world or that his failure to obtain recognition as an equal from the Spirit of Earth should have proved a severe shock to his pride. The severe snub administered to him brings⁶ on an acute fit of the *acedia* incidental to his profession and an outbreak of pessimistic despair. Faust makes a not-very-resolute attempt at suicide, from which he is deterred by sentimental memories of his childhood; but the real strength of his emotion is better revealed later, when in reply to Mephisto's gibes, he denounces life in the magnificent curse which ends "Fluch sei der Hoffnung! Fluch dem Glauben! und Fluch vor allen der Geduld!"

Now I think we must take it as psychologically probable that Faust's despair had been coming on for a long time subconsciously; if so, the Lord doubtless knew it when, in the Prologue in Heaven, he set Mephisto on to Faust by the challenge of his bet. He foresaw that to tempt Faust successfully Mephisto would have first of all to restore his zest for life and to cure him of his pessimism.

Whether Mephistopheles had gauged the situation equally well is more questionable. It depends on the conception of what Goethe meant his real rôle to be. Did he mean Mephisto to be taken merely as just an ordinary soul-hunting mediaeval devil? Scarcely, as I have fully argued in the study "Concerning Mephistopheles" in my *Humanism*. In Goethe, Mephis-

⁶ "Du gleichst dem Geist den du begreifst, nicht mir!"

topheles is far too well aware of the humble part he plays in the economy of the universe. He knows that his cosmic function is to stir up others to do the will of God.⁷ But he knows also that he is a privileged devil, a *Schalk*, an amusing imp, who could extort a smile even from the Lord, if he ever permitted himself such levity,⁸ and is the least repugnant to him of all the spirits that deny.⁹ So we can never be quite sure how serious Mephisto is and whether he realizes what a formidable psycho-therapeutic job he is taking on in Faust. For, whether he knows it or not, what he undertakes to do in the first place is to effect a cure for a case of utter pessimism.

Now utter pessimism is a well-nigh incurable malady. For it involves among other things, such as complete distrust in the appearance of goodness, a loss of the will to live. Life no longer has either joys or temptations to offer to one in this condition; it has simply lost its savour. How then can Faust be led astray, distracted, or amused by his tempter?

Fortunately for the reader of Faust, Mephisto is not a solemn devil in deadly earnest. He is an entertainer of the highest class, who tries upon Faust, one after the other, all the regular forms of entertainment, beginning with the lowest, the drunken debauchery of Auerbach's Keller. He finds amusement everywhere, even in Faust. Or rather, I think, his perseverance in tempting Faust must be due to the amusement he derived from Faust's unresting striving. But his first attempt is a failure: Faust is only disgusted. Mephisto at once realizes what is the matter, and changes his tactics. Faust is too old, and his beard is

⁷ "Des Menschen Tätigkeit kann allzuleicht erschaffen

Er liebt sich bald die unbedingte Ruh;

Drum geb'ich gern ihn den Gesellen zu,

Du reizt und wirkst und muss als Teufel schaffen."

⁸ "Mein Pathos brachte dich gewiss zum Lachen

Hättst du dir nicht das Lachen abgewöhnt."

⁹ "Von allen Geistern die Verneinen

Ist mir der Schalk am wenigsten zur Last."

too long.¹⁰ He is too old merely to play; too young to have become indifferent,¹¹ as he himself declares. Nothing but a miracle can save the jaded old magician and revive his interest in life.

So to a miracle Mephisto unhesitatingly has recourse. He subjects Faust to a rejuvenation by means of the elixir of life he drinks in the witch's kitchen. This enables him to cast off the physiological effects of thirty years of strenuous study and to continue his career, or rather to start afresh with the physique of youth and the experience of age. It grants him fulfillment of the wish, "*Ah si jeunesse savait, si vieillesse pouvait.*" For the miracle is really of a twofold character and psychological as well as physiological. He does not sacrifice any of his prodigious learning, but he acquires the strength to use and the youth to enjoy it.

From a philosophic point of view the transformation effected by this rejuvenation is the most questionable feature in Goethe's story. For it waves aside the undoubted fact that the answer to the problem of what to do with life is in a large measure determined by the prospective length of life. For a being that has only a few years or hours to live, it would be no use to embark upon undertakings that would require ages to attain fruition. And, conversely, for a life that lasted for centuries it would be possible to plan largely and would be worthwhile to plant groves of sequoias, whereas the shorter life would have to be content with radishes. So the quality of vital activities depends upon the time-scale of the life.

Now the special feature of the miracle Faust undergoes is, as we have seen, that he becomes physiologically a man of thirty, while psychologically he retains the maturity of a man of sixty. This is enough to render him a praeternatural being and to

¹⁰ "Allein bei meinem langen Bart
Fehlt mir die leichte Lebensart."

¹¹ "Ich bin zu alt um nur zu spielen
Zu jung um hone Wunsch zu sein."

render precarious all argument from his case to that of a normal man.

It is evident, moreover, that Faust's miraculous rejuvenation is essential to the plot. Without it the action would have come to a standstill. It alone could have revived in him the natural instincts which he had had to repress in youth in order to become a prodigy of learning and a paragon of knowledge. Obviously the affair with Gretchen could not have run the course it did, if Faust had been a graybeard. Nor would he have ruled his principality so well if he had not been wise beyond his apparent years and vigorous beyond his actual age. For the ambition to rule and to control rarely arises early in life, though it often persists after the capacity has decayed. So we must here regretfully record a fatal interruption to the logical development of the plot of *Faust*.

By reason of this "interruption" it becomes difficult to speak of a single Faustian way of salvation. Faust's salvation seems to be due to a succession of miracles. First his miraculous rejuvenation fits him to become a hero of romance. Then the miraculous assistance of Mephistopheles enables him to render such services to the Emperor that he is raised to princely rank and political power and granted the opportunity of realizing his ideas in action. Next, the miracle of Gretchen's love seems to mobilize on his behalf the heavenly hosts, which rob Mephisto of his prize and carry to heaven the lofty soul of Faust, which was pledged to him and was his due.¹²

But is such a succession of miracles justice? Is it art? It hardly seems so at first sight. Yet there is something to be said on behalf of Goethe. Miraculous as is the concatenation of events, it does not shock our aesthetic sense, while the trick by which Mephisto is cheated of his prey is felt to be just retribution for his sharp practice in claiming the fulfillment of his bond.

¹² "Die hohe Seele die sich mir verpfändet
Die haben sie mir pfiffig weg gepascht."

For he had not really satisfied the soul of Faust. It was not after all the case that Faust had actually said to the present moment "Oh stay, thou art so fair" and really meant it. What he did say in his dying speech was something very materially different. He was indulging in an imaginative forecast of the future and of the possibilities of enclosing further portions of the sea and turning it into fertile fields. Then he comments:

Yes, that is wisdom's last conclusion
 He alone deserves his freedom, as his life,
 Who daily has to conquer it afresh.
 And then may youth, maturity and age
 Surrounded by peril spend their active life.
 Such a crowd I am fain to see,
 Standing on free land, with a people free.
 Then might I to the moment say
 "Oh stay thou art so fair!"
 The traces of my earthly days
 Can never pass away in aeons.
 Anticipating in my heart this lofty bliss
 I now enjoy the supremest moment of my life.¹³

With that he dies! Obviously, then, Faust's version was not a description of the present fact, but an anticipation of the future and, we may add, of a contingent future. Only if and when he had created the free land and free people ever able to maintain itself would he be able to hail the present moment as the pro-

¹³ "Das ist der Weisheit letzter Schluss:
 Nur der verdient die Freiheit wie das Leben,
 Der täglich sie erobern muss.
 Und so verbringt, umrungen von Gefahr,
 Hier Kindheit Mann und Greis sein tüchtig Jahr
 Solch ein Gewimmel möcht ich sehn,
 Auf freiem Grund mit freiem Volke stehn
 Zum Augenblicke dürft' ich sagen
 Verweile doch, du bist so schön!
 Es kann die Spur von meinen Erdentagen
 Nicht in Äonen untergehn.
 Im Vorgefühl von solchen hohen Glück
 Genieß ich jetzt den höchsten Augenblick."

phetic satisfaction of his dream and feel assured of deathless fame. But his anticipation was not fact, and there could be no guarantee that it would ever become fact. Perhaps it was no more than the delusion of a dying man. It was, moreover, in painful and pathetic contrast with the actual plight of the blind old man on his deathbed. With his usual cynical candour Mephistopheles at once confesses and stresses this:

No pleasure has sated him, no happiness sufficed,
 He goes on longing thus for fickle phantoms,
 It is this last, bad, empty moment that he wishes to retain, the
 wretch, who had resisted me so steadfastly!
 But time has mastered him, and now the old man lieth low!¹⁴

Mephistopheles, therefore, though he lays claim to Faust, has not really fulfilled his compact. Nor has he won his wager with the Lord. Faust has continued his *hohes streben* to the end. Active to the last, he has died with visions of further activities before his sightless eyes.¹⁵ Nor has he fulfilled Mephisto's boast that he should take pleasure in devouring the dust of earth.¹⁶

Indeed, it might be argued that really Mephisto had been fool enough to make a compact in terms he could not possibly fulfil. At the time when Faust signed the pact he had despaired of life and was nearer to damnation than he was, or could be, after he had consented to carry on the sorry business. Psychologically speaking he was damned before ever he contracted to let Mephisto try to damn him. On the other hand, the condition he exacts for his surrender to Mephisto plainly implies, not damnation, but eternal salvation. To be able to say to the passing moment "Oh stay, thou art so fair" is to declare oneself

¹⁴ "Ihn sättigt keine Lust, ihn g'nüht kein Glück,
 So buhlt er fort wechselnden Gestalten;
 Den Setzten, schlechten, Leeren Augenblick,
 Der Arme wünscht ihn fest zu halten
 Der mir so kräftig widerstand,
 Die Zeit wird Herr, der Greis hier liegt im Sand."

¹⁵ "Nur rastlos betätigt sich der Mann."

¹⁶ "Staub soll er fressen und mit Lust."

completely satisfied, to have attained to utter bliss, which there is no longer any occasion to transcend or change. But this is a description of the logical character of heaven, not of hell. So his compact meant that Faust could be damned only if he could get to heaven. But if he could once get to heaven, he would be most plainly saved and Mephisto would be beaten.

So in whichever way the matter is regarded, Mephisto has established no right to the soul of Faust. On the contrary, he himself has been fooled once more; once more has he been used as an instrument of the higher power, as the means of Faust's salvation. For let there be no mistake about this: Faust's salvation is what he has in fact achieved. He has extricated him from the bottomless Slough of Despond; he has failed to hold him down in the morass of earthly lusts. He has restored his faith in the future of the cosmic process, the desire for posthumous fame he had cursed so roundly,¹⁷ and has turned him into an active collaborator with God in the shaping of a better world.

What more shall we demand of Goethe and his poem? That it should prove to be, not merely the tale of how one soul escaped the devil's clutches, but of universal application? I fear that this is asking a great deal. For, after all, the *Faust* is the drama of a great soul, not of an ordinary man. Nor was Goethe a democrat, like William James with his carpenter who thought that there was "very little difference between one man and another but what little there is is very important," or like Jesus, the carpenter's son. Goethe could even doubt whether ordinary souls were worth preserving forever, even though in the *Faust* he somewhat modifies this doctrine and grants that not only greatness of achievement but also greatness of devotion may be deserving of immortality. When the attendants of Helen refuse to return to Hades with their mistress, the leader of the chorus declares:

¹⁷ "Verflucht des Ruhms, der Namensdauer trug!"

Who won no fame, who has no noble aim,
Falls victim to the elements—so go!
For me, I crave to follow with my queen,
Not merit only, but attachment, preserves our personality.¹⁸

In spite of all this, it may be that the *Faust* contains lessons for others besides dissatisfied magicians. It may be, in particular, that it has a lesson for the whole academic world, or at least for the German part thereof. For the *Faust* is full of satire on the academic man, the pure theorizer, typified in Wagner; and Mephisto's advice to the freshman must appeal to all who have any appreciation of the comic side of academic life. I see no reason to doubt that this satire was seriously intended. For, alike by his training and his position Goethe was well qualified to understand, if not to solve, the central problem of the academic life. The problem is a serious one, and I do not think that the university system in any country can boast that it has solved it successfully.

The problem is twofold, and is this. First, how shall the knowledge of one generation be effectively transmitted to the next? Second, how shall institutions be created that will not only instruct and guide the youth but also conduce to the advancement of knowledge, and of knowledge for which there is a social use and need? Both are problems of psychology, and the professors of psychology should set themselves to study the psychology of professors as well as the mental age of youth. In practice, difficulties arise both with the youth and with the professors. The recalcitrance of the first is notorious, but the perversity of the second is by no means as widely recognized as it should be.

For actually all the extant university systems seem more or less to defeat the purpose for which they are devised. They all

¹⁸ "Wer keinen Namen sich erwarb, noch Edles will
Gehört den Elementen an so fahret hin!
Mit einer Königen zu sein verlangt mir heiss,
Nicht nur Verdienst, noch treue, wahrt uns die Person."

more-or-less fail either to advance knowledge or to teach it. And they fail to teach it, because they themselves have so largely made it useless or unteachable. It is so much easier to do this, and often much more profitable to the professor. All he has to do is to set up a cult of pedantry and to mount the pedestal of his own hobby-horse.

Now in Goethe's time the German university system was peculiarly addicted to this defect; one may say that it led to an apotheosis of pedantry. For the German professor's whole glory depended on his contributions to research; he controlled his subject and directed his students to this sole end. Moreover he and his subject were one; it was what he declared it to be, and he was as jealous of any encroachment upon it as any cock upon a dunghill. If he decided to take up a subject for research, he parcelled it out among his students and set each to work upon an aspect of it, using his seminar to train each of them up in the way he should go. After they had done most of the dirty work, he appropriated, summed up, and combined their work, rewarding them with Ph.D.'s, and published his work of research. The one humiliation to which he was subject was that he must never write a book in the literary sense. For that would have aroused the jealousy of his rivals, the other professors of the same subject in other institutions, and they would have denounced him as reprehensibly popular and scientifically nugatory; and this would have prejudiced his career and arrested his promotion, in consequence of his researches, to higher academic status and to larger (and therefore more remunerative) institutions.

Quite recently, however, the new régime in Germany is showing signs of materially altering this system. It is not merely purging the universities of Jews, liberals, socialists, which is what the Austrian government is doing also (with the added purge of Nazis)—a procedure which is not new in principle in countries where the universities are subject to political

control—but it also appears to envisage an entirely new and different type of professor. The German professor of the future is not, it seems, henceforth to be of the book-worm type, burrowing by preference, unseen by men, not into problems which demand solution, but into regions where few or none can follow and in which he can ensconce himself in safety and defy pursuit. He, too, is to develop the qualities of leadership, to become an intellectual leader. He will have to be also something of a politician, but this would not be new on the continent of Europe. What is more important is that more attention is to be paid to researches which are likely to be of social and industrial value rather than to those which minister merely to the professorial desire to spin round himself a secure cocoon which no hostile criticism can penetrate. One curious consequence of this conception is that it seems to bring us back to the Platonic ideal of the philosopher-king, only by another route; instead of the sage becoming king, the man with the art of ruling is to enter academic life.

It is much too early to say, of course, what the results of this experiment will be. It has been initiated with much brutality and ruthlessness; and at present it looks quite probable that it will succeed only in ruining the German universities as seats of learning. Much the same may be said at present of a still more grandiose scheme, the German legislation on eugenics. But this would certainly seem to be consonant with the spirit which drove Goethe's Faust from words to deeds and from the sciences to their applications. And if it should succeed, even in part and after much amendment, in ending the reign of the philosopher-pedant and in replacing him by the philosopher-king, one could hardly deny that it was a significant example of the Faustian way of Salvation.

PLATO'S PHAEDO AND THE ANCIENT HOPE OF IMMORTALITY¹

AN EPIGRAM in the *Greek Anthology*² tells us that Cleombrotus the Ambraciote leapt from a high wall to his death for no other reason than that Plato's reasoning had convinced him of another and a better world. Cicero and Milton retell the tale, with the addition that he leapt into the sea, but without a hint that it proved anything but the persuasiveness of Plato. It is, however, quite probable that its author, Callimachus, was slyly scoffing at Plato and wished his readers to reflect that Cleombrotus was a fool. Nevertheless, the tale is good evidence of Plato's amazing and lasting prestige as the great philosopher of immortality. In antiquity, as the case of Cato of Utica shows, it became part of a regular etiquette for suicides to fortify themselves by rereading in the *Phaedo* the moving tale of the death of Socrates. And certainly they could have selected nothing better as literature for their purpose in Plato and nothing anything like so good in the dreary mass of verbiage which represents the great bulk of philosophic writing on the vital subject of man's destiny and future. But the critical intelligence is apt to be eclipsed by the onset of death; and whether the arguments used by Plato in the *Phaedo* are such that they ought to carry conviction or are even the best that Plato has

¹ Lecture delivered to the Forum at the University of Southern California, 1934.

² Anth. Pal. ix. 358. Cf. Cicero *Tusc.* i. 84, and Milton (*Paradise Lost*, iii. 471), "he who, to enjoy Plato's Elysium, leapt into the sea, Cleombrotus."

produced, is quite another question. It is the question which is the topic of this lecture; and in order that you may not think that in criticizing Plato I am indulging merely in hostile carping, I will candidly confess that to my thinking the question of immortality is one of the biggest, if not the biggest, question in philosophy and that it is cowardice or worse in philosophers not to face it. At the same time, it is not only a difficult but also a complicated question, and in many influential quarters a serious and dispassionate discussion of it is by no means welcomed.

In token whereof let me tell you two anecdotes, which must be regarded as more authentic than that about Cleombrotus. Some of you may have heard them, but they are so revealing and instructive that they can hardly be told too often. The first is the tale of Myers's churchwarden. Frederic Myers was one of the founders of the Society for Psychical Research, and one of the few men I have met who were keenly and constantly interested in the question of a future life. He had, in consequence, developed a disconcerting habit of inquiring into what people really thought about the matter. On one occasion he had buttonholed an old churchwarden of the most impeccable respectability and unimpeachable orthodoxy and asked him what he thought would happen to him after death. The old gentleman did not like it at all and tried to evade answering. At last he burst out: "Well, I suppose I shall enter into everlasting bliss, but I do wish you would not talk about such depressing subjects." My second anecdote concerns an eminent Scottish philosophy professor, the late Andrew Seth Pringle-Pattison, and is told by Professor John Laird, of Aberdeen.³ Laird had been talking to Pringle-Pattison about his (wholly historical) Gifford Lectures on Immortality and inquiring whether he intended to pursue the subject. "You mean a metaphysical defence like MacTaggart's?" (smiling) "That is the

³ *Mind*, n.s., XLIII (1934), 399.

last thing I would ever do. Besides (slowly and confidentially), "Immortality is such an *unpleasant* subject."

It is not difficult to detect that at bottom both the professor and the churchwarden had essentially the same attitude. They did not like to think about a future life, because that meant thinking about their death, and that was a thought from which they both shrank. Moreover, the feeling they expressed has probably been common always and everywhere. It is a feeling to which natural selection must have rendered us all more or less susceptible. For a healthy fear of death had to grow up in order that men might think twice before they threw away their life. Also, since there seemed to be no escape from death by any amount of forethought, psychologically the easiest way of avoiding the depressing thought was to repress all thought whatsoever about death and cognate subjects.⁴ This explains why men have never behaved as if they wanted seriously to investigate the problem of a future life. They have retailed ghost stories, but have thrown endless difficulties into the way of their verification. They have not wanted to renounce the "ancient hope" altogether but have not wanted it to be more than a vague "hope," incapable of growing into a full-bodied belief that could determine action. They wanted a half-belief that could be looked to for consolation in emergencies, but would remain discreetly in the background on ordinary occasions.

But, as I said, there are exceptions, and Plato apparently was the greatest of them. Plato's constant preoccupation with the thought of a future life comes out in most of his chief dialogues, not only in the *Phaedo*, but also in the *Phaedrus*, the *Meno*, the *Gorgias*, the *Republic*, the *Timaeus*, and the *Laws*; he endeavoured to render the idea plausible by all the

⁴ Cf. Dr. Jacks's story of the preacher who prayed "Protect us, oh Lord, against the ravages of modern thought. Yea, Lord, protect us against the ravages of *all* thought."

resources of his art, not only by formal arguments, but also by poetic myths. Yet his myths and his arguments are always changing; and this perhaps is a proof that they seemed as little convincing to him as they do to us. Indeed, we may at last be driven to realize that the logic of the Platonic system, far from favouring the belief in immortality, really forbade personal immortality altogether. But these very facts are so far from casting a doubt on Plato's earnestness that they should be taken to show only how strong was the psychological *nisus* that impelled him towards this belief. Psychological study⁵ would seem to show that such a *nisus* is not so very rare and that many are endowed by nature with an intuitive conviction of immortality. If Plato was one of these gifted mortals, this will explain his re-iterated efforts to prove, for the benefit of others, what needed no proof for himself.

But it is time we examined his main proofs. They may be classified into those derived (1) from the verbal implications of "soul," (2) from Plato's theory of Ideas, (3) from his metaphysical dualism, (4) from ethics.

(1) The existence of a word for soul in nearly all languages may be taken as good evidence that there is something in the world (or in experience) which needs naming and to some extent at least justifies the name. It shows that the problem of immortality is not a vain invention of philosophers or priests. It may also be conceded that although the soul is intended to be an immaterial principle and is normally invisible, it is inevitable that it should be described at first in terms of various material analogues. The most favoured analogues have been "shadows," "smoke," "wind," and "breath"; and all these impressed the ancients. After death the soul departed to the "shades"; the Greek word for spirit, *thymos*, is the same as the Latin word for smoke, *fumus*; the Latin word for spirit, *ani-*

⁵ Cf. my paper in the *Proceedings of Society for Psychical Research*, Vol. XVIII, Part XLIX (October, 1904), pp. 416-53.

mus, is akin to *anima*, "soul," and to the Greek *anemos*, "wind"; *spiritus* in Latin and its derivatives and *psyche* in Greek both come from roots meaning to "breathe" or to "blow." Further the word for soul, *psyche*, regularly has in Greek, as in Hebrew and many other languages, a second meaning indissolubly bound up with it. It means "life" as well as "soul," to the embarrassment of translators when they find Aristotle discoursing about the "vegetative soul," and the creation of man ascribed to an infusion of the Divine "breath" into the lifeless dust. We read in Genesis ii.7 that "the Lord God formed man of the dust of the ground and breathed into his nostrils the breath of life, and man became a living soul."

Now it was on this circle of ideas that Plato in the *Phaedrus* was building his great definition of the soul as the "self-moving." The underlying ideas are primitive but not therefore contemptible. They become intelligible if we consider that the living body manifestly moves itself and that the easiest way of deciding whether it is alive is to see whether it is still breathing. Breathing is self-motion *par excellence* and so the best proof of life and soul.

With a little extension, moreover, this line of thought may be made applicable to physics and there leads to the argument⁶ that the process of nature would cease but for the immanence of soul in it; ultimately we can trace to this same source the Aristotelian conception of God as the Prime Mover; while the double sense of "psyche," as both life and soul, conducts to the culminating proof of immortality accepted in the *Phaedo* (105). The idea of soul is there shown to be inseparably bound up with that of life; *ergo* the soul cannot die. Literally true, but the binding up is accomplished merely by language. "Is this ambiguity all that the proof comes to?" the astonished modern reader is apt to exclaim. Yes! *mais que voulez vous?* That is all a proof by *a priori* metaphysics ever does or can

⁶ *Phaedo*, 72.

come to. In ultimate analysis it always rests on the assumed meanings of words and it is lucky if the words in use have been moulded, as in this case, by respectable amounts of past experience.

(2) The argument which Plato bases on his theory of Ideas seems to us quite the most frigid, unattractive, and inconclusive approach to his problem ever devised. No doubt for Plato the theory of Ideas had become a highly emotional subject that could stir him to the depths of his soul, but to us its applications to the question of immortality seem mere logic-chopping and full of fallacies. Besides, its most cogent part—the pleasing doctrine of reminiscence, which Plato so poetically represents as a necessary presupposition of knowledge—is speedily watered down by Aristotle to the prosaic statement that all knowledge arises out of previous knowledge. That is, out of absolute ignorance no knowledge can arise; but even the newborn babe is never in a state of absolute ignorance. He is equipped from the outset with sensory apparatus and feelings out of which he can fashion a more-or-less intelligible world, and even with all the “universals” he needs. So epistemology can dispense with pre-existence. And this perhaps is just as well. For no merely epistemological argument about the pale abstractions of logic could make much impression on the ordinary man. As a propagandist for the idea of immortality, Pythagoras far surpassed Plato when he recognized as his own the shield of the Trojan warrior Euphorbus hung up in the temple, and interceded on behalf of a beaten dog because he recognized in its yelps the voice of a former friend.

To the second argument from the theory of Ideas which forms the initial argument of the *Phaedo*, namely, that the flux of phenomena implies the stability of the underlying Ideas and that therefore the living must come from the dead, not much weight seems to be attached by Plato himself. It seems sufficient to reply that the dead do not engender children. But

the argument has some importance as mediating a transition to the more properly metaphysical arguments which Plato repeatedly employs.

(3) These are all based on the profound dualism to which Plato clings so tenaciously. If we will grant him that the cosmos is cleft in twain by the distinction between appearance and reality, between the sensible and the intelligible, between becoming and being, and that the former halves of these antitheses are always more or less tainted with unreality, a very neat and complete doctrine of immortality will follow easily. We have merely to declare that body and soul are different substances and at home in different worlds. The body belongs to the world of appearances, the soul to that of true reality. The soul's union with the body is a temporary degradation, perhaps a punishment, as Empedocles had suggested, from which the soul is ever trying to escape. The soul is imprisoned in the body as in a tomb. Her true nature can hardly be discerned in this fallen condition, and she is comparable with Glaucus the sea-god, all battered and maimed by the floods of change, and overgrown with shells and seaweeds that are ex-crescent on her essential form.⁷

This doctrine at once leads on to the conception of the soul as a complex being with a plurality of parts or forms, which is so essential to the psychology of the *Republic*. Plato is the first to pursue this line of thought, and we shall see that it leads him into difficulties. It does not, however, prevent him from being the author also of the simple-substance argument, which makes the soul immortal because it is uncompounded and unchangeable like the Ideas of which it has recollection. It cannot, therefore, be dissolved at death into "parts" which it does not possess. This argument is urged in the *Phaedo* (78-79). Apparently Plato at one time asked as little as did the other philosophers who have since adopted the simple-sub-

⁷ *Republic*, 611.

stance view of the soul whether a simple and immutable soul was at all worth having and worth preserving.

But soon the reasons for admitting the soul's complexity impressed themselves upon him. In the *Phaedrus*, which is probably later than the *Phaedo* and earlier than the *Republic*, the soul is described under the image of a charioteer, the Reason, driving a team of two winged horses, Spirit and Desire. Of these, the former is described as orderly and obedient, the latter as vile and unruly; but as yet both appear to be conceived as permanent constituents of the soul and as such immortal.

After a while, however, Plato seems to have repented of this readiness to equip the soul with a permanent principle of evil. He tends more and more to regard the good only as immortal, and to explain away the evil in man as a consequence of the soul's lapse from the true realities of the suprasensible Ideal world and of its immersion in the unstable floods of Becoming. This tendency begins to prevail in the *Republic*. In the Fourth Book Plato expounded the tripartite soul of the *Phaedrus*, divided into the philosophic reason, its natural ally spirit, and the disorderly mass of desires; in the Ninth Book he recognized the soul's unity by conceiving reason, spirit, and desire respectively as love of wisdom, of honour, and of wealth. But in the Tenth Book (611-12) he gets qualms. How can a soul which is composite and, moreover, made up of bad materials conceivably be immortal? He goes on to suggest that the soul is like Glaucus the sea-god who has suffered a sea-change. He has been so overgrown with seaweeds and shells and has been so battered and mutilated by the sea waves that his true nature can no longer be perceived.

The implication both of the argument and of the simile is that the lower parts of the soul are not essential to it. They are excrescences or accretions grown upon it in its incarnate state. The immortal part, the true Soul, is the Reason alone. This

interpretation is made explicit and confirmed by the *Timaëus*. There (69-72) it is fully explained that the soul contains a "mortal part," and to it are assigned all pleasures and pains, hopes and fears, love and all emotion and sense-perception. As a further confirmation we may refer to the *Philebus* (33 C) where it is said to be unseemly for a perfect being, a god, to feel either joy or sorrow.

But if all the feelings and emotions are to be expunged at death, what will become of human personality? Nothing more will remain than Aristotle's shadowy "active reason," which also was called immortal, but with which even the coldest philosopher might hesitate to identify himself, and compared with which Bradley's bloodless ballet of categories would be lively.

(4) The difficulty presented by the later forms of the Platonic doctrine is not diminished when we proceed to consider, lastly, the moral arguments for immortality which we find in Plato. In the *Republic* (608-11) he is found to argue that everything is destroyed by its own defects and that moral virtue and vice are, respectively, the excellence and the defect of the soul. If, therefore, vice, its natural defect, is found to be incapable of killing the soul, it must be because the soul lives forever. The equivocation between the two senses of soul—as the principle of life and as the principle of consciousness—is very evident here and completely vitiates the argument. More frequently, however, Plato's moral arguments occur in his stories of the after life. He never actually urges outright that cosmic justice demands the punishment of evildoers in a future life; but in practically all his myths he provides for the exemplary damnation of a few conspicuous sinners. And, by implication and very naturally, he warns us that if we neglect to fortify ourselves against the perils of a mistaken choice at re-incarnation by the study of philosophy, we run a risk of eternal damnation. This warning is given most plainly in the *Republic* (Myth of

Er). The soul that had obtained the first choice greedily seized the biggest tyranny, and then only observed what atrocities it was fated to suffer and commit. Yet it had been one of those that had come from heaven where it had reaped the reward for a thousand years of its virtuous conduct in its last incarnation. Its virtue had not, however, been a fruit of philosophy and rational conviction, but merely a result of habit and education in a well-ordered State. This warning seems very sinister in the light of the previous tale of the fate of Ardiaeus the tyrant, who had committed unpardonable and inexpressible crimes, so that when he came up from Hades for rebirth he was carried off into Tartarus by devils, to be damned eternally. A little reflexion, moreover, shows that in the long run such a fate is bound to overtake all who will not take to philosophy. Sooner or later, as re-incarnation goes on without end, the unphilosophic soul will draw the first lot, and will then choose a tyranny that damns it. Plato does not really think that salvation can be assured outside his system.

But his doctrine at this point conflicts palpably with that of the immortality of Reason alone. If the moral nature is not part of the soul's essence, but only grown onto it *ad hoc* to fit it for the troubles of Becoming and the illusions of sensible existence, and if it passes away again at death, when the soul recovers its true nature, the moral nature should not be made the ground for penalizing the soul, still less for damning it. The plunge into the flux of Becoming at incarnation must then be regarded as a temporary aberration of the soul, as a fit of fever or insanity, for which it cannot justly be held responsible. Or, conversely, if the moral nature, if the personality, are important enough to deserve damnation, they cannot be assigned to the mortal part of the soul. Further discussion of this difficulty is precluded by the fact that Plato has told us nothing about the reason why the soul must periodically fall from her high estate and re-incarnate at all.

Nor again has he said anything to soften the greatest difficulty that his doctrine of immortality encounters, which has been urged remorselessly by Professor Teichmüller.⁸ He raises the question whether the Platonic philosophy was entitled to arrive at a doctrine of personal immortality at all and answers it by an emphatic negative. This negative he bases not only on the fact that (as has often been noted) all Plato's proofs (their validity conceded) are constructed to prove, not the personal immortality of individual souls, but merely the indestructibility of soul as a cosmic principle. More than this, he asks "how could the thought of individual souls ever enter into the Platonic system?" Was not its essential endeavour to explain the indefinite plurality of sensible appearances by referring them to the unchanging unity of the universal Idea? If all dogs were manifestations of the Very-Dog, and all men of the Very-Man, all just things of Justice-Itself, and all beautiful things of Beauty-Itself, how could there be more than one Soul in the realm of True Reality? Surely the phenomenal plurality of souls could not extend to the Ideal world—they must all be appearances of the one universal Soul.

Must we surrender to this final objection and throw up our brief on Plato's behalf? I am reluctant to do so, although I am willing to make extensive concessions. I will admit, in the first place, that Plato's rational arguments fall far short of proving individual immortality. But Plato was probably himself well aware of this. It was for this reason that he kept reverting to the subject and varying his arguments. It was for this reason, also, that he so persistently supplemented his rational arguments by myths. His myths admittedly are poetry, but they may be also more. When a topic is repeatedly treated in myths, it may mean that its nature is such that it eludes and transcends purely rational argument; and certainly eschatology is a topic

⁸ *Studien zur Geschichte der Begriffe*, Vol. I (1874).

of this kind. Hence I do not think that Plato's eschatological myths have no significance.

I would next observe that even if Plato had wished to affirm personal immortality he would not have been enabled to do so by the actual resources of the Greek language. The conception of personality had not been developed in his time: it has had a slow and difficult growth, and to this day many philosophers, even in Los Angeles, are shockingly vague about it. Furthermore, Plato had blocked his own way to an adequate apprehension of personality by two of his chief doctrines. First, by his doctrine of Ideas, by his great logical discovery that the words in use in predication are always "universals." As logic had not yet been distinguished from metaphysics, this discovery was bound to mean to his mind that the universals, his "Ideas," were true reality, and that plurality was phenomenal illusion. Secondly, Plato had, in pursuance of this logical line of thought, arrived at the doctrine that the individual was incapable of being known. In the *Theaetetus* (209) he had argued forcibly that the difference between Socrates and Theaetetus could not become a subject of scientific inquiry. Plato was the great originator of this delusion, which still blinds most philosophers to the actual procedure of the sciences which predict and control individual events with enormous success. Lastly, the only word in Greek suited to express the self or personality (*autos*) had already been used up by Plato to describe the Idea.

It is clear that these doctrines would together make it very difficult for Plato to uphold the immortality of individual souls in any rational manner. But is it absolutely certain that Plato's attitude in the matter was purely rational? Is it absolutely certain that any philosopher's attitude on any matter is purely rational? I am open to conviction, but I have not found philosophers entirely reassuring and convincing. When it comes to questions that come home to them, and I admit that they are often very odd questions and take some finding out, I have not

found that they are more rational, logical, and consistent than other folk. It seems to me quite possible, therefore, that Plato clung to the belief in individual immortality despite the logic of his system. He may have been one of those rare souls who, as I said, are endowed with an intuitive conviction of their immortality.⁹ That would be a matter of his psychology; and unfortunately, even if we admit the authenticity of his *Letters*, we do not know enough of his psychology to penetrate to the core of his system.

Is then the hope of supporting the "ancient hope" of immortality by philosophic argument completely shattered? I fear it is, so far as the Platonic system goes. But it was not wise either in Plato or in us to expect support for it from a metaphysic which had no conception of personality and could ascribe no rational reality to any individual existence. If we want reasons we should look for them in likely quarters. Now philosophically the likely quarters are, not monisms for which plurality is only an illusion, but pluralisms, which are willing to entertain the thought of an ultimate many. It is desirable, also, that they should have some appreciation of personality and should prefer the more concrete considerations of psychology to those of abstract logic. Even so, it is probable enough that we shall not find any philosophic argument really satisfactory. At most such an argument may be able to show that immortality would be rational if the world were rational; but this is far from proving that immortality is therefore real. It needs the amazing self-conceit of a system like Hegel's to beg the question as to how far the rational is the real and to treat a mere postulate of rationality as an accomplished fact.

Nevertheless I am a little loth to end upon a note of merely destructive criticism. So I will point out that there is just one philosophic argument which if it cannot actually prove a future

⁹ F. C. S. Schiller, *Problems of Belief* (London, Hodder Stoughton, 1924), pp. 72-73.

life can at least render it conceivable and can demolish all the disproofs of it which have been offered. It is drawn from one of the doctrines which go under the hideously ambiguous word "idealism," though it cannot be derived from the idealism of Plato and would not be recognized by most of the philosophers called "idealists" in the textbooks. It is, however, a plain implication of an idealism which may be called empirical and psychological, and it argues thus:

If it is admitted that all the "realities" which we recognize, experience, and infer are relative to experience and that, strictly speaking, the experience is always personal, that is, is our experience, and not that of any god, demon, or absolute—we can profitably ask what happens to us at our "death." "We die, and the world goes on," it is easy to declare. But it is inexact and misleading. The world which goes on is the common world, in which the dead man figured and in which he left behind a corpse. But the common world was not the whole of his experience. It was only an effective extract from it, by the aid of which he could guide his life and which he accepted as real by reason of its pragmatic efficacy. It is therefore essentially an extract for purposes of intersubjective intercourse, and it has no bearing whatever on the question "what has happened to his experience?" Neither has the experience of any one else.

When the common world dissolves at death, each one is thrown back upon his own resources. Fortunately we all have reserves of experience, which during life we value meanly, but which in an emergency may be mobilized. We may then bethink ourselves that after all we do not live merely in the common world. We have experience also of a multitude of dream worlds and have learnt how to pass to and fro between them. To enter a dream world, one has only to "fall asleep and dream"; to leave it, one has only to "wake up." Moreover, the supremacy of the real world rests, not on any psychological difference in kind between it and the dream worlds, but merely upon a

judgment of value extorted by its practical superiority. There is not, as had been discovered already in Plato's day,¹⁰ any theoretic refutation of the suggestion that our waking life also may be essentially a dream.

If life may be a dream, what may happen to us when we awake? Why, we may awake to find ourselves in another world. And if that world seems to us superior to the present, we shall certainly regard it as more real. If only we can emancipate ourselves from the pragmatic fiction that there is only one world which we inhabit, even though in point of fact we all live in a multitude of worlds, we shall find no flaw in this argument.

But what does it prove? Only the conceivability and possibility of a future life. If we want more proof than that, we must seek it as strenuously as any other reality in positive, empirical and scientific indications that all the ties between the various worlds are not wholly and utterly severed by death.

¹⁰ Cf. *Theaetetus* 158.

