

A History of Western Philosophy

B Russell, (Simon & Schuster, 1945)

Introductory

108 Philosophy, as I shall understand the word, is something intermediate between theology and science; like theology, it consists of speculations on matters as to which definite knowledge has, so far, been unascertainable; but like science, it appeals to human reason rather than to authority, whether that of tradition or that of revelation. All definite knowledge—so I should contend—belongs to science; all dogma as to what surpasses definite knowledge belongs to theology. But between theology and science there is a No Man's Land, exposed to attack from both sides; this No Man's Land is philosophy. Almost all the questions of most interest to speculative minds are such as science cannot answer, and the confident answers of theologians no longer seem so convincing as they did in former centuries.

125 This implies only empirically confirmed propositions are definite knowledge.

Science tells us what we can know, but what we can know is little, and if we forget how much we cannot know we become insensitive to many things of very great importance. Theology, on the other hand, induces a dogmatic belief that we have knowledge where in fact we have ignorance, and by doing so generates a kind of impertinent insolence towards the universe.

160 The barbarian invasion put an end, for six centuries, to the civilization of western Europe. It lingered in Ireland until the Danes destroyed it in the ninth century.

230 The Catholic Church was derived from three sources. Its sacred history was Jewish, its theology was Greek, its government and canon law were, at least indirectly, Roman. The Reformation rejected the Roman elements, softened the Greek elements, and greatly strengthened the Judaic elements.

As we will see later, this is related to the romantic movements and emphasis of emotion rather than reason. Two points related to this:

(i) Greek democracy prepared 'reasonable arguments' to demonstrate anything; thus to enlist intellectual people Christianity needed 'reasonable argument' to demonstrate God. Thus, the Scholastic theology was largely logical; Aristotle was appreciated. In Jewish and Islamic traditions, proving God was out of question.

(ii) Russell organizes the history of philosophy around the dichotomy of reason and emotion, but now we know they are not dichotomous; logical operations and reaction of the reward system make up our decision system.

Protestants, on the contrary, rejected the Church as a vehicle of revelation; truth was to be sought only in the Bible, which each man could interpret for himself. ... In Protestant theory, there should be no earthly intermediary between the soul and God.

The effects of this change were momentous. Truth was no longer to be ascertained by consulting authority, but by inward meditation.

The result, in thought as in literature, was a continually deepening subjectivism...

238 Modern philosophy begins with Descartes, whose fundamental certainty is the existence of himself and his thoughts, from which the external world is to be inferred. This was only the first stage in a development, through Berkeley and Kant, to Fichte, for whom everything is only an emanation of the ego. This was insanity, and, from this extreme, philosophy has

been attempting, ever since, to escape into the world of every-day common sense.

Subjectivity, once let loose, could not be confined within limits until it had run its course. ... Tigers are more beautiful than sheep, but we prefer them behind bars. The typical romantic removes the bars and enjoys the magnificent leaps with which the tiger annihilates the sheep.

Against the more insane forms of subjectivism in modern times there have been various reactions. First, a half-way compromise philosophy, the doctrine of liberalism, which... begins, in its modern form, with Locke.... A more thoroughgoing revolt leads to the doctrine of State worship.... Hobbes, Rousseau, and Hegel represent different phases of this theory.

281 In general, important civilizations start with a rigid and superstitious system, gradually relaxed, and leading, at a certain stage, to a period of brilliant genius, while the good of the old tradition remains and the evil inherent in its dissolution has not yet developed. But as the evil unfolds, it leads to anarchy, thence, inevitably, to a new tyranny, producing a new synthesis secured by a new system of dogma. **The doctrine of liberalism is an attempt to escape from this endless oscillation.** The essence of liberalism is an attempt to secure a social order not based on irrational dogma, and insuring stability without involving more restraints than are necessary for the preservation of the community. Whether this attempt can succeed only the future can determine.

Book One. Ancient Philosophy

Part I. The Pre-Socratics

Chapter I The Rise of Greek Civilization

516 Prudence versus passion is a conflict that runs through history.

In the sphere of thought, sober civilization is roughly synonymous with science. But science, unadulterated, is not satisfying; men need also passion and art and religion.

Chapter II The Milesian School

Chapter III Pythagoras

837 Most sciences, at their inception, have been connected with some form of false belief, which gave them a fictitious value. Astronomy was connected with astrology, chemistry with alchemy. Mathematics was associated with a more refined type of error. Mathematical knowledge appeared to be certain, exact, and applicable to the real world; moreover it was obtained by mere thinking, without the need of observation. Consequently, it was thought to supply an ideal, from which every-day empirical knowledge fell short. It was supposed, on the basis of mathematics, that thought is superior to sense, intuition to observation. If the world of sense does not fit mathematics, so much the worse for the world of sense. **In various ways, methods of approaching nearer to the mathematician's ideal were sought, and the resulting suggestions were the source of much that was mistaken in metaphysics and theory of knowledge. This form of philosophy begins with Pythagoras.**

873 The influence of geometry upon philosophy and scientific method has been profound. ... The axioms and theorems are held to be true of actual space, which is something given in

experience. It thus appeared to be possible to discover things about the actual world by first noticing what is self-evident and then using deduction. This view influenced Plato and Kant, and most of the intermediate philosophers. When the Declaration of Independence says “we hold these truths to be self-evident,” it is modeling itself on Euclid.

Personal religion is derived from ecstasy, theology from mathematics; and both are to be found in Pythagoras.