PLATO'S REPUBLIC¹

PLATO'S *Republic* is the supreme work of art in philosophic literature. There is nothing to touch it in Plato's other dialogues, and still less in the works of other philosophic writers. It is incomparable, alike in matter and in form. No other philosophic book has such perfect form, no other has such a rich variety of contents, and no other has said so many new and memorable things so well. And we other philosophers ought to be thoroughly ashamed of ourselves that we have so rarely dared to emulate Plato and tried to follow in his wake.

In the scant space at my disposal I will not be expected to give more than a very sketchy idea of the greatness of Plato's work. May I begin, however, by explaining how it was, I think, that Plato succeeded in the *Republic* in surpassing, not only the other philosophers, but also himself?

We must imagine Plato as a favourite of fortune, as a great gentleman, who could trace his descent from several gods and could himself be suspected of being the son of Apollo, living in the best society at Athens. But the Athens of his time was a rather corrupt and very fanatical democracy, and these very advantages of his birth debarred Plato from taking part in politics. Being thus excluded from political, he was forced into academic, life and became the founder of the first Academy:

¹ A Forum lecture delivered at the University of Southern California on Feb. 20, 1934, and appearing in *The Personalist*, under the title "The Evolution of Plato's Republic," XV (1934), 327-40.

the Platonic School became the first institute of higher education and endured as such for about one thousand years.

You should not, however, suppose that Plato lived an academic life merely in his library and his study. He lived a social life among his friends, companions, and admirers; and he talked to them, no doubt, like a father or an elder brother. His teaching would be conversational rather than formal, though no doubt the lecturing habit grew upon him, as it does on most of us. Still it is unlikely that he ever became a professor in soul, like Aristotle.

Being, moreover, an artist and a psychologist, he rightly thought that something more than lectures was needed to impress his doctrines on his hearers. So he used his literary powers to compose dialogues on the topics he had lectured on, and with such dialogues he would regale the virtuous pupils who had endured to the end of his course—in order that they might carry away something memorable in their hearts.

The finest of the dialogues became the one which concluded the lectures on politics—our *Republic*. It became the finest, presumably because Plato often had occasion to lecture on politics, and was always begged to read it. He was constantly called upon, therefore, to revise it.

Internal evidence makes it seem highly probable that the *Republic* was repeatedly and extensively revised. The first Book has quite the air of an early Platonic dialogue of the so-called "Socratic" type. It confutes several inadequate conceptions of justice, but tells us nothing positive. Its conclusion, also, the dazzling Myth of Er the son of Armenius, may well be dated back to the time when Plato the philosopher had not yet tamed Plato the poet. Both these sections, then, may well have been conceived before the main argument of our present *Republic* had occurred to Plato.

But the beginning and the end of the *Republic* were soon to be welded together by a continuous argument. This extends

through Books II-IV, Book VIII, and the first part of Book IX, and would yield a consistent defence of morality, as the proper good for man. It based morality on the psychology of human nature and made justice the proper subordination and harmony of the parts of the soul.

This first stage in the evolution of the *Republic* must have comprised, also, what we no longer find in it, a short sketch of communism, based on the contention that since good friends have all things in common, they must also share wives and children, and that the citizens of the ideal State must all be good friends. In the present state of the *Republic* these doctrines get a full discussion in Book V, but in Books III and IV there remains one allusion to the community of property (417A) and another to that of wives and children (424A).

If the *Republic* grew up gradually, these allusions probably mark the places where communism was originally introduced, and we thereby get a fairly definite date also for the first form of the *Republic*. It is clear, in the first place, that the communism of the *Republic* must be later than the publication of the *History* of Herodotos, for Plato has adopted his communism of women and children from the reason given for their customs by the Aggathyrsi.² They wanted the whole tribe to be friendly and one large family.

The latest date for the *Republic*, first form, may be placed in 392-91 B.C., because it is presupposed by Aristophanes's skit on votes for women, the *Ecclesiazusae*, which ridicules ideas we cannot but identify as Plato's. Now we can date the *Ecclesiazusae*. Its performance was not earlier than 393 nor later than 390 B.C. So Plato was thirty-eight at least, quite old enough to have worked out the plot of the *Republic*.

How did Plato react to criticism and particularly to this attack of Aristophanes? The later form of the *Republic* supplies the answer to this question. He wrote a fuller defence of com-

² Herodotos iv. 104.

munism and inserted it in what is now Book V. Simultaneously, no doubt, the earlier accounts were cut down to the allusions I have mentioned. This interpretation is confirmed by his reaction to the criticism which his attack on the poets in Book III must no doubt have provoked. In this case, also, he did not withdraw his contention, but strengthened it. He left, however, his original text; only he reinforced his original censures, in the first part of Book X, by bringing up the heavy guns of metaphysics and expelling from his city the leader and the very best of the poets, Homer. Clearly, then, Plato was not a man to compromise and yield ground when attacked: he preferred to renew his onslaughts and to carry the war into his enemy's country.

The middle books, V-VII, to which we can add the end of Book IX and the first part of Book X, have quite the air of afterthoughts, added probably in consequence of Aristophanes's attack. They lift Plato's argument from a psychological to a metaphysical level and exhibit what may be regarded as the loftiest flight of his genius, in the vision of the Idea of the Good. They contain, also, the three great waves of paradox with which he overwhelmed his critics, communism, the equality of the sexes, better conceived as the enlistment of women in the public service, and the philosopher-king, or rule of the wise.

Thus in the now complete *Republic* Plato shows his mastery on three great levels of method, the dialectical, the psychological, and the metaphysical. In Book I the discussion is wholly dialectical. Here the rules of the game demand strict formal consistency, and it is necessary to defend one's thesis precisely as it was formulated, and to uphold it in its verbal integrity. Logically, our guide is the analogy of the virtues with the arts: that is, if Socrates can show that the just man is *like* the skilled craftsman, Thrasymachus has to own himself beaten. But Socrates himself indicates that this method is not enough: at the end of the Book he complains that he has only shown what

justice is *like*; he has not yet found out what it *is*, essentially.

The sustained argument which begins in Book II and reaches its climax in Book IV is the beginning in philosophic thought both of the science of psychology and of the persistent tendency to base morals upon the conception of an ideal "nature," the normal functioning of which would insure both virtue and happiness. Both these lines of thought are handled by Plato in the most plausible and persuasive way. True, his psychology is definitely of the "faculty" type which is so hard to eradicate. It is hampered, of course, by the blindness of the Greek language to the existence of "will"; but, still, he succeeds in recognizing both the moral struggle and the possibility of unreasonable action in his account of spirit (*thymos*), the faculty mediating between reason and desire. The tale of Leontios's surrender to his morbid craving to view the corpses of the executed criminals is a complete repudiation of the ethical sophistries of the Socratic tradition and of its intellectualistic dogma that virtue was just knowledge and that true incontinence (*akrasia*), clearly conscious of what was bad and yet doing it, was not possible.

The metaphysical level reached by the *Republic* in Book VI is, I venture to think, the high-water mark of Platonic metaphysics, and it supplies the best clue to nearly all the later developments of metaphysics, whether by himself or by others. Not, indeed, that one can justly claim that it has solved the central crux of Platonism and made visible the *nexus* between the intelligible world and the world of sense. No subsequent metaphysic has done that! but Plato clearly shows what demands must be made upon his metaphysical principle, and neither before nor after the *Republic* did he ever come so near to success.

In the *Republic* alone does he admit that the multitude of the Ideas, or Forms, which are the true realities whereof the things of sense are but blurred reflexions, must be unified in a cosmos,

in an intellectual order. They are presided over, and in a sense transcended, by the Idea of the Good, which can perform the same service for the intelligible world which each Idea performs for sensible particulars. It unifies and rationalizes the material to which it applies.

In the *Republic* alone, also, does Plato approach a real solution of the problem of the One and the Many, by suggesting (476A) that not only in their relations to sensible things but also in their relations to each other, the Ideas, in spite of their essential unity, must appear as plural.

Lastly, it is in the *Republic* alone that he supplies a key to the subsequent mathematization of the Ideas, to which Aristotle later testified.

Let me explain the second point first. The Ideal theory was, I take it, essentially a very gallant attempt to justify the practice of predication: the Idea was what vindicated the application of the same term to a multitude of particular objects. In virtue of their subjection to the same Idea, they were all related and rationalized. That is, all dogs were rendered intelligible and related *inter se* by being conceived as examples of the Very-Dog, the ideal essence which pervaded all its cases. This essential Dog was one and indivisible, and though sensible dogs appeared to be a multitude, they all participated in the Idea of doghood, or dogginess.

Now usually this is the point at which the Ideal theory stops short; yet by parity of reasoning it was capable of extension into the Ideal world. The Ideas also could not be left a chaos of unrelated essences without a unifying principle. Their intelligible relations can be traced and predicated of each other. In the *Republic* Plato saw the need for such a unifying principle, and gave it a name. He called it the Idea, or Principle, of the Good, and exalted it above the other ideas. If they were true reality, their superior principle must transcend reality and form a principle from which all reality could be

descended. And if by "existence" the sensible world was intended, then the Idea of the Good would be still more ineffably "beyond existence."

But why was it called "the Good"? Because what Plato was seeking was a complete teleological explanation of everything that was understandable at all. He desired an explanation in terms of goods, or ends. He would not content himself, rightly, with a merely causal and historical explanation of the form "B is because A was": he wanted to be able to show that "B is, in order that A may be."

But he did not imagine that this supreme Good, or End, was known. When he comes to the point at which his eager reader is all agog to have revealed to him the secret of the universe (532), Socrates tells Glaucon that he cannot explain the Good further, because Glaucon has not read enough mathematics. Here Plato is really telling his readers that science is not sufficiently advanced to permit deduction of the laws of nature from a single principle.

That is as true now as then; and that it should still be true in spite of the fact that the sciences have made such astounding progress without the philosophers' having discovered the Good, is a proof that there was a grave error in Plato's calculation. This error becomes manifest when we ask how deduction from a single principle is possible. For Aristotle has taught the world that to deduce a conclusion we have need of two premisses, and in the Good Plato had only one. His ideal of rational proof was formally impossible. Yet his argument has been the inspiration of all monistic metaphysics ever since.

Plato's mistake about the form of deduction was the reason, also, I believe, of his mathematizing of the Ideas and equating them with numbers. For when he looked round the world to find something analogous to the intelligible relation of the Ideas to the Good, in virtue of which they might all follow rationally from it in infinite number and variety, he

discovered the number-system. Here was a completely rational system, in which an infinity of numbers was deducible by rigid necessity from the One, the unit, and, in virtue of this very deduction, every number could stand in an infinity of intelligible and eternal relations to all other numbers. If, therefore, we can equate the numbers with the Ideas, and the Good with the One, shall we not understand the whole rational order of the cosmos?

Alas, that there should have been an error in this analogy! Plato had overlooked that the One alone does not generate the number-system. To evolve the system out of the unit, units have to be added, 1 to 1 and 1 to 2, et cetera. The operation of addition is indispensable: it is the missing second principle which cannot be omitted, and Aristotle triumphs.

There is a further flaw in Plato's account of the relation of metaphysics to the sciences, though a majority of philosophers still seems to suppose that his account is adequate. Plato argued that because scientific procedure was hypothetical it was insecure and that the initial hypotheses stood in need of validation by a metaphysical deduction from the supreme principle, the Good. Now this assumption means that all proof must in the end be *a priori* and implies that for lack of knowledge of the Good no scientific progress should have been possible. Actually, however, it has occurred; *ergo* there must have been an error in the argument. Plato's error lay in thinking that scientific principles cannot be established empirically and *a posteriori*: he had overlooked the initial stage in every science, in which experimentation with principles is in order, and that they are selected and verified by their working. True, this procedure does not lead to absolute and indefeasible truths (which all remain in fact dependent and hypothetical); but it yields sciences that are effective and progressive to infinity. Moreover, even a slight study of the history of science shows that this is how our present

principles have come to be established and how the sciences have made their selections between possible alternatives.

Let us return, however, from the rarefied altitudes of metaphysics to the mire of politics. In this region also the *Republic* has left its mark. It has proclaimed gorgeous paradoxes, which no political philosophy can overlook. Plato stands out as the great aristocratic revolutionary, and his proposals are immensely stimulating. But they could never be realized, and when they have all been thought out they, too, all have their flaws.

In his advocacy of the political equality of the sexes Plato argues that the differences between men and women are not *relevant* to their political functions, and so gives the first example of an appeal to relevance. But, unlike "validity," relevance is always a disputable notion, and experience only can decide whether these differences are relevant or not.

In his plea for communism Plato seems to make the hazardous assumption that selfishness will wither and become extinct if it is deprived of its usual fields of exercise—private property and the family. But this argument will prove fallacious if the new social order affords scope to selfishness in other than the traditional ways. Plato does not pause or stoop to consider this possibility. Actually, it may be shown that selfishness would necessarily be engendered and fostered in every citizen of the Kallipolis precisely because he is deprived of the shelter of a family. From the day of his birth he would be forced to fight for his own hand and to make good his position by his own unaided efforts. His existence would be possible only on condition that he remained popular with his equals and won the favour of his superiors. By the time he rose to positions of power he would assuredly have been moulded into an accomplished hypocrite, profuse in his professions of public spirit, but utterly selfish at the core.

Lastly, the rule of the philosopher also would fall far short

of the ideal. It would actually degenerate into a bureaucracy. The philosopher-king, the man who combines the highest knowledge and the ripest experience, offends against Plato's own canon (Book II) of the division of labour and is not allowed to specialize. Plato does indeed absolve him from the duty of increasing knowledge by postulating that knowledge must be completed before he takes office: the Idea of the Good, which forms the coping-stone of all the sciences, must be known before the Ideal State can be founded upon this knowledge and the Kallipolis can start upon its career. But there are two ways by which the rulers can keep themselves superior in knowledge to the ruled, and to perfect themselves in all knowledge is not the easiest way. It is much simpler and easier to preserve their superiority by keeping their subjects ignorant, and such has always been the policy of rulers who have claimed to rule by virtue of their superior knowledge. That is what the Jesuits did in Paraguay, and the Brahmins in India. It is what the Catholic Church has tended to do always and everywhere.

If we are curious to know how the Ideal State would have worked out in practice, we have merely to study the history of the Middle Ages. There we shall find a society organized into three castes, with workers deprived of all power, but exempt from military service, with the knights as the fighting auxiliaries of the spiritual rulers or clergy, and these culminating in the supreme pontiff, the Pope, as the philosopher-king. It is almost needless to add that the verdict of history has not been favourable to this constitution of society, and it certainly did not lead either to a happy and harmonious State or to a supremacy of wisdom. I would suggest, therefore, that in the end the most valuable of Plato's contributions to politics may turn out to have been his launching of the ideal of eugenics.

From lack of time I must pass over with a bare mention many more of the brilliant ideas enshrined in the *Republic*. Plato's ascetic censorship of art, which shocks us as so illiberal, was

forced upon him in large measure by the fact that the moral motive appeared to the Greeks in the æsthetic guise of the Beautiful (*to kalon*); hence it was imperative to control social opinions about the Beautiful in the interests of conduct. Nor could the votaries of art deny that if "the Good" is defined as "the supreme end of action," artistic activities also must be subjected to its sway.

Plato's pessimistic theory of pleasure in Book IX, on the other hand, was an incidental consequence of the physiological analysis of vital process or metabolism which he had taken over from his predecessors. If the whole metabolism is analysed into the twin processes of catabolism (impairment, or "emptying") and of anabolism (repair, or "filling"), it follows that the former has the priority and that the latter can at most make good the loss. In principle all pleasures are paid for in advance by antecedent pains, and at death life must always end in uncompensated pain. Yet this unattractive theory has more than held its own in the opinion of philosophers with Aristotle's psychological amendment, which took the form of declaring pleasurable the whole functioning of the organism, its normal *energeia*, so long as it was not thwarted and warped by impediments.

The *Republic's* theory of education as a life-long process is justly famous and corresponds closely to the present training of a Jesuit priest. Noteworthy, also, is Plato's preference for science over literature as the medium of the highest education, and the consequent attack on Homer, the Bible of the Greeks.

The doctrine of immortality in Book X gives rise to many problems, alike in its scientific and in its physical part. The comparison of the Soul to Glaucus the sea god, battered by the waves and overgrown with shells and seaweeds, would seem to indicate that the *Republic* already adopts the later doctrine of the *Timæus*, which distinguishes between a mortal and an immortal part of the soul and regards desire and the moral nature as evanescent accretions grown upon the soul's eternal

essence by its immersion in the sea of Becoming. But then what becomes of the justice of punishing souls for their moral lapses, even to the extent of eternal damnation, as exemplified in the case of Ardiaeus the Tyrant? And what again of the central paradox of the Platonic doctrine of immortality? How can a theory which apparently restricts eternal reality to the Ideas and declares that plurality is an illusion of the senses and that there is only one of each idea conceivably provide for an immortality of plural souls? The doctrine of the *Republic* throws no light on this crux. Its scientific argument as in the other dialogues seems to prove the immortality of Soul as a Principle, not of individual souls; and no consistent conception can be extracted from it either of the unity or of the plurality of the human self.

After all these cavils we cannot help confessing that Plato stands out as the one philosopher of the first rank who seems genuinely and perpetually to concern himself with the problem of immortality; yet he always leaves his meaning in a tantalizing state of uncertainty.

Whatever Plato's eschatology may have meant, I want to draw attention, finally, to the subtle way in which the end of Book X reverts to a question casually thrown out in Book I and there left unanswered. Cephalus, the good old man who has practised kindness and justice all his life, had candidly confessed that he had always treated the tales of the after-life as fables, with which he need have no concern; but now that he felt that his days were drawing to a close, he was growing afraid that there might be some truth in them, but hoping that his just dealing might stand him in good stead. Cephalus is dismissed early from the dialogue, for it would be a shame to subject him to the torments of the Socratic cross-examination, and presumably he goes to bed; but Plato was too good a psychologist not to know that fears such as he had expressed were quite common, and he determined to allay them. So the final

transfiguration scene of the *Republic* gives the reply that the just man at any rate need not fear. If he has wisely studied philosophy, his sense of the true values of life will keep him safe when he passes through the ordeal of re-incarnation, even though the fool may ruin, and even damn, himself by his greed for the fleeting goods of this world of shows. The reply, though not perhaps devoid of moral difficulties, is neat and beautifully knits together the two ends of the *Republic*.

PHILOSOPHY IN PRACTICE

HOW FAR DOES SCIENCE NEED DETERMINISM?¹

THE ODDEST THING, perhaps, about philosophy and science alike, is how little attention they have paid to the alternatives to accepted views, even when these alternatives were logically obvious and inherently quite as probable as the accepted views. Thus it is quite as easy to argue that life is not worth living as that it is, and that all physical phenomena are relative as that they are absolute. Yet such alternatives are simply suppressed by the great majority of philosophers and scientists. It seems to require something like a sensational discovery or a revolutionary upheaval of thought to induce men to consider alternatives they should have kept in mind all along. Fortunately we appear to be living in one of these revolutionary eras in which obsolete beliefs are being crushed into fertilizers for new ideas.

At the moment, the revolutionary focus is situated in the dominant science of physics. Physics has been plunged into embarrassment and apparent conflict with what was believed to be one of the first principles of scientific method by its wonderful success in getting much nearer to the ultimate constituents of physical reality than it had ever done before. Instead of handling what were from time to time considered ultimate particles by the thousands of millions at a time, physicists had found ways

¹ Paper written for the ninth Congress of Philosophy at Paris, 1937, and printed in its Proceedings, VII, 28-33.

of observing the behaviour of individual "atoms," nay of various theoretical subdivisions of that formerly indivisible *ens rationis* which did not exceed a two-thousandth part of the atom's "mass."

They were then amazed and shocked to find that electrons and their kin appeared to elude or defy one of the best attested principles of scientific method. It had long been assumed that with sufficient knowledge of the antecedents of a scientific object its future behaviour could be predicted infallibly and exactly. But in the case of an electron this seemed to be impossible: you could calculate either its place or its velocity, but never both together; and consequently its behaviour always exhibited a measure of indetermination or contingency. Indeed no exact prediction of what it would do next was even conceivable. Of course, however, there was a good and sufficient reason for this disconcerting fact. In order to observe the behaviour of an electron, no other method was known but to throw light upon it. But to do this meant to subject it to light pressure, and this was enough to send it scurrying away. Hence the would-be observer could never tell where it was to be observed, and his predictions might always fail. There followed a number of conclusions deadly to the established doctrine of deterministic science:

(1) There exist physical events which are unpredictable in principle. (2) The assumption that laws of nature are exact and universal formulas was discredited. Their status was reduced to that of statistical regularities or expectations, exemplified by large numbers, but not necessarily applying to the individual case. (3) The assumption that the observer's manipulations in observing his object make no difference to it was refuted for the science of physics. (4) Consequently the assumption that physics has no need to take into account the observer's personality and his "personal equation," was disproved.

Now the first things to be pointed out about these conse-

quences are that every one of them could and should have been anticipated theoretically before it was rendered practically certain, and that if physicists had been more solicitous about the possible alternatives to the doctrines they were assuming they could all have been discovered long ago.

Thus in the first place it was always obvious that if the physical theories about molecules and atoms were correct, physical science was handling physical objects only by the myriad. Hence there was no proof that the laws of physics were not statistical, as those of psychology and sociology had long been known to be. Moreover, there had never been any need to take them as anything more. It was possible, and indeed easier, to take scientific determinism as an assumption of method or postulate of predictability, rather than as a fact in nature. Determinism is scientifically just as useful if it is conceived as a methodological assumption; but a methodological assumption may always turn into a methodological fiction when limits to its applicability are discovered. This is all that Heisenberg's Principle of Indeterminacy requires the physicists to confess; what it upset was, not the logical status of determinism, but a metaphysical inference which had been, falsely and needlessly, drawn from it.

Next, there had never been any need to regard laws of nature as more than statistical, or as more than the established habits of physical objects. The evidence from which they were extracted could never have proved them universal, absolute, and immutable, any more than biological evidence could ever have proved the fixity of species in the days before the rise of evolutionism.

Thirdly, the assumption that the observing operation leaves the object unaffected had never been more than a convenient fiction. It had never worked in the social sciences, but had merely marked the *differentia* between mechanical and intelligent objects. Also, it had long been known that taken in the mass the latter might be treated as mechanical. Why then should

it have been such a shock to discover that supposedly mechanical objects displayed individuality when given the chance and taken individually?

Lastly, the abstraction from personality, which was supposed to be characteristic of scientific method, had long been known to be a fiction, by reason of the fact that some of the sciences had found themselves unable to make it for some of their purposes. Thus, astronomy had long been forced to allow for the "personal equation" of its observers; and this should also have prompted psychologists to recognize a personal factor in all scientific observing; but unfortunately many of them mistakenly and snobbishly imagined that they could raise their scientific status by adopting the assumptions and fictions of the mechanical sciences. The logicians also should have been careful to point out that every inquiry was essentially a purposive enterprise and that, therefore, to abstract from its purpose was liable to make nonsense of any logical process.

May we take it as admitted, then, that science needs determinism only as a method subservient to the purpose of predicting the future course of events? It has no need whatever to take it as a statement of actual fact or to be disconcerted when it discovers that its application to the real has limits. On the contrary, scientists should be proud of having themselves discovered the limitations to which their working assumptions are subject. For, as in the similar case of the discovery of the relativity of all physical properties, they have thereby taught the philosophers and especially the logicians an invaluable lesson, both about the method of science and about the nature of knowledge.

The philosophers ought to have been profoundly grateful for the instruction. But, alas, for the most part they were not. They were unable to emancipate themselves from the errors of their tradition, because, unlike the scientists, they were not accustomed to test their theories by the facts of observation.

Even when an exceptionally open-minded philosopher confronted them with such facts, they usually refused to recognize them and never drew the obvious inferences from them. I have space to illustrate this habit from one example alone; but it is the palmary example, that is, Hume's criticism of the superstitions about causes. Hume pointed out that the necessary connexion supposed to exist between the cause and the effect was not a fact of observation but a fiction, a human addition to the facts, which, Hume thought, rested only on our psychological habits of expectation. The old philosophic doctrines about the universal law of causation were thereby completely overthrown. But the philosophers did not understand it so. They denounced Hume as a sceptic, but made little attempt to understand the causal postulate more intelligently and to inquire into its meaning and use.

Now the inquiries that should obviously have been suggested by Hume's discovery were such as these: (1) If necessary connexion is a human attitude towards events, how is it related to the allegation of contingency and to the human consciousness of a freedom to do or to leave undone? Clearly these can no longer be dismissed as manifest absurdities; they may even turn out to be likewise based on human psychology. (2) Again, how is the line to be drawn between the cause and the effect, and what are their respective limits? Is not this line also relative to human designs, purposes, and interests? (3) What indeed is the justification for the analysis of the flow of happenings into regular series of effects and their causes? How were they discovered to belong together? How was the distinction between effects and events established? (4) Nay, what right have we to select events at all from this flux and to isolate them for separate inquiry?

It is notorious that none of these obvious and instructive questions was asked by the philosophers who succeeded Hume. Instead they lavished infinite pains on obscuring and reversing

his results and on patching up the old doctrines of necessity and universal causality which he had exploded. They did it very clumsily and quite inadequately. Kant, for example, who was generally supposed to have had most success in "refuting Hume," while accepting from Hume the assumption that causality ought to be something an outside observer can notice about the course of events, imagined that the subjective factor detected in a causal sequence could be rendered innocuous by declaring that it was one of a dozen "*a priori* categories" imposed by the mind in viewing its objects. He admitted that collectively the categories interposed an impenetrable screen between the mind and the Real but insisted that without them no objectivity could arise.

But, on his own showing they did not solve the problem for which they were invented. When Kant (tardily and dimly) realized that the problem of justifying the practice of causal explanation required him to distinguish causal from casual sequences, he could think of no better criterion to allege than that the former were irreversible and the latter reversible. Yet the upshot of his own doctrine of causality was that all events in the phenomenal world were necessarily determined and therefore irreversible and unalterable, although he somehow persuaded himself that this assumption was not incompatible with the noumenal freedom of moral agents.

Moreover, it never occurred either to Kant or to Hume that the whole practice of causal analysis stood in need of vindication. Before any question could arise as to whether a particular series of events should be regarded as causal or casual, the common-sense procedure of dissecting the total flow of events and selecting objects of inquiry should have been accounted for; and the attempt to do so would at once have proved fatal to the assumptions Kant had taken over from Hume.

It would then have appeared that science is never the fruit of passive observation of phenomena, but springs always from

purposive manipulation and intelligent interference with the given. Also that the given itself is always a selection, determined by human interests and purposes and far more "taken" than "given." In short, the whole intellectualist description of knowing would have been recognized as a fiction which ought to be scrapped and superseded by a more voluntarist account.

If only philosophers had been willing to correct these consequences of their intellectualist bias, Hume's criticism of the current notion of causation would have ceased to terrify them with the bogey of scepticism. They would have felt free to consider whether the notions of necessity and of freedom were not correlative and logically on a par, both being additions made by us to the observable with the purpose of justifying the practice of extracting manageable items from the flow of events. The problem of causal analysis would thereupon have supplanted that of causal synthesis as the moral to be drawn from the *débâcle* wrought by Hume.

Nay more, Hume's criticism should have become fruitful of further inquiry into the whole notion of necessity and of a thorough exploration of its ambiguities. It would speedily have appeared how little need there is to take "necessity" as meaning more than "need." A little unprejudiced research would have revealed that the whole need for "logical necessity" is rooted in an accident of the history of logic. Our logic happens to have sprung from the dialectics of the Greek schools. These exercises put a great premium on any procedure whereby an opponent could be compelled to surrender to a verbal argument and to own himself beaten. Accordingly, a disputant always tried to represent his own (psychologically) natural train of thought as being "logically necessary," that is, as capable of compelling his opponents' assent; and the syllogistic form was hailed with rapture because it was taken to guarantee just this. But it was a grave mistake to transfer the procedure of necessary demonstration to the method of science and the investigation of nature.

The latter yielded only the growing probabilities and satisfactions of a progressive verification of truths that are, not "necessary," but "valuable"—all the more valuable because they are not necessary. Thus it is only an obsolete logic which requires scientific truth to lay claim to "necessity"; and the only necessity which really occurs in a more enlightened logic is that which "follows" from the initial assumptions and agreements that delimit a science. But the reasons why these cannot be altered at will and without notice are ethical and psychological rather than logical, and so in the end "necessities" are always reducible to "needs."

May we then conclude that although determinism is needed for the scientific purpose of prediction, it need in nowise be taken as an ultimate fact of metaphysics? But what a pity it is that philosophers have so much more faith in coercion by the big stick than in the avowal of human interests!

THE RELATIVITY OF METAPHYSICS¹

METAPHYSICS is the name for the loftiest and most arduous region of the philosophic field, which promises its votaries the finest views and an all-embracing conspectus of the whole. It has, however, drawbacks too. Its peaks are plentiful and are suspected to be virgin; for the more accounts of their alleged ascents one reads the more doubtful one grows whether anyone has ever really climbed to their very tops. Moreover, they are nearly always shrouded in thick clouds and impenetrable fog, the ascent to them is steep, and the going rough; while the atmosphere on the summits must be so highly rarefied that no one could maintain himself at that altitude for long. So it is no wonder that metaphysicians are rare and precious and that metaphysical ascents are not adventures for the masses but fit only for the trained and hardy few, with the best guides. They are, indeed, a form of intellectual mountaineering. As such they are good sports, and they may also be good fun, if we do not take them too seriously and are willing to put up with hardship and defeat and turn back in time when the conditions are unpropitious. For we must not assume that we can scale our peak, or that we shall get our promised view, still less that we can dwell aloft upon it, as on a philosophic throne, and continue to look down with contempt and unconcern on the labours and the progress of the sciences.

Dropping these metaphors, we should conceive metaphysics

¹ From *The Personalist*, XIX (1938), 241-54.

as the final synthesis of the sciences, as the culmination and acme of the endeavour to know. But we shall have to be prepared to defend this conception of its function against the rival view, which regards it as an independent science of ultimate reality which is wholly *a priori* and independent of experience and of the sciences. Metaphysicians have often tried to conceive their function in the latter way but have always miserably failed. They may fail, also, if they go on our conception of their function; but if they do, they will fail more honourably and in a way which gives promise of subsequent success. Our conception brings metaphysics into close connexion with the sciences, which provide them with their data. But these data may be insufficient. The sciences are and will always continue to be incomplete, and they cannot, therefore, provide sufficient material for a successful synthesis. But, as they are also progressive, the metaphysician lives in hope that they may do so in the future. He must also ever be prepared to adjust and improve his metaphysical synthesis as fresh scientific material accrues. So, with growing sciences, metaphysical syntheses cannot remain unchanging and unaffected by the fortunes of the sciences.

This conception of metaphysics has, moreover, the advantage that metaphysics can never be an utter failure. No matter how imperfect their success and how frequent their failures, they can never wholly be suppressed. Metaphysics will remain as an aspiration and as a problem to be solved, even though we never actually succeed in constructing any final synthesis of all knowledge and in commending it to all. Now, if such is the place of metaphysics in the philosophic field, to what sort of metaphysics may we expect Humanism to conduct the philosophic adventurer?

In the first place, we may note that the humanist is not bound to set out on metaphysical adventures, if he does not wish to, if he has not the heart or the head or the stomach for such things. As metaphysics is such an audacious undertaking,

his should be a great relief. Humanism allows him to excuse himself. He can say: "I do not think that metaphysics is a science. Its data are too fragmentary and too disparate; the sciences contribute too little, and subjective preferences and guesswork count for too much. So putting together a metaphysic is a thankless job and really a waste of time and ingenuity. Far better cultivate your garden in some cozy corner of the scientific field and eschew adventures." Humanism cannot condemn this attitude, and it may, in fact, be the best for most of us to adopt.

But neither, secondly, does Humanism absolutely forbid and taboo metaphysical adventures. It recognizes that it is a legitimate human craving to synthesize all knowledge and to view all existence as a whole. Nor is there harm in trying. Only it insists that the nature and the risks of metaphysics should be realized beforehand, and that their results should not be overrated. No metaphysician has a right, for example, to force his metaphysics fanatically down our throats.

For, thirdly, all metaphysics are only probable. They should be regarded as hypotheses, as thought-experiments, as more-or-less ingenious guesses, the value of which needs to be established by persistent testing. They should never be allowed to harden into dogmas, but should always be kept plastic and improvable.

The more so, fourthly, that they are at bottom individual experiments, relative to individual data, and presuppose personal idiosyncrasies. They cannot, therefore, constrain assent. A metaphysic which is true for one man, because it seems to him to synthesize his experience, may be false for another, because his personality is different. For example, a pessimistic metaphysician can never hope to convince an optimist. For even if they agreed on all the facts, they would yet differ irremediably in their valuation of these facts, and this difference of interpretations would have far-reaching consequences.

This essential individuality of metaphysical constructions is

attested by the whole history of philosophy. The endless variations and vicissitudes of philosophic systems become intelligible only when they are understood as expressions of the personality of their makers. The whole history of philosophy thus becomes an eloquent paean on the triumph of personality.

Moreover, the essential individuality of metaphysics is deducible from their very conception. A metaphysic, *ex hypothesi*, has to synthesize all the data all the sciences can provide. But it must do more. It must include also in its synthesis all the material guaranteed by each man's direct experience, or in other words, all his idiosyncrasies and his whole personality. For a metaphysic cannot plead, like a special science, that its outlook is restricted and that it may leave outside any facts for which it has no use. We must include all facts; and idiosyncrasies, beyond question, are psychic facts.

These personal data are, moreover, most important metaphysically. They supply the modes of interpretation and the points of view, they determine the aims and values, without which no metaphysical synthesis can be effected. Whether he knows it or not, a metaphysician's personality is always an essential, ineradicable presupposition of his system. He shapes his system to suit himself, and its cut reveals his personality.

But, just because it fits him, it never quite fits anyone else. We should beware, therefore, of a philosopher who retails absolute and universal truth, good for all, and for all purposes: he is a vendor of panaceas and, most probably, a fool or a fraud. We should beware, also, when two philosophers profess the same doctrine; it is always two doctrines that they advocate, because they understand it differently. A genuine metaphysic is the most individual thing in the world.

Now, this perception strikes a death blow at dogmatism and intolerance; but it is not a bar to sympathy and even understanding. For, without literally appropriating another's metaphysic, we may recognize it as alien to our own and may

understand, also, how the differences in both cases flow from the differences in the persons concerned.

Undoubtedly this peculiarity deprives metaphysic of its claim to be a science in the usual sense. For sciences are at bottom methods, that is, ways of dealing with a selected material for certain human purposes. They are common highways, meant for common use, without regard to personality, and are good for all.

But how do they achieve this feat of communication? Simply by a trick; simply by abstracting from personality at the outset. But this is a trick metaphysics cannot emulate. They cannot abstract from personality, because personality is a fact, and a fact which enters into their essential function. It is part of their business not to abstract from personality, but to take account of it, as of everything else in the world; and if, on this account, they are excluded from the circle of the sciences, they must grin and bear it.

We see, then, how unexacting metaphysic is. If you do not like it, you need not embark on it; if you do not like the results of any metaphysical inquiry, you need not grow alarmed. You need not quarrel with it nor take it tragically. You can put it down to its maker's idiosyncrasy and console yourself with the thought that, after all, it is only his personal guess and that no one can deprive you of your right of guessing, too.

I expect that after all these explanations many will have lost whatever appetite they may have had for hearing about my own personal metaphysic. I could, therefore, excuse myself the more elegantly that I perpetrated quite a pretty metaphysic once, myself, in my crude and daring youth. It was called *Riddles of the Sphinx*, and references to it even got into some German histories of philosophy. It is now out of print, and I am unlikely to reprint it. For it would need too much rewriting. That is natural enough, for if I wish to make no changes, I should be confessing that I had learned nothing in the last forty years.

However, I shall not say how I should change it. I find it is as much as I can do to take the responsibility for my own metaphysic without taking the responsibility of foisting it on anyone else, and this is a further reason for not undertaking the responsibility for any other metaphysic. Ultimately everyone should bear the burden of his own convictions; the most that Humanism should be required to do is to drop some hints concerning the ways in which metaphysics may be constructed, so that everyone who chooses may be able to construct his own to suit his case and to suit himself.

The natural starting point for all humanist metaphysics will be, of course, the great saying of Protagoras, which is the first statement of Humanism, and one of the deepest of philosophic dicta. *Man is the measure of all things; of things that are that they are, of things that are not that they are not.* No completer statement of relativity is conceivable; it plainly anticipates Einstein by its reference to the problem of measurement, but it enunciates a more thorough-going relativity than any physics has as yet found use for.

It serves as a salutary reminder that every problem, every belief, every reality, every truth is relative to man the knower, and that it is meaningless to trouble about unknowable "reals." This, however, in no wise denies that there may be reals as yet unknown to us, which we may sometime know; it merely assures us that when that day comes they will come into relation with our minds. It removes, therefore, all apprehension that our life may be doomed to failure, because essentially dependent on what does not exist for us, and it warns us against vain speculations about reals unrelated to our life.² The real world which concerns us, which we should seek to measure, conquer, and control, is one related to us and necessarily relative to our apprehension, and this is the best and most hopeful feature

² Most forms of "realism" would seem to warrant this apprehension, and to need this "warning."

about it. It is not unknowable and inaccessible to human thought and unresponsive to its operations. The real world is *our* real world, measurable by *our* standards. It is further limited by the dictum of Protagoras that science is essentially measurement, an *aperçu* which the history of science has amply confirmed. Surely there is nothing in this doctrine which is anything other than an encouragement to thought.

Yet, strange to say, when we turn up the old-fashioned histories of philosophy, we find this grand dictum described and decried as "scepticism." Why? For no discoverable reason; merely to gratify an ancient prejudice which dates back to Plato and is only an appeal to human indolence and slipshod thinking. It assumed, without examination of the facts, that there could be only one single universal truth, alike for all knowers and independent of all knowers—a thoroughly non-human truth, therefore, which we were bidden to adore as superhuman. But neither Plato nor anyone since has ever been able to explain how such truth, if it existed, could be recognized and grasped by us; so the outcome of this so-called "idealism" was really scepticism: yet whenever one challenged it and pointed out its consequences, one was accused of "scepticism."

But did Protagoras deny all truth when he declared that truth was relative to man? Surely not. He denied that truth was absolute and inaccessible to man; but he affirmed, surely, human truth in the plainest terms. Was it to deny all truth to declare that every man had his own truth? That was to deny that there was only one truth; but it substituted many truths and multiplied truth a hundredfold. It was to be a pluralist about truth, not a monist, and still less a nihilist. It was to allow everyone a vote in the making of a common objective truth which was a fruit of social intercourse and mutual agreement. It was to be a democrat about truth, and not a monarchist, and to abjure all attempts to make truth rest on tyrannous coercion. There is really, therefore, no way of bringing Protagoreanism

into touch with scepticism, unless one simply takes for granted that any denial of absolute and universal truth, however cogent and reasonable may be its grounds, must be denounced as scepticism. Moreover, as we have seen, Protagoras was quite right metaphysically. Metaphysics must exist in the plural if they are to perform their characteristic function. They must be relative to the experience and the knowledge and the needs of their makers. In this they differ from the sciences. But that the sciences are not relative to individual men, that they proclaim universal truths which claim to be the same for all men—and for none—is due to their abstractness. They all deliberately practice self-limitation. They select a small field for their operations, and they omit the personal side of knowing, so far as they can. But in so doing they approach, not truth, but fiction.

It is, therefore, a great illusion which admires them for ignoring the very data which are most decisive. If the abstraction practiced by the sciences could really be carried through completely—and the mere statement of this ideal betrays how futile and self-negating it is—if we could really know the real as it is apart from us and our knowledge of it,³ such knowledge would be literally worthless. For we ascribe value to the real in virtue of its relation to human ends and feelings, and a completely dehumanized real would be neither knowable nor worth knowing. Have we not a right, then, to take the assurance that

³ What is at the moment the most progressive of the sciences, physics, is beginning to entertain serious doubts about this ancient fiction. It is discovering that it can no longer work with it. This would seem to be the real meaning of Heisenberg's Principle of Indeterminacy. We cannot know *both* the place and the velocity of an electron, because knowing involves an operation which affects it. In order to observe it, we have to throw a ray of light upon it. But that sends it scurrying away, and does not reveal where it would be but for our interference. This situation, however, should be no paradox, but a welcome confirmation for a pragmatist notion of science, which takes an operational view of knowing. It is foolish to try to know what electrons are doing in the dark when no one is looking. (This was clearly developed by Dr. John E. Boodin in a paper presented during a formal dinner at the University Club of Los Angeles, tendered by Mrs. Wildon Carr, Dr. Schiller, and Dr. Boodin to Dr. Albert Einstein in 1934. Editor's note.)

our world is inalienably ours, necessarily related to each of us personally, and not merely to an abstract "humanity in general," in order to exist at all for us, as a precious pledge that we may remould it nearer to the heart's desire?

Let us not, then, be intimidated by foolish outcries against "scepticism" and "subjectivism." A plethora of truths is not the same as none at all. And to start with subjective truths does not condemn us to end with them. It only means that we should trace out the interesting process of mutual exchanges and adjustments by which the mind gets to know its world, and by which the common truths that get social recognition are segregated from the personal truths of immediate experience that remain individual and incommunicable. We can thus observe the growth of the objective out of the subjective, until we reach the common world of common sense and understand its working.

Protagorean humanism, therefore, is none the worse for being relativistic. The relativity of our world to our experience does not detract from its reality, but enhances it. Humanized, it shelters us against the frosts of naturalism and dissipates the nightmares of absolutism. We do not need the pretentious absolutes of the old philosophies, either absolute truth or absolute reality. For both would be unattainable. Truth-for-us and reality-for-us, revealed progressively in the cosmic process, are far better for us. Why, then, shrink from them, when they are offered us?

Next, Protagorean humanism seems to have very definite applications to the stock controversies of metaphysics. The various naturalisms, materialisms, and behaviourisms it easily disposes of by showing that they leave out of their calculations man and human personality and that they misinterpret scientific method.

It has a direct bearing, also, on the issue between realism and idealism. It finds that the ordinary idealist is singularly lacking in the courage of his convictions. He does not venture

to contend that he is master of a standpoint whence all things appear transfigured in a new and hopeful light—he is anxious, rather, to show that practically idealism makes no difference and that he can endorse all the conclusions of common-sense realism. This seems to me a great mistake in tactics. It reduces idealism to an incomplete and pusillanimous philosophy that does not alter or improve the philosophic situation. It thereby exposes itself to the criticism of the pragmatic test, which declares that when the practical deductions from two doctrines do not differ they are really different wordings of the same doctrine. If, therefore, idealism makes no difference in the view of reality taken by common-sense realism, it is indistinguishable from realism and it is meaningless to call it “idealism.”

To be genuinely different it must make a difference, and to be better it must make a difference for the better; moreover, it must be formulated so that it can do this. Judged by this criterion, Protagorean humanism alone would seem capable of leading to a genuine idealism which can make a significant difference to us and, after accepting all that is of value in common-sense realism, can open out much greater vistas. Its procedure may be outlined thus:

To make us and our reality mutually dependent on each other is an idealism, for it is to scout the superstition of an objective world completely alien to the knowing subject. Such an assumption serves no reasonable purpose, either of theory or of practice. It is as useless theoretically as it is unpalatable practically. Further, to reject it is not to reject objectivity; it is to regard objectivity as an achievement, not as a datum. It is, moreover, an achievement of great antiquity, which has high pragmatic sanction as embodying so much human experience of the way to live. The humanist does not, therefore, repudiate the common world. His question is rather: “How much of my immediate experience belongs to the common world? That is, how much of it can be shared? I want to share as much of it

as I can, for I firmly believe in the existence of other spirits and need their sympathy. Why do I believe in others? Because I will not hold that I am the responsible author of my whole experience. I will not be a solipsist, because I do not wish to look upon myself as a raving lunatic and the maker of what would be a nightmare world. I find, moreover, that my rejection of solipsism works excellently; it is verified as strongly as such a theory can be. That is how I escape from solipsism. The other idealisms cannot do so by the merely intellectual arguments they use. These all break down or make matters worse. They are also quite superfluous."

At bottom there is only one sound argument for idealism, but idealists mostly shrink from using it. It is too empirical and cuts too deep. Unlike the technical "proofs" of idealism, it does not appeal to the implications of words, into which the conclusions to be reduced have first been smuggled, but rests on a common undeniable experience which is familiar and open to all. And it is entirely welcome to Protagorean humanism.

We may call it the argument from dreams. Every night we go to sleep and usually dream. Now, in our dreams we venture forth into other worlds which seem as real as ours. There seem to be any number of them, and they have a great family resemblance to the world of waking life. Though not in our space and not always easy to correlate with our time, they are spatial and temporal. They are likewise physical, though their laws seem often to be different. For example, we sometimes find that in a dream we can fly at will. Also, they are inhabited by living beings and men, though the former are often strange, and the latter strangers.

Our visits to these dream-worlds are only brief. We return from them by the discontinuity entitled "waking up." When we are able we find ourselves back again in the world we went to sleep in and ruthlessly revise our estimate of the reality of our nocturnal adventures. Usually we say, "so then it was only

a dream," and dismiss it as unimportant. Nay, we claim to have constructed it ourselves, and deny its reality. "Reality" here means "cosmic importance"; for as a psychic fact a dream remains real until it is forgotten. Not all dreams, however, are thus condemned; a small but important minority are regarded as valuable revelations and visions of higher realities by those who have them and by their followers. Such "dreams" have entered into the fabric of all the great religions. The grounds for these higher valuations are, however, derived from the intrinsic contents of these dreams; so far as our experiencing goes, there is no difference between the divinest vision and the idlest dream. Therefore they ought all or none to be condemned as unreal.

Our practical attitude towards dreams is thus inconsistent, and the scientific explanations of them also vary. But philosophically they are clearly of great importance. We can learn three lessons from them which we could learn from nothing else:

(1) Dreams prove that idealism may be true. If we adopt the usual interpretation that they are unreal and creations of our imagination, they indisputably prove that we have the power of creating subjective worlds which can ape objective reality while they last. This shows that the idealist contention that the mind can create reality can be exemplified in fact. Ergo, may not all reality be similarly mind-created?

(2) May not our real world be a dream-world, too, differing from the rest only in that we have not yet awakened from it and so are not yet able to condemn its reality in retrospect? Hence, life may be all a dream, or rather a series of dreams separated off by the transition called awakening—or death. Life might conceivably pass through an infinity of such experiences, each enwrap within the other, and revealed in their true nature only when they are transcended. This is a very old suggestion, often urged and never refuted. Plato argues against it in the *Theaetetos* (158), and it pervades all Hindu philoso-

phy. Moreover, we need not suppose the source of dreaming to be random; if we please, we can import a definite direction into it. We can then conceive the series of life-dreams as conducting us either into more and more real worlds or as plunging us deeper and deeper into nightmare. We can then define Heaven as the beatific vision of supreme reality and Hell as the abyss of bottomless illusion.

(3) Dreams yield an interesting basis for the notion of a future life. They support it by enforcing two suggestions. Not only do they (a) sweep away at one blow all the objections to it which rely on the ultimate reality of our present physical world, but (b) they inform us how the transition from one world to another may be conceived and even what it feels like. It may feel just like awakening to a more real and better life from an evil nightmare in which we "dreamt" we had "died." Dreams, moreover, may reveal dream-worlds of every kind and degree of reality, from the lowest to the highest. For none need be conceived as utterly unreal. In this series our present real world might not be more than a single term, intelligible only in the context of its series. It might be real enough, and important, while we traversed it. Yet its full meaning might become apparent only after we had quitted it and could view it in a wider setting and could recognize the truer realities on which our present reals were modelled and of which they were the adumbrations and dreamlike anticipations.

With this suggestion it may be well to close. For has it not been shown how Humanism can provide materials for the construction of an infinity of metaphysics? And must not their actual construction be left to the taste and resources of their individual architects?

ETHICS, CASUISTRY, AND LIFE¹

A VERY little reflexion on life should suffice to convince us that in a general way human nature must by this time be pretty well adjusted to the conditions of life. For if man could or would not adjust himself to these conditions and if he were powerless to alter them, he would simply have been eliminated, like the prehistoric monsters whose bones we behold in our museums. Instead of being master of the earth, man would have become a fossil. Actually, although he has mastered the earth, he is still, however, subject to the biological law just stated. He has risen in many ways above the merely natural plane and has evolved an ethical and spiritual social order; but nevertheless he must still so conduct himself and his affairs that he does not incur the penalty of extinction by which natural selection stimulates and regulates the behaviour of all that lives. If he refuses to comport himself suitably, he takes the consequences like every other living thing.

This is the biological fact which conditions all human action and underlies human society and its moral order. It is the foundation on which all forms of social life must be built. It is the basis, also, of the whole psychology of the individual man. All that we do, either individually or collectively, must in the last resort reckon with the biological necessity of achieving adaptation between man and his conditions of life in one way or another.

¹ From *The Personalist*, XIX (1938), 164-78.

In the course of ages this adjustment has already been achieved in a large measure, and the problem of right living has to a large extent been solved. We have not only learned what we must do to survive, but a willingness to do it has become fairly deeply ingrained in our nature. So we can by now rely pretty well on its promptings, even though minor adjustments to meet minor changes in the conditions of life are constantly going on.

Consequently we can take this adaptation for granted as a fact and use it to account for our psychological equipment and our normal behaviour. The actual adaptation of human nature to the conditions of human life will, therefore, furnish a good starting point for the theory of human behaviour and the study of ethical ideals. It is the natural starting point for all ethics, and Humanism is keenly aware of this.

We may, therefore, at once emphasize an obvious consequence. It follows from the adaptation of man to the conditions of terrestrial life that he must be built for action. Or, rather, for reaction on the stimulations he receives from outside and for active interference with them when he does not like them.

It follows further that his actions or reactions will be effected with his whole nature, wholeheartedly and with an exertion of all his powers. For life is far too strenuous an affair for him to handicap himself by neglecting any source of strength, any avenue to success.

The perception of this fact should discredit and invalidate in principle all attempts to split human nature into independent faculties which cannot or will not co-operate and contribute to the success of the whole organism. It disposes of the divisions and antitheses of an antiquated faculty psychology which split human nature into antagonistic parts, with different functions, different spheres, and different aims. It condemns the search for "elementary" processes in the mind, for it implies that the simplest unit of mental life that could actually exist would al-

ready be a reaction-upon-stimulation. It condemns also the dualisms which split human life into a sphere of theory and a sphere of practice and sever contemplation from activity and action by an insuperable chasm.

In its protest against all such artificial divisions and psychological fictions Humanist ethics will uphold the integrity of human nature and the need for studying and understanding its behaviour as a whole. It will allow the existence of all the traditional counters of ethical theory, denominated instincts, impulses, desires, volitions, thoughts, cognitions, et cetera, only on the understanding that they can be really used to explain what in fact men do. It must be made explicit that the meaning and the truth of all such distinctions is functional. And Humanist ethics will take pains and pleasure in tracing out how in fact these entities enter into human actions and determine man's behaviour.

Consequently it will be possible to dismiss at once as mythical the conceptions of pure thought, pure reason, and pure intellect. These are fictitious entities, because it stands to reason that our intellect, like the rest of our equipment, must be constructed for action, must be a means for effecting salutary responses to stimulation and beneficial adaptations to the environment. In other words, it must be a practical intelligence, watchful, adaptable, ready in every emergency to intervene to direct or to shape the course of events, finding itself rather in the intelligent things it can do than in the abstract things it can think. This, moreover, would seem to be the sort of intelligence we have, and a "pure" intellect is impossible nonsense.

Similarly, what we call our "knowing" must bear the imprint of man's total nature. Knowing must be conceived, not as an independent function, standing in no vital relation to life or hovering serenely in a supersensuous ether, but as a prelude to action and as an instrument for guiding and improving it. "Pure" science, therefore, must be declared a misnomer. What

is so called should be conceived as a late and extreme specialization of the impulse-to-know which has grown very remote from the immediate urgencies of action and oblivious of the connexion to which it owes its being.

As a matter of fact, nothing is more instructive and more apt to allay doubts about the rationality of the real than to trace the connexions of the pure sciences with the practical needs out of which they spring. Usually, moreover, this is quite easy. Pure mathematics, for example, will never be able to disavow its dependence on applied mathematics so long as the very word "geometry" betrays the fact that its original meaning and motive was simply "land surveying." And attempts to derive the impulse to science from mere curiosity collapse as soon as we inquire whether it is credible that the instinct of curiosity had no survival value for the animals that developed it. It is true that penguins, squirrels, monkeys, and sundry sorts of busybody seem to have somewhat over-developed this impulse; but one may fairly question whether men of science will prefer to count such creatures in their spiritual pedigree rather than the strenuously living forerunners who found life full of practical problems and devised theories for their solution. The transition from the thought that is directly practical to that which is called theoretical, because its connexion with practice seems more remote, is not, therefore, hard to find or to understand.

Nor is it impossible to give a plausible account of the transition from action to thought. Thus, the first need of biological adjustment is quickness of response, action as nearly as may be instantaneous. Only so can sudden and unforeseen dangers be avoided and opportunity be promptly seized. Hence, all living creatures develop a capacity for rapid action and grow full of impulses to act and that without hesitation.

But this organization is not sufficient. When the conditions of living grow more complex, predicaments are not infrequently encountered in which there is need to discriminate the actual

case from past cases which resemble it. A careless identification of this case with its predecessors, and too rapid and impulsive action, may become perilous, and may even prove disastrous. It then pays to stop to think, provided always that the delayed response to the situation proves more salutary than the impulsive action would have been. Accordingly, occasional thinkers arise and prosper. We have all become such occasional thinkers, though some of us think only occasionally. However, the occasions for thinking and the value of thinking and of its contribution to success in life are enormously exaggerated by the philosophers, who naturally incline to magnify their office. Actually, we can get on very comfortably with very little thinking most of the time, while a being entirely devoted to unending self-contemplation, like Aristotle's God, clearly could not flourish on our earth.

In detail, thinking seems to proceed as follows. First comes the "stopping to think," already mentioned, which may be likened to a "boulevard stop." This is not an intellectual process at all, but a restraint of an impulse to act, an inhibition of a natural and congenital tendency. Next, the thinker uses his respite from action to examine his actual situation in the light of past experience. He analyses it, considering in what respects it resembles and in what respects it differs from similar situations which he recalls. Indeed, he had probably noticed some of these differences from the first; they were what gave him power and inhibited his original desire to react at once.

As a typical occasion for thinking we may take the case of a wild animal smelling around a trap or a fish nosing a baited hook. The fish is normally constructed to snap up any worm he comes across, so he impulsively swallows the hook; if he could stop to think, he might notice that this worm has a line protruding from it. This difference might excite suspicion, were it noticed, and prompt him to decline the worm. But as a rule fish do not stop to think; and even if they do, they cannot long resist

the temptation of a wriggling worm dangling before their jaws and incontinently gulp it down—which is why fishermen can make a living.

A being capable of thought, however, will act differently. After due, but not too long, reflexion, he will act, but act in a way modified for the better, in consequence of the reflexion. So finally he survives, whereas rash action would have ruined him.

Note that in this analysis the stress on the salutary modification of the impulsive and habitual action is essential; it is what justifies the reflective act and the loss of time it cost. Otherwise the stopping to think was unnecessary and the delay before action harmful. Hence, good judgment is shown, not by perpetual thinking, but by thinking only on occasions when the delay before action is beneficial.

It is important to observe the essential feature of this explanation of the genesis of thinking. It represents the reflective act as effecting a closer adjustment to the particular situation at the time than could have been achieved by the impulsive act which is a product of habit and past routine. We see, therefore, how misleading it is to represent rational thought as concerned with rules and "universals"; it is really required and elicited by the need of dealing with the particular and special case, especially with the case which proves recalcitrant to the current rule. Aristotle here is a much safer guide than Plato. He saw that action was concerned with the particular case and that this might always prove exceptional; whereas Plato is the father of the philosophic delusion that science is not interested in the particular case. Science is interested in nothing else than prediction from particular cases; and the general rule is merely an instrument for facilitating adaptation to the particular case. Only so can its use and the limitations to its use be understood and justified.

Now all this does not hold merely in logic: it remains true

throughout all ethics. Right action is always an affair of particular cases; and the right act is the right response in a particular emergency.

Man's whole equipment, then, should be conceived as relative to his mode of life. His intelligence, instincts, impulses, and desires all fit him to live successfully a life he feels to be worth living. This life, moreover, has long been a social life, and so his nature has grown social, too, though not yet so social as to preclude all clashes between his social and his presocial ("selfish") impulses. Still, his acts normally have reference not merely to himself but also to others. He is normally interested in and fond of his family and friends, his tribe, and his country and can often be induced to sacrifice his more "selfish" interests for them.

This double aspect of human life, however, personal and social, generates a large number of problems and demands continual adjustment of the most various kinds. In general terms, a man must learn to take account in his actions not only of his own welfare but also of that of others, and of a multitude of social organizations, with which he is connected, by which he is affected, and in which he is interested.

These multifarious relations enormously complicate the problem of living, and generate great numbers of difficult situations in human societies. To extricate himself with credit from these difficulties a man needs both intelligence and good will, right feeling, and motives strong enough to guide his action aright. There arises, therefore, a pressing problem of the best adjustment of these various factors; and about this problem different men may, do, and will, take different views.

Some of these views will, of course, be extreme. Those who incline to intellectualism will assert that reason, and reason alone, is enough to solve all the problems of conduct. Others, like Kant, will declare that there is nothing good but the good will, and that the good will is enough. It would seem to follow

that a well-meaning fool may be worthy of our highest respect, however pernicious may be the consequences of his acts.

It is clear, however, that there is no reason why a man should not develop all these desirable qualities and learn to balance them harmoniously. His moral education should teach him how to do this. Actually, in every society more or less persistent and intelligent attempts are made to equip him with the qualities which are considered socially necessary and desirable. Every society formulates them more or less definitely and tries to enforce them by moral rules, intended for the guidance of its members and for the control—if need be, the restraint—of their actions.

This is how and why moral codes arise, from the customs, taboos, and initiation rites of savages to the Golden Rule, the Ten Commandments, the Twelve Tables, and the elaborate and unending legislation of the modern State. These codes are all enforced by all the sanctions that are available, especially the religious. The religious sanctions are particularly directed upon those portions of the social code which are most difficult to enforce, where other motives fail. Other powerful sanctions are the political, alias the police; social approbation and reprobation, alias public opinion; the prudential motive of enlightened self-interest, which appeals only to the intelligent and the farsighted; considerations of health and good taste; caste ideals like chivalry and *noblesse oblige*: a naturally healthy taste in pleasures; and last, but not least, a moral faculty or conscience. This last, however, needs to be trained and educated intellectually, and always is so trained in every social *milieu*.

In spite of all these variations of moral motive, however, much the largest part of the conformity of individual action to social requirements probably continues to be due to mere custom and brute habit. Hence, the moral danger of too rapidly upsetting social habits and relaxing the authority of immemorial custom.

It soon turns out, however, that all rules and all codes involve themselves in a peculiar difficulty, which seems fatal to their claims. Sooner or later they always encounter cases to which the rules as stated do not seem to apply. If you insist on applying them with pedantic strictness, they work badly and the results are outrages upon your moral feelings. Moreover, the hard cases are hard intellectually as well as morally: for it is hard to understand why they should defeat your rules. At last it is perceived that it is of the nature of rules to generate hard cases—and that not only in ethics. In this way the problem of dealing with hard cases, otherwise known as “casuistry,” overshadows all ethical practice and theory.

Now, at first sight the remedy seems obvious. The cure for insufficient rules is more rules—more precise and detailed rules. If the commandment “thou shalt not kill” is seen to be too broad and, indeed, impracticable, then you can formulate the conditions under which killing is no murder. In this a system of casuistry became an indispensable adjunct to every moral code. The most elaborate and scientific was that compiled by the Roman Catholic casuists, especially the Jesuits.

But unfortunately the method of casuistry does not solve the problem of deciding cases rightly. However detailed you make the supplementary rules which eke out your code, you cannot foresee everything. You still encounter special cases which elude you. You can get no guarantee that the infinite particularity of the case will not in the end defeat your rule.

Meanwhile, what have you done? You have tried to forecast, in advance of the event, the circumstances of all the cases that might possibly occur. You have tried to construct a system of ethics *a priori*. But to do this you had to consider in the abstract all the possibilities of human conduct. You had to foresee, therefore, all the possibilities of human depravity you could think of and to discuss them, in order to decide under which of your major rules they should be condemned and to deter-

mine the exact amount of their guilt. Clearly, reflexions of this sort will be extremely demoralizing, and casuistics, when put into cold print, will be shocking reading, especially to pure-minded folk who would never have bethought themselves of a tithe of the immoral possibilities which the casuist seemed to elaborate so lovingly. The handbooks of casuistry, the guide-books for seventeenth-century father confessors, are perhaps the filthiest literature ever compiled.

Healthy moral feeling, therefore, naturally revolts against scientific casuistry. It did so, very effectively, in Pascal's *Provincial Letters* and swept away Jesuit casuistry in a flood of moral indignation. Would that some one would deal similarly with the filth which is now being disseminated under the guise of "psycho-analysis"!

Ever since Pascal's attack Roman Catholic casuistry has been morally in bad repute. It has stunk in the nostrils of the Protestant public. But intellectually it had not been overcome. The problem of casuistry had not been solved. Protestant moralists shrank henceforth from concocting systems of casuistry, but they renounced thereby the duty of guiding moral action. Instead of deciding cases of conscience, they were content to talk vaguely and feebly about "moral ideals." And, to make sure that their moral ideals would not be misapplied or come to grief on a reef of hard cases, they were formulated in rich, abstract purity until they became inapplicable altogether. Theoretic ethics has been meaningless and practically useless ever since.

The typical example of this craven policy is found in the "categorical imperative" of Kant. As he formulated it, it cannot really be applied at all to any case of human action. It is so completely purified and purged that it is totally devoid of content. It vociferates, indeed, "do your duty," but it contains no hint of what your duty is. If, despite this forbidding formalism, you try to apply it, it soon turns out that you can extract from it a seeming vindication of any conduct you please. Thus, the

only reason it can urge against the crime of murder is that it cannot be "universalized." But what does this mean? Does it mean that all cannot attempt to murder or that all cannot succeed in murdering? The categorical imperative does not say. Yet the former interpretation is not impossible. Universalizing murder might commend itself to the Borgias or to the gangsters of Chicago. It might conceivably result in a society of would-be murderers, all so skillful and efficient in protecting their own life that no murders would actually occur. On the other hand, a mere bungler might use Kant's principle to justify his murder. He might say, "according to Kant any action is right that can be universalized. Well, that covers my case. Like the ruthless rhymester, I murdered my wife because I simply had to stop her snoring. Anyone who had heard her would have done the same. Therefore I did right."

The true moral of this *reductio ad absurdum* of the code idea of morals is that the attempt to regulate action by a code should be given up. We should cast about for a different conception of the relation of principles to cases. Such a conception can be found; it was recommended long ago by Aristotle and fits in beautifully with the logic of Humanism.

Moral action, Aristotle tells us, always deals with a particular case. So does all action and all thought; for every thought is an act. Moreover, the case we think about must always be a hard one, hard enough to arrest impulsive action, else we should not have stopped to think. Thinking about a moral act, about what we ought to do, is, therefore, quite in line with any other thinking. Here, too, we examine the situation in the light of our moral experience and according to the moral habits we have formed, dealing with it according to the best of our knowledge and belief. Then we act. If our habits were good, our experience of similar situations adequate, and our intelligence sound, we shall have decided aright; we shall have done what we ought and have won the approval of right-thinking men who under-

stood our case. Moreover, our moral act will react upon our moral habits. Our right decision will confirm right habits and strengthen our grasp of moral principles. These latter are thus the ripe fruits of right conduct, not its presupposition. They arise from moral experience and embody its lessons. Just as scientific laws are formulas drawn from events in order to predict events, so moral laws are formulas extracted from right actions to facilitate more moral actions. Thus a principle formulated ahead of its application to a case is only tentative. It is not certain, *a priori*, that it will apply to the next case upon which it is tried. It is always capable of further growth and should never be allowed to grow rigid. We should always remember that circumstances alter cases and that cases elicit and develop principles.

In all these respects moral knowledge entirely conforms to scientific knowledge and is supported by the analogy of the latter. In scientific knowing, also, principles arise in the course of experience and are suggested by observation of events and then confirmed by their working. Their use is to predict and to control events, and if they fail to do so they are in danger of rejection. Moreover, any application of a principle has a reaction on the principle: it may develop or modify it. Thus Humanism can make provision for the unending progress alike of science and of morals.

Lastly, attention should be drawn to a curious and instructive parallel between ethics and jurisprudence which will serve as the best confirmation of the doctrine just stated. There is not merely an analogy, but at bottom a logical identity, between a case of conduct and a case at law. The moral case and the law suit are both cases for decision, and no one could content himself in the latter with principles that cannot decide cases. This is a great advantage law has over ethics—it has to get rid of inapplicable principles. But it, too, is troubled by codes. Indeed, code-law has been the prevalent type of law. Its assumption is that the code contains all the rule required for the decision of

all cases; hence, all that the judge has to decide is what rule of the law he will apply to the case. In fact, however, he cannot always do this. Since the code was enacted, new conditions have arisen which its makers had not contemplated, and these may give rise to cases which the code cannot deal with properly. Every code, therefore, will sooner or later grow out of date. It requires, therefore, constant recourse to supplementary legislation or else to "legal fictions," by dint of which cases the legislator never dreamed of are brought under his rules by legal ingenuity.

But there exists, also, a completely different way of meeting the difficulty. Instead of enacting a code we can adopt a system of "case-law," such as that familiar to us in the "common law" of England and America. In this system the principles of the law are not formulated ahead of the case, nor ever stated explicitly and universally. Its sole assumption is that right decisions have been rendered in the past and that from them principles may be extracted which will apply to and decide aright analogous cases in the future. So the conduct of our case takes the form of quoting precedents and appealing to past decisions of the court to obtain a favourable decision of the present case. Thus, counsel for the plaintiff will contend that the judgment in *Smith vs. Robinson* is applicable, while the defendant relies on *Brown vs. Jones*. The judge may set aside both precedents and decide in accordance with *White vs. Black*.

Now this procedure has distinct advantages. It yields a very plastic law which can develop further and be adjusted to new circumstances without recourse to further legislation. Such law is "judge-made," being made by the decisions of experts, and will usually be better than the laws made by blundering, harassed, and frequently corrupt, politicians. Moreover, though no courts are infallible they can under this system correct their errors, even when a final court of appeal, like the House of Lords or the Supreme Court of the United States, has made them. Sup-

pose that a supreme court has handed down a judgment which, though legally final, is condemned by the best legal opinion, either at the time or in view of its subsequent working. Of course the actual decision cannot be reversed, any more than a wrong decision under an antiquated code; but the precedent can be sterilized and the law modified. It is merely necessary to wait till a similar case occurs which may be thought to involve the same principle. Then, if the court (which may meanwhile have undergone changes in its composition) is desirous of reversing its former judgment, it can always find enough differences between the circumstances of the first case and the second to base on them a decision in a different sense. Thereafter there will be a precedent to quote on either side; but the decision which is less harmful will be deemed the better law and the wrong decision will thus be set aside.

It may thus be shown that a distinctive treatment of moral problems, also, is associated with the Humanist attitude in philosophy, and it will clearly bear considerable elaboration. For our present purpose, however, it must suffice to have shown how the problem of right action may be handled in the concrete and rescued from stupid rigourism and empty formalism.

PROPHECY AND DESTINY¹

IT IS NOWADAYS pretty generally agreed that prediction of the future and the consequent control of the course of events are the real aim of science and the real test of scientific truth. By implication, prophecy becomes a legitimate human ambition and its possibility a legitimate study of human science. But, alike practically and theoretically, it has become a much more difficult study than it used to be. Gone are the naïve days when astute politicians could simply send a dignified deputation to some revered shrine of undisputed sanctity, to bring back some appropriate bit of advice, wherewith to impress and curb the folly of the masses and to enable those who had consulted and inspired the oracle to steer the ship of state to safety.

It is to be regretted for several reasons that the consultation of oracles is an instrument of which modern rulers can no longer avail themselves. But this does not mean that prediction has become less important humanly or that modern societies must despair of the art of prophecy. The truth is rather that the art of prophecy must be recognized to have several branches and that the decadence of the oracular only requires us to put our trust in one or more of the alternative methods, such as the fatalistic or the rational. All these ways of predicting have much in common. All alike are practical in intent and aim at extricating men from some predicament into which they have fallen. But a price has to be paid in each case for success in

¹ Printed as "Prophecy, Destiny and Population" in the *Hibbert Journal*, XXXV (July, 1937), 510-20.

prophecy. Thus the oracular demands a heavy draft on our capacity for unquestioning faith. The fatalistic requires us to accept a constitution of reality from which we should otherwise shrink as intolerably restricting or even utterly denying our freedom of action, while the rational will fail to yield us the absolute assurance which our instincts crave. But all three are well deserving of further study.

The problem of oracular prophecy is like the Zenonian paradoxes about motion and Epimenides the Cretan's testimony to the universality of Cretan mendacity in being essentially a discovery of the acute Hellenic intellect; but unlike these famous puzzles, which have baffled philosophers for some two thousand years, it concerns a genuine difficulty and is capable of conveying real instruction. Both its rivals have received attention much above their merits. For, after all, both were easily soluble with a little common sense. Zeno's proofs of the impossibility of motion could all have been cut short and silenced by a simple reminder that they were utterly self-contradictory and presupposed the wagging of Zeno's tongue,² while little would have remained of Epimenides's crux if it had been ruled permissible to ask what he meant by "liar" and whether he imagined that a "liar" was a sort of pathological converse of George Washington and must lie in every assertion he made. Oracular prophecy on the other hand does, as will appear, raise genuine problems, alike whether the prophecy is supposed to make a difference to the course of events or not; and Greek mythology illustrated this with mordant wit in the story of Cassandra. The tale runs thus:

In the heroic days, when every girl of good family might be suspected of having an affair with a god, it happened that Apollo, quite the most ungenerous and ungentlemanly member of the Olympic pantheon, cast admiring eyes upon Cassandra, a

² Cf. F. C. S. Schiller, *Must Philosophers Disagree?* (London, Macmillan and Co., 1934), pp. 239-40.

daughter of Priam, King of Troy. Now Cassandra was a clever girl, acquainted with Apollo's record, who knew how he had treated poor Daphne when he tired of her and also the miserable Marsyas when he had disputed Apollo's musical supremacy. She did not want either to be turned into a shrub or to be flayed alive. She knew also that Apollo was the prosperous proprietor of a chain of flourishing oracles. So she thought she could assure her future by acquiring the art of prophecy, highly esteemed in Trojan society, and demanded the power to predict as a *quid pro quo*. When, however, she had had it safely bestowed upon her by the infatuated deity, she changed her mind and refused to fulfil her part of the compact. The infuriated god, having sworn by Styx, could not withdraw his gift; but he added the rider that though Cassandra's prophecies should all come true, no one should believe them. Here, unfortunately, the story stops. We do not know whether Cassandra thereupon got even with Apollo by making unpleasant predictions about him, such as that he himself should be disestablished and disendowed and even turned into a butterfly and called *Parnassius Apollo*. Neither are we positively informed that when Apollo said "everything" Cassandra prophesied should come true and that nevertheless "no one" should believe her, he really meant his dictum to be strictly universal; but, as good formal logicians, we must assume that neither Apollo nor Cassandra herself was exempted from the devastating operation of her gift.

If so, decidedly interesting philosophic consequences will accrue. We shall have to inquire what is Cassandra's real position as the result of her one-sided bargain with Apollo. How much power has she gained thereby? Apparently far more than is commonly suspected. She knows that all her predictions, however improbable they may seem to her when she makes them, will come true. She need not, therefore, stint herself in predicting whatever she desires. She knows also that no one else will believe her predictions and can be sure that everyone else will

act as if she were a false prophet. This will enable her to say "I told you so," when the event vindicates her prescience.

But she herself will be in a difficult position. For she will know what will really happen, even though she too cannot feel as though it would. In order, therefore, to adjust herself to the course of events, she will have to *act as if* what she feels and believes to be a false forecast were true, and what she believes to be true were false: she must, therefore, repress her own feelings as a misleading guide to life. If she can thus set aside her feelings, the event will bear out her prediction, and her action will be a triumphant success. She can dictate the course of history. She can predict the victory of Troy and bring it about, in spite of all the ruses of Greek strategy and all the efforts of Trojan horses and Trojan asses to the contrary. Her crop predictions and stock-exchange gambles will speedily convert her into the greatest multimillionairess in Asia. Practically and pragmatically she will be an immense success.

But theoretically she gets into a complicated position. For she will habitually be acting contrary to her own professed convictions. And after a while she will find it hard to persuade others of her good faith. They will say—

You predicted a bumper olive crop this season; we thought it nonsense, but it came about. You say you agreed with us; but you sold olives short and made a pretty penny. Are not your actions a better clue to your real beliefs than your professions? Pragmatically you *acted as if* your predictions would come true, as they certainly did. Ergo, you really believed them. We regret to state that you were a true prophet and exploited us this time; we shall think twice before we disbelieve you the next time.

What, moreover, would be the effect of the continuous and astounding success of her predictions on Cassandra herself? Could she, herself, continue to disbelieve in them? Would not the act-as-if-true attitude prove untenable and rapidly grow into a full acceptance of their truth? At any rate, it is clear that

Cassandra becomes a leading case in the great pragmatic controversy about the relations of action and belief. This is why I have discussed her predicament in Chapter XV of *Must Philosophers Disagree?*

Moreover, her case raises a further metaphysical question of great importance. What difference does foreknowledge of a future event make to the occurrence of the event? We may hold that our foreknowledge may (1) prevent the predicted event from occurring at all or (2) modify its occurrence in an infinity of ways or (3) that it will make no difference at all and that the event will happen just the same. In strict logic, the first two of these alternatives may indeed be grouped together as meaning that foreknowledge will make a difference, but as our common-sense interest is usually in the character of the difference and in modifying the event for the better rather than in stopping it altogether, the two cases had better be distinguished. The third case is important because it forms the transition from the oracular to the fatalistic form of prediction.

Fatalistic prediction arises when religion gives way to science and a naïve belief in oracles yields to an uncritical belief in scientific determinism. Its essential belief is that what will be, will be and must be, and that nothing we can think or do can alter or avert the predestined process of nature's necessary march. Ultimately every event is exactly calculable and inevitable, and if only we knew enough we should be forced to realize this.

The historical origin of this theory is not known to science; but we may suppose that in the earliest days of Babylonian star-worship, some able and ambitious priest who was a bit of a mathematician and of a humbug, realized the advantage to himself and his profession of spreading a belief that all human happenings could be rigourously deduced from observation of the movements of the heavenly bodies. He, thereby, generated the pseudo-science of astrology, the dogma of determinism, and what I have called the fatalistic attitude towards prediction. All

three of these aim at gratifying the desire to predict; all three rest on the assumption that absolutely exact prediction is possible and are willing to sacrifice to it all human efforts and desires to alter or avert the predestined course of events or to break the ineluctable chain of cause and effect.

Nevertheless, it is not difficult to show that dogmatic determinism is (1) a false inference from the data on which it relies, (2) a fallacious interpretation of scientific method, and (3) an impossible account of causality.

(1) Complete determination, with the exact prediction it implies, is not an observable fact in any science. It exists only as a matter of faith in the last resort. It is often alleged to have been proved; but no scientific observation holds beyond the limits of the accuracy of the observing instruments. In the social sciences this impossibility of exact prediction has always been a familiar fact, but the physical sciences were elated by the growing accuracy of their predictions. Recently, however, physics also has had to surrender to facts which set a limit to the accuracy of its observations. It is found that there are no means of determining at the same time both the place and the velocity of electrons accurately. For the reason that to observe the finer processes of nature it is necessary to illuminate them; but in so doing, we subject them to light pressure and this rapidly repels them. Hence, our essential assumption, that our act of observation does not alter the object observed here breaks down. This is the famous "Principle of Heisenberg," and it imports an element of contingency into all scientific observations and shows that "exact" observation is a chimera.

(2) Secondly, complete determination is a gratuitous assumption. For it is a misinterpretation of scientific method to assume that such determinism is a *sine qua non* of scientific inquiry. It is not necessary to conceive it as an ultimate fact in nature; it is quite enough to take it as a principle of method. If we want to make a forecast, we must assume that the course of nature is

such as to let her course be predicted. But our predictions need not be exact to be serviceable, and any accuracy which goes beyond what suffices for our purpose is a waste of time and effort. Moreover, even if the operations of nature are not fully determined, they may yet be regular enough to be treated as if they were. So long, therefore, as it is possible to find habits in nature, it is possible to talk about "laws" of nature. But these "laws" also should not be taken as absolute; they will serve us just as well if taken as statistical averages, and stable habits. We cannot prove them to be more, and it is bad method to assume more metaphysics than we need for purposes of scientific calculation. Hence, dogmatic determinism is not a postulate of scientific inquiry; determinism is only a methodological assumption and in the end a fiction.

(3) The third scion that springs from the root of fatalistic prediction is the causal law or necessary *nexus* between cause and effect, which controls events in their minutest particulars. This is a favourite field for philosophic discussions which are as futile as they are interminable. However, the chief objection to this way of predicting is that it can be shown to involve flat contradiction. Originally fatalistic prediction had the purpose of reaching a course of events which was knit together by its immanent necessity and could in no way be tampered with by human interference. But the conception of causal connexion will not satisfy this demand. Hume showed long ago that the causal *nexus* was only a human addition to the observable events, and he ought to have convinced philosophers that necessity is always and everywhere a mark of subjectivity. But the majority of philosophers have never been able to digest Hume. Unfortunately, also, Hume himself omitted to mention that his argument applied to all cases of "necessity," not merely to causal connexion. Nor did he see that the essence of causal explanation was analysis rather than synthesis, the dissection of the whole chaotic flow of happening into "events," "effects," and

“causes” selected from it by human manipulation and the play of purposes and interests. So in the end the causal chains with which the human intelligence seems to have fettered itself are of its own forging and of its own imagining.

Thus the whole fatalistic analysis of the course of nature is a blunder and a failure. It takes as final fact what are only methodological assumptions, pragmatic and self-defeating fictions of limited utility, which must be seen through and discounted if we are to find a basis for rational prediction.

Before, however, rational prediction can be properly discussed, it will be well to consider the exploits of some of the false prophets who have tried to use the fatalistic method of prediction. Oswald Spengler³ has formulated a pretentious law which is asserted to govern the rise and fall of civilizations in cycles extending over about sixteen hundred years. But this law is merely pseudo-science. It is very rash to derive a universal law from the hasty inspection of eight or nine cases of social history which overlooks exceptions like China and Japan and ignores the many alternative explanations of the facts on which Spengler has chosen to base his interpretation. A truly scientific historian should at least try to derive the course of human history from human psychology and the conditions of human life. Nor is it wise for a prophet to omit to consider the effect of his prophecies on the minds and actions of those to whom they are delivered. To assume without more ado that history is subject to the notion of “destiny” and that there is nothing that can be done about it is not only fatalistic but also renders all our efforts vain, including that of foreseeing the future. For what is the use of foreknowledge if it cannot avert our predestined doom?

Similar objections hold against all attempts at fatalistic prediction. They all represent the future as predestined, and regard human intelligence as impotent to alter or improve it. This was

³ Oswald Spengler, *The Decline of the West*, translated by Charles Francis Atkinson (Knopf, 1926-28).

precisely the position in which Apollo thought he had placed Cassandra. But it makes the assumption that knowledge can make no difference to action, and that an intelligent agent must be as dumbly helpless as a stick or a stone. We have seen, however, that scientific method does not demand this interpretation. Determinism may be a methodological assumption rather than a scientific fact, and it need not be so taken as to frustrate the human desire to control the future.

This conclusion takes us back to "rational prediction," which we must regard as the true aim of scientific effort. Rational prediction should be taken as the end product of reflexion upon the probable consequences of extant conditions and tendencies. It does not lay claim to exactness and infallibility, nor does it demand literal fulfillment. It tries rather to evaluate the probabilities which it is reasonable to take into account and to adjust action accordingly. Its predictions, therefore, convey warnings, to be heeded by the wise, rather than announce destinies and ineluctable dooms. So it leaves plenty of room for intelligence to devise means of escape from dangers that are foreseen.

It differs from fatalistic prediction in realizing that all rational predictions are only probable. Such predictions are deductions from premisses and admit of the reaction of intelligence upon unwelcome prophecies. If predictions are deductions, they may have to be changed if we change their premisses; hence our actual predictions are always more or less hypothetical. They will come true unless something is done to stop them; but we may be able to prevent their occurrence. Thus when Croesus receives the oracular response that by crossing the Halys he will destroy a mighty empire, he may be intelligent enough to reflect that the empire may be his own and refrain from going to war.

Furthermore, it should be recognized that the publication of a prediction always alters in some degree the conditions on which its success depends. It may always modify the actions of those whose interests are affected by the prediction, and their

action may alter the consequences. Common sense is well aware of the fact that knowledge can alter the course of events, and that crop reports and advance information may make all the difference in the world to the course of speculation.

Nor is there any sound reason why science should be less intelligent. Why should it not recognize that its predictions are products of intelligence, and means for use by the intelligent and that the consequences will be very different according as they are passively accepted or intelligently modified? Thus the future regains the contingency which fatalism had denied it, and man his freedom and responsibility.

But there remain some paradoxes in prediction, which may again be illustrated by the case of Cassandra. If Cassandra prophesies truth and is disbelieved, her prophecies will come true. So she will first be regarded as a false prophet; that she is a true one will be recognized too late. But if she is believed, her prophecies will not come true. They will be counteracted by those who have the power to modify what is predicted. So, though she seemed a true prophet at first, she will prove a false prophet in the end. She will thus have a painful choice; either she must be content with the poor satisfaction of saying "I told you so," or she must avert by her foresight the evils she predicts—at the cost of being scouted as an alarmist and a pessimist.

That this is a real crux, and not an idle academic puzzle, may be illustrated by Malthus's discovery of the law of population. This was a great discovery and incidentally led to the discovery of Darwin's conception of natural selection. It has cast its shadow over all subsequent thought about the future of man. As, for example, in Dr. G. K. Bowes's excellent article on "The Doom of Social Utopias."⁴ Dr. Bowes's article would be irrefutable, if it were true that human intelligence can do nothing to control and reverse the effects of natural fertility, birth control, the

⁴ *The Hibbert Journal*, xxxv (January, 1937), 161-75.

differential birth-rate between different classes, the preference accorded to weakness and incompetence by our present social institutions, and the consequent inevitability of human decay. But the alternative is, of course, the need of reforming our institutions by the use of eugenical science. Unfortunately Dr. Bowes is not very familiar with the possibilities of eugenics. As he seems to believe (p. 173) that no one has given any thought to the problems of positive eugenics, I must refer him to my *Social Decay and Eugenical Reform*.⁵

He also fears that "democracy," meaning thereby the demagogic eyewash of our present politicians, would never stand eugenics (Bowes, p. 172). But surely even our so-called democracies could be reformed before they have driven society down the path of the Gadarene swine. Lastly, it is astonishing that Dr. Bowes should not be alive to the significant portent that already one first-class nation has committed itself to a far-reaching programme of eugenical reform. At present the programme gets too much of its popular appeal through being wrapped up in racialist and nationalist theories of a pseudo-scientific sort, and it is doubtful how long it will last; but, if it works successfully, it may confidently be predicted that the rest of the world will have to reform itself on scientifically eugenical lines or perish.

The over-population Malthus predicted did not in fact occur. Why not? Because the more intelligent realized in time that there would be over-population unless some form of birth-control were adopted. Now the prospect to which our present birth-rates point is rather a population declining, slowly at first, and then more and more rapidly in all civilized societies. But does anyone believe that this is how the human race will become extinct? No; long before race-suicide becomes inevitable and imminent, a great variety of expedients will be introduced to

⁵ F. C. S. Schiller, *Social Decay and Eugenical Reform* (London, Constable, 1932).

raise the birth-rate to or above the safety-limit. Thus, in a general way, forewarned is forearmed.

This, however, is not to deny that our future is endangered by enormous masses of social stupidity. All civilized societies are at present indulging in many practices which are bound to ruin them if they are continued. Let me enumerate a few. Democracy and most forms of freedom are seriously endangered by the incompetence and dishonesty (of several sorts) of those who set up as leaders of the people. If, as is not unlikely, the Communist and Fascist tyrannies supplant it, the primary reason will lie in the follies of the Democracies. Education is largely frustrated by pedantry and defeated by its moral inefficiency. Religion is paralysed practically by its failure to transform theory into practice and shackled theoretically by ambiguous formulas which have largely lost the meaning they had, and its advocates have not succeeded in reaching agreement upon any other. Then there is war—long the sport of kings and now the nightmare of peoples. But nowhere are the rulers taking any effective steps to stop its recurrence, and it is more than likely that the next Great War (Armageddon III) will wipe out our present civilization altogether. But in the long run the most pernicious of our social practices are those that flow from the dysgenic constitution of our civilization. It is so constituted that it recruits itself by preference from its morons and criminals and taxes its most valuable members out of existence in order to preserve the less valuable. If civilization is to survive, some effective scheme of eugenics will have to be devised to counteract this fatal trend of every civilization that has hitherto existed.

The case for pessimistic prediction thus seems quite overwhelming, if we consider merely the present situation as it is, without reference to its historical context. But if we take the latter into account, we may, perhaps, find consolation in the past. Prophets of woe have always abounded, and their prophecies have never yet come true. This may have been due to the

fact that they have acted as warnings as much as to the fact that their authors exaggerated; yet if the state of the world at any past time is subjected to careful scrutiny, it is remarkable that it is always such as to afford reasonable ground for the gravest apprehensions. Civilization always looks as though it were about to crash; but it never does. This does not, of course, justify a comfortable thought that it never will and that we can go on for ever sinning and fooling with impunity. But it does suggest that we can pull ourselves together, even on the brink of destruction, and can at the eleventh hour escape from all the destinies and dooms that menace us. It seems to be true that the condition of the civilized world today in many ways resembles that of the Greco-Roman civilization in the early days of its decline, and that we have made for ourselves a number of additional dangers that did not beset the ancients; but there is one important difference, which may be vital. The ancients, though like all people they were fond of talking of a Golden Age and the good old times, did not realize that their civilization was in a parlous state, declining and verging towards collapse. So they made no intelligent attempt to stave off their destruction. We, on the other hand, are keenly interested in the future of mankind. Our prophets, whether of woe or otherwise, are busy predicting our future and gauging the social effects of every new factor that enters our life or comes into our ken. And some of them are remarkably successful. Others are falsified only by the steps we take to counteract them. Hence we ought not to discourage prophets too severely. The intelligent thought which is given to rational prediction is well bestowed. It may warn us in good time, and even if literally falsified, may serve the purpose for which prediction was needed. At any rate, it should be clear that the problems connected with prediction are fraught with destiny and powerful to determine our weal or woe.

POLITICAL PHILOSOPHY

THE CRUMBLING BRITISH EMPIRE¹

ONE OF the advantages of long-distance prophecy is that the prophet of evil is usually well out of the way in his grave before his prophecies can be fulfilled or fail. Whether they come true, therefore, or are falsified, he cannot be called to account. He gives away the advantages of this position, if he returns without need to the subject of his predictions and so draws attention to his possible failures. Nowadays, however, events move so rapidly and the course of history has acquired such momentum that a modern Cassandra runs real risks of experiencing the truth of her own predictions.

Accordingly, I should not have been surprised to be called² upon to justify the warnings I propounded, only eight years ago, in a little book in the "Today and Tomorrow Series," called *Cassandra, or the Future of the British Empire*. I should be astonished rather at the uncanny speed with which my gloomiest vaticinations are coming true. Already Cassandra's difficulty is no longer that of finding some one to believe her prophecies and to heed her warnings; it is rather that of finding some one who disbelieves her and yet is willing to avert the disasters which are clearly seen to be impending. The world is in a bad way, but it is not at present suffering from a lack of foresight: it has a

¹ From *Current History*, XXXIX (October, 1933), 25-31.

² Two years after this article appeared, Dr. Schiller was asked by the publishers of *Cassandra* to complete his prophecies in a book, *The Future of the British Empire after Ten Years* (London, Kegan Paul, Trench, Trubner and Co., 1936). Editor's note.

clear perception of its danger, but this is rendered vain by a paralysis of statesmanship.

In *Cassandra* I declared that "three great dangers clearly beset the future of the British Empire, each of them affecting and aggravating the others. The first is the labour problem in Britain, the second is Britain's European entanglement, the third is the permanent strain which this puts upon the cohesion of the parts of the empire." Has anything happened in the last few years to modify this forecast? It can hardly be denied that these three dangers have all developed enormously and that now they completely overshadow the political landscape. Let us take them in order.

As regards labour, the unemployment problem in Britain, as elsewhere, has grown completely out of hand. Instead of one million unemployed, we now usually have three million. Thousands of young people are everywhere growing up who have never done a stroke of honest work in their lives, have never had a chance of doing such work, and, humanly speaking, never will have. Society simply has failed so to train them and to organize itself as to be able to employ them. Nor are they compelled to take such work as is available, like domestic service, or building houses and roads, or a thousand useful things that could and should be done if the labour were available. They live, miserably enough, on the dole, or, more officially, on the "social services" which the politicians have provided for the voters, and they constitute not only an economic burden but also a political danger. In Germany they form the irresistible force behind Hitlerism and have established a reign of terror; but to all appearance our British politicians are as blind to the signs of the times as were the German parliamentarians.

So the old problem of the idle rich is now utterly dwarfed by that of the idle poor. Nor is there any remedy, because no politician of any brand (with the exception of Austin Hopkinson, whose voice may now and again be heard crying in the wil-

derness which is the House of Commons) will either face the facts or educate his constituents to distinguish between measures that can cure and those that must aggravate the evils of the situation.

As measures of the former kind one might mention, first, the shortening of the hours of labour, a concession which the employers of labour owe not only to their employes but also to themselves and to humanity. If it were universally enforced by law, it would not enable any employer to steal a march upon the rest; while if it were accompanied by an organized system of shifts, it would not necessarily diminish output and raise the costs of production. Industrial machinery has little need for rest and could continue to be operated though the attendants on it were changed.

But, of course, if leisure were distributed more equably and generously, it would become vitally necessary to remodel our systems of education. At present they are essentially vocational and aim at training men to do their work well; in future they will have to be supplemented by instruction which will teach the workers to use their leisure well or at least harmlessly.

Next, the present situation affords a providential opportunity for getting many sorts of work done which, though socially beneficial, cannot be rendered immediately remunerative. The unemployment crisis should be exploited not only for clearing away slums but also for starting crusades against a number of pests with which we have put up far too long. Rats, lice, flies, mosquitoes, and many other sorts of noxious insects, and weeds, like nettles and thistles, can and should be exterminated. Not only the health but also the wealth of every country that would use its unemployed for such crusades would gain enormously. Moreover, the crusaders' work would be interesting and even amusing if the hours were not too long. Rat-hunting, for example, would appeal to many men (as well as dogs) as a popular sport rather than as work; and fly-swatting might again be

recognized as an imperial hobby, as in the days of the Emperor Domitian.

On the other hand, it should by now be clear that economically, at least, nationalism is an evil and a major source of poverty. It stands to reason that the world as a whole will be best off if every region and every people is allowed to produce the goods for which it is best fitted by nature, without regard to politics. But political considerations have completely upset this simple principle of trade. Ever since peace was concluded all States have attempted in growing measure to render themselves self-sufficing and to equip themselves with all they need, above all with munitions of war. Over a huge area like the United States this policy may conceivably succeed, if Americans are willing to pay the cost, which includes the sacrifice of export trade and the complete renunciation of interest on foreign debts, but it becomes absurd in States like Iceland, Ireland, and Estonia.

It is folly, also, to persist in conceiving international trade as a form of warfare instead of regarding it as an exchange by which both parties gain. This delusion is the root whence spring the ever-growing tariff walls and the paralysing apparatus of quotas and embargoes that fetter trade. It is hardly an exaggeration to say that for the past fifteen years no government has enacted any regulation which has not had the effect of further strangling trade.

Yet it is undeniable that in all their pernicious activities governments have had the support of an equally ignorant and foolish public opinion, even for their most fatuous regulations. Even Mr. De Valera's antics in Ireland have received the sanction of popular approval.

Perhaps, however, such manifestations of the people's will should be treated as proofs of the decay of democratic intelligence and as symptoms of a collective insanity which seems to be spreading through the world. At any rate, they are to be

paralleled only by an incident in one of Lewis Carroll's books, in which a politician is hooted down by an infuriated mob and, when he can speak no longer, has to listen to what they are saying. He finds that they are shouting for less bread and more taxes. That is what the people are in fact demanding when they cry out, "Buy British [or Irish, or American]." And they have been doing it for fifteen years. Why not?

A second procedure by which governments have been drying up the sources of prosperity has been a very general tampering with standards of value and a debasing of currencies. During the war these practices were excused on the plea of necessity, and they certainly enabled the war to be carried on—perhaps too long. After the war labour everywhere cried out for a "capital levy." Capitalism protested, with apparent success. But has not its victory proved illusory? In point of fact the overwhelming burden of the debts created by the war has by now forced all the former belligerents to devalue their currencies and to repudiate their debts. Some of them struggled hard to avoid this fate. The last two resisters were the pound and the dollar; but the former succumbed, reluctantly, in 1931; the latter, proudly, in 1933.

Is it more than a question of words whether such procedures are better described as capital levies or as repudiation? Whatever they are called, they perform the function of lightening the intolerable burden of debt, which would otherwise entail the collapse of a capitalist economy.

For, in the third place, a certain balance between the total amount of production and trade and the charges on it in the shape of debts and taxes, is essential to the functioning of the economic side of life. Whether the burden on industry is due to debt or to taxation, and whether the debts are public or private, are questions of less importance. A great factor in the depression was that the total burden had become too great. From the governments down, every one had been allowed and

encouraged to run into debt, and as soon as the tide of prosperity began to ebb no one could pay.

Furthermore, government expenditures, stimulated by the waste and prodigality of war time and by the growing cost of the social services, which are the modern mode of electoral bribery, had remained persistently too high. By the autumn of 1931 Ramsay MacDonald's second government found that it had outrun the constable and steered the ship of state on to the rocks of bankruptcy, but even so the majority of its members did not repent. They were willing enough to abandon the gold standard and to run the incalculable risks of inflation, but they shrank from reducing the nominal money value of the dole. So they deserted the ship, and only a handful of the Labour party followed MacDonald into the new National Government, a coalition formed to balance the budget and to save the country.

In October, 1931, it appealed to the country and obtained an overwhelming majority and a "Doctor's Mandate." But it has done very little with it. Some slight economies, not exceeding ten per cent (except in the case of the judges, who were mulcted twenty per cent) were imposed. Taxation was increased, and the budget was balanced. The dole was administered a little more strictly and cut ten per cent, but the fall in prices promptly made its real value greater than ever. Nevertheless, the pound was driven off gold by the exaggerated fears of foreign depositors of gold who still looked upon London as the financial capital of the world.

After that, further inflation was the readiest means of so reducing labour costs that British industries could continue to compete in the world markets. Administrative threats and an act against profiteering succeeded in checking any considerable rise in the cost of living, by curtailing the excessive spread between wholesale and retail prices. So British trade has not declined so much as might have been expected. But its condition is still unsound. Wages are still insufficiently elastic, being still

largely fixed by the political influence of trade unions, and are still too high in the "sheltered" trades relative to those that work for export. It seems very improbable that Britain will ever regain her old supremacy in cotton, coal, and shipping.

Moreover, she, too, has finally delivered herself over to the demon "Protection," at the general election of 1931. This surrender was long in coming, but it should have been foreseen, for the condition of the workers was sufficiently desperate for them to listen to deceptive promises of protectionist employment. It will not be easy to reverse this decision, which is bound to do damage—perhaps irreparable—to the hopes of freer trade and to have unfavourable repercussions on Britain's foreign relations. If the dream of an imperial customs union could be realized, it would soon become a question of how long the world would tolerate the British Empire.

Foreign affairs have proved quite as much of an entanglement as was predicted; and under all administrations alike British policy has cut a sorry figure. There has been no effective leadership and hardly any attempt at it, either in Europe or in the East, either in matters of disarmament or of reparations or of war debts or of economics. To all appearance British policy has oscillated impotently between two distracting fears—of giving offence to America and to France.

In 1928, alone, something significant seemed to be about to happen, but this move also was allowed to peter out. After the British and American admirals had been allowed to negotiate together at Geneva and had, very naturally, arrived at disagreement rather than disarmament, Sir Austen Chamberlain turned the French loose upon his admirals. The result was a mysterious agreement with France, which seemed to be designed as a permanent alliance, for the British admirals conceded to the French as many submarines and destroyers as ever they pleased, and this seemed to imply that henceforth no disagreement between Britain and France would be conceivable. In view of all the

circumstances thoughtful people asked whether such an alliance would not be tantamount to vassalage. Still more puzzling were the staging of air manoeuvres over London, in August, and the official report that some 180 hostile planes would have been shot down, but that London would have been burnt. This report seemed to be intended to impress the necessity of a French alliance upon the British public. In September a ray of light was thrown upon these dark secrets of state by the enterprise of a young correspondent of the Hearst papers in Paris. He obtained some confidential French documents which seemed to show that the proposed agreement with France was directed against America. More significant, perhaps, than the actual texts were the actions of the French Government; the correspondent was promptly expelled from France, and Mr. Hearst has not been allowed to land there since. Finally, Sir Austen Chamberlain fell ill and took an extended holiday, while nothing more was heard of his agreement, presumably because his Ministerial colleagues refused to endorse his policy when they discovered its character.

Now manifestly these curious episodes (and others not unlike them) do not mean mere incompetence in the management of foreign affairs. They are due to a permanent dilemma in which the British Empire is involved. As *Cassandra* put it, "the British Empire is left at the mercy of one foreign power and its capital at the mercy of another." If we offend America, we alienate the Dominions; if France, we may wake up any day to hear the Angel of Destruction beating his wings over London. Yet neither of these fears can be avowed, and the French have a monopoly of talk about "security" at international conferences.

Since *Cassandra* described the British Empire as easily "the most ramshackle empire on earth, *vice* Austria exploded," it has rapidly grown more of a paradox and a marvel. There has never been anything like it in history, and it defies all political

philosophy to explain how it holds together. It is utterly anomalous, alike in its constitution, in its fiscal policies, and in its racial composition.

Its legal basis, in the first place, is constantly changing because it indulges periodically in Imperial (no longer Colonial) Conferences, and these issue in changes which invariably weaken and loosen the bonds which unite it. After the establishment of dominion status, which gave to Canada, Australia, South Africa, New Zealand, and so forth full control not only over their internal affairs but also over their tariffs, two such bonds were supposed to exist. One was the common allegiance which all parts of the Empire owed to the Crown, that is, the King in his constitutional capacity, in virtue of which a royal proclamation was binding on the whole Empire; the other was that the Crown's responsible advisers in Britain, the British Ministry, had effective control of the whole Empire's foreign relations. They had no doubt found it more and more advisable to consult the Dominion Governments before they did anything important that affected the Dominions, but still they alone had access to the Crown; and a declaration of war, for example, advised by them, was binding on the whole Empire.

But in 1931 the British Parliament passed the Statute of Westminster, which divests the British Ministry of its privileged position and puts it on a par with those of the Dominions. Henceforth the Dominion Ministers are the King's advisers for each Dominion and recommend the appointment of his representative, the Governor-General. There is no longer, therefore, any single body that can advise the Crown on behalf of the whole Empire. In the future each Dominion will have to declare war separately—if it chooses to go to war.

This evidently opens up the question of what would happen if a Dominion Government gave the Crown advice incompatible with that proffered by the British Government. The question cannot be answered till it has arisen. But seeing that last

year the Irish legislature was actually permitted to repeal the law which imposed the oath of allegiance and that a vigorous tariff war has been raging between Ireland and Britain for many months, one cannot but wonder how much of a bond of allegiance the Crown continues to be.

The commercial interests of the Dominions have long been pressing Britain (their chief market) for preferential tariffs and promising abatements from their tariff rates which, however, have remained prohibitive even after the empire preferences had been deducted. At last the Ottawa conference of 1932 put these professions to the test and showed how little substance there was behind the dream of a fiscally united empire. The Ottawa conference did not quite justify the apprehensions of the free-traders who had predicted that it would break up the Empire. But it is generally admitted to have shown that no real customs union of the Empire is now realizable, for the Dominions are clearly determined to manufacture for themselves in spite of the discontents which their extreme tariffs are provoking in their own components, for instance, Western Canada, Western Australia, Natal.

Racially the British Empire continues to house an array of hornets' nests. In Africa (Kenya, Rhodesia, and South Africa) the whites are clearly bent on policies which must sooner or later provoke race wars. In Egypt the farce of parliamentary rule has indeed been ended by a reversion to monarchy, but no permanent settlement has been reached. In Palestine (a far-too-much Promised Land) the British mandatory has the difficult task of protecting the Jewish minority in its "national home" against an overwhelming Arab majority. In India the British Raj is plainly crumbling: it has to hold the balance even between a multitude of warring creeds and to try to satisfy the national aspirations of the educated classes. The negotiations concerning the future constitution of India are still continuing, and it is hard to say what they will result in. But it seems most

improbable that any settlement will be reached that will bring peace, will last long and will be more than a further step toward the total evacuation of the country.

When this has happened and the Dominions have declared themselves independent (which they may not trouble to do for some time yet), what will be left of the British Empire? With its sea power gone, nothing, it would seem, but a precarious hold over a number of minor Crown colonies, mostly liabilities rather than assets and in need of periodical assistance from "grants in aid" in order that they may not default on their loans, nothing but an ever-dwindling trade and an ever-growing overpopulation. The British peoples are sensible and patient, but is this not a prospect from which all human nature must revolt?

Meanwhile, how are the masses of the people facing the steady disintegration of the British Empire? Strange to say, they hardly seem to be aware of it. They have not yet realized all that is at stake; they have not yet grasped that unless they can pay for their food imports by exporting manufactures, the population of (once) Great Britain must come down to one-quarter of its present number. Neither do they seem to resent the fatal policies by which their politicians are bringing them to this pass. They seem so wrapped up in struggling for their daily bread and in keeping up with their daily sports that they are becoming more and more indifferent to what their politicians say, knowing that in no case is anything ever done. Nevertheless, they may wake up some day and surprise the world—and themselves—by shaking off the *paralysis agitans* of parliamentary government, as Russia has done and Italy and Germany. The misleaders of the people had better be agile on that day!

Such is the most likely prognosis for the future of the British Empire. It is somber; yet it leaves room for a gleam of hope. It seems just possible that, in spite of all the forces tending to

dissolve it, the British Empire may somehow hold together. Indeed, it may hold together in virtue of the very looseness of its composition, of the very absence of all constraints, for it thereby avoids the internal friction which wears out more coercive governments.

There would be no precedents in history for this suggestion, but we have seen that there are no precedents for the British Empire anyhow. Moreover, history never quite repeats itself and today is reversing many precedents. So it may even be conjectured that if by some divine grace or lucky chance the British Empire can hold together by dint of mere sentiment, it may give a valuable lead to and serve as a model for the rest of the world. For if it is the manifest destiny of civilization to unify mankind, it is even clearer that at first this union will have to be very easy-going and will be able to use only the most tenuous bonds and the most elastic institutions. And the present British Empire may show the world how to do it.

CAN DEMOCRACY SURVIVE?¹

POLITICALLY, the chief lesson of the World War has been the utter failure of expert government. Expert government is one of the greatest and most attractive of political ideals, to which the world is constantly reverting in spite of frequent disappointments. It sprang from the protest of the Athenian aristocrats against a democracy which excluded them from public service and nominated its highest officials by drawing lots. When Socrates declared that virtue was knowledge and government an art that needed skill and science, he was making himself the mouthpiece of the aristocratic criticism of Athenian institutions and the father of all bureaucracy, not only of the bureaucracy whose paradoxical features were presently to be delineated in the *Republic* of Plato. Socrates had his reward—in the cup of hemlock; for the democratic leaders did not fail to see what a danger bureaucracy would be to the sort of democracy they led by the nose. But bureaucracy triumphed, nevertheless—alike in the substitution of professional armies and navies, controlled by privileged and trained officers, for citizen levies, and in the substitution of a regularly selected and permanent civil service for the popular election of magistrates and judges.

Before the war bureaucracy was dominant almost everywhere, and many great States were pretty nearly nothing but bureaucracies. In the Austrian Empire the bureaucracy alone preserved its unity amid a chaos of quarrelling nationalities; the Russian

¹ From *The Twentieth Century and After*, CXIV (October, 1933), 385-97.

Empire also was ruled and held together by the bureaucracy of its *tchinovniks*. Germany boasted (with some reason) that it had the most highly trained and skilled, the most intelligent and efficient, of all bureaucracies; while only the Indian Civil Service could claim to rival it, though the Indian Civil Service had little reason to be proud of its record in Mesopotamia during, and in India after, the war. Diplomacy, moreover, was a highly privileged and aristocratic profession in all countries—except in America (the decisive factor!)—which none of the skilled diplomats could understand and which they all mismanaged.

Yet how did all these experts and professionals conduct affairs and meet the emergencies created by the war? Never has a war employed so many generals and disclosed so few good ones. Never have the occult arts of diplomacy incurred and deserved such widespread contempt. Never have there been greater opportunities for statesmanship more pitifully lost. In the Great War the great bureaucracies were all defeated and destroyed, after having led their countries to ruin through a series of incredible blunders—diplomatic, military, and political. The Austrian bureaucrats, who started the war on the false theory that all the various peoples of the Empire would be as eager as they were to avenge the murder of Francis Ferdinand, contrived to alienate their allies Italy and Rumania. The Russian bureaucrats lost the war at the outset by mobilizing their coal miners, although they had already called up eleven million more men than they could arm and had at once lost the Polish coalfield and the imported coal from Britain and Germany. Hence their growing inability to move their armies and to feed their cities, till they were swept away by a revolution the imminence of which they had not the wits to perceive. The German bureaucrats, after having been obsessed for years by the fear of a “war on two fronts” against France and Russia and having rejected on this ground Joseph Cham-

berlain's offer of a British *entente*, managed to plunge Germany into a war, not only with France and Russia, but also with the British Empire, and forced America to join their foes at the very time when the outbreak of the Russian Revolution offered them an easy victory.

By contrast with the "skilled" rulers of the bureaucratic States the politicians of the "democracies" shone out as paragons of skill. They at least had not forgotten the arts of persuasion and could get their peoples to follow them. They at least had not forgotten the ancient maxim *populus vult decipi* and could successfully deceive their peoples. They told all the necessary lies to win the war (and sundry others); but they got them believed, whereas the skilled rulers had lost even the art of lying plausibly. This was a great source of weakness to them, both at home and abroad: they had lost even the perception of the right moment to stop the war and to save their own skins! In short, never in history was there such a display of bureaucratic stupidity and professional ineptitude.

These historical facts suggest, not only that there is a specific sort of stupidity which is generated by bureaucracy, but also that there is a real art of demagogy which is understood and practised by the leaders of democracies and which considerably tempers the latter. It is, of course, an art of deception, which induces the masses to fight to make the world safe for democracy, with the results we behold today; but it is a real enough art, nevertheless. It will be the aim of this article to divulge the operations of this art, to show to what a farce it succeeds in reducing real democracy, and to indicate what must be done if democratic forms are not to be superseded as illusory and intolerable.

To explain the workings of this art, however, it will be necessary first to clear up the notion of democracy. Democracy is not the government of the people by the people for the people, as the people are so often told. In the more advanced democ-

racies it is more nearly a government of the people by the politicians for the politicians; but it is at any rate a form of government. As such it competes with other forms of government and seeks to justify itself by claiming to provide better government. It has advantages and disadvantages; and what it concerns the people, or at any rate sensible people, to know is whether it yields the best government that can be got. Now among its advantages is that it is as a rule a great help to a ruler to ascertain in advance how people are disposed towards his measures; so it is well to consult the people and to shape one's course accordingly. Moreover, as has sagely been remarked, it is better and easier to count heads than to break them.

Every government, it is true, obtains a certain measure of popular assent; otherwise it does not endure at all. But this assent is often implicit and passive, or only apparent, especially in countries where the people are not consulted or their consultation is a sham. Hence it is a real advantage of the democratic form of government that it presupposes and demands a much more active assent of the governed. A democracy cannot be a success unless the masses are actively interested in politics and determined to obtain good government. Where these conditions are not fulfilled, there is nothing in democratic forms to prevent democracies from sinking very low in the scale of values.

Now the political principles upon which all democracies, both ancient and modern, have been based are two. In the first place, the sovereign people does not govern, but others govern it, either by force or by guile. It is therefore sovereign only in name. Secondly, the Minister, or manager, of the sovereign people, if he desires to put through the measures he judges good, must distract and more or less deceive the people. Wherever the people have political power enough to be worth conciliating, the actual rulers must keep them contented and amused. Even the Roman emperors found it expedient to pro-

vide *panem et circenses* for the mob of Rome, or, in modern parlance, a dole and race meetings. He has, of course, far more powerful agencies at his command to work upon the public mind than ever the ancients had. Thanks to the radio he can address the whole world. Thanks to the press, he can daily indoctrinate the people with what he wishes them to believe, without their suspecting the source alike of their views and of their beliefs.

The "skilled rulers," the bureaucrats, have failed politically, and have proved unequal to carrying on the traditions of the ancient statecraft; the demagogues, or bosses, who manipulate "democratic" institutions may also claim to be experts in this very field. Moreover, during the war they exhibited a much greater degree of astuteness and adaptability and contrived to carry on successfully. Since then, however, they have shown almost total incapacity to understand post-war problems, which are mainly economic. From ignorance and stupidity they have made a great mess of world economics and seem to be quite incapable of mopping it up. Now they are showing signs of reaching the end of their tether. Their incompetence has not only thrown the whole social order into confusion, but it is also beginning to endanger their own necks. In consequence, democracy is manifestly waning all the world over, and a desperate demand for dictatorships is growing up. Dictatorship is, of course, an old and familiar resort of desperation, and its future is predictable. What is not so predictable is the future of democracy. Can our so-called democracy be restored to efficiency and health? Is a real democracy conceivable at all? And what must democracy do to be saved? The great bureaucracies had all succumbed, and it was supposed that the world had been made safe for democracy and its bosses. For a while it really looked as though the art of managing democracies had made such progress since Abraham Lincoln's day that, even though it was not yet possible to fool all the people all the time,

it had become possible to fool all that mattered, that a sufficient variety of week-end "stunts" would tide a Government over any crisis, and that a sufficient supply of ambiguous formulas would solve any problem. But, alas, it presently appeared that hard economic facts could not be conjured out of existence by the most seductive rhetoric and that they had the power to expel from their fools' paradises even the most ardent believers in worlds fit for heroes. The heroes found themselves unemployed in growing masses, and the doles conceded to them by their rulers' fears had presently to be cut. And in spite of desperate attempts to protect national standards of living by tariff-walls, every country found itself sinking deeper and deeper into the common slough of a world-wide depression.

The political consequences of such a state of affairs were not slow to show themselves. Rightly and wrongly the peoples blamed their rulers for their distress. So they rose up and changed them, repeatedly, everywhere, but found that *plus ça change, plus c'est la même chose*. None of the ordinary methods of political change, not even the South American method of armed rebellion, seemed to afford relief. So there has arisen a widespread disbelief in what is called democratic government. Democracy is everywhere on trial and even the demagogues are beginning to be in danger of their lives. Parliamentary government is breaking down and ceasing to function or being reduced to a show and a sham.

Superficially this movement has led to a great development of dictatorships, mostly military and everywhere resting upon force and violence. In Russia, Italy, Jugoslavia, Hungary, Turkey, Portugal, Lithuania, and now Germany and Austria, the dictatorship is blatant and avowed; in the United States, Greece, Spain, Bulgaria, Czechoslovakia, Finland, Rumania it is more or less cloaked in constitutional forms. In Europe parliamentary systems linger on only in Britain, France, Belgium, in the Scandinavian countries and in a few minor States that escaped the

shocks of the war by remaining neutral; but, even in these, parliamentary government can be carried on only by coalitions. The whole situation seems a most humorous comment on a war that was most plausibly said to be fought to render the world safe for democracy! Dictatorship is a revolt against democracy and represents a twofold reaction against it. It is a return, on the one hand, towards the personal ascendancy of personages like Lenin, Mussolini, Pilsudski, Hitler, Roosevelt, Kemal, Horthy, Carmona, Venizelos; on the other, it means a return to bureaucracy and the revenge it takes on democracy. For all dictators rule with bureaucratic support in the army and the civil service, and even the dictatorship of the "proletariat" soon becomes (in fact) a dictatorship of the "secretariat."

Moreover, elsewhere also bureaucracy is taking its revenge and undermining the democracy. Although the demagogues won the war for their democracies, it was the bureaucracies which gathered in the fruits of victory. They enormously extended their numbers and their powers by increasing the amount and intricacy of State regulation and organization and consequently, of course, the expenses of the civil service. (A typical example is the preservation everywhere of the farcical but irritating passport system.) Thereby they rendered themselves so indispensable to their official superiors, the demagogues, that they may be said to have subjugated them and reduced them to puppets. Securely screened behind a *façade* of popular government, they now rule irresponsibly in the name of the people and the Ministry. In most "democratic" countries parliamentary government is becoming more of a farce every year, especially in Britain. Every year a hidden bureaucracy, as Lord Hewart has so well shown, encroaches more on the functions of the Legislature and of the nominal Executive and persuades them to delegate to it their powers. The bureaucracy wields its power by the methods by which capable subordinates have always controlled incapable superiors.

If an ostensible ruler is ignorant or lazy or greatly inferior to his Ministers in intelligence, it is psychologically inevitable that he should always, in the long run, be controlled by them. For it is for him the path of safety and least resistance—nay, his only escape from overwork and death—to do as he is told and not to ask unnecessary and inconvenient questions. But if he is obstreperous and too inquisitive and wants to know what is done in his name, there are plenty of well-trying ways of taming him.

Needless to say, such methods are applicable also to the sovereign people. There is nothing in its status to protect it from such trickery, which is practised in this case by the co-operation of the bureaucrats and the politicians. Though all the forms of deference may be preserved, the "people" is an easy victim. For collectively the sovereign people is just as Plato described it in the *Republic*—well-meaning, but ignorant and stupid. Being ignorant, it does not know enough to decide the complex questions on which its prosperity depends—let us say of the gold standard, of tariffs, and of foreign policy. Being stupid, it could not understand them if it tried. Being lazy, it is bored by them, and does not try. Being amusable and easily diverted, its attention is easily absorbed by the distractions which the press and the cinema so lavishly provide [a very pack of Alcibiidean hounds] with the instigation and approval of the demagogic government. Really the poor sovereign people has as little chance of exercising an intelligent control over public affairs as the stupidest of Tsars.

Again, consider the mechanism of consulting it, an appeal to the people. A general election takes place when a Prime Minister dissolves Parliament. Naturally he dissolves it at a time which suits him and his party best, when he thinks he can put before the voters an issue they will understand and about which they will agree with him, so that he may be returned to power. But for the same reasons his opponents will endeavour

to confuse the issue by bringing up other points. Neither party lays all its cards on the table; and as often as not the electorate is stampeded at the eleventh hour by a lie or a half-truth which constitutes a successful "ramp." When the whole hubbub is over no one can tell with certainty what the people really voted on and willed. If the appeal to the people takes the form of a referendum on legislation already passed by the Legislature, it is easy to discredit it by submitting it in a form so complicated and obscure that the voters cannot understand it, or suspect some trickery; while the whole attempt to obtain direct popular sanction for legislation may be frustrated by referring anything and everything to the voters, until they cease to vote or reject all the laws submitted to them in disgust. In short, the principle of democratic government always is that by hook or by crook the people must be deceived, whether it wills it or not.

When one considers, further, the ways in which plutocratic influences percolate into "democratic" governments and politicians are bribed by, and blackmail, business interests, one realises how easily democracy may be degraded into a sham. This lesson may still be learnt most easily from transatlantic politics, and both prudence and the facts admonish us to seek our illustrations overseas; but it would be folly to think that British political human nature can permanently remain immune to the temptations, for example, of tariff legislation after we have established tariffs. The leading instance of the relations of business to politics is still the famous reply of Jay Gould to the committee of the Senate that was investigating him. When asked about his political opinions he candidly replied: "I am a Republican in a Republican State, and a Democrat in a Democratic State: but I am an Erie Railroad man everywhere." The late Mr. Ivar Kreuger had evidently adopted the same principle. It has the great advantage of securing business against political interference whichever party is in power. In many cases, however, it remains in doubt whether such trans-

actions are better described as a bribing of a politician by a plutocrat or the blackmailing of the latter by the former.

In England, however, we are as yet more timid or more decorous. Our party chests are replenished more cheaply and more innocuously than by legislation which enriches generous subscribers to the party funds. The party which controls the fount of honour, rewards and ennobles its "public services" by titles and decorations, so it is difficult to see how party government could be carried on if the House of Lords were abolished. Evidently, also, our British method is far more salutary in the public interest. But it is clear that everywhere a true democracy presupposes incorruptible politicians. And if you multiply temptations and abolish all but pecuniary rewards, how long can you fairly expect your politicians to remain incorruptible?

In spite, however, of occasional ugly symptoms, it is not corruption that seems likely to lead to the overthrow of our democratic bosses. It is rather their sheer incompetence and inability to carry on government by their ancient methods; or, more specifically, their incapacity to understand the intricate economic relations of modern societies, and, above all, their cowardly shrinking from leadership and courtly reluctance to tell King Demos unpalatable truths. It was not to be expected, of course, that our demagogues should themselves understand all the economics of banking and exchanges, of industry and international trade. They had, however, the advice of plenty of technical experts, by which they might have been guided. But all the indications are that they did not take good advice, because they had not the intelligence and the knowledge to understand it.

Nor had they the courage to divulge to the masses they had so long doped with war propaganda that all this sort of thing was now out of date and must stop, that the orgies of nationalism were too costly and must cease, and that the attempts of every State to live for and by itself were the road, not to safety, but

to poverty and ruin. No politician even yet has dared authoritatively to tell his people that for all the world to try to increase exports by strangling imports was a flat impossibility; and nowhere, probably, do the masses yet understand this. It was a lack of courage also that prevented a clean and speedy settlement of the war and left impossible war debts and reparations to linger on and to poison normal international relations for decades.

For all these blunders the penalty will have to be paid. It is already being paid by the peoples, but their rulers or managers will not escape. This is the meaning of the drifting away from democracy to dictatorships and other monstrosities of political organization. And if the bosses desire to escape with whole skins, it is high time that they mend their ways and give their earnest thought to a real reform of democracy. If we define democracy as a form of government in which all the people are genuinely consulted by the rulers before they do what they think best, it is clear that such genuine consultation is rarely found in fact. For the consultation of the people in so-called democracies is more often illusory and fraudulent. Indeed, the same *apologia* may well be made for the failure of democracy as for that of Christianity and of Prohibition: "democracy has not failed, because it has never yet been truly tried!" Of course, the reason is the same in all three cases. Democracy is difficult. It is a form of government which demands the existence of a vigilant, intelligent, and instructed public opinion, devoted to politics and actively interested in public affairs, which is resistant to dopes and distractions and determined to learn all that is necessary to form an intelligent judgment about public questions. Moreover, a truly democratic government is one which should require and obtain the active support of such public opinion.

It is, however, pretty clear that this ideal is nowhere realized. Actual democracies fall far short of it. They might, however,

come much nearer to it, if only they could purge themselves of sundry weaknesses and defects. The chief obstacles to such a purge are the existing politicians, without distinction of party. For it seems a natural consequence of human psychology that when a political system is well established and thoroughly understood by the politicians who work it, they all get so used to it and so fond of it that they become extremely reluctant to introduce any changes into its essential working. They prefer to play the familiar game and refuse to change its rules. That some of them may call themselves reformers and even radicals makes no difference; though willing to reform others, they will not want to reform themselves and the rules of their beloved game of politics. This is why politicians not only will not devote any thought to the mechanism of politics but also are always indifferent or hostile to any really democratic reform which aims at improving the expression of the people's will and the effectiveness of the political machinery.

To illustrate. It is notorious that in most countries the methods of election do not give the voters a fair chance of expressing their will, while democratic constitutions teem with artifices for frustrating it. The countries in which the electoral laws are such that parliamentary representation can reflect popular opinion can be counted on the fingers of one hand. And even where the laws admit of this possibility, their administration usually frustrates it. The only clear exception known to me is Switzerland, which is also the only country in which there is no political discontent, because majorities do not attempt to oppress minorities. Now this frustration of the people's will brings with it many evils. It not only subverts the central idea of democracy, but produces discontent and tends to revolution and rebellion. And even where it does not, it leads to a political instability which renders continuous progress difficult. A single illustration from our own country will

probably suffice to make this clear. We are at present² blessed with a National Government, which was forced upon our politicians by the desperate mess they had got us into, and which is proving more stable than most of us expected. But under our present electoral laws it cannot last longer than five years. After that, quite regardless of the Government's record, many voters will feel that they would like a change and will set the pendulum swinging again, whereupon our social order may be thrown into the melting-pot, and chaos may come again!

Yet all this danger of instability is a consequence merely of our gross system of misrepresentation and of the conservatism and stupidity of our politicians in refusing to amend it. There is not really in the country a majority for revolution, and in all probability never will be. But there is considerable probability that we shall blunder into revolution, owing to the unfairness and fatuity of our electoral system. It is a system which will not represent minorities, which eliminates moderate opinions, and which forces any voter who dislikes an extremist government and wishes to get rid of it to vote for their opponents who may be equally extreme and dangerous. Actually there exist at present some millions of Liberal voters who are unable to elect any but a very few representatives; so that in the Commons their intermediate opinion, which actually holds the balance in the country between Conservative and Labour, goes for nothing. There are also suppressed minorities in the two larger parties, Conservative Free-traders, moderate Trade-Unionists, and the like, who might beneficially influence their party policies, if they were not suppressed by the party caucuses. And there are a number of honourable and independent voters who are not allowed to express disapproval of one Government without being taken to have expressed approval of the Opposition.

Now all this is a wholly artificial and unnecessary consequence of our pseudo-democratic electoral laws. It would be quite easy

² Written in 1933.

to change it by simple and slight changes in the electoral machinery. It would be quite easy to make the consultation of the people a reality and to obtain a House of Commons that would really and adequately express the opinion of the people. With three parties it is theoretically possible, under our present system, for a little over one-third of the voters to elect the whole House of Commons! And the politicians are well aware of it. Only it does not suit their book; and they will do nothing until they are compelled by outside pressure. In the hope of putting on a little of this pressure and in the interests of a genuine democracy I will enumerate a few simple and urgent reforms of the present system.

First there is proportional representation. This is a well-known and well-tried system of permitting the adequate representation of minorities. It is capable of representing minorities of any size with the utmost accuracy: it is merely necessary to enlarge the constituency in order to grant representation to a smaller minority. It is also perfectly simple to vote: the voter has merely to mark his preferences among the candidates 1, 2, 3, et cetera, and to abstain from marking the names of those he does not wish to see elected. Every schoolboy who enters for a combined scholarship examination shows himself capable of this feat. Its political consequences also are well known. It eliminates "tidal waves" and violent "swings of the pendulum," and substitutes for huge homogeneous but caucus-made parties a number of groups that shade off from one extreme to the other. They cannot be ordered about by the leaders of the biggest groups and so are less convenient to handle, but they accurately reflect the opinion in the country. The absurdity of arguing that proportional representation would mean a succession of coalitions, and that coalitions cannot govern, is sufficiently confuted by the present situation. Also the system has some convenience even for party leaders: they cannot be deprived of their jobs by losing their seats in a tidal wave. For,

each one being the first choice of his party, they are sure of election as minority representatives. Proportional representation has shown itself a means of political stability in most countries, except Germany, where it has been tried; it has prevented the triumph of Socialism in Switzerland, it has given Ireland ten years of breathing-space, and even now it puts a check on De Valera.

Secondly, the negative vote is deserving of mention. There is no reason in the nature of things why this should not be permitted, and its political effects would be very salutary. The negative vote means merely that a voter can vote directly *against* a candidate as well as *for* him, with the consequence that his vote cancels a positive vote. Negative votes might also be made transferable, like positive votes under proportional representation. Thus, if a bad candidate had already failed of election, the voter's negative preference might be transferred to the next most objectionable name on the ticket.

A system which permits a voter merely to vote *for* a candidate is too simple to express all that is in his mind. It is psychologically crude. There are psychological gradations of approval and disapproval which he is not allowed to express. But these differences could be expressed, and it would be to the public interest that they should be. The defective mechanism of the electoral laws alone stands in the way. The negative vote would remove some of these defects, and the transferable vote under proportional representation would remove another. For it would enable the voter to state his second and third choices as well as his first.

I will mention next a simple little reform which would, presumably, be passed by acclamation, if any Government could be induced to propose anything so unheard of and so sensible. For it would benefit all parties and the public service as well. Ministers should have the right (as in many other countries) to address either House, whether they sit in it or not. This little

reform would relieve the Liberal and the Labour parties of frequent embarrassment in finding suitable, adequate, and trustworthy spokesmen in the Lords and would enable the Tories to utilize their surplus strength in that House. It would also be in the public interest, because it would become possible and customary to confer upon members of the House of Lords such public offices as seem to require a Minister's undivided attention or require to be screened from the attacks and distractions of the Commons.

The reform of the House of Lords is a much bigger affair. Quite apart from the general desirability of constituting a real aristocracy and of giving the best minds in the country an influence on public affairs, it is an urgent political need to construct an effective check upon such a House of Commons as we have under our present system. We have seen that owing to its mode of election it is inevitably a product, not of the considered opinion and political wisdom of the Nation, but of a fit of electoral hysteria. It is never representative of the actual distribution of political opinion. It grossly exaggerates majorities and suppresses minorities. Its majorities are artificial creations and mostly the outcome of the desperate struggles of negative voters to rid themselves of an intolerable Government: they swing from one extreme to another, because the voters speedily discover that its successor is no better. Finally, the House of Commons is an unwieldy mob which would be far more businesslike if its numbers were halved. Altogether, it is a marvel that it has not yet completely discredited democracy in the eyes of intelligent people.

But it is no wonder that its real power is rapidly waning and that it is sinking into a cumbersome machine for registering the decisions of any Ministry which has a "safe" majority in it. The misfortune is that this Ministry is always deluded. It imagines that it has the support of the country and that it can retain it by passing good or popular measures. But as a matter of fact,

whatever it does, the swing of the pendulum which generated it is certain to sweep it away again at the first opportunity. Hence no continuous or far-sighted legislation is possible on matters which are involved in party politics. All these evils are consequences of our grotesque system of misrepresentation. They jeopardize the future of parliamentary government and, indeed, of democracy itself. But it is easy to see how to reform them: they could probably be cured by the expedients we have mentioned.

But there are other evils at present afflicting us which are not so easy to cure. The world's economic ills, for example, are not to be cured by Democracy or Communism or any other form of government. No effective remedies can be applied to them till the masses everywhere are made to realize that they have been attempting economic impossibilities and repent them of their folly; at present they are still crying out for "less bread and more taxes," like the mob in Lewis Carroll's *Sylvie and Bruno*.

But a complete solution of the economic problem may need more than a return to economic sanity. It may need more than the establishment of a genuine democracy freed from frauds and trickery. And both may require something more, and better, than we get at present in the shape of human material; both may require a change in the policies by which this material is now provided. For it is a tragic fact that in all existing civilized societies the recruiting mechanism has gone astray. They no longer recruit themselves from the better, brainier, more efficient and successful strata of their population, which do not reproduce their numbers, but from the inferior, the feeble-minded, and the incapable. These are kept alive by social support and enabled to multiply by social protection—at the expense of the classes able to pay taxes which are becoming more and more excessive, because of the prodigious waste of public money on all sorts of social follies. So we organize "baby-saving weeks" for

the worse babies instead of "better babies exhibitions." The biological consequence of these fatuous forms of social interference is inevitably the progressive deterioration of the stock. How far this deterioration has already gone is, for a variety of reasons, hard to determine. But it is not hard to predict its political consequences. It is rendering liberty and genuine democracy unworkable and a relapse into some form of depotism certain. It means, also, the doom of civilization, unless an intelligent policy of eugenical reform can speedily be started.

THE POSSIBILITY OF A UNITED STATES OF EUROPE¹

I SUPPOSE that many will think that I could have chosen no more fantastically improbable topic for discussion at the present day than the possibility of a United States of Europe. How utopian this possibility is I feel as strongly as any one, and yet this should be taken as an additional reason for discussing it academically. For why is it so improbable and utopian to ventilate the idea that the many undersized and over-differentiated states of Europe should make an effort to emerge from the poisonous atmosphere of war and jealousy in which they have lingered so long? Why do they so resent any suggestion that they should get together and sink their differences in an intelligently constructed federal union? The project would plainly be beneficial to the vast majority of the inhabitants of that distracted quarter of the globe, and physically it no longer involves any serious difficulty. Nor is there any intrinsic impropriety or material impossibility about it if only Europeans could be got to remove one great spiritual obstacle which blocks the way to union. The idea of a United States of Europe runs starkly counter to the traditional hatreds, the exasperated feelings, the insane prejudices by which the peoples of Europe are at present kept apart and incited to make life a burden to themselves and to others. That it is their most sacred duty to cherish and insist on every item of the differ-

¹ From *World Affairs Interpreter*, IV (1933), 139-44.

ences that distinguish them and implacably to carry on all the blood feuds which their history has started, is the great illusion which poisons all their international relations.

If only it were possible by some magical draught of forgetfulness to delete from their minds the whole memory of their past, the record of what they have severally done and suffered; if one could curb the excesses of their crazy nationalism; if one could open their eyes to their true interests and their hearts to the advancement of civilization—it would be easy enough to show them that the United States of Europe are both an economic and a political necessity, infinitely easier of achievement than the nefarious and impossible aims which the present nationalistic rulers of Europe are actually pursuing. For ever since the disease of nationalism infected the world in its modern virulent form, and that, I suppose, means ever since the Napoleonic era, they have been attempting the impossible by means that are self-contradictory, self-defeating, and iniquitous.

They have all tried to be at one and the same time national states and empires. Now this is quite a modern absurdity. Until the nineteenth century the empire-makers never dreamt of founding national states. Alexander, Charlemagne, Jenghiz Khan, Timur, Charles V, Akbar, Peter of Russia, and even Napoleon were ready to incorporate in their empires anybody who would obey them. And, as a bond of political union, nationality was greatly inferior in strength to loyalty to a leader or a dynasty or a religion. Moreover, owing to the actual composition of the European populations, it was quite impossible to find any homogeneous nationality occupying an area sufficient for an empire. So to be national, European states had to compose themselves of a single unified nationality; to become empires, they had to rule over a variety of nations and make their rule acceptable to them all. The way they all tried to combine these discrepant aims was to subdue all their subjects into uniformity, to force all the nationalities found within

the state to sink themselves in that of the dominant people. But of course this method did not produce the desired result. It led to injustice, oppression, strain, internal weakness, rebellion, and war. All the European empires have weakened and in the end wrecked themselves by this foolish policy. For there are far too many nationalities in Europe to base a big empire on any one of them alone.

But what, after all, is this conception of nationality to which the whole world at present seems bent on sacrificing all the natural goods of life at such inhuman cost? In actual fact the sole functional basis of nationality appears to be language. It is not descent, for as America shows, a vigorous sense of nationality may arise in a people of the most various descent. It is not race, which in Europe, at any rate, is mainly a myth, because the Europeans are all mixed and, moreover, mixed of much the same ingredients. It is no longer religion, as it used to be in Europe until Christendom was disrupted by the Reformation, and in the East until the last war.

Language, however, is not naturally fitted to be the foundation for an exclusive nationalism, for the simple reason that it is possible to acquire more than one language, and so more than one nationality, if language is made the test thereof. Community of language is, of course, a convenience for the communication of ideas; but it is by no means the basis necessary for a political community. The Roman Empire endured for many centuries, although it had two official languages; and Hungary was a fairly contented state until 1848, so long as its many nationalities agreed to use Latin officially as their common language. Conversely, if men are permitted to master a plurality of languages, language fails as a test of nationality and becomes rather an instrument of internationalism. A study of languages, therefore, would not only foster international understanding and commerce, but also individual development and political adjustments. If instead of foolishly trying to make

one national language dominant by suppressing all others, the rulers of Europe recognized the use of all the languages extant in their countries, they would be much stronger politically, and would remove one of the chief obstacles to European union. A bilingual or trilingual Europe would not only be a more intelligent and better-educated Europe, but also on the way to a federated Europe.

That these suggestions are not impossible and utopian, is best shown by the fact that they propose nothing but what has already been achieved. There is in Europe one unique and anomalous state whose national feeling is not based on language or religion or geography or force; nevertheless, it is as genuine, fine and patriotic as any in the world, for it is based on justice and mutual forbearance.

The Swiss are about the most contented and successful nation in Europe, and they are the only people who have sincerely renounced internal quarrels and external wars. They are in fact the only people in Europe who have discovered the secret of European peace and prosperity, and have solved the problem of European politics. They have solved it by their native intelligence and good sense, and not by any extraneous advantages or resources. They were divided by mountains, by religion, by language, by history, and were surrounded by larger and more powerful neighbors who had a multitude of claims on their country and their people. Yet they have held together and achieved union.

How did they do it? By the exercise of justice and forbearance, as I said, and by showing a willingness to co-operate. The German Swiss, and the French Swiss, and the Italian Swiss can and do co-operate, because none of them is trying to oppress and dominate the others; but they all respect the individuality and the rights of the others under the federal constitution. Moreover, the individual Swiss takes pride in mastering all his national languages and so becoming a more educated man, more

able to appreciate the point of view of others, as well as better able to deal with the Germans and French and Italians who dwell beyond his borders. May we not say then that the Swiss are the only wise and sensible people in Europe and that the only way of solving the problem of European politics is the one which they have indicated?

It is impossible in a short article even to sketch the way in which a federal union of Europe may be brought about with a little goodwill and a good deal of hard-headed insight into realities. I can only express my conviction that the motive force will be provided by economics and that statesmen should find their starting-point in economics, not in politics. For the healing of the many economic sores with which the peace treaties have dotted the map of Europe would produce comparatively rapid political appeasement. For example, one of the worst of Europe's political problems, that of German-Polish relations, could be rendered innocuous by devising a scheme of permanent economic co-operation for upper Silesia and the Polish Corridor, which would ignore the political borders, and create common interests between Germany and Poland. Germany's quarrel with Lithuania over Memel might similarly be healed by a trade treaty which would make Germany a market for Lithuanian agriculture and Lithuania one for German manufacturers. Of course international trade-relations do not produce their political effects in a day or even in a decade. But it is one of the mistakes of politicians that they are in too much of a hurry and do not look far enough ahead. Human progress is often slow and even imperceptible. And perhaps the time is not yet ripe for a United States of Europe. But if their federal union is delayed or rejected, the peoples of Europe are doomed to a continuation of their present sufferings till they grow willing to enter upon the pathway of salvation. For, as the ancient adage says, "Destiny takes the willing by the hand, but drags the unwilling by the hair!"

ANT-MEN OR SUPER-MEN?¹

HARDLY any one nowadays is likely to deny that man's nature—that is, his spontaneous tendencies to feel and act—is profoundly social. The disputes about man's destiny and prospects begin only after this obvious fact has been admitted, and when the question is raised to what sort of society his social nature can, or should, give rise. Moreover, a little reflexion will show that the sides men take in these disputes are determined largely by the ways in which their convictions about man's social nature have been reached. Those who have taken the high *a priori* road and argued from metaphysical essences and necessities of thought will naturally find themselves a little wearied by their arduous journey and disposed to view man's social nature as a resting-place and end, after reaching which they are disposed to think all will be well and nothing more need be said or done. In consequence their contributions to the problem of man's future are apt to be nugatory. Those, on the other hand, who have followed the empirical way of biological science will easily apprehend that the need for society rests on the simple fact of individual mortality: they will also realize that the problem of the relations of the individual to society is capable of an indefinite number of solutions, among which it is incumbent on us to choose the best. Accordingly man's social nature will appear to them, not as a terminal, but as a starting-point, from which there radiate many alternative policies and programmes for the future development of man.

¹ From *The Nineteenth Century and After*, CXVII (January, 1935), 89-101.

It will not, however, seem feasible to discuss the future without reference also to the past. For it should never be forgotten that man's present nature is the resultant of a long historical development, which has knit together his nature in all its details. Nor can one overstress the fact that he is not merely a social being in the abstract, as might be inferred from the disquisitions of most philosophers: he has acquired a specific sort of sociality by leading a special sort of life in the specific history of the race. Hence it means little and explains nothing merely to proclaim him a social being; but it is highly relevant to know how he acquired his present habits and organized his existing institutions. His laws, his customs, his manners, his religions, his morals, his failings, his temptations, his crimes, nay even his diet, all have a bearing on his social nature and have gone to mould it. They must all be studied historically in order to understand what he has become.

For example, it would be possible, as the late Professor Carveth Read has shown,² to write the whole social history of man in terms of the successive revolutions in human food supply. To begin with, man (or rather his ape-like ancestor) must have been (as the structure of his teeth still testifies) a good vegetarian, who lived, like the gorilla, on the fruits and shoots of a tropical forest, necessarily in small bands or families that ranged over large areas for their sustenance. Then the climate deteriorated in their forest home and winters grew up in which vegetable food became scarce. This change confronted the ape-men with a choice between extinction and the adoption of another diet. They preferred the latter alternative and became carnivores. They decided, further, to prey on the big beasts of the forest and the prairie rather than on the smaller fry. After that they had to change not only their physique, by coming off their forest perches (again like the Kivu gorillas) and becoming agile on the ground, but also their social habits. They had to or-

² In the *Origin of Man* (Cambridge, University Press, 1925) chs. v and vi.

ganize themselves into packs of hunting wolf-apes—that is, of apes who had adopted the methods and acquired the mentality of wolves—to gain their livelihood. Carveth Read very acutely pointed out that this inferential history explained a number of oddities about man's social nature. It explained why human mentality is that of the pack, in all its atrocity, rather than that of the herd. It explained why socially men are able to combine to attain a common aim, but are very apt to quarrel immediately afterwards over the division of their booty. It explained, lastly, why the once vital instincts of the hunter and the fisher had been reduced to "sports" and continued to be indulged in at great cost, even though they have ceased to be necessary or even profitable under modern conditions.

After they had thus lived precariously as hunters for ages, an original idea occurred to men—as it did to ants. Why not intervene in the course of nature so as to domesticate and secure their food supply? Thus the livelihood of the hunter was eked out and finally superseded by the domestication of animals and plants; and with that arose two new ways of life: the tending of tame animals, the pastoral; and the tilling of the soil, the agricultural. So the herdsman and the agriculturist rendered the hunter obsolete. The consequent addition of milk, butter, eggs, grains, and vegetables to human diet not only turned man back again into a vegetarian (in the main) but also had far-reaching effects upon human politics. It enormously increased the numbers of mankind and the density of population a given area could support, and it divided the tribes of men into nomads, who drove their herds from pasture to pasture according to the season and lived a varied life with a good deal of incident and leisure for reflexion, and the plodding agriculturists doomed to unceasing toil, who were practically *cripti glebæ* and tied to the soil they tilled.

So a contrast and a conflict soon arose between Cain and Abel; but (contrary to Scripture) it was Abel who usually

proved himself the better man and became top-dog. For the nomads' mode of life was intellectually more stimulating and more conducive to the growth of leadership. Also the nomads were better and more mobile fighters who carried their food supply with them on their raids and could therefore gather in greater numbers to overwhelm the little strongholds of the agriculturists. So the leaders of the nomads overran the settled districts and founded nobilities and dynasties, which fostered civilizations and grew into empires. These they could administer with the aid of priestly castes that had from the earliest epochs cultivated knowledge, real or imaginary, as the avenue to power. It is pretty plain that the earliest science was conceived as an aid to agriculture, being astronomical in order to determine the length of the year and geometrical in order to measure out fields annually inundated by the fertilizing floods of rivers like the Nile and the Euphrates, the Ganges and the Yangtze-kiang. It would seem, also, that the earliest art, the paintings which adorned Mousterian caves, was essentially food magic and the work of men who had devised this way of sharing in the spoils of the chase without incurring its dangers. In some such ways, we can aver with growing confidence was human nature moulded and did human civilization grow.

But can we detect in this history any law of progress? If we could, we might, by observing it and conforming to the requisite conditions, secure the indefinite continuance of progressive change. But as yet the achievement of progress (in the sense of change for the better) seems so rare, so haphazard, so contingent that we cannot formulate any "law" for it that will guarantee it inevitably and apart from our efforts. We cannot even assign to the possibility of progress any very deep roots in the nature of things. We have to content ourselves with observing under what conditions the progress we recognize seems to have occurred.

It would then appear that one main condition of progress

is a proper balance between the forces of conservation and of change. An excess of either is ruinous. Too much conservation means failure of adaptation to new conditions, fossilization, and destruction. On the other hand, too rapid and revolutionary a change also means destruction by social disintegration and the deliquescence of social habits.

We may inquire further by what means a society can equip itself with sufficient amounts of conservation and of change. As to the former there is no great difficulty: the force of habit alone can be trusted to conserve an established order. Moreover, quite a moderate amount of fairly low-grade intelligence, such as the bureaucratic expertness of an experienced official, will suffice to carry on affairs in an established routine. But to change with safety and advantage involves a creation of the new and its adaptation to the old; whence is the new to come, and how is it to be adapted to the old? Both originality and skill are needed, and the former is the rarest of human qualities.

It is a quality which occurs in only a few individuals. Every novelty that has enriched and improved the world has originated in an individual mind and started its career in a minority of one. In consequence, its hold on existence is very precarious at first, and it is the rule rather than the exception for it to be strangled at birth. There is then nothing for it but to wait until it re-incarnates in another individual mind, more potent or more favourably situated to make itself heard. In the most favourable event, a novelty can survive only if it takes birth in a society which contains a number of other minds who, though not capable of originating it themselves, are well disposed towards novelties and willing to try them. These form the natural raw material for Liberal parties everywhere and in all subjects. Contrariwise, it is from lack of a favourable social environment that so many discoveries have to be made over and over again and do not win recognition until the obstructive conservatism that suppressed them begins to feel that after all they have be-

come familiar and no longer offend too glaringly against the principle that there is nothing new under the sun!

But no society has yet recognized how vital it is to its prosperity and continuance that it should refrain from suppressing innovations on general principles and should organize itself so as to give them a fair trial. Nor has any society adequately recognized the debt it owes to the individuals who have saved its existence by adapting it to new conditions or by inventions that improved its adjustment to old conditions. Historians also have greatly underrated the rôle of invention in determining the course of events. It has been generally assumed that the supply of salutary innovations would never fail.

Nor, strange to say, has it failed so far. Thanks to some strange luck, fatality, or providential guidance, the necessary innovations have always been forthcoming. All through history human originality has made discoveries and initiated progress. Some of the earliest of these were the most difficult and the most important. Thus in all mythologies the discoverer of the art of making fire has ranked high among the gods or heroes. The inventor of the wheel is not so famous, but he must be credited with the only human mechanism to which nature had provided no obvious clue.

Thus the problem of judicious innovation is the real crux of human progress; conservatism and stability must be supplemented by an intelligent Liberalism. If now we analyze the idea of Liberalism as a social ideal, we shall find that it comprises two aims. The first is to maximize freedom and to develop individuality to the utmost, meaning by freedom the permission to do as one pleases, minimizing social coercion and resting government on the free consent of the governed. Secondly, Liberalism stands for the policy of reaching social agreement by reasonable discussion or debate rather than by authority and force.

Both these ideas of Liberalism go back to the Greeks, especially to Athens, and in both respects the nineteenth century

appears to represent the high-water mark of Liberalism. Since then it has been ebbing, at a growing and alarming rate, for reasons we shall presently consider. But the vicissitudes of its popularity cannot affect the psychological fact that Liberalism is as natural and as deeply rooted in human nature as Conservatism and trust in routine.

The Conservatives and the Liberals, then, are the two great parties into which human society is naturally divided; in spite of their contentions both are necessary to human progress. Indeed, so much is this the case that in a well-ordered polity it will often seem that each party is driven to play the other's game and practically joins it in directing the smooth course of progress. For example, in England, before the war, the balance of the forces of conservatism and of progress was normally so perfect that it seemed as though neither party could realize its programme except with the aid of the other and through the agency of a Government belonging to the opposite party, because only then would the normal inhibitions to it be withdrawn. It used to be said that only a Conservative Government could pass a radical reform and only a Liberal Government could plunge the country into a great war. Hence it was that feminine suffrage and Irish Home Rule were conceded by Parliaments which contained large Conservative majorities, while it was the Liberal Government of Asquith and Grey which got entangled in the foreign policies that ended in the catastrophe of 1914.

This catastrophe seems to have pretty well proved fatal to Liberalism all the world over. War is naturally adverse to Liberalism, because it substitutes violence for reason as the method of settling international differences; but, still, even the Great War need not have proved the death of Liberalism. Its demise looks more like a case of murder than of natural death. For it was chiefly due to the actions of three eminent statesmen who controlled the destinies of the world after the war. All three professed Liberalism, and all contributed to its destruc-

tion, when by adopting another attitude they might easily have brought about a triumph of Liberalism and launched the world on a career of unprecedented progress.

But, unfortunately for mankind, President Wilson was more of a pedant than a philosopher, while M. Clemenceau was more of a nationalist than a Liberal and a hater of his enemies rather than a lover of mankind. As for Mr. Lloyd George, he was essentially an opportunist, who discovered too late that Liberal catchwords suited his style of eloquence far better than did those of Conservatism or of Communism and that his amendment to Abraham Lincoln's *dictum* that one cannot fool all the people all the time—namely, that if one is clever enough one can fool all that matter—did not in the long run apply to a party leader who had split his party to gain his position and delivered himself into the hands of his enemies in order to escape from the vengeance of his former friends.

So it first of all became too difficult for Liberalism to withstand the tide of Nationalism. Everywhere a narrow and bigoted conception of nationality broke up not only the political but also the economic aggregates that were essential to human civilization and prosperity and forced mankind back into barbarisms, follies, and superstitions that it seemed to have outgrown long ago. It was a signal example of the bitter irony of history that a war which had been ostensibly fought to render the world safe for democracy should lead not only to a widespread abandonment of democratic institutions, but also to a state of affairs in which there was no safety for life, property, or justice and to a recrudescence of personal rule in its most ruthless and tyrannical forms.

As this ebbing of Liberalism seems likely to continue, and Liberal sentiment seems to be merely stunned by the course of events and unable to understand and resist its causes, it may be well to carry our analysis a little further.

Deadly as had been the betrayal of Liberalism by its leaders

in the peace treaties, it might have recovered from the blow if strong leadership had been forthcoming in the triumphant democracy. But parliamentary politics seemed to be overtaken everywhere by a sort of paralysis. Innumerable conferences and endless talk led to nothing or worse than nothing; and yet nothing seemed to shake the complacency of democratic politicians and their conviction that all was for the best in the best of all possible worlds. They appeared to be quite blind to the loss of public interest in their proceedings and of public confidence in their methods. They could see nothing beyond the futilities of party politics and did not understand what was meant by the successive revolts against the debating-society theory of government. They continued to imagine that the voters would continue to be satisfied by periodical elections and did not observe their growing impatience with constitutional forms that had been debased into shams powerless to relieve either the discontents or the distresses of the people.

So revolutions alike in the theory and in the practice of government became the order of the day. Dictatorships took the place of parliaments in one country after another. They were easy to establish wherever a picturesque personality was available.

Bolshevized Russia led the way. Its dictatorship was called that of the Proletariat, but was actually that of the Bolshevik leaders, Lenin and Stalin, who organized their party despotically and suppressed all other parties. They organized also an elaborate propaganda aimed especially at enthusing and entralling the young and the ignorant and turned their Communism into a sort of religion. But they took care not to change the actual mechanism of government, the system established in Russia by Ivan the Terrible, and they ruled by open force and secret police, like the Tsars. They disavowed the private profit motive as the inducement to industry; but the necessities of their situation are forcing them to revert to compulsion and to re-intro-

duce a still earlier device—namely, forced labour, serfdom, or slavery.

Italy, in Mussolini, has produced the most capable of dictators; Spain, the feeblest, in Primo de Rivera. Mussolini showed remarkable skill in appealing to the dramatic sense of the Italian people, and Fascism may be said to have evolved a political theory of sorts.

Germany, in Hitler's National Socialism, has apparently the maddest of all the dictatorships, based on the pseudo-science of fantastic race theories and the barbarism of anti-Semitic *Judenhetzen*, which before the war were confined to Russia, but have since been steadily coming further west, and the hooliganism of perpetual brawling and an unofficial civil war.

Nevertheless, it is not safe to argue from the initial antics of dictators at the beginning of their careers to the final character and effect of their rule. They have to rise to power by adapting their programmes to popular follies and frenzies and rendering it palatable to the meanest intelligence. Like democracy, but far more directly and forcibly, they rest on an appeal, not to the *intelligentsia*, but to what may be called the *unintelligentsia*. But when they have consolidated their rule, they no longer need the crudities of castor oil and the manganello, though they must still provide *panem et circenses*. So even Hitlerism may outgrow its anti-Semitic barbarism and its "Aryan" racialism and find itself compelled to return to its allegiance to *la haute finance* and to make its peace with Jewry. Even now it must be credited with a firm and much-needed stand against sexual laxity and degeneracy in Germany and with setting a truly scientific example by recognition of the social need of eugenics. This in the long run may turn out to be the most important and beneficial feature in its programme.

The political justification of the modern European dictatorships is everywhere the same. It is to be found in the social chaos to which excessive war, frantic nationalism, the upsetting

of stabilizing habits and customs, the defiance of economics, and the oblivion to morals have reduced the unhappy populations of that continent. This chaos the traditional methods of parliamentary democracy, corrupted as they everywhere are by political trickery, are manifestly unable to abate. Hence, in their desperation men are more and more attracted by devices which promise them relief in a more rational and planned order, which can be established speedily by main force, without the tedious delays and constant frustrations interposed by parliamentary oppositions, party intrigues, and long debates. The dictator is the ideal man who can remould the world nearer to the heart's desire of multitudes, even though he has to shatter much of it to bits in the process.

But those who feel thus fail to realize that our chaotic social conditions are largely a reflexion of the chaos existing in the individual soul. One great truth underlying our distresses is that we are not fit at present for any less chaotic social order than our own. It is idle to talk of planning, of Socialism, or of Communism while the extant human mentality is an unescapable presupposition of all attempts at reform. We do not possess at present the men who can plan successfully, as President Roosevelt's well-meant efforts have amply shown, nor the men who are willing to work Socialism and to work under it, nor the men who are willing to live communally. All these sorts of men have to be grown. But it will not be easy to grow them, and as yet far too little thought has been given to the problem of growing them.

Dictatorship, however, is not only an ideal. Like Democracy, it is also a form of government, and the aims of dictatorships may differ. While they all agree that a strong and authoritarian government is demanded by the emergency which enables them to arise and while they may seem to agree in the doctrine of a totalitarian State, they may yet differ widely in their concep-

tions of the nature of the life they desire to produce and of the men they desire to populate their State.

Actually these differences are already quite marked. They are all proclaiming the need of unlimited sacrifice from the individual citizen; but the kind of man wanted in a Communist dictatorship like Russia is plainly very different from the kind of man wanted in Fascist Italy or Hitlerian Germany, and none of these dictatorships would be content with the merely servile masses submissive to financial exploitation that would satisfy the requirements of South American dictators.

In each of these cases the citizen is required to be relative to the constitution under which he lives and to be adjusted to it. But the root of all political troubles and discontents is that in point of fact he is not. The average man of to-day is not such as to fit into any of the revolutionary schemes; he does not make a good citizen either in Russia or Italy or Germany. He is not even willing to submit any longer to exploitation by the despotic dictator or tyrant, though for ages he has been more nearly adapted to this ideal of dictatorship than to any other. As for the man who would come up to the communist ideal or that of Mussolini or Hitler, it is safe to say that at present he does not exist on earth. Hence every dictatorship intelligent and convinced enough to wish to perpetuate itself is confronted by the problem of remoulding human nature. It must breed, or somehow mould, the sort of man it wants, the man who would be fit for its purposes, would believe in its ideals, could enjoy life in it, or could at least endure it. At present such men hardly exist—at any rate, in sufficient quantities. But it is conceivable that they may be grown, and it will be instructive to consider how the various dictatorships would set about the task of growing them.

Let us take first the communistic man, adapted to a communist State. He is easy to delineate, not so much because he may already be coming into existence in Russia, but because the

problem he presents to his makers has already been solved, in all essentials, by the social insects. From the communities of the ants, bees, and termites we can gather what must be the qualities of communistic man, whom we may henceforth call the "Ant-man." He must be infinitely labourious, self-sacrificing, and submissive to his social order. Moreover, all these social qualities must be so ingrained in him that they have become unquestioning and instinctive and that he performs his social functions willingly, easily, and without demur or friction and approximates to the ideal of an efficient and trustworthy social automaton. If he can attain to this degree of adaptation he will not need the motives which have hitherto driven men to labour, either the lure of personal wealth or the lash of the slave-driver. He will be impelled to work by his own nature, without any *arrière-pensée* of any sort, without hope of private gain, and without fear of the whip. Similarly, he will sacrifice himself for the ends of the State, without question, hesitation, or regret, feeling that this function is not to reason why but merely to do and die. And he will be incapable of thinking of anything better than the established order which has made and moulded him. Evidently it will take many generations and the severest and most unrelenting discipline to evolve him; but when he is evolved, he will be in many respects a very formidable beast!

But he will be lacking in intelligence, and this deficiency may prove his undoing, if he has to contend against a different type of man. Intelligence is essentially adaptability, the capacity to vary response and to modify habitual action under novel conditions and thereby to improve adjustment. Of such intelligence the ant-man will become as incapable as the ant, for, like the ant's, his intelligence will have become a matter of habit and instinct. For dealing with novelties he will not be equipped, and so his unintelligence will make him unprogressive; yet the need for progress may be forced upon him. If new conditions arise, if new adjustments are required, his instinctive intelli-

gence will be too stereotyped to make them. He will go under, therefore, if he has to compete with plastic and more flexible types of intelligence.

This is a prediction which may safely be based on the history of the social insects. They, too, are essentially unprogressive. They have existed, apparently for æons, in their present state. They had discovered the value of social combination ages before the ancestors of man did and had elaborated highly complex and ingenious forms of social life. They, too, have domesticated animals and plants; and in the complete subjugation of the individual and the frictionless working of their institutions their social order appears to be greatly superior to ours. They have also devised more perfect methods of birth-control and of regulating population than any we have reached.

But they have never advanced towards a domination of the earth. For they doomed themselves to stagnation by sterilizing the individual and arresting the natural selection of superior types. The worker-ant (and -bee and -termite) has been unsexed in order that nothing may detract from devotion to the commonweal, and leaves no descendants to learn by her experience; while the males and functional females have been reduced to mere instruments of propagation.

An essentially similar policy is bound to be pursued in human communisms, if they survive. The taming of the individual and the extirpation of his individualism will demand the reduction of the human worker to the level of the insect worker. The process will presumably be painful, long, and difficult; but it has already begun. The Bolsheviks began it by exterminating or expelling their *intelligentsia*. They are now continuing it by periodically decimating their technicians for the crimes of sabotage and counter-revolutionary activities. They seem to think that men will work best with the sword of Damocles hanging over them. They are also sending to Siberia and similar resorts (where, if they survive, they may grow into a nucleus for a

successful revolt against the whole system) as *kulaks* all the more intelligent and energetic of their peasants. But even the somewhat crudely selective method of shooting the "planners" when their plans break down does not seem very likely to conduce to better planning, if there is any truth in the assumption that the best reputed planners had been selected to do the planning! And by constant selection of the submissive and elimination of the recalcitrant, what are they likely to achieve but a progressive lowering of the level of the collective intelligence? In short, the Ant-men seem to have a poor prospect of surviving in a world which harbours also other sorts of men.

Will the world ever harbour more efficient sorts of men—more efficient, that is, than our present men are, or than Communists can ever hope to be? There is at least a chance of this. For what may be termed a Super-man is scientifically conceivable and can be brought into existence by sustained and intelligent efforts, hardly more difficult than those needed to produce the Ant-man. Already one of the new dictatorships, the German, has declared in favour of eugenics, alike in its negative or sanitary form, which aims at purifying the stock, and in its positive and more ambitious form, which aims at creating a real aristocracy and a better type of man. No doubt many centuries may elapse between this declaration and the realization of its programme; but it is none the less significant that the ideal of eugenics should now have been officially adopted and proclaimed in a great modern State. If, moreover, as we may hope, the methods adopted are intelligent and adequate and really able to purify and invigourate the human stocks subjected to them and actually to raise the level of human intelligence, the example of Germany must prove infectious and will be imitated everywhere. Thus the human race may be enabled to resume the progressive evolution which has been so deplorably arrested by the unforeseen mischiefs of a biologically dysgenic civilization. Civilization hitherto has been dys-

genic in its effects, because it has so softened the conditions of life that weaklings in depressed social strata have been able to survive and to propagate abundantly, while in the upper strata there have been such temptations, so much fighting, so much prudence, that their numbers have always dwindled. A truly and inherently progressive civilization, on the other hand, would be so ordered as to recruit itself from its best stocks and to eliminate, slowly but surely, its defective material. By so doing it will progressively ameliorate social conditions by increasing the efficiency and capacity of the individual citizens.

It is plain, however, that any programme of eugenics, or what the Germans call "race-hygiene," manifestly looks ahead to a distant future and demands faith, determination, and perseverance. It is no programme for the immediate future and holds out no hope of instant commercial returns. Hence, at first, stern discipline will be needed to enforce it and to steer the ship of State straight for so distant a goal. Probably eugenics will have to be elevated into a sort of biological religion and equipped with appropriate ritual and myths. But this should not prove more difficult than was the creation of the early astronomical religions, with their assiduous worship of the heavenly bodies, as a means of determining the length of the year. Nor would there be anything in the eugenical programme and the social discipline it entailed to debase the Super-man and to lower his intelligence to that of the Ant-man. For he would always be encouraged to develop his faculties and to excel. Hitlerism is already committed to the policy of developing leadership, a quality which the democracies are more and more failing to produce; and it would surely be the height of folly to breed leaders only to dispose of them after the fashion of the Purge. Society would not attempt, therefore, as in the communist State, to abolish competition, to extinguish initiative, and to make all equal by levelling down and eradicating individuality. It would realize that by such attempts it was hamstringing prog-

ress and that in individual variation alone could be found the stimulus and source of salutary innovation. Instead of suppressing individuality, therefore, it would be content to socialize it by education.

Hence it is possible that a Fascist dictatorship, even though it might not initially appear to be any more favourable to human freedom and development than a dictatorship for the alleged benefit of the Proletariat, would develop very differently. Originally both are essentially socialistic: they agree in demanding the subjection of the individual to social purposes. But after that their paths may diverge. Communism sets out from a postulate of human equality and proceeds to grind down individuals to the uniform degradation of the Ant-man. But Fascism, unhampered by any such dogma, can afford to develop all suitable individuals and to utilize all talents in building up its social synthesis. If it desires to progress, it can adopt the eugenical programme of human development and aim at the ideal, not of an Ant-man, but of a Super-man. It will then have to utilize the progressive possibilities latent in human individuality and to cherish the individuals from whom it will derive the impetus to progress. Moreover, as it will not be able to determine altogether *a priori* what will turn out to be the value of various variations in behaviour and endowment, it will have to adopt an open-minded experimental attitude and to practise a good deal of toleration. And on this scientific basis there may once again grow up a considerable degree of Liberalism and a certain amount of rational discussion. This new Liberalism will differ from the moribund Liberalism of to-day in being based, not on abstract dogmas about the equality and rationality of men, but on science and experience. We may hope, also, that the grievous collapse of nineteenth-century Liberalism will serve it as a salutary warning to be ever on its guard against the danger of atavistic relapses into brutality and savagery.

But these solitudes concern the future. For the moment our most urgent task and immediate endeavour must be to extricate ourselves from our present mess and the imminent danger of a rapid reversion into barbarism. If we can prevent our feelings from sacrificing our civilization to our nationalism, and our dictatorships from growing into tyrannies, we may find leisure to give some careful thought to the momentous choice between the alternative social developments now confronting us. Shall we aim at the Ant-man or at the Super-man? If we do not choose speedily and rightly, the avenging Furies of our past misdeeds may turn us back again into the beasts we were.

FASCISMS AND DICTATORSHIPS¹

THE MOST REMARKABLE and important political developments in recent times are the general abandonment of representative government and the substitution for it of despotic personal rule, under the names "Fascism" and "Dictatorship." What is the significance of this blatantly retrograde step, and how has it become possible, nay imperative, in one country after another, to scrap representative government? The process is world-wide and is gathering momentum as it grows; even in the half dozen states which still retain democratic forms, it does not look as though they were destined long to survive.

It is wise, however, in the first place to understand this tendency and to suspend judgments of approval or condemnation until we have grasped some of the reasons for what has come about. It is only after we have understood this new political system that we shall be entitled to express our opinions of it; and the fact that twenty years ago no one would have predicted what has in fact occurred, shows that it is a very surprising development. It is deserving, therefore, of careful study.

We may begin by realizing wherein the new dictatorships differ from the old ones, which we have always had with us, for example, in the South American states. These have always been ruled by dictators, ever since they successfully rebelled against Spanish rule, nor has there been any mystery about the reason. Their social development was such that they were ludi-

¹ Lecture delivered to the Los Angeles Institute of World Affairs at Pasadena, California, 1934.

crously unfit for representative government and had to be ruled by force. It is, perhaps, worth mentioning that politically some of these South American dictators have no mean achievements to their credit. In a world weighed down with debt, eyes are naturally turned with envious longing to the one unique country which has paid off its national debt. In Venezuela, President Gomez accomplished this miracle.

There are, moreover, a number of essentially similar dictatorships in Europe, which are mostly relics of the stresses and distresses of the Great War, and they flourish all over Eastern Europe, in Austria, Hungary, Turkey, Poland, Jugoslavia, Greece, Rumania, Portugal, and in the Baltic states.

But this reason does not suffice to account for the new dictatorships. The new dictator is not merely a despotic ruler who has got into the saddle and means to stay there. He is of a different type. He is not merely a strong man with a knack of looting the public treasury. He loves his job, ruling, and power, more than pelf. His ambition is not to retire to Paris, and there to spend his plunder gracefully. Paris is not the haunt of retired dictators as it is of discarded royalties. The modern sort of dictator, on the other hand, has not so far been found to be corrupt; and as the sort of government he has supplanted has usually been extensively pervaded by corruption, he has been able materially to improve the quality of the government supplied to the governed. At the same time it may be well not to insist too much on this benefit: dictatorships are still novelties, and on their good behaviour; and no form of government can be trusted to preserve immunity from corruption when it gets thoroughly established, except by constant vigilance. Hence, in due course financial scandals may be expected to break out also in dictatorships.

A more essential difference between the new dictatorships and the old is that they are *animated by ideas*; but we must admit that they are thereby rendered much more formidable.

What the actual ideas are that inspire them is of minor importance. They seem to me to be quite absurd and detestable, but they are popular and potent. Moreover, they are always backed by myths and legends which appeal to the masses: indeed, they owe their effectiveness largely to this very fact.

Thus, to take only the three leading dictatorships, the Russian, the Italian, and the German. The myth behind the Soviet system is that of the equality of man, or rather of the supremacy of the under dog; brotherly love and the supersession of all the institutions that human experience has until now evolved are secondary features. This is what the loyal proletarian is required to believe. In actual fact, however, Soviet rule rests on the machine guns of the Red army, on the forced labour of masses once again reduced to serfdom or slavery, and on the exportation of all critics of the régime to Solovetsk or to Siberia. In addition its safety is assured, as formerly, by the sinister activities of the secret police. In short, it is essentially a continuation of the old Russian system of government established long ago by Tsar Ivan the Terrible: there has merely been a change in the personnel and ideology of the tyrants that oppress the Russian masses.

Italian fascism, similarly, flourishes on the mythical glories of imperial Rome; and German national socialism, on the pseudo-scientific legend of the biological superiority of the German race, the Nordic "Aryans," the "chosen people of nature." It is quite logical and in accordance with this myth that one of the first measures of the new régime in Germany should have been to stage a conflict with the "chosen people of Jehovah"; but it will probably be found that the dictators of Germany will presently come to terms with the victims of their persecution and conclude an honourable peace with the powers of high finance, at the first opportunity. For though, especially at the beginning, it is of great value to a dictatorship to provide the populace with an unpopular object of hatred, like the Jews,

the Freemasons, or the *bourgeoisie*, no country nowadays can in the long run afford to drive out any large proportion of its intelligence; there is too little of it being produced everywhere.

A minor, but still important, idea that animates dictatorships, is that the conflict of parties and their debates, futile and endless, doing nothing and achieving only delays, must come to an end. The Bolsheviks may justly claim that they were the first to perceive that this infringement of the peoples' rights was both desirable and practicable, or in other words that the seventeenth-century attitude towards parliaments had changed. They perceived that the people had wearied of the talkers and were no longer interested in debates. Indeed, they had neither the patience nor the intelligence nor the occasion, to follow them. For the newspapers had long ago given up the hopeless attempt to throw the light of publicity upon the dreary flood of unmeaning and unavailing talk. Consequently all the dictatorships have found it perfectly easy to shut up the talking-shops. The cause of free speech has bred no martyrs, and it was not even necessary to march a corporal's guard of grenadiers into them in order to take away their baubles. It sufficed to lock them up and to sequester the war chests of the various parties to put an end to the whole democratic party system.

Not only has there been a great likeness between the ideal background of the various dictatorships, but there has been also a great similarity in the methods by which they have consolidated their power.

First of all they have made use of force and have fought their way into the seat of power. The Bolsheviks got their force originally from the mutinous sailors of the Kronstadt fleet and the revolting garrison of St. Petersburg. The Fascists practised street fighting for several years with the Communists before they marched on Rome amid the applause of the big business which had financed them and under the benignant eyes of the

generals who had supplied them with arms. The National Socialists got their training in the sordid sort of civil war which they were allowed to carry on with the Communists for a dozen years by a series of weak and foolish parliamentary governments that had neither the heart nor the sense to suppress them, while they were being subsidized by foreign armaments firms and the ring of hostile powers round Germany looked on with cynical approval.

But no dictatorship has relied on force alone. They all have made skillful use of purely political methods also and have beat the parliamentarians at their own game. For example, they all discovered a way to appeal to the people above the head of the party machine. By the use of the radio it became possible for the Fascist leaders to do without troublesome meetings that could never have accommodated a majority of the voters, and to speak to them directly as man to man. Indeed, as many have probably discovered from personal experience, the relation of a listener over the radio to a speaker is much more intimately personal than that of a hearer of a speech distracted by distance and interruptions. At a public meeting the hearer feels he is one of a crowd; but the listener-in yields to the flattering illusion that he is the subject of a personal appeal.

Secondly, the dictators have all paid special attention to the young, while the old parliamentary hands neglected them. Now, as a class, the young cannot be expected to take much interest in parliamentary politics. They know that they have not for years to come any prospect of public office or of a parliamentary career. For our large democracies all tend to gerontocracy, for the simple reason that it takes so much time to become known well enough to be nominated for office. Hence all the world over, the average age of legislators is probably well over fifty.

But the dictators set themselves to organize bands of youths, the younger the better, to brawl in the streets, to march in parades, to applaud skillfully staged emotional appeals. Was

not all this much more fun than to sit still and listen to old fogies labouring dull platitudes? No wonder the dictatorships captured the youth!

So soon as they had the power, moreover, they controlled the newspapers (editors and owners are rarely heroes), the radio, the films, the churches, the universities, and the schools. The young heard nothing but what their dictators thought it was good for them to hear, and they swallowed what they heard uncritically. For the young are much less critical than the old and cynical, though much more dynamic. So both in Italy and in Germany the dictator was swept into power by a tide of juvenile enthusiasm.

Thirdly, the dictatorships nowhere hesitated to fortify themselves and to beat down opposition by sheer terrorism. Compared with the Terror of the French Revolution, indeed, even the Bolsheviks must be regarded as having been relatively mild. But the terror was everywhere sufficient and effective. In Italy, the *manganello*, the cudgel, the lavish doses of castor oil, and the *confino* terrorized the opposition; in Germany, beatings, concentration camps and recently sheer murder; in Russia, drumhead court martials, mysterious disappearances and relegations to the frozen north. Once a dictatorial régime is established, the terror may abate; it becomes less visible, but lurks always in the background.

Lastly, the dictatorships have known how to employ all the arts of propaganda, about which it would be vain to deny that all the governments had learnt a great deal in the course of the World War. One of the chief lessons of the War should everywhere have been, though one may doubt whether anywhere the lesson was fully learnt, that the people could be made to believe anything by sufficient propaganda. In their propaganda the dictatorships have simply carried on the methods practised during the War. In consequence, the subjects of a dictatorship are permanently reduced to an abject condition of war mentality.

They have no means of discovering what is really happening beyond their own immediate ken. They have no means of distinguishing between the truth and the official lie. For even if they can obtain the furtively circulated leaflets of the opposition, they cannot feel assured that they are not being regaled with equally mendacious propaganda. So, as in the War, the vast majority give up the vain endeavour to ascertain the truth, and surrender to the official propaganda and its claim to exclusive patriotism.

There are two more questions which demand consideration. What were the causes of the success of the dictatorships, and what are their prospects?

The main cause of their success was, of course, the pitiful incompetence of the governments they superseded, or in other words, the corruption, inefficiency, and folly of the parliamentary democracies. He is no true friend of democracy who shrinks from admitting this; and whoever wishes to save democracy must endeavour to reform it. I am not quite certain that democracy is worth saving, but I am quite sure that to be saved it stands in need of radical reform. I will try therefore to state the case for such reform.

Democracy is a form of government which makes great demands on the moral and intellectual qualities of the people. It requires the citizen to be interested, honest, and intelligent beyond the standards requisite in less exacting constitutions. Consequently, if for any reason there is a falling short in these respects in the masses of the people, or even if the mechanism of politics is so perverted that the good sense and the good feeling of the people can no longer determine the working of political forces, a democracy decays. It must then relapse into some simpler and easier form of government. This is generally some form of personal and autocratic rule, a dictatorship or an empire. The Greek political philosophers, who had observed this tendency, laid it down as a law of politics that an extreme

democracy naturally degenerates into a tyranny. We should be slow to dignify such social tendencies with the name "laws"; but the modern crop of dictatorships certainly goes far to confirm this belief.

The devil in the case, however, was not so much the people as the politicians. In the parliamentary democracies the latter had everywhere grown into what was far too much of a caste, a profession, or a trade, full of tricks whose ultimate purpose was to deceive the people and to prevent it from performing properly the political functions assigned to it by the democratic constitution.

It is hardly an exaggeration to say that in no modern democracy do the politicians really desire to consult the voice or to do the will of the people. All their endeavours aim merely at inducing the people to vote them into power with a blank cheque. This they usually obtain by false pretences or because the people have found a government so bad that they do not think their opponents can do worse. Now of course a voter who feels thus does not necessarily wish to endorse the programme of the opposition. He may find it quite as distasteful, when he gets it, as that of the defeated government. But at present he is given no alternative to voting for one party or another. There is no reason whatever for this (often painful) restriction of his choice, except that it suits the politicians. It ought, however, to be open to the voter to poll a simple negative vote against a candidate he disapproves. This would cancel a positive vote, and if a candidate polled many negative votes, he would probably be defeated by his rival. In some cases both candidates might deservedly poll a plurality of negative votes; then there would have to be a new election, with the salutary consequence that both parties would presumably put up better candidates. In any case, if negative voting were permitted, a party victorious in consequence of the negative votes given to their opponents would not be under the delusion that the people had supported

them: they would be on their good behaviour and would provide a better government. As things are, the political machine is everywhere constructed to deceive and misrepresent the people. Nowhere, on the other hand, is it considered part of the duty of the public men to instruct and enlighten the people. The feeling that the real truth about the state of public affairs must on no account be revealed to the very people who under democratic institutions are invited to express an opinion on them, is probably the cause of worse deceptions of the people than the outspoken mendacity of many politicians. The universal assumption of democratic statesmen seems to be that since the people are fools, they must be provided with plenty of fools' paradises to live in.

To forecast the future of dictatorships needs a gift of prophecy I cannot claim. But there seem to be no symptoms visible on the political horizon that promise any relief from dictatorships. An unsuccessful war would presumably end them all; and even a successful war would probably be too much for the Soviet system. Hence, one might argue that the instinct of self-preservation will keep the dictators out of wars, were it not that the same instinct held for monarchs, and yet they all took the plunge in 1914. The transmission of power from the first dictator to his successor ought always to be difficult; yet the power of Lenin was passed smoothly on to Stalin. On the whole the great dictatorships seem likely to last, though those approximating to the South American type may perhaps be upset by assassinations.

On the other hand, new conversions to dictatorships are quite probable. In France parliamentary government is in a critical condition; it has already been necessary to enact laws by ministerial decree in a thoroughly dictatorial fashion. I am reluctant to speculate about the present dictatorship in America for several reasons: one being that it is still uncertain how Presi-

dent Roosevelt's great experiment will end. But it is evidently in accord with the whole trend of political change in the United States in recent times, which has tended to increase the powers of the President of the Federal Government, simply because city and state governments have shown themselves so unable and unwilling to remedy crying evils. Also the Roosevelt dictatorship has unquestionably a legal basis. His dictatorial powers have been duly voted him by Congress. In this respect the American dictatorship resembles the German, which rests on the legal cession of legislative powers to Hitler by a duly elected Reichstag. Clearly the methods of establishing dictatorships are becoming more legal: marches on Rome and fighting in the streets are no longer necessary.

In conclusion, it may be pointed out that a dictatorship is not unthinkable in England and indeed might prove her salvation. At any rate the Mother of Parliaments is in serious danger. In fact, one can pretty well see how a dictatorship may come about at the next general election. For a plan or plot which has this aim has already been revealed.

Sir Stafford Cripps, a lawyer and a younger son of Lord Parmoor, formerly Attorney-General in the second MacDonald administration, belongs to the scanty *intelligentsia* of the Labour Party. He seems to be an earnest revolutionary who is impatient of the piecemeal revolution which has been going on for years in Britain. He wants socialism in his time and has produced a plan which would be effective and looks devilish sly. It has not yet been officially adopted by the Labour Party; but it was not rejected, only postponed to the next year's party conference when its author was elected to the Executive Committee. Moreover, there is little doubt but that the force of circumstances and the logic of the situation would in all probability compel the party to attempt to carry through this plan in the event of a victory at the polls.

Now such a victory is highly probable, even at the next election. For the present National Government is signal proof of the creeping paralysis which has overtaken parliamentary government and of the decadence of British democracy. It possessed a ten-to-one majority in the House of Commons, but has done nothing with it. It is so lost to all sense not only of its duty towards the constitution but also of the instinct of self-preservation, that it has refused to preserve the political existence of two of its constituents, the National Liberals and the National Labour Party by granting proportional representation, and of the constitution by reforming the House of Lords. It has refused to spike the enemy's guns and to defeat the Crippsian plot by limiting the numbers of the Lords. It has deserved to be defeated at the next appeal to the country and is quite certain to lose heavily in seats and prestige.

Nevertheless, it is not to be expected that the Labour Party, if it goes to the country with an openly revolutionary programme, will obtain a large majority. Its majority, moreover, will be mainly due to voters who are merely sick of the futility and inertia of the National Government. Sir Stafford Cripps is quite well aware of this, but is determined to carry through his revolution even with a small and evanescent majority, by dictatorial methods.

He realizes that by the present parliamentary procedure nothing much can be done. For the House of Lords, by rejecting bills which it dislikes, can hold up revolutionary legislation for two years; by that time the majority in its favour is likely to have evaporated even in the Commons. But instead of accepting this rebuff, Cripps argues "Very well, then we must abolish the House of Lords to begin with. How? By forcing through it a bill for its own abolition. There is no limit to the numbers of the Lords, and all we have to do is to create 700 or 800 Labour Peers pledged to vote for our Bill. This is a

possible and constitutional procedure, if the King consents. After that, the House of Commons abdicates by empowering the ministry to legislate by Orders in Council. Then at last will the revolution be able to proceed at any pace desired, without let or hindrance."

There is only one little flaw in this pretty plan, apart from the colossal and imprudent arrogance of revealing it. It presupposes that the victorious Labour Party will be allowed and asked to form a government. But this they cannot do till their opponents have resigned. And in this gap between the defeat of the old government and the formation of the new much may happen. It is not improbable that something will happen that will be fatal to Sir Stafford Cripps's plan.

For what would happen, if, with that plan as its programme, the Labour Party won the elections? As soon as the results were known and the Labour victory was certain, that is, on the very next morning after, an unprecedented panic would set in. The vast sums of foreign money, normally deposited in London, would be ordered out by telegraph. Much the worst panic in history would break out. The pound would slump to unexampled depths. All the banks would be forced to close within a day or two. Bankruptcy would be universal, and starvation imminent.

Under these conditions would there not be a universal and irresistible outcry for a saviour of the country? Millions of voters who had thoughtlessly voted for the Labour Party would repent them of their folly. Supreme power, a dictatorship, would be within the grasp of any ambitious politician who had the nerve and resolution to assume office and to take the responsibility of suppressing Stafford Cripps and his revolutionary plot. He would have the support of the police, the army, the navy; of every one who had lost anything or had anything to lose. One might admit that in our present ministry no one would

be found who could rise to the occasion; but there are still a few personages in politics, like Winston Churchill and Lloyd George, who have nerve and courage. Even the avowed leader of the Fascist Party, Sir Oswald Mosley, might be found capable of rising to the occasion.

Moreover, there would always be one who would have both nerve and courage, and, besides, the position and the strongest personal interest to foil the revolutionary plan. I mean His Majesty the King. The King would have the constitutional duty of providing the new government; he would be forced to intervene, and his intervention would be hailed with rapture. Moreover, poetic justice also would attend such a revival of royal rule for he would thus recover the power of which the House of Commons deprived his ancestors three hundred years ago. He would dissolve the newly elected House of Commons, appoint as prime minister a man of the calibre of General Smuts, and issue a royal proclamation declaring his duty and intention to save the country; after achieving which he would allow another general election. In all probability his action would be overwhelmingly endorsed.

For it would save not only the situation, but perhaps even the Empire. For ever since the present Parliament passed the Statute of Westminster in December, 1931, there has been no legal bond other than the Crown to hold the British Empire together. The British Empire has become a mere creature of habit, which continues because no crisis has yet arisen to test its cohesion. Constitutionally the King has to take the advice of all his premiers equally. But what is to happen if the premier of Great Britain advises him to participate in the next European war and the premiers of Canada, Australia, South Africa, and Ireland are insistent that he must not? Nobody can say, but the King will have to decide on his personal responsibility.

This possibility, that the dictatorship in England would turn

out to be of the fascist rather than the bolshevist type, is, I fancy, the reason why Sir Stafford Cripps made the ill-mannered attack upon the Crown for which he soon had to apologize. And so we may be reasonably sure that the British Lion and the Unicorn will always support the Crown against any Loch Ness Monster that may be spewed up from the slums of Glasgow.

LOGIC

HUMANIST LOGIC AND THEORY OF KNOWLEDGE¹

THE STUDY of logic is not a popular one, even among the most ardent philosophers. To the reading public in general logic is the most terrifying part of philosophy, about which cluster such epithets as cold, heartless and inexorable. The kind of logic which is described in these terms by no means fully deserves them; for it is quite easy to play with it, and even to make fun of it. But the philosophic attitude toward logic is no less peculiar. The philosophers are wishful to believe, either that the subject has been settled for all time by Aristotle, or Kant, or Hegel, or else that it is nothing but a sort of intellectual game with weird symbols, the manipulation of which can take the place of active thought and mechanically issue as new truths. So they should think it theoretically possible to construct a machine that would do their thinking for them. Still, most of them do not like to play this game, finding it too hard.

Humanist logic, on the other hand, is a reaction against all this sort of thing. It challenges all the earlier logics, and accuses them of a false and inadequate analysis of knowing, due to a false and foolish intellectualism, which has ignored and abstracted from all the characteristic operations of real thinking, and substituted a whole system of fictitious notions of abstractions. These have severed logic from its natural setting in the

¹ From *The Personalist*, XIX (1938), 16-31, where it appeared under the title "Logic: A Game, or an Agent of Value."

human mind, estranged it from human psychology, and delivered it over, bound hand and foot, to artificial and artful conventions of language. Thus has logic been made into a word-game—or rather into a series of such, since their conventions could be indefinitely varied—which had no relation whatever to the acquiring and assuring of knowledge, nor any bearing on the progress of the sciences. It is the purpose of this article to convict the old logic on these charges and to show that they are no exaggeration.

The Humanist logic and theory of knowledge are best approached by a road which skirts the hopeless morass into which formal and absolutist logicians have plunged their subject.

In recognizing formal logic as a word-game we are only calling it what it was from the beginning. Logic had its origin in a word-game which was popular in the schools of Athens in the fifth century B.C.; so it has remained true to type. The game was called dialectic, or the art of contentious conversation. It consisted in getting up a debate on some live question, just for the fun of it, or rather to find out which party could get the better of the other. As with other games, there was a serious purpose in the background: it was excellent practice for the art of persuading a jury, and this might be a matter of life or death. But on the surface the overt motive was merely victory; the players all tried to defeat their opponents and to convince, or at any rate to convict, them of error. But it was hard to know when one had won and to force one's opponent to confess himself beaten. Logic was needed to extort this confession, and thus began its career as a handmaid of rhetoric.

This situation gives the key to the instantaneous and enormous success of Aristotle's invention of the syllogism. For the syllogism offered Greek debaters the very thing they wanted—an instrument of coercion. It seemed to be an infallible way of compelling assent, of extorting acceptance of its conclusion from anyone who had been rash enough to accept its premisses. Being

thus coërcive, it was hailed as the perfect form of proof or demonstration. No one thought it odd or offensive that truth should be represented as something to which the mind had to be driven by force rather than as the reward of an eager pursuit. Nor that the syllogism should tacitly supersede the notion of truth by that of "validity." For it seemed clear that a syllogism might be valid whether or no the premisses were true, and even though its conclusion was absurd. It was "valid" in virtue of its form and irrefragable. Once true premisses had been found and arranged in valid form the conclusion had been mastered. It followed inexorably, and all could be forced to assent to it. There was no loophole for error to creep in on the way from the premisses to the conclusion. Conversely, any conclusion could be proved coërcively, if only true premisses could be formed from which to draw it. The whole process of reasoning was rightly knit together by logical necessity at every step. Thus was necessity enthroned as the ideal of thought, and thus did logic acquire its terrific reputation as cold, heartless, and inexorable!

Having thus supplied a manifest need, Aristotelian formal logic early established its supremacy over the whole realm of thought. All other sorts of reasoning paled before it. All other processes used in knowing found themselves judged by its standards, and forced into conformity with it, under penalty of being despised as invalid and precarious. So numerous attempts were made to put inductive reasoning into the form of valid syllogism, while mere probabilities were openly disdained. To be respectable, truth had to be necessary and absolutely certain and if possible demonstrated by a syllogism.

The Aristotelian syllogism had a long reign, equalled only by that of Euclidean geometry. Its ascendancy lasted much over two thousand years, and indeed is hardly ended yet. Its prestige is best attested by the fact that during all these centuries not even the most determined attempts at reform ever dared to call in question the fundamental assumptions of Aristotelian formal-

ism, to doubt the adequacy of its analysis of the right, or to reject its characteristic notions.

Yet from the first it might have been observed that this Colossos stood on feet of clay. It has no less than five defects, all of which are fatal to its claims, and three of which are peculiarly deadly because they are purely formal.

(1) Greek ingenuity discovered almost at once, and in Aristotle's own day, that there was a difficulty about getting a supply of true premisses. If this could not be assured, it was useless to show that if the premisses were true the conclusion must be true. No conclusion need be accepted, and the syllogism broke down as an instrument of coercion.

Moreover, it was an awkward fact that the truth of the premisses always could be disputed, at least dialectically. A disputant could always say to his opponent "Please prove your premisses," and the demand was fatal. For the only way of proving a premiss was by constructing a syllogism which had the disputed premiss for its conclusion. For this two true premisses were needed. So, to prove your original premisses, you needed two more syllogisms, and therefore four true premisses. Moreover, if and when you had achieved this difficult task, you found that you had gained less than nothing. For each of your new premisses could be challenged in its turn. So the only result of your efforts to prove your premisses was that instead of having two propositions that might be challenged and had to be proved, you now had four! Clearly the syllogism was a form of proof in which an infinite regress lay artfully concealed. And you could never get to the end of that. The more you tried to prove, the more you had to prove; and every step you took, took you further away from your destination, and doubled your burden of proof.

When Aristotle met this difficulty he could think of nothing better than to allege the existence of intuitive truths in their own right, which were to be self-evident and to need no demon-

stration. If you traced back premisses far enough, you were sure to come upon such truths, and they would put a stop to the infinite regress for you. For they were intrinsically certain, self-evident, and self-proving, and so formed the basis of all proof, being in fact more certain than any proved conclusion.

To appeal thus to intuitions was to cut the Gordian knot, but logicians have found it very hard to do without this expedient and, so, many of them still profess belief in intuitions. For the only alternative seemed to be to argue in a system, in which every part supported every other; but this, alas, was indistinguishable from arguing in a circle, an acknowledged fallacy since Aristotle's day.

Yet intuitions are a broken reed which only the extremest credulity could stomach. How was it possible to discriminate between the perception of intuitive truth and dogmatic affirmation of whatever one wanted to believe? How was it possible to distinguish between valid and invalid intuitions, and to separate those which were logical and sound from those which were psychological and unsound? No wonder the believers in intuitions were unable to agree upon any list of self-evident primary truths. In short, to cure this defect of the syllogism by intuitions was worse than the disease.

(2) A further objection to the syllogism was also an early discovery. It was fatal to all the usual ways of understanding the syllogism, and when at last an escape from it was found, it was fatal to the syllogism's claim to be formally valid. It is best illustrated by an example.

Let us take the traditional proof that every man must die. It argues thus: "All men are mortal," "Socrates is a man," "Socrates is mortal." Essentially this reasoning offers universal mortality as a proof of the mortality of an individual, and this again implies several assumptions which are not even stated. It implies that no individual can ever show himself recalcitrant to the universal with which he is classified, and that he has been unam-

biguously classified under the right universal. There is also a more obvious difficulty. Common sense soon detects that unless the conclusion is true the major premiss is false. That "Socrates is mortal" must be true, if "all men are mortal" is to be true. Hence it seems absurd to say that the mortality of all proves that of Socrates; the truth is that that of Socrates goes to prove that of all men. Plainly then the conclusion said to be proved is presupposed in the truth of the premisses. So the argument is fallacious, and the technical name for its fallacy is *petitio principii*, or begging the question.

Logicians are still wriggling desperately to escape from this objection. But it avails nothing to suggest that mortality is inherent in the nature of man and that therefore if Socrates were not mortal he would not be a man. For then the question is begged by the minor premiss when it declares that "Socrates is a man." Nor is it less futile to take the major premiss as stating a "law of nature" and the minor as bringing a case under it. For we then beg another question. We assume that universal propositions cannot be misapplied, and that what is a case of a law for one purpose, say for classifying men, is necessarily also a case for another, say for predicting death.

The only way to avoid begging the question in using the syllogistic form is to sacrifice the truth of the premisses and to take them frankly as stating a hypothesis and as making an experiment in thought. If it is a law of nature that "all men are mortal" and if Socrates is a man to whom this hypothesis applies, Socrates will die. His death is deducible from our hypothesis. Does Socrates die in fact? If he does, our hypothesis is so far confirmed, or as we say "verified." But verification admittedly is not a formally valid procedure; it is incurably affected with the formal fallacy called "affirmation of the consequent." If, then, even at its best, a conclusion cries out for verification and depends on it, syllogistic proof is not really a formally valid prop-

cedure either. It does not really guarantee that a "proved" conclusion will come true.

More recently two further fatal flaws have been detected in the syllogistic form. (3) As Alfred Sidgwick has long been pointing out, when we put together two premisses which we believe to be true, we can never be sure in advance that they will not put us to shame by leading to a false conclusion. Thus, "No good sailor gets seasick," "Admiral Nelson was a good sailor," ergo "Admiral Nelson did not get seasick"—whereas, notoriously, he did. When we go into the reason for this failure, we find that, though we should not have scrupled to call our premisses true separately, yet when we combined them our middle term "good sailor" developed an ambiguity which spoils the argument. A little further reflexion shows that this sort of thing may always happen. For it depends on the contexts in which the middle term is used and it always must be used in two contexts, the difference between which may always disrupt the argument. We learn further that a proposition which is true in one context may become false in another, and a proposition which is true in general may turn false in some contexts. A formal logician, when he comes to grief in this way, will of course declare "Well that middle always was ambiguous, and there never was a syllogism at all!" This is true, but irrelevant; it does not meet the difficulty that we can find out the defect only when we try to use our premiss, and after our argument has gone wrong. To content oneself with the formalist explanation therefore means to admit that logic can discover the mistake only after it has been committed and is altogether wisdom after the event. Formal logic thereby confesses that it is incapable of guiding thought and of averting blunders. It will let us argue from premisses which look true in the abstract; it will let us use them in contexts in which they turn false, and it will let us "prove" conclusions which are falsified by the event. In short, it is ridiculous.

(4) It is, moreover, quite untrue that historically formal logic

has been content to play such a minor rôle; it has always sustained the pretension that a syllogistic proof could justify prediction. Indeed, successful prediction was the covert, though unavowed, aim of the syllogistic form, and a large part of its charm, as it is of all *a priori* philosophy. If from "all men are mortal," "X is a man," ergo "X is mortal," we cannot absolutely predict the death of X, the glory of the syllogism has departed. Its charm consisted in the power it seemed to give us to predict the future. If men can go on dying, in accordance with the order of nature and the custom of their forbears, until one fine day some one concocts an elixir of life or devises a way of arresting the ageing of the body, how can we any longer assume that our premisses are ever absolutely true or put our absolute trust in predictions drawn from them? Both are reduced to probabilities, and these grow less as the future they endeavour to predict grows more distant. As an instrument of unconditional prediction the syllogism has a fifth and fatal flaw.

(5) This further failure may finally lead us to scrutinize its terms more closely. How is syllogistic (or indeed any sort of deductive) prediction to be rendered compatible with the growth of knowledge and the changes in the meaning of terms which this must entail? We may test this question on our former syllogism. What did "mortal" mean in it? Did it mean "doomed to die," or only "liable to death"? At present it is probably taken to mean the former; but if an elixir of life were discovered, would it not have to be changed into the latter? Again, when it is applied to one who has been dead for some two thousand years, like Socrates, must not "mortal" mean just simply "dead"? In view of all this is not our syllogism quite hopelessly vitiated also by the ambiguity of "mortal"?

The five objections we have urged against the syllogism hold also *mutatis mutandis* against the so-called non-syllogistic forms of reasoning. For they are inherent in the attempt to extract truth from forms as such. Similarly the fundamental ideas

which, though never justified and hardly ever avowed, are common to all forms of formal logic, are open to unanswerable objections. Among these ideas the three foremost are formal validity, logical necessity, and verbal meaning. We shall find that they are not only impossible of attainment but pernicious and superfluous.

The illusoriness of formal validity has already been exhibited. Formal reasonings are not really "valid"; that is, they never really guarantee unconditional truth without regard to experience. The obviously right inference from this is that the notion of formal validity had better be dispensed with; it is not an adequate substitute for real truth, as was supposed.

Logical necessity also appears to be an (even more deceptive) mare's nest. No astute and resolute antagonist can really be forced to assent to a conclusion against his will. We saw that he could always question its premisses *ad infinitum*. A truly coercive logic, therefore, is a vain dream and a false ideal.

Nor is it true that logical necessity is required to hold our reasonings together. Logical necessity is only the imaginary cement which is feigned in order to connect the fictitious entities called "propositions," which are really nothing but forms of words. The really efficacious acts of thought called "judgments" get on without it. They are conducted to their destination by trains of thought and are guided in their course by the interests and purposes of thinkers. For all thought is purposive and personal. Yet no mention of the real agencies which inspire and incite human thinking is ever allowed to appear in any formal logic.

The ultimate reason for this strange omission is to be found, no doubt, in one of formal logic's initial abstractions. It has all along and systematically abstracted from real meaning. Real meaning is personal; it is the meaning of the man who means, and who wishes others to take his meaning. Instead, formal logic substitutes verbal meaning, the meaning of the words em-

ployed, out of which the personal meaning is selected and built up.

Now it is easy to see that personal meaning is the primary meaning and verbal meaning is secondary. For words acquire their meaning by being used (successfully) to convey meanings which are personal. These past uses are remembered and attached to words; after which they form a fund out of which we can, on suitable occasions, extract words which will help to express our meaning. It is in virtue of this substitution of verbal for personal meaning that the traditional logic could become a word-game with fixed and easily remembered rules; but it is the vice of this procedure that it completely alienates logic from real life, real thought, and the real work of the sciences.

I should next like to emphasize that this whole criticism of the traditional logic has a definite philosophic background. It is personalistic and voluntaristic and forms a systematic protest against the intellectualism, the abstractness, and the apriorism of the old logic. Traditional logic inherited its intellectualism from its Greek founders, who naturally shared in the peculiarly intellectualistic bias of their compatriots. The Greek language betrays this peculiarity by showing an almost complete blank where other languages have a vocabulary of volition. By intellectualism, then, we should mean the inability or refusal to see any but cognitional operations in our mental activities and to see any but processes of pure thought in our cognitive efforts.

Now both of these assumptions are amazingly untrue to life and impoverish out of all recognition the intellectualist accounts of our knowing. They overlook, leave out, or distort, constant, prominent and enormously important features. For in point of fact our thinking is volitional through and through. It is set going by desires and purposes; it is driven onwards by the urgency of problems. It pursues ends which appear to it as good and is pervaded and steered by values of all kinds. Truth itself moves us, not because it is distant and unattainable, disinter-

ested and dispassionate, but because it is near and dear to our hearts; it is felt to be a value and worth achieving, even at the sacrifice of ignobler aims and lesser values.

The inhuman and incredible abstractness of intellectualist logic reveals itself particularly in its abstraction from the personal side of knowing. All actual knowing is in fact knowing by persons for personal ends; but for reasons which are never publicly avowed this all-important fact is utterly slurred over and ignored in the traditional logic. If one may venture on a guess, the abstraction was made because it was mistakenly assumed that otherwise an intolerable complication could attach to every logical situation. We should have to take into account not only purposes and motives but also desires and personal circumstances and antecedents; in short, the infinite and inexhaustible particularity of every act of thought, would have overwhelmed and distracted logical analysis. Unwilling or unable to cope with the whole of this material, logic refused to recognize any of it; this was a great relief and a valuable simplification.

But was it not manifestly a gross falsification and the beginning of gross fictions? Did it not sever all connexion between logical theory and psychical fact and render impossible all cooperation between logic and psychology? Moreover, was not its vaunted simplification largely illusion? True, it gets rid of some complications, the gravity of which it has overrated; but in return it gets entangled in others, with which it has struggled vainly ever since. For the personal context, which gave the clew to the real meaning of the actual judgment, it substitutes the verbal proposition; but it leaps thereby from this frying-pan into the fire. For the proposition is merely a form of words to be used with discretion, on occasion; and when it is used, it becomes a judgment. In itself it is infinitely ambiguous, for it may mean whatever it can be used to mean in any context—past, present, or future. To determine "its" meanings, therefore, all its possible uses would have to be explored; but this is

impossible, nor can anyone say, apart from a context, which of its senses is that really intended.

On the other hand, the complications arising out of the psychical setting of the personal judgment have been grossly exaggerated. It may be expedient to trace out the psychological antecedents of a judgment, and to reconstruct the personality of its maker, in order to understand it fully; but it is false to assume that this has to be done perpetually. It may have to be done, sometimes, and we should be ready to do it when necessary. But we should not assume that the personal context and the psychological circumstances of the making of a judgment can never be irrelevant.

Thus, all that is needed to render a personalist logic workable is to admit the conception of "relevance" and to grant the right of selection. If we have a right to exclude the irrelevant and to attend to and select the relevant, we can deal with any situation in logic, not indeed without risk, but with good prospects of success. Whereas, if we allowed ourselves to be paralyzed by the absolutist contention that we must play for safety and may draw no inference till we have considered the totality of reality, we should never be able to reach any conclusion at all.

But why show such animus against formal logic and go so fully into its mistakes and misdeeds? Barbara, if we may dub it so, is after all an aged and toothless hag, who might be left to mumble in obscurity and to die in peace. "No," I reply, "she is a pernicious witch, and her enchantments are the root of all that is most evil and harmful in philosophy and are the hidden cause of all its failures." Formal logic is the tap-root from which springs a poisonous crop of absolutisms, naturalisms, scepticisms, intellectualisms, formalisms, verbalisms, and determinisms, which form an impenetrable thicket of errors and delusions and bar the way to a sane and humane philosophy which permits a full development of the human spirit.

So long as formal logic is not eradicated root and branch, we

can have no logic that is more than a trivial play with words, no logic that can recognize the actual procedures of human knowledge in their integrity, no logic that can understand and justify the method of science, that can be on speaking terms with psychology, that can reconcile thought and action and transcend the pernicious antagonism between theory and practice and render thinkable a harmonious growth of all human faculties, no logic that can establish peace and order in the human soul and assign their due rank to the sciences of value and find a place for the supreme value of personality.

On the other hand, when we have substituted a humanist logic, resting on a voluntaristic conception of human nature, which realizes how completely man is built for action, we can say goodbye forever to all the fictions of formalism. Humanist logic does not enact impossible ideals and condemn our thinking for failing to attain them; it starts soberly from observation of the psychological procedures used in knowing, it values them according to their success, and it approves of those of which experience attests the value.

It observes, moreover, that thinking occurs, not *in vacuo* nor in flashes, but in trains of thought, and that such trains are always purposive. That is, they are inspired by interest in some subject, started by some desire to know, and they aim at some end which seems desirable. Thus one thought follows another in an easy flow, and its sequences are felt as consequences.

Hence reasoning proceeds, not by compulsion from behind, not because the reasoner is inexorably driven onwards step by step (or rather dragged, reluctant, jerk by jerk), but by the attraction of an end which is eagerly pursued. The whim of logical compulsion or necessity can be dispensed with.

Nor is that of formal validity required. No actual reasoning (as opposed to the fake illustrations that figure in the textbooks) is ever formally valid, and no "valid" reasoning is ever really

valuable. Validity is a wretched substitute for truth, and truth is value, not "validity."

But the truth aimed at and attained in good and valuable reasoning is never absolute. How could it be, seeing that it is plainly relative to the knowledge which it presupposes, the question which it answers, the problem which it solves? Absolute truth is nothing but a snare which catches the dogmatic. It is a meaningless illusion which no human knowledge guarantees. But human truth is true "enough" and good "enough" for the purposes for which we seek it. That it is not "absolute" is really an advantage. It means that it always remains susceptible of improvement, that knowing need never end, and that an old "truth" can always be superseded by a better, so soon as a better heaves in sight. So the continual scrapping of antiquated truths which attends the progress of the sciences is accompanied, not by despondency and despair of truth, but by a growing feeling of fulfillment, which enables the humanist logician to smile at the charge that his theory is "sceptical."

Nor is he troubled by the feeling that his truth is insecure. His truth, at every moment, is the triumphant outcome of the whole truth-seeking of the past. True, it is not absolutely certain, because such certainty does not exist. What matter, if practical certainty exists? Certainty like truth is and must be relative to the evidence on which it rests; but this may grow so great that no one could feel more certain. This is practical certainty and is psychologically equal to absolute. For a certainty which no one questions is surely good enough. If it feels certain beyond all actual doubt, the abstract possibility that some day it may be doubted does not detract from its psychological sufficiency. If that day arrives, and it is superseded, we shall simply transfer our allegiance to the new truth and shall rejoice in it, as before. Thus, though every truth has its day, sufficient for the day will ever be the truth thereof.

This, moreover, is not only a comforting but also an inspir-

ing doctrine, for it sets no limits to the progress of knowledge and assures us forever of the value of its services.

Lastly, by conceiving truth as a value and logic as the study of this value Humanism improves the relations of the sciences. It brings logic into line with ethics and aesthetics and greatly mitigates, if it does not wholly remove, the possibilities of conflicts between our various values. It will elsewhere be shown that for Humanism ethics springs as easily and naturally as does logic out of the needs of life, out of the practical predicaments in which man finds himself on earth.

MULTI-VALUED LOGICS—AND OTHERS¹

FOR MORE than fifty years I have been inquiring diligently of all the logicians and logics I could get hold of what they think logic is about; what, that is, its subject matter is and how it is related to the subjects treated by other sciences with which it comes in contact and has more or less friendly or hostile relations. I regret to say that the Holy Grail itself has not proved a more elusive quest. Not only have these inquiries led to no very intelligible or satisfactory result, but, so far from logicians working their way out to greater clarity about the aims and objects of their industry, the muddle logic is in is growing steadily and rapidly worse. The truth of this statement hardly needs to be expounded at length: it will not be disputed by any one cognizant of the facts about the present state of affairs. But a brief summary of the situation will be such a good introduction to such remedial suggestions as I can offer, that I must undertake the ungrateful task of setting out in plain English the actual condition of the studies that figure under the name of logic.

There are in being at present no less than four distinct inquiries that claim the name "logic." As scientific systems they are incompatible with each other; and neither the logical nor the psychological connexions between them are at all direct and obvious. So different are they that they can hardly be regarded even as divergent species of the same genus.

¹ From *Mind*, n.s., XLIV (1935), 467-83.

1. There is first of all the old Greek logic of dialectical debate, which reached its culmination and a high degree of perfection in the syllogistic of Aristotle and may for purposes of reference be denominated "Barbara." It is not only the oldest but also the simplest and easiest of all the logics, and it is still apparently the most convincing. It is still the only logic which is taught extensively (and perhaps the only one capable of being taught) to the young; and if logicians would be candid about their past, they might all have to confess that at some time or other they have been enormously impressed by Barbara, and more or less in love with her! It takes time and maturity to revolt against her charms, to detect her tricks, and to abandon her devices.

Moreover, there is really something to be said for Barbara, if she is taken in her historical setting. The original purpose of logical study in the Athens of the fifth century B.C. was essentially forensic: in the absence of lawyers (who had not yet been invented) the young men of the upper classes were eager to be trained in the art of public speaking, in order to defend themselves and their property against the constant attacks of professional informers who arraigned them before hostile democratic juries. So they flocked to the Sophists to learn how to compose orations and followed Socrates round to learn the art of cross-examination. The most urgent demand, therefore, which logical study had to satisfy was that for dialectical victory and "proof"; you wanted to beat the other fellow, to crush him so that all could see that he was beaten, and to compel him to own himself beaten. Naturally, therefore, Barbara became a logic of consistency and compulsion and laid all her emphasis on constraining a reluctant mind to yield to "necessary" truth. Her one object was to convict an adversary of inconsistency and self-contradiction, to drive him into a corner, and to force him to unconditional surrender.

On the whole Barbara did her work remarkably well—so well indeed that for several thousand years no one ventured either to

question her all-sufficiency or to explore the foundations of her power. It was, however, intrinsically unreasonable to expect that a technique which served the purpose of showing up a hostile reasoner should be suitable also for the purpose of investigating nature; and when the empirical sciences developed this ambition, it was inevitable that Barbara's vogue should decline. The new sciences did not and could not employ her. She made, indeed, a bold bluff to persuade the world that a syllogistically proved conclusion should rank as an eternal truth and was entitled to predict the future of reality; she argued that if it was true that all men were mortal now, that was a real guarantee that every one would die forevermore.² Nevertheless the exploration of nature by syllogistic methods did not prove successful, even though "inductive" logicians showed the utmost deference, not to say abject servility, to Barbara, and laboured incessantly to show that their methods attained to formal "validity" and "absolute" certainty. Barbara, moreover, when criticized on the ground of her empirical inadequacy, could always excuse herself by pleading that the fault lay with the "matter" of knowledge, not with its "form," leaving intact her claim to have described the "ideal of knowledge," once "absolutely true" premisses had been provided.

Consequently any really effective exposure of Barbara has to attack her on her "formal" side. Now on this side she is strongly entrenched behind the barbed wire of linguistic usage, being indeed based on a very fairly complete analysis of (Indo-European) speech. Yet here, too, she is by no means invulnerable. For though she long deterred logicians from raising the searching question as to what guarantee the syllogistic form can yield that the verbal identity of its terms assures also the real identity of the objects they denote in their several contexts, it is clear that this assumption is vital to the syllogism's "validity." There is literally nothing to assure it but the identity of the middle

² Cf. my article, "Are All Men Mortal?" *Mind*, n.s., XLIV (1935), 204-10.

term in the two premisses. But this need not be more than a purely verbal fact. If the middle term in relation to a particular minor (which may be a very exceptional case) develops a different meaning to the middle in its relation to the major, the syllogism breaks in two. Moreover, it is impossible to foresee whether this will happen until the attempt is made to use the middle term; and when it does happen, "material" knowledge of the case will always be needed to understand why the reasoning has gone astray. Hence the potential ambiguity of the syllogism's middle term (which may turn into actual ambiguity in use) must be regarded as a formal and a fatal flaw in the syllogistic form.

A further objection to the validity of syllogistic analysis arises from the doubt whether it is capable of representing the natural development of the meaning of terms in the growth of knowledge. For it is clear that wherever knowledge grows the meaning of the terms in which it is expressed must constantly be modified. It must be expanding or contracting, becoming vaguer or more exact and incisive. Hence the application to it of the postulate (law) of identity will become more and more disputable. In a progressive science, therefore, an argument based on the verbal identity of terms will always be precarious and will grow less and less convincing. This is why the empirical sciences are never impressed by accusations of inconsistency and seem often to revel in contradictions.

Nay more; it is not possible to fix meanings absolutely even in ordinary usage. For it is neither rational nor psychologically possible to enunciate a proposition without supposing that it will convey some novelty to the persons to whom it is addressed. Whenever, therefore "*S is P*" ceases to be an empty form of words and becomes a real judgment, it must be held to change the meaning of its terms: it changes "*S*" into an "*S-of-which-P-can-be-predicated*" and "*P*" into a "*P-which-may-be-predicated-of-S.*" Thus one of the chief (though covert) presuppositions of

Aristotelian logic, that of the fixity of terms, is revealed as a fiction which disqualifies it from representing actual thinking. The latter needs merely a sufficient stability of meanings and a sufficient familiarity with verbal meanings to enable the particular personal meaning of one interlocutor to be conveyed to another in an actual context.

2. We may next pay homage to the metaphysical logic which still cherishes the ambition of describing in and by thought the innermost meaning and actual course of reality, or, even of prescribing its course to reality by an *a priori* analysis of thought. Its fundamental assumption is enshrined in the dictum of Spinoza that the order and connexion of ideas is the same as that of things; and of its methods Hegel may still claim to be the most imposing master.

As regards nomenclature, it may here be fitly denominated "Pythia," in recognition of the persistent oracularity of its responses and its reluctance to come off its tripod and to mingle in the rough and tumble of scientific dispute.

Her record, moreover, shows beyond question that Pythia possesses great powers of fascination, due not so much to the rationality of her reasoning as to her willingness to minister to the secret ambitions and desires of many philosophers. To raise the essential issue quite candidly and bluntly, why should it be assumed that the course of events must comply with human demands? Psychologically, indeed, the reason is clear enough. It would be charming if we had reason to believe it; but it would be a bold man who dared to ask Pythia for reasons. Methodologically, also, we are surely entitled to experiment with any hypothesis that is attractive and that would be helpful if it were true; still it is a far cry from this admission to a dogmatic assertion *a priori* that the universe is bound to comply with our intellectual (or other) demands. The chasm that yawns between the ideal and the real cannot be leapt in so facile a fashion.

The truth is that Pythia's procedure is in all logical essentials

that of the so-called ontological proof of the existence of "God." She attempts to argue from the existence of a notion in the human mind to its realization in the real, and that without inquiring into the past history and psychological motivation that has generated it. This procedure has always been a stumbling-block to great but honest philosophers like Aristotle, Aquinas, and Kant. However often it is refuted it is always being revived, for the very cogent reason that the only alternative to its *a priori* procedure is verification by its working in experience, that is, a sheer empiricism that is felt to be an intolerable insult to notions like "God," "infinity," "the universe," and "the absolute."

When Pythia's lovers condescend to contemplate the particular problems of logic, they invariably commit three major blunders. They imagine that truth must reside in the whole, and they taboo selection. Also they ignore the conception of relevance by which the practice of selection is justified in the sciences. Thirdly, they totally ignore the purposive nature of thought. For the rest, they are quite as deeply addicted to verbalism as is Barbara; and all the metaphysical "proofs" which appeal to the law of contradiction ultimately rest on the traditional meanings of words.

Although both Barbara and Pythia are continually confronted with the difficulty of avoiding metaphysics on the one side and verbalism on the other, they think they can agree in denouncing psychology. This does not in the least prevent them from making (dogmatically) psychological assumptions and retaining a great deal of (mostly obsolete) psychology in their texture. But they detest psychology, on the principle *odisse quem laeseris*, with the implacable hatred of a bad conscience.

3. Their attitude contrasts sharply with the purely empirical psychologic which substitutes judgments for propositions as the subjects of logical discourse, frankly seeks the co-operation of psychology and is willing to be a handmaid of the sciences. It does

not attempt to lay down the law to them, but sets itself humbly to observe all that the other sciences do, and how, and how far, they succeed in accumulating precious stores of knowledge. Being thus devoted to the dirty work of labourious observation and scorned by the great majority of logicians, we shall have to call her "Cinderella." But some day, no doubt, the happy prince will come who will snatch her away from her kitchen-maidenly drudgery and raise her to reign by his side over a well-ordered and intelligible realm of truth. Meanwhile we must leave Cinderella to her humble functions and proceed to consider the fourth and at present the most aggressively vigorous of the prevalent conceptions of logic, namely, logistic.

4. Logistic would appear to be essentially a hybrid, nay a double hybrid. On one side of its ancestry it is a product of intercourse between the oldest logic and the most ancient of the sciences, namely, mathematics. But in some of its younger forms it appears to be the offspring of a further crossing between logistic and pragmatism. For what is called "logical positivism" seems to combine a pragmatist theory of meaning with an intellectualist conception of truth and a mathematical method of exposition. Whatever its exact parentage, moreover, the resultant attitude towards logic seems to be abundantly endowed with what the biologists call "hybrid vigour."

What shall be the familiar name we bestow upon it? It desires to be known as Analysis; but in view of the facts that more than one analysis would appear to be always possible and that of late it has blossomed into "multi-valued" logics, the prefix "poly-" seems to be requisite for an adequate description. Let us therefore call it "Pollyanna."

Pollyanna's claims to be the only true and proper logic are based on several grounds. Barbara's intelligence was somewhat narrow and restricted to the relation of substance and attribute. But why, it was asked, should not other relations be subjected to logical treatment? Barbara, moreover, could juggle with

only three terms at a time, a further indication of her limited capacity. Again she was grossly deficient in exactness.

Now, exactness is an ideal which has always had an uncanny fascination for the academic mind. It was supposed to mark the assumptions and procedures of the oldest and most assured of the sciences, mathematics, with a smattering of which every schoolboy had been tortured in every educational system for the good of his soul. Professional logicians, therefore, were not slow to recognize the sadistic possibilities of logistics. They made exactness, therefore, the first demand of "modern" logic.

Unfortunately, however, they were quite unable to say what they meant by it when asked to illustrate or define exactness in logic. They could only point with pride to mathematics, and affirm that logic and mathematics were identical.

But the same difficulty arose in mathematics also: what exactly did "exactness" mean there? It clearly does not mean either that mathematical objects exactly reproduce physical realities or that physical realities exactly exemplify mathematical ideals. Straight lines and circles and units are not to be copied from nature, for they are not found in nature; while all the physical constants, like the year, the month, and the day, are inexact and variable.³ In vain did astronomers postulate that heavenly bodies must move in perfect circles—in vain did they pile epicycle on epicycle to render astronomy an "exact" science; they have been forced by their own facts to admit that their laws and formulas were only conveniences of calculation. Now Plato had recognized long ago that there was no exactness to be found in the sensible world; yet he continued to think of

³ Except where their invariance is really a postulate of scientific method. For example, the velocity of light is taken to be constant; but it is a curious fact that the empirical measurements of even this "constant" have successively yielded a diminishing value. This may be connected with the theory of the "expanding universe," to which, it should be remembered, the alternative is that all the constituents of the universe are shrinking. The conservation of matter and energy are now widely recognized as just methodological postulates, too.

God as a mathematician. He should have added that when "God geometrizes," he does so very inexactly.

What is really meant by the exactness of mathematics is that mathematics is a science which can define its own objects, apparently without regard to reality. Mathematical truths primarily refer to ideal objects which the mathematician has himself created and defined. But in its relation to nature the mathematical ideal is a mere command, which may or may not apply. The rules of common arithmetic apply to a great variety of objects; but if we are wise we shall not expect four to result from the process of adding two drops of mercury to two others, or two lions to two lambs, or two to be the consequence of adding a bull to a cow. Nor should philosophers flatter themselves that definitions are revelations of the essence which makes all things what they are and utterly independent of empirical facts. If a definition is not so formulated that it applies to something in reality, it becomes sterile, otiose, and in the end unmeaning; the only way of assuring that a definition will be useful is to allow the real to suggest the ideal which is embodied in the definition. This is what in point of fact mathematicians had sense enough to do. They allowed the ray of light to suggest the straight line and, as the word attests to this day, developed geometry as an aid to agriculture.

The importance of exactness in definitions is further restricted by the fact that in mathematics, as in every other science, knowledge grows and that the definitions have to keep pace with this growth. As vehicles of growing knowledge they too must progressively change their meaning. If they are too stubborn and refuse to expand, they have to be scrapped. But most scientific terms allow themselves to be stretched to the point of verbal contradiction. No physicist would dream of discarding the notion of "atom" because "atom" means "indivisible," and the modern atom has become a nest for a vast brood of problems. The usual way of extending definitions in mathe-

matics is by analogy, which, notoriously, is not exactly a valid process. Absolute exactness, then, must be rejected as a useless fiction, at any rate in mathematics.

Mathematics will not support Pollyanna even in talking of greater or of smaller degrees of exactness. For to determine these either an absolute standard of exactness which we have found to be non-existent, would be requisite, or some immediate experience of a quality which occurs in varying degrees like the hotness of water or the sweetness of wine or the goodness of a joke. It would seem then that if Pollyanna wishes to assimilate herself to mathematics she had better not lay too much stress on her exactness.

Like Barbara and Pythia, Pollyanna declines to concern herself with the processes by which human knowledge is actually advanced. Hence she also regards propositions as her subject-matter, not judgments. But she is not content to take them as they stand and to leave them just verbal formulas. Her affinity with mathematics requires her to conceive them upon the analogy of mathematical functions. They have to be equipped with variables to which various values can be assigned, and thus "propositional functions" are introduced into logic. This, of course, raises a new question, namely, how the truth of a proposition is related to that of a propositional function.

This question is complicated by the fact that the meaning of a proposition cannot be ascertained until a "proposition" has been generated by choosing the variables which turn a propositional function into a proposition. For example, in "If A loves B, A will eat B," much will depend on whether A is a goat or a man and whether B is a woman or a cabbage: also, if A is a man, on whether he is a cannibal. So it is clearly quite premature to discuss the truth or falsity of the proposition until its context and its meaning have been settled. This would seem to be the merest common sense, but the admirers of Pollyanna have strangely overlooked it.

They have overlooked also the difficulty of finding propositions which do not turn into propositional functions (or alternatively into fully particularized judgments) whenever an attempt is made to use them in real reasoning, as distinct from the artificial process of juggling with symbols and manipulating formulas. For a quarter of a century now I have been vainly begging them to produce (1) propositions of which the terms would not turn out to be variables on closer inspection, and (2) propositional functions of which the truth does not depend on the use made of them. Yet they continue to speak of functions which are "always true"; by this they can only mean functions out of which no false "propositions" can be generated by attributing to their variables values calculated to confute them.

Is not the natural inference from this situation a deep-seated scepticism as to whether propositions exist at all and whether in consequence formal logic is not a pseudo-science that has no objects? If we admit the analogy between logic and mathematics, and we may do this without admitting their identity, the propositional function seems intelligible enough. It is like a mathematical function, and must be treated like it. That is, it is a formula enclosing blanks, and these must be filled in to give it a meaning and a truth-claim. When this has been done it can be used, rightly or wrongly, successfully or otherwise. And when it has been used repeatedly, we can determine whether it is a good formula, which has enabled us to obtain true results or not. But whenever it was used, it was adopted by some one, and became a "judgment"; it did not remain a "proposition."

What then *is* a proposition in the doctrine of Pollyanna? And where in nature, outside of textbooks of logic, does it occur? These questions appear to be unanswerable. But what is usually called a proposition is merely a verbal formula which can be used in a great variety of contexts and for a great variety of purposes. Its meaning, its value, and its truth depend on its

uses. There is apparently no means of ascertaining them apart from its uses. But if it has ever been used successfully, it remains potentially useful and acquires potential meaning and truth, that is, logical value. But as its uses are various, it is always ambiguous in the abstract, even though all its ambiguity may disappear when it is used in a suitable context. Pollyanna does not yet appear to have grasped this situation, even in her most advanced moods. Nor has she yet drawn the very necessary distinction between the potential truth of a propositional function (or so-called "proposition") and the actual truth of a purposive judgment. She has merely taken over from mathematics her conception of truth-values, and is only very slowly realizing how inadequate it is for the purpose of representing the complexities of scientific reasoning.

Now, in mathematics it was natural enough that the truth-values taken for granted should be just true or false, and that as no question was raised *how* true they might be and no inquiry was instituted into how precisely "truth" and "falsity" were to be understood, they should be taken as absolute. It would be quite unreasonable to expect a special science to institute a critical examination of technical terms that do not belong to its special sphere of interests. It is not the business of mathematics but of logic (or epistemology) to discuss the nature of truth-values. So mathematics was quite naturally and properly content to take truth and falsity as the two mutually exclusive truth-values and to operate with its functions as if their truth or falsity alone concerned it.

But Pollyanna ought to have been more critical, and in fact the need for more careful discrimination was soon forced upon her. After all, propositions could not all be confidently asserted to be simply either true or false. Some claimed the superior dignity of "necessary truths," while others were denounced as contradictory or impossible. It seemed a dangerous concession to psychology to admit that when propositions were viewed as

possible or probable, a human attitude towards them was indicated. Yet such admissions were lurking in such topics as the "modality" of propositions. Moreover, mathematics itself had developed a branch called the theory of probabilities, and it could hardly be denied that probabilities lent themselves to inferences. So the absolutely true and the absolutely false seemed to be driven into the position of limiting cases, to which the probable truths of the sciences aspired but never attained.

Pollyanna, therefore, had to admit that she had been too naïve. Her two-valued system of symbols was unequal to the complexities of science, and further values had to be introduced. It speedily becomes clear that there are in fact infinite degrees of probability between the absolutely true and the absolutely false. A consistent symbolic logic, therefore, should endeavour to devise symbols for them all. But when this is done, it becomes clear that the notions of absolute truth and absolute error are rendered otiose and may be scrapped, as was very frankly confessed by Professor Hans Reichenbach (now of Istanbul) at the recent Prague Congress of Philosophy.

In view of this admission it is difficult to see how there can be a scientific future, either for the two-valued logics, which operate merely with the values true and false, or for the multi-valued varieties so ingeniously constructed by Professor Lukasiewicz and the other Polish followers of Pollyanna. If the truth-values occurring in the sciences are essentially probabilities, the only logical symbolism that can possibly be adequate for scientific purposes will have to be one in which the values vary continuously between the two limits of truth and falsity and admit of quantitative treatment. In this respect the present aspect of Pollyanna is not mathematical enough.

In other respects, however, she would seem to be too mathematical. For the true and the false are not the only values the logician is called upon to consider. He constantly encounters the unmeaning and the ambiguous, and has hardly yet begun to

explore the vast fields of inquiry which they present. Probably relevance and irrelevance should also be added to the list of topics a thoroughly symbolic logic should endeavour to symbolize. But I cannot discuss the matter in this paper. They function, of course, as negative values or obstacles to the attainment of truth-values; but most logicians have not yet realized the pitfalls which are dug in their path by the unmeaning on the one side and the ambiguous on the other. Hence the remarks that follow should be taken as an elementary introduction to an intricate but highly important subject.

As it is, many logicians still imagine that the unmeaning can be disposed of simply by denying its existence. They think that the "law of excluded middle" justifies the assertion that everything must be either A or not A , and they ignore the alternatives "both" (ambiguity) and "neither" (meaningless), which even Barbara officially admitted, though she troubled little enough about them.

There is, moreover, a good deal of confusion about the logical status of tautologies and contradictions. The capital error which the formal logics have committed in their dealings with both of these is to assume that their nature can be determined by mere contemplation of the verbal form of propositions which look tautologous or contradictory. They have sought to avoid in this way the trouble of inquiring whether the apparent tautologies and contradictions were real. Actually, however, this assumption is very often ruinously false.

Tautologies were long held to be meaningless and disregarded as such, though there is now a strong movement to regard them as the very purest forms of formal logic. Actually, however, it is only the forms that are meaningless: the actual tautologies, from "I am that I am" downwards, are full of meaning, and indeed are usually very pointed remarks. If his etiquette permitted the logician to inquire into the meaning of the persons who utter tautologies, this would speedily appear.

Contradictions, on the other hand, when their existence has been ascertained, really are devoid of meaning, though this fact of human psychology has been most disastrously obscured by mistaken attempts to treat them as proofs of falsity. Here, too, the logician's first duty should be to get hold of a genuine contradiction. Most contradictions are merely verbal; and it should be the logician's duty to go behind the verbal form and to ask the propounders of such propositions what they meant.

He would then discover that what was meant was not contradictory, even though the meaning was expressed in a paradoxical and perhaps unfortunate manner. He might even discover that (verbal) contradictions normally arise in the progress of a science and are part of its growing pains. They arise out of the fact that old words have to be used as vehicles of new meanings and transform and supersede their traditional meanings. Hence it is pedantic folly to object to the Darwinian conception of species that species are immutable and to the modern conception of the atom that the atom is indivisible. Such contradictions, when they appear in actual contexts, are like Mahaffy's famous Irish bulls, "always pregnant." They are challenging, picturesque, and paradoxical ways of enunciating novelties of thought.

Owing, however, to the prevalence of muddle-headedness in human thinking, genuine contradictions may occur. They occur when a reasoner loses the thread of his train of thought and blunders into asserting two (or more) propositions which he cannot believe together and did not mean to assert together. He can then (sometimes) be brought to realize this by having it pointed out to him that his propositions are "contradictory." He must then amend his statement. He may choose to abide by one of the contradictory propositions and to drop the other. He may explain that in the way he meant them they were not really contradictory. Or, lastly, he may scrap both and take up a new position. If he does this, it will be because he realizes

that his old position was untenable and his total meaning null and void.

But the proper inference even from this last situation will not be that what he said was false but that it was unmeaning. He must be told, therefore, that he has said nothing and requested (if possible politely) to say something. He should try again and propound a meaning that can be true or false. Thus, for the very reason that genuine contradiction destroys meaning, it cannot serve as a test of falsity: it only leaves the field clear for a fresh assertion. An apparent contradiction creates at most a *prima facie* case for suspecting a lack of meaning; in general, however, contradiction is cogent evidence for the contention that logic cannot ignore the unmeaning.

Finally, we should not leave the subject of the unmeaning without remarking that next to unverifiability one of the commonest causes of meaninglessness is failure of application, shown by abstract propositions which have acquired logical status in connexion with theories and lines of thought that have a record of good service in the past.

Such propositions are specially common in mathematics, where it is possible to develop mathematical apparatus far ahead of the present needs of the other sciences and to pursue long trains of hypothetical reasoning for which at the time no applications are known. But these researches are developments of assumptions which have been found to be applicable; and it frequently happens that applications are subsequently found even for the most useless mathematics. If a branch of mathematics really proved so completely sterile that it did not even amuse any one but its author, it would be abandoned as unmeaning.

It has long been a logical custom to fail to distinguish between ambiguity and lack of meaning. They are usually lumped together, because they are equally incompatible with the simple disjunction of "true or false" and equally defeat the logician's

desire to draw a simple and valid conclusion. When we are presented with an ambiguous proposition we cannot tell what it means, simply because there is no "it." We cannot therefore argue from it. A plurality of meanings between which we have no means of choosing, is as baffling as a complete absence of meaning.⁴

Yet it should have been plain enough that the two cases are really different. An ambiguous proposition defeats the logician's ambition by expressing too many meanings at once, without giving him any means of choosing between them; whereas the unmeaning proposition defeats him by having no meaning at all. Hence, with the unmeaning the logician can do nothing at all; it simply baffles thought. But the ambiguous should prove a great stimulus to inquiry, wherever there is a real desire to know. This very important difference should not be slurred over and is not disposed of by calling all mention of desires, whether to know or to conclude, "psychological."

The most important form of ambiguity is a virtue inherent in the construction of language and of any other symbolism which serves the purpose of communicating meaning. Words and symbols may be used more than once, and from this fact they derive by far the greater part of their usefulness. In virtue thereof they acquire an inherent meaning, a verbal meaning as opposed to the original personal meaning of the people who invented them; and this fits them for general use. They are all in principle universals, capable of use on an infinity of occasions, and capable of serving an infinity of purposes. If they lacked this virtue, their utility would be destroyed. A language composed entirely of nonce-words would be unintelligible.

But the *revers de la médaille* is that words have the defects of their qualities. In virtue of their very merits they are all what is, somewhat stupidly, called "ambiguous." For if a word is used a second time it is applied to a situation different more

⁴ Cf. A. Sidgwick, *Elementary Logic*, p. 108 n.

or less from the first and this meaning will differ slightly from the first meaning. The meaning in the two cases will not be absolutely identical. Often it will differ and develop greatly. Technically, therefore, the logician will always have a right to declare that it has been used in two senses and has become ambiguous.

This, however, seems a very unwise use of the notion of ambiguity. For in the first place such ambiguity is not a vice, but a virtue, of thought; and, secondly, it cannot be avoided. It would therefore be much better policy to call it plurality of senses⁵ and to point out that it is not an obstacle to communication of meaning but a condition of thought, that it is potential and need never become actual in a context, and that there is a much more dangerous situation to which the term "ambiguity" should be restricted.

This situation arises when the words used to convey meaning in an actual context may be construed in more than one way, not in the abstract, as a verbal formula, but in their actual context. We may thus be at a loss how to take them, in doubt whether we apprehend the meaning intended, and unable to decide any question about them. They may be true in one sense and false in others, or even quite inapplicable and therefore unmeaning.

A little anecdote may illustrate better than long disquisitions the kind of difficulty with which this sort of ambiguity confronts formal logic. It was my privilege not so long ago to attend a meeting of logicians, mostly "modern," which was completely posed by the question "If A loves B and B loves C, what is the relation between A and C?" After an awkward pause I ventured to suggest that probably A and C would hate each other; but clearly this suggestion was not based on any kind of formal logic and could not be stated as a valid argument. It rested merely on human psychology. Intrinsically, however, the ques-

⁵ Or what Alfred Sidgwick calls "indefiniteness." Cf. my *Formal Logic*, pp. 26-28.

tion was unanswerable, for all its terms were hopelessly indeterminate and infinitely ambiguous. Nothing was known as to who or what A, B, and C were—whether men, women, or children, dogs, cats, or angels. The relation, therefore, inquired into would naturally dissolve into a collection of alternative possibilities: its whole meaning would depend on how these variables were filled in and how much allowance had to be made for moods and varying circumstances. In any actual case the relations would be fully particularized and individual: they would depend on the character and circumstances of the parties, not on any doctrine a logician might have been pleased to lay down. It is impossible to see how such doctrines could be helpful, but plain that if we tried to go by logic we might easily go wrong.

Very troublesome forms of this (the proper) ambiguity arise when words are taken (as they are regularly in all the forms of formal logic) to guarantee that there is no significant difference between two contexts in which they are used. They may then easily become the sources of far-reaching errors. If we take the certainty that "eggs are eggs" as an *a priori* warrant of the quality of our breakfast eggs, we court disappointment. If we are wise, therefore, we shall realize that we cannot always argue from verbal identities or even from identities which may turn out to be merely verbal. We should always be prepared to find, therefore, that the terms of any argument have something of the chameleon about them and turn ambiguous when we try to use them. They are always transferred from one context and applied to another; and circumstances alter cases. It is the liability to this sort of real ambiguity which renders all *a priori* inference precarious and compels us to ask for empirical verification, even of the most validly proved conclusions.

Thirdly, there is a sort of ambiguity in which alternative meanings are not merely present but are also actually intended. When a proposition is meant to be understood in more than

one sense, its ambiguity is not accidental and involuntary, but intentional and often malignant. This sort of ambiguity should be distinguished as equivocation, and it is common enough in diplomacy, politics, oracles, jokes, and some sorts of philosophy.⁶ Practically the only way of treating and curing these last two sorts of ambiguity is to ask which of the alternative interpretations was intended; but would this be playing the game of formal logic?

What now is Pollyanna to do about all these complications of her enterprise? In principle she ought to undertake to symbolize them all. Perhaps this is theoretically possible; but it is evident that to succeed she would have to add largely to her store of "baleful signs." In addition to signs indicating whether a proposition or set of propositions, followed, truly or falsely, from another, she would have to indicate what degree of probability was claimed for the inference. She would have to indicate also whether the process was really or only apparently meaningful, really or only apparently contradictory, and really or only apparently relevant. Lastly, she would have to exhaust the possibilities of the various sorts of ambiguity. This alone would imply not only an exhaustive knowledge of past uses but also prophetic insight into the whole future.

I confess that I do not envy Pollyanna her self-imposed task. My imagination is staggered by the contemplation of the pages of the Pollyannic logic of the future. Compared with these the most formidable chapters of Whitehead and Russell will surely seem simple, easy, popular and unscientific. But it is when I endeavour to forecast the possibilities of teaching this logic of the future that I fall prey to the most furious doubts. Is Pollyanna really the paragon of hybrid vigour we have taken her to be? Is she not rather a diabolic illusion, a malign and can-

⁶ Occasionally, also, in law, as in Judge Carew's decision in the Gloria Vanderbilt case. When the judge was asked what his cryptic ruling meant, he replied, "It means exactly what it says. It was designed to keep you from knowing or finding out." No formal logician has even been half so candid!

cerous growth that will prove the death of logic? And are the logicians that follow in her train treading in the path where reason leads? Or are they actuated by the suicidal impulse of Norwegian lemmings? Until these questions are answered intelligently and convincingly, I, for one, prefer to take shelter under Cinderella's wing.

DATA, DATIVES, AND ABLATIVES¹

WE HAVE HEARD a great deal of late about "data," and it has been generally, freely, but perhaps rashly, assumed that they are somehow important, or even essential, to the understanding of knowledge. Without on this occasion directly questioning this assumption, although it is one which may well provoke some scepticism, I am willing to take it on faith that "data" have somehow to do with knowledge. Even granting this, however, I have been somewhat painfully impressed by a confusion that appears to prevail in some quarters with reference to the starting-point alike of actual knowing and of what is called "the analysis of knowledge" and also by the ambiguity and insufficiency of the vocabulary in terms of which philosophers attempt to cope with this situation. This confusion is, I believe, largely due to an underestimate of the complexity of the knowledge situation and could be greatly lessened by enlarging our vocabulary and recognizing more distinctions; hence this paper is offered as a slight contribution to this end.

As regards the starting-point in any account of knowledge, it would appear to be evident that we have a considerable choice. Thus, we can modestly start from a problem of actual knowing and set ourselves to consider how we can make our way from it to further knowledge, endeavouring humbly to observe how our knowledge actually grows. This procedure will be psychological in the broadest sense, although our academic psy-

¹ *Journal of Philosophy*, XXX (Aug. 31, 1933), 488-94.

chologies may shrink from undertaking it. Or we can assume a haughty and complacent attitude of *ex post facto* reflexion on an accomplished achievement of the knowledge that is a product of the knowing process, and can proudly review it in the light of its success, real or supposed. For historical reasons this procedure is known as epistemological. It is fairly clear that these two enterprises are quite different and easily distinguishable. Yet they would appear to be frequently confused. I wish to declare war upon this confusion.

The second of these undertakings, which seems to be the aim that has animated nearly all epistemologies, has a decidedly ambitious program. It involves essentially, not a description, but an avowed or covert evaluation of knowledge. The first, on the other hand, though it should not hesitate to record cognitive values, need not as such involve anything more than a psychological description of a factual process.

It should next be noticed that, if to epistemologize we are determined, we have a choice between a great variety of epistemologies. Any piece of knowledge can be reflectively described and valued in terms of any rationalist, empiricist, realist, idealist, Kantian, pre-Kantian, or post-Kantian theory of knowledge. And any theory of knowledge can be complicated and confused by any sort and amount of metaphysics. We shall have to admit, therefore, that in principle there may be an infinity of such epistemological standpoints and of "epistemologies" proceeding from them. What will be common to them all will be that they will all presuppose knowledge and will all be *ex post facto*. So they will all be "post-analytic," in Professor Loewenberg's useful phrase, that is, rearrangements, manipulations or shufflings of logical abstractions. Hence there will be no need for any of them to concern themselves with any actual process of generating knowledge; they should not even claim to accomplish the description of such a process. Unhappily they do often claim to be descriptions, and—even the sole admissible descriptions—

from an indeterminate and ambiguous standpoint which is either psychological or logical or both or neither, like the famous *Critique* of Kant; but strictly they have nothing to do with any psychological fact or order of events. Accordingly when they make such a claim, they invariably fail to substantiate it; and it would avoid much confusion if they all ceased to make it. We should then be left free to choose our epistemologies, and could base our choice candidly and honestly on their aesthetic merits; we could revel in the complexities of the Kantian system and the beauties of the Hegelian dialectic with a good conscience. If ever we tired of the airy fancies of aesthetics and desire to renew our contact with Mother Earth, we could proceed undistracted to our descriptions of the process of knowing, with our eyes keenly open to the observation of what would be in some sense facts.

Even so, however, we should not escape from choice between alternatives merely by adopting the first aim and by setting ourselves to trace the development of actual knowing. We should have escaped, indeed, from an infinity of distorting "reflexions" and fantastic interpretations of the actual process; but we should still have to decide, before proceeding further, what psychological process we mean to observe and from what standpoint we intend to view it. At this point, therefore, we shall have to consider at least three very distinct alternatives.

(1) We can start very easily and naturally from the individual mind of the philosophic observer. This is usually a more-or-less sane adult mind, which has come to be what it is in consequence of an historical process. The philosopher's natural endowment, education, social circumstances—in short his whole idiosyncrasy and history—will have left their mark in and upon his observing mind and will be part of the instrument whereby he hopes to describe the generation of knowledge. Of all the various sorts and senses of "data" those which arise in the context of an individual soul have the best claim to be primary,

and to be truly "given"; but even they can hardly be said to be absolutely given, and collectively they certainly form not a cosmos to be accepted, but a chaos to be transcended.

(2) We can start from the standpoint of common sense and take for granted the truth, or at least the descriptive value, of the assumptions of common-sense realism. Of this standpoint philosophers are apt to be unduly contemptuous. They regard it as far beneath them and as almost beneath their notice. Yet they should bear in mind that it comes of an ancient stock and has a long history behind it. The common-sense view of the world is the outcome of a long development and the embodiment of much racial experience: the view which man and his ancestors have successfully evolved for dealing with the world in which they have lived and have managed to survive. It has therefore the highest pragmatic sanction and should not be lightly set aside. Yet it must also be admitted that its sanction is only pragmatic and that its solutions are primarily practical. It must not, therefore, be assumed that they can be pressed beyond the point at which they cease to be useful; they were not intended to be complete theoretic accounts of all things, nor are they commonly fit to be such.

It should be noted further that data on this common-sense level are always social facts, but need not be anything more. They may be conventions, fictions, or superstitions, which are not binding on the individual knower and may actually be rejected by him. There are always some and often many who do not believe what is commonly believed and do not do what is commonly done. Hence the appeal to common-sense data usually involves a certain risk.

Finally, all (especially those of us who are philosophers) should always be on guard against relapses into common sense after having ostensibly abandoned it for something supposed to be higher. For in that direction inextricable confusion lies. Yet few philosophers, I fear, can be wholly acquitted of such relapses.

For philosophers are human, and human atavism is so very strong.

(3) We can place ourselves at the standpoint of science and set ourselves to observe how scientific truth progresses. This choice will entail further alternatives. For the standpoint of science will really split up into the several standpoints of a number of particular sciences at a particular time; science is made up of sciences, each of which has its problems and has had its history. So we shall really have a great plurality of standpoints under this heading from which to view the growth of knowledge. None of these standpoints, however, can safely be taken to coincide either with that of the individual knower or with that of common sense. The scientific data from and about which the sciences argue are never the more-or-less crude data which are treated as given either by common sense or by the individual knower. They are always *sumpta* selected from what appear to be *data* on some lower, non-scientific level, from motives which are really dictated by the interests of each science; moreover, they are usually seen in the glamorous light of whatever scientific interpretation happens to be in fashion. Thus, the scientific data are literally creations of the sciences, products of highly selective value-judgments, made in the interests and for the purposes of each science that adopts them. Nothing could well be more remote from the elusive ideal of unsophisticated fact.

It is easy, therefore, to understand what terrible confusions may arise if all the data that can be alleged on all these different levels and in all these contexts are lumped and jumbled together in one amorphous, undiscriminated mass; and I fail to see how any intelligible or serviceable theory of knowledge can emerge from such confusion.

Even if we agree to limit our data to the scientific level, our procedure will commit us to severe restrictions, which will disqualify our sciences from representing the ultimate truth about

the whole of reality. For not the whole of human history will be relevant to the scientific standpoint, but only that part of it which led up to it; nor will the whole of human idiosyncrasy be relevant. For the purposes of scientific description only the attitude of the scientist, *qua* scientist, may be assumed. Hence our descriptions will probably be conceived in much narrower and more abstract terms than in the two former cases.

Yet in these less sophisticated cases also we shall have had to use plenty of abstractions. For the common-sense standpoint has already involved an enormous purging of our primary experience. It has ruled out great masses of it which have gone into discard under the headings "unreality," "imagination," "dream," "illusion," "hallucination," "error"; it has placed highly laudatory valuations upon the preferred remainder which it deems pragmatically serviceable. Moreover, the individual knower also is a highly selective agency: his interests are selective, and he is by no means free from prejudices. His reactions and interpretations are determined by his past and related to his future: they embody his aims, hopes, and fears, and utterly fail to conform to the ideal of pure, unbiased, and disinterested knowing.

Hence, if it is *de rigueur* to cling to the traditional ideals of pure science, pure apriority, absolute truth and absolute fact, we shall have to go far afield to seek them and are likely to find ourselves embarked upon a wild-goose chase.

The most promising hunting-ground, perhaps, to which we shall be directed will be the knower's earliest infancy. So we shall be bidden to resuscitate the psychological baby and to listen reverently and with bated breath to the unsophisticated howls with which it greets the first impact of the real. Yet we shall speedily be driven to admit that in the psychological baby's first experience only the first howl can possibly be pure. The second will already be affected and vitiated by the memory of the first and by the time its artless babblings fulfil the promise

of intersubjective intercourse, it will have committed itself to all the sophistries of human speech, and to the whole metaphysic enshrined in language.

Thus it is clear that, even at their best, the various creeds, even of epistemology, have tried to build their churches upon a very narrow pinnacle of solid rock. Perhaps the true moral is that for practical purposes of describing our knowing processes we shall do better to give up the hunt for absolute data; perhaps we should conceive our data differently and resign ourselves to the use of data which confess that they are relative—to the standpoints which serve us as starting-points, to the aims we have in view, to the knowledge which is available, to the methods in use, to the experiments which have been or can be tried.

After hewing our way through this jungle, how shall we conceive our data? If we are wise and prudent we shall, I think, before attempting to go further, enlist a whole host of distinctions.

Let us distinguish, therefore, "data," things given, from "sumpta," things taken. Let us observe, moreover, that there has been a great deal of taking for granted and selecting before accepted data could reach their present shape. We may wonder whether there are such things as pure data anywhere to be encountered or obtained by hook or by crook. It is always permissible to inquire what assumption of data (if any) serves any useful purpose in any particular inquiry.

We shall have to accommodate, also, a variety of "inventa," things stumbled or hit upon and found, though we may feel doubtful whether the mere fact that they are somehow there yields us any guarantee that they can be put to important uses.

And, above all, we shall insist on making explicit the hidden relations lurking in these notions. A "datum," we shall say, is essentially triadic: it can not be a datum unless it is given *by* some one or something *to* some one—and withal, given *for*

some purpose or inquiry. These three relations should all be borne in mind, stated, and made clear before any datum can fully be discussed. Similarly, it is surely clear that a "sumptum" is taken *by* some one, *from* something, *for* some purpose. Even an "inventum," though it may seem to pop in upon us out of the blue, must surely have a context which is observable; even if it is merely encountered *by* some one, it must be met with *somewhere* and *at some time*. All these particulars, which are observable in every process of actual knowing, should be dragged out into the light of day and not slurred over and suppressed, as has been the custom. For they may always prove relevant to the purpose and value of an argument and are always relevant to its meaning. Without an understanding of them, its meaning may at any moment dissolve into vagueness and ambiguity. Verily there is much work to be done upon data before they can be used!

Lastly, may I justify my title? The term "data" has proved extremely vague, misleading, and hard to justify; but in whatever sense we have found it convenient to take it, we can properly call "datives" what we think we have gained from the data we have assumed. Then our "datives" will properly be gifts or donatives, and we shall not forget our debt of gratitude to their donors. The term "*ablative*," on the other hand, will properly express the products of any process of ablation, abstraction, or selection. And seeing that all, or nearly all, the entities called *datives* will in point of fact involve references to starting-points, and purposes, and methods, which can not be represented as merely given or acquired without the co-operation of the mind's activity, and will actually have been arrived at by varying amounts and degrees of abstraction and selection, shall we not have to declare that our "datives" are in truth to be accounted "ablatives"?

This conclusion appears to me to be irresistible. It completes the work which the greatest of grammarians and schoolbook

writers, or as James would say, of American schoolroom pests,² Julius Caesar, initiated several thousand years ago when he recognized the Latin ablative and segregated it from the dative, in which it had been merged. Even if, however, philosophers should not be willing to accept these results in full and the elucidations of current terminology which they demand, I shall not be utterly discouraged. For perhaps I shall be thought to have said enough to put believers in "data" upon the defensive, and upon their mettle. I may even cherish a hope of eliciting from them straightforward declarations as to what precisely they do mean by "data," what kinds they require for their metaphysics and theories of knowledge, whence they propose to acquire them, and how they propose to justify them. After that I, for one, and perhaps also some others, may feel less at a loss in sailing the frail bark of human reason on the high seas and in the deep waters of epistemology.

² *Pragmatism*, p. 254.

ARE ALL MEN MORTAL?¹

I MUST BEGIN this paper with an apology. It is not intended to announce the ripe fruits of a life-long research into the elixir of life, nor even to be a profound disquisition on eschatology. Its aim is much humbler. It really aims at nothing more than an adequate discussion of one small point of logic, nay, of formal logic.

Nor will it demand any recondite knowledge from its readers in order that they may follow its argument: it will suffice if they can recall the familiar syllogism by which logicians have endeavoured for over two thousand years to demonstrate at one stroke the value of syllogism and the mortality of man. I will assume only that we have all been brought up to believe that if it is true that *All men are mortal*, and that

Socrates is a man; it necessarily follows that
∴ *Socrates is mortal*.

Have we not all, moreover, tacitly taken to heart the grievous fate of Socrates and applied it to ourselves? Do we not all believe that in virtue of this syllogism we too shall die? Do we not all admit that it provides conclusive and coërcive proof of the mortality not only of Socrates, but of every other man?

Furthermore, we are assured by all exact logicians—and do not nowadays at least 75 per cent of logicians claim to be “exact”?—that the above syllogism is a “valid” argument and that its truth is undeniable. So there seems to be no hope for

¹ From *Mind*, n.s., XLIV (1937), 204-10.

us to escape from the grip of a logic as inexorable as death itself.

Such, then, is the tradition I wish to call in question. I wish to show, not for the first time, that, as commonly interpreted, it is invalid in form and fallacious in prophecy; while as for "exactness," good heavens! if this syllogism illustrates what exactness means, let me thank my stars that I dare not claim to be an exact logician!

My criticism may fitly begin with a brief recapitulation of some ancient objections which have been urged against this model syllogism. Soon after it was promulgated, it was noticed that this "valid syllogism" appeared to be an illustration rather of a notorious "fallacy," namely, the fallacy of begging the question. For was not the truth of the major premiss dependent on that of the conclusion? Could all men be mortal unless Socrates was, too? For was he not a member of that doomed assembly? Unless the formal and exact logician knows, for sure, that Socrates is mortal, he has no right to affirm that all men are mortal. His alleged proof of Socrates's mortality, which he reaches so triumphantly in his conclusion, has covertly begged it in the major premiss.

The formal logician, however, is not daunted. He would scorn to surrender to so obvious an objection. He has thoughtfully secreted one or two more trumps, which he proceeds to play. So he repudiates the suggestion that the major premiss of a syllogism is to be interpreted as a summary of facts and observations. It is intended as a definition, and an (otherwise) man-like creature that is not mortal is no "man." But, alas, if that be so, why then is not the point said to be proved now begged in the minor premiss, when Socrates is called a "man" and it is assumed that he is a man in the sense required by the definition of man as mortal?

Even so, however, formal logicians still have a third line of

defence, on which they can and do fall back. There is a third interpretation of the syllogism which, they are confident, will make it sound and valid. The major premiss should be taken, not as a definition or as an exhaustive and therefore impossible enumeration of particular cases, but as a connexion of universals or as the statement of a law of nature. Take it thus and the immutable order and stability of nature will safeguard the conclusion.

Candidly, I must confess that this contention seems to me no better than the others. It is here assumed that the magic word "universal" avails to put to flight the critic and that no one will dare to ask just how the universal mortality of man assures the demise of Thomas, Richard, and Henry.

If, however, I can be protected from assassination till I have finished my argument, I will pry further into this assumption. May I humbly inquire why the logician feels so certain that every particular is nothing but a case of any "universal" any one chooses to inflict upon it and why he may presume that, because his classification seems to fit in some respect or for some purpose (which we may charitably suppose him to have investigated), it therefore applies in all respects and for all purposes (which he cannot even have imagined exhaustively)? The logician doubtless can impose any universal he desires; but cannot the wretched particular resist and rebel against the imposition? Surely every particular is fully concrete; it may exemplify an indefinite number of universals in a variety of contexts, and yet these may all leave its individuality unexhausted and intact. Also for one human purpose one universal may be better than another; one may fit and be right, another wrong. As Alfred Sidgwick says, for some purposes a thermos-flask may be a hot water bottle.

How then will it be possible to prove that what is a case of a certain universal for one purpose must also be a case thereof for another? And how, may I ask, is it proved that every particu-

lar which for a certain purpose may be taken as a case of a certain universal, must *ipso facto* function also as a case thereof for all other purposes? Why should every case of any universal exhibit all the qualities of that universal? May there not be exceptional cases to which under the special circumstances the normal rule does not apply? And may not the case we are interested in prove in some respects exceptional? How can we know *a priori* that when we try to prove Socrates mortal by means of his general conformity to the habits of the human kind, we have not hit upon a quality in which he happens to be exceptional?

So on this third construction also our syllogism would seem to beg the question. It assumes, but does not prove, that our case, Socrates to wit, cannot be recalcitrant to the habits of humanity (as known up to date). It argues that:

All human nature (including Socrates's) is mortal;
Socrates is human;
 ∴ *Socrates is mortal.*

Now the contention that Socrates cannot do anything exceptional, because in a general way he is a man, cannot at any rate appeal to the authority of the author of our argument, Aristotle. For (as I ventured to point out²) Aristotle realized in his own fashion that, in our sublunary world at any rate, exceptions might occur to all rules, thanks to the prevalence of contingency and the possibility of "accidents." Thus rules were general, but not necessarily universal. He was willing therefore to admit that something might be true in general and yet false in this special case or for a special purpose. It could not therefore be asserted *a priori* that a particular case would come under the general rule. If the syllogism assumed that it must, it begged the question or ignored the special circumstances of the case.

Plainly, then, it will not do to set aside the protests of Ti-

² In *Mind*, n.s., XXIII (1914), 1-18.

thanos, Enoch, Elijah, the Wandering Jew, and so forth—in short, of the whole band of heroes who have claimed exemption from the “law” of the mortality of man.

If we desire really to defend the syllogism and to insist that it must have a sense and a good one, we must look deeper than these naïve devices of formal logic. We must give up the pretension that our reasoning can start from absolutely true premisses and prove its conclusion absolutely true. We must not sever it from its scientific context in an inquiry in which certainty is an aim, not a presupposition. A syllogism must be a way of stating a hypothesis and formulating an experiment, of which the issue is as yet in doubt but may peradventure be observed. If so, the occurrence of the conclusion, as predicted, will confirm our belief in the premisses and will increase their probability, though it will never amount to absolute proof. For it will not be more, logically, than the verification of a hypothesis.

We shall then be able to protest also against the grotesque demand that a decision should be given about the case of Socrates in the abstract and without any context. No one in his senses, we shall say, will argue about Socrates, without knowing what is meant by “Socrates,” whether a defunct philosopher or a negro slave, a tom-cat or a character in fiction, and without knowing what the problem is that has arisen about him. Give us a real problem, and we may be able to give you a real answer; but do not torment us and yourselves with unmeaning forms of words that are hopelessly ambiguous, or rather indeterminate. If and when, therefore, any one has occasion to construct a syllogism about any “Socrates,” it must be in the context of an actual problem. It must be because a problematic “Socrates” has turned up and there are doubts about him. He is under grave suspicion. Is he a man or a ghost? Has he died with due decorum, or is he an impostor who has put on a delusive show of having come to life again?

But in all these cases shall we not have to admit that the conclusion of our syllogism is but probable? If, for example, a loquacious and eristic spook claims to be "Socrates" in very deed and if it is objected to him that he died over two thousand years ago and should stay dead, because all men are mortal, he will have to show that he is not a crafty medium in diaphanous disguise, but is psychologically continuous with the personage whom the enraged Athenians overdosed with hemlock so long ago. And notoriously the proof of spirit-identity is difficult: it can hardly be absolutely proved, and until it is, the conclusion "Socrates is mortal" remains disputed and in doubt.

Nay, it remains in several sorts of doubt. For in our haste to hail the argument as valid and coercive we have quite neglected to inquire what exactly may be the meaning of its terms. Does "man" include "ghost," "spirit," "spook," "phantom," "elemental," "hallucination," and "delusion"? Or does it include them for our purposes? And what does "mortal" mean? Does it mean "doomed to die," "liable to death," or simply "dead"? The use of Socrates as the syllogistic hero strongly speaks in favour of the third suggestion. But how is the fact that Socrates has been dead for over two thousand years a proof that all men are doomed to die?

If in the case of Socrates "mortal" can mean nothing more than "dead," has not our major term become ambiguous, and is not our "valid" syllogism afflicted with four terms? What then becomes of our coercive demonstration of the universal mortality of all men—past, present, and to come?

Yet, plainly, if Socrates is to be our guide, "mortal" must mean dead. It cannot mean "liable to death" or "doomed to die." And then, if we interpret consistently, our syllogism runs:

All men are dead;
Socrates is a man;
 \therefore *Socrates is dead.*

Here, certainly, the conclusion seems true; also the minor premiss, if we are willing to concede that being dead or alive makes no difference to a "man." But what about the major premiss? Surely it will never do to argue to the future death of those now living from the mere deadness of the dead?

We must therefore try again. Let us send Socrates back to Hades (where he belongs) and select a living man, let us say Mussolini. Can we validly and cogently infer that Mussolini will die some day, because in former days all who have died are now dead? Mussolini may emulate the mighty dead in this matter also; but I fail to detect any logical or biological necessity in the argument that professes to compel him. Why should he imitate the dead, rather than the living? Why should he not initiate a new departure in biology as in politics? Why should not some Fascist professor of physiology succeed in discovering some drug or mode of life that would extend indefinitely the organism's power to repair itself and so to stave off death? And why should not Mussolini profit by this discovery?

Moreover, if this discovery were made, what would happen to the traditional mortality of men and to the presumable meaning of "mortal"? Clearly, it will no longer be able to mean "doomed to die": for it will no longer be inevitable that all must die. It will therefore be expedient, nay imperative, to reduce the meaning of "mortal" to "liable to death"; for man will still be capable of dying and will not yet be "immortal."

But what will then have happened to our syllogism? It will fail as an instrument of prediction and will no longer be able to give us the assurance of Mussolini's death. For it will run:

All men are liable to death;

Mussolini is a man;

∴ Mussolini may die—but who can tell?

We are now getting very near to what I suspect to be the true inwardness of formal logic. It loves the syllogism and has clung

to it through good report and ill, because it has conceived it as a great instrument of prediction *a priori*. It values the mortality of man, not in order to feel assured that Queen Anne is dead, or Socrates, but in order that it may claim to predict the future deaths of all men to all time, and that no science may dare to contradict it. With its aid it seemed possible to burke Hume's inconvenient question: "Why should the future resemble the past?"

Can this claim be allowed? It can base itself, of course, on an array of impressive and pretentious principles, such as the uniformity of nature, the laws of identity and of contradiction, the stability of meanings. But when we look more closely, their support soon begins to totter. There is no "valid proof of induction," simply because induction is always a risky process. The uniformity of nature is a confused rubbish-heap of principles, of which the most reputable are principles of method; but it is no protection against the stream of change. The laws of nature are, at most, the habits of things. But cannot all things change their habits if sufficiently provoked? We have, at any rate, no proof that they cannot. The law of identity, also, is no guarantee of immutability, for everything is in continual change in spite of it. It rests with us to declare when a thing has changed so much that really we no longer care (or dare) to identify it with its past; but we are also free to insist that the slightest change shall be considered fatal to its "identity." So, too, we are at liberty to denounce the slightest change as a breach of the law of contradiction—because the thing is no longer what it was and has thereby "contradicted" itself; nevertheless, we fight shy of invoking this principle, because we dare not be so grotesquely and impracticably eleatic as to deny that things can change. All these appeals to principles turn out to be empty threats that can get no purchase on the course of nature.

Verbalism also will not save us. For though we can, of course, proclaim that words shall not change their meanings, we cannot

but admit that they have more important functions to perform than just to keep their meanings stable. How, for example, shall we enable them to transmit the new meanings necessitated by the growth of knowledge and the progress of invention? We can, no doubt, enact a law that men shall "ride" only on animals, on horseback, on a mule, on an elephant, or even in extreme and disastrous cases, if a foolish virgin, like Europa or the young lady of Riga, on a bull or a tiger; but what then are we to do on a bicycle, in a train, or in a car? Again, when the physicist discovers whole realms of entities within the compass of his former ultimate, the "atom," how can he be compelled either to devise a wholly novel set of terms or to retain the indivisibility he had so rashly postulated?

The truth is that it is neither practicable nor good sense to endeavour to arrest the natural growth of meanings which attends the growth of knowledge; if our control over nature changes, so must the language which describes it. It is vain, therefore, to decree that "mortal" shall retain its former meaning, even though the facts which it was intended to describe have radically changed. We must let our words develop with our knowledge and our power.

We cannot, therefore, base genuine and fruitful predictions on the present meanings of our words. For we cannot foresee what changes they may have to undergo. In a world which is plainly capable of novelty and change there is no absolute proof, no absolute certainty of inference, and no complete scientific answer to Hume's searching question. Or rather, our answer cannot be more than methodological. We assume *faute de mieux* that Nature is "uniform," because it is the simplest of the assumptions we can start with, and enough, initially, to guide inquiry; but, as we painfully discover the inaccuracy of our assumption, we gradually correct our formulas until they work sufficiently. Our whole procedure is essentially empirical, and the pretensions of the formal logician to foresee the future and

to predict it without fail by "analysing" the present meaning of our words is fantastic and absurd. It is "wishful thinking" which measures nothing but the height of his presumption and the depth of his ignorance and conceit.

Let us therefore be more humble. Let us honestly confess that we do not know whether all men will always need to be described as "mortal" and that at any rate no such conclusion can be validly elicited from formal logic.

HOW IS "EXACTNESS" POSSIBLE?¹

IT IS AMAZING what a spell the ideal of exactness has cast upon the philosophic mind. For hundreds, nay thousands, of years philosophers seem to have been yearning for exactness and hoping that, if only they can attain it, all their troubles will be over, that all the pitfalls in the way of philosophic progress will be circumvented and that every philosophic science, from psychology and logic to the remotest heights of metaphysics, will become accessible to the meanest understanding.

Yet what a gap there is between these professions and the practice of philosophers! Despite all their zeal for exactness, what body of learned men is more careless in their terminology and more contemptuous of all the devices which seem conducive to exactness?

Experience shows that it is quite impossible to pin any philosophic term down to any single meaning, even for a little while, or even to keep its meanings stable enough to avoid gross misunderstanding. Even the most express and solemn definitions are set at naught by the very writers who propounded them. The most famed philosophers are the very ones who have been the worst offenders. For example, Kant's fame rests in no small measure on the tricks he played with words like "*a priori*," "category," "object," and his systematic confusion of "transcendental" and "transcendent." There is hardly a philosophy which does not juggle thus with ambiguous terms. If the theories of

¹ Paper read at the eighth Congress of Philosophy at Prague, 1934, and printed in its Proceedings, VIII, 123-29.

philosophers may be interpreted in the light of their practice, they should be the last persons in the world to laud "exactness."

On the other hand, they might fairly be expected to inform us what "exactness" means or at least what they wish it to mean. I do not find, however, that they are at all eager to do this. Apparently they are content to refer to mathematics as an "exact" science and to admonish philosophy to respect and aspire to the mathematical ideal.

To understand "exactness," therefore, we must go to mathematics and inquire whether and in what sense mathematics is "exact." Now it is clear that mathematics is not exact in the sense that mathematical objects exactly reproduce physical realities; nor do physical realities exactly exemplify mathematical ideals. There are no straight lines nor circles to be found in nature, while all the physical constants, like the year, month, and day, are inexact. Plato knew this, but yet thought of God as a mathematician; he should have added that when God geometrizes, he does so very inexactly.

Hence, if the relation between realities and mathematical ideals is conceived as a copying or reproduction, it cannot possibly be "exact." Which is the archetype and which the copy does not matter; whether the real copies the mathematical ideal or the latter is moulded upon the former, no exactness can be found.

There is, however, a sense in which exactness depends on definition; and mathematicians take great pride in the exactness of their definitions. A definition can be exact, because it is as such a command addressed to nature. It sounds quite uncompromising. If the real will not come up to the definition, so much the worse for the real! In-so-far therefore as exactness depends on definitions, mathematics can be exact. It can be as exact as anything defined exactly.

But there appear to be limits to the exactness thus attainable.

The exactness of a definition is limited by two difficulties: (a) In the first place things must be found to which the definition, when made, does actually apply; and secondly (b) the definition has to be maintained against the growth of knowledge. Both these difficulties may easily prove fatal to exactness.

As to (a), it is clear that we cannot arbitrarily "define" the creatures of our fancy, without limits. Definitions which apply to nothing have no real meaning. The only sure way, therefore, of securing a definition which will be operative and will have application to the real, is to allow the real, idealized if necessary, to suggest the definition to the mathematician. The mathematician was sensible enough to adopt this procedure. He allowed a ray of sunlight to suggest the definition of a straight line, and this assured to Euclidean geometry a profitable field of application.

But it did not render the definition immutable and immune to the growth of knowledge. The mathematical definition remains dependent on the behaviour of the real. If, therefore, rays of light are found to curve in a gravitational field, a far-reaching doubt is cast on the use of Euclidean geometry for cosmic calculations.

As to (b), the definer retains the right to revise his definitions. So the very framing of his definition may suggest to the mathematician the idea of developing it in some promising and interesting direction. But this procedure may entail a further definition or re-definition which destroys the exactness of the first formula. Thus, when he has accomplished the "exact" definition of a circle and an ellipse, it may occur to a mathematician that after all a circle may be taken as a special case of an ellipse and that it would be interesting to see what happens if he followed out this line of thought. He does so, and arrives at "the points at infinity," with their paradoxical properties. Again the development of non-Euclidean geometries has rendered ambiguous and inexact the Euclidean conceptions, for

example, of "triangle." Even so elementary and apparently stable a conception as that of the unit of common arithmetic undergoes subtle transformations of meaning as others beyond the original operation of addition are admitted.

In mathematics then, as in the other sciences, it is inevitable that the conceptions used should grow. It is impossible to prohibit their growth and to restrict them to the definitions as they were conceived at first. Indeed the process of stretching old definitions so as to permit of new operations is particularly evident in mathematics.

The method by which it is justified is that of analogy. If an analogy can be found which promises to bridge a gap between one notion and another, their identity is experimentally assumed. And if the experiment works for the purposes of those who made it, the differences between them are slurred over and ignored. If it were not possible to take the infinitesimal, now as something, now as nothing, what would be left of the logic of the calculus? But the logician at least should remind himself that analogy is not an exact and valid form of argument.

Can exactness be said to inhere in the symbols used by mathematicians? Hardly. $+$ and $-$, and even $=$, have many uses and therefore senses, even in the exactest mathematics.

The truth is that mathematical definitions cannot be more exact than our knowledge of the realities to which, sooner or later, directly or indirectly, they refer. Nor can mathematical symbols be more exact than words. It is sheer delusion to think otherwise.

And what about words? Whence do they get their meanings, and how are they stabilized and modified? Words get their meaning by being used successfully by those who have meanings to convey. *Verbal* meaning, therefore, is derivative from *personal* meaning. Once a verbal meaning is established and can be presumed to be familiar, personal meaning can employ a word for the purpose of transmitting a new meaning judged ap-

appropriate to a situation in which a transfer of meaning to others is judged necessary or desirable. Thus a transfer of meaning is always experimental, and generally it is problematic and inexact.

Moreover the situation which calls for it is always more-or-less new. Hence a successful transfer, that is, the understanding of a meaning, always involves an extension of an old meaning; and in the course of time this may result in a complete reversal of the initial definition. For example, when the "atom" was first imported into physics, it was defined as the ultimate and indivisible particle of matter. Now, notoriously, it has been subdivided so often that there seems to be room in it for an unending multitude of parts; and its exploration is the most progressive part of physics. The word remains, but its definition has been radically changed. For the scientist always has an option when he finds that his old words are no longer adequate: he can change either his terms or his definitions. But there is and can be no fixity and no exactness about either.

There is a further difficulty about definitions. Not all words can be defined. Wherever the definer begins or ends he makes use of terms not yet defined, or has recourse to definitions revolving in a circle. So, if he hankers after exactness, he declares that some terms are indefinable and need no definition. This subterfuge is utterly unworthy of an exact logician. For if he holds that these indefinables are yet intuitively understood or apprehended, he enslaves his "logic" to psychology. If he admits that he cannot guarantee that any two reasoners will understand the indefinables alike, he explodes the basis of all exactness. Thus even the exactest definitions are left to float in a sea of inexactitude.

The situation grows still more desperate if the logician realizes that to achieve exactness he must eradicate and overcome the potential ambiguity of words. He must devise words which

exactly fit the particular situation in which the words are used. For otherwise the same word will be permitted to mean one thing in one context, another in another. It will be what logicians have been wont to call "ambiguous." However, they may have been mistaking for a flaw the most convenient property of words, namely, their plasticity and capacity for repeated use as vehicles of many meanings.

For the alternative of demanding a one-one correspondence between words and meanings, seems incomparably worse. I remember this was tried once by Earl Bertrand Russell, in a sportive mood. It was not long after the War, and he had just emerged from the dungeon to which he had been consigned for an ill-timed jest, that he came to Oxford to read a paper to a society of undergraduate philosophers on what he called "vagueness." I was requested to "open the discussion" on this paper, and so obtained what in Hollywood is called a "pre-view" of it. What was my amazement when I found that Russell's cure for "vagueness," that is, the applicability of the same word to different situations, was that there should be distinctive words enough for every situation! Certainly that would be a radical cure; but in what a state would it leave language! A language freed from "vagueness" would be composed entirely of nonce-words, *hapax legomena*, and almost wholly unintelligible. When I pointed out this consequence, Russell cheerfully accepted it, and I retired from the fray.

Russell had rightly diagnosed what was the condition of exactness. But he had ignored the fact that his cure was impracticable and far worse than the alleged disease. Nor had he considered the alternative, the inference that therefore the capacity of words to convey a multitude of meanings must not be regarded as a flaw, but that a distinction must be made between plurality of meanings and actual ambiguity.

It is vital to logic that the part words play in transmitting

meaning from one person to another should be rightly understood; but does not such understanding reduce the demand for "exactness" to a false ideal?

What finally is the bearing of these results on the pretensions of logistics? It seems to reduce itself to a game with fictions and verbal meanings. It is clear that it is a fiction that meanings can be fixed and embodied in unvarying symbols. It is clear that the verbal meanings to be fixed are never the personal meanings to be conveyed in actual knowing. The assumption that they can be identified is just a fiction too. There appears to be no point of contact between the conventions of this game and the real problems of scientific knowing. This is the essential difference between logistics and mathematics. Pure mathematics is a game too, but it has application to reality. But logistics seems to be a game more remote from science than chess is from strategy. For in a science the meanings concerned are those of the investigators, that is, they are personal. They are also experimental. They respond to every advance in knowledge and are modified accordingly. Their fixity would mean stagnation and the death of science. Words need have only enough stability of meaning, when they are used, for the old senses (which determine their selection) to yield a sufficient clue to the new senses to be conveyed, to render the latter intelligible. In their context, not in the abstract. In the abstract they may remain infinitely "ambiguous," that is, potentially useful. This does no harm, so long as it does not mislead in actual use. And when an experimenter ventures on too audacious innovations upon the conventional meanings of his words, the right rebuke to him is not "You contradict the meaning of the words you use," but "I do not understand; what do you mean?"

I am driven then to the conclusion that logistics is an intellectual game. It is a game of make-believe, which mathematically

trained pedants love to play, but which does not on this account become incumbent on every one. It may have the advantage that it keeps logisticians out of other mischief. But I fail to see that it has either any serious significance for understanding scientific knowing or any educational importance for sharpening wits.

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Compiled by Louise S. Schiller

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