Chapter IV, Heraclitus

910 Now almost all the hypotheses that have dominated modern philosophy were first thought of by the Greeks... They discovered mathematics and the art of deductive reasoning.

1029 Russell appreciates the founders of new meme.

Plato and Aristotle agree that Heraclitus taught that “nothing ever is, everything is becoming” (Plato), and that “nothing steadfastly is” (Aristotle). .. Plato is much concerned to refute this doctrine.

The search for something permanent is one of the deepest of the instincts leading me to philosophy. ...

1056 Heraclitus himself, of all his belief in change, allowed *something* everlasting.

Chapter V. Parmenides

1090 Parmenides invented metaphysics based on logic.

1100 When you think, you think of something; when you use a name, it must be the name of something. Therefore both thought and language require objects outside themselves. And since you can think of a thing or speak of it at one time as well as a another, whatever can be thought of or spoken of must exist at all times. Consequently there can be no change, since change consists In things coming into being or ceasing to be.

This is the first example in philosophy of an argument from thought and language to the world at large.

Parmenides’ argument: if a word can be used significantly it must mean *something*, not nothing, and therefore what the word means must in some sense exist.

1156 What subsequent philosophy, down to quite modern times, accepted from Parmenides, was the indestructibility of *substance*.¹ ... A substance was supposed to be the persistent subject of varying predicates. As such it became, and remained for more than two thousand years, one of the fundamental concepts of philosophy, psychology, physics, and theology. ... it was introduced as a way of doing justice to the arguments of Parmenides without denying obvious facts.

Chapter VI. Empedocles, Chapter VII Athens in Relation to Culture, Chapter

¹[Jittai]

VIII, Anaxagoras

Chapter IX. The Atomists

1361 Leucippus came from Miletus, and carried on the scientific rationalist philosophy associated with that city.

Leucippus was led to atomism in the attempt to mediate between monism and pluralism, as represented by Parmenides and Empedocles respectively.

The atoms were always in motion, but there is disagreement among commentators as to the character of the original motion.

Democritus was a thorough-going materialist; for him, as we have seen, the soul was composed of atoms, and thought was a physical process. There was no purpose in the universe; there were only atoms governed by mechanical laws. He disbelieved in popular religion, and he argued against the *nous* of Anaxagoras. In ethics he considered cheerfulness the goal of life, and regarded moderation and culture as the best means to it. He disliked everything violent and passionate ... In all this, he was very like Jeremy Bentham; he was equally so in his love of what the Greeks called democracy.

1518 In spite of the genius of Plato and Aristotle, their thought has vices which proved infinitely harmful. After their time, there was a decay of vigor, ... it was not until the Renaissance that philosophy regained the vigor and independence that characterize the predecessors of Socrates.

Time of rise and time of decay are contrasted in this book. Its essence is economic state of the society. Depression causes dogmatic/religious societies.

Perhaps rising societies tend to be inhumane, because even inhumanely treated people can tolerate cruelty with hope. In contrast, humane society could be a sign of depression.

Chapter X. Protagoras

1522 The word “Sophist” had originally no bad connotation; it meant, as nearly as may be, what we mean by “professor.”

1530 In many cities, however, and especially in Athens, the poorer citizen had towards the rich a double hostility, that of envy and that of traditionalism. The rich were supposed—often with justice—to be impious and immoral; they were subverting ancient beliefs, and probably trying to destroy democracy. It thus happened that political democracy was associated with cultural conservatism, while those who were cultural innovators tended to be political reactionaries.

Part II. Socrates, Plato and Aristotle

Chapter XI. Socrates

1903 The dialectic method is suitable for some questions, and unsuitable for other. Perhaps this helped to determine the character of Plato’s inquiries, which were, for the most part, such as could be dealt with in this way.

Some matters are obviously unsuitable for treatment in this way—empirical science, for example.

Wherever what is being debated is logical rather than factual, discussion is a good method of eliciting truth.

1921 **Logical errors are, I think, of greater practical importance than many people believe;** they enable their perpetrators to hold the comfortable opinion on every subject in turn. Any logically coherent body of doctrine is sure to be in part painful and contrary to current prejudices.

Chapter XII. The influence of Sparta

2040 The myth of Sparta, for medieval and modern readers, was mainly fixed by Plutarch. When he wrote, Sparta belonged to the romantic past.

2049 Of these (Greek) memories, Plato was the most important in early Christianity, Aristotle in the medieval Church; after the Renaissance, men began to value political freedom, was above all to Plutarch that they turned. He influenced profoundly the English and French liberals of the eighteenth century, and the founders of the United States ...

2102 The effect of Sparta on Plato, with whom, at the moment, we shall be specially concerned, will be evident from the account of his Utopia.

Chapter XIII. The Sources of Plato's Opinions

2113 The most important matters in Plato's philosophy are: first, his Utopia, which was the earliest of a long series; **second, his theory of ideas, which was a pioneer attempt to deal with the still unsolved problem of universals; third, his arguments in favour of immortality; fourth, his cosmogony; fifth, his conception of knowledge as reminiscence rather than perception.**

Universal is a product of feeble mind. Note that even a small brain can recognize (or only recognizes) universals. Concrete pictures are first constructed as a picture in the nervous system; if that is useful (or 'matches reality') the mechanism to construct the picture survives.

2122 Knowledge as reminiscence is in a certain sense correct. Refer to phylogenetic learning.

Plato attributed Athens' defeat to democracy. which his social position and his family connections were likely to make him despise..... Plato possessed the art to dress up illiberal suggestions in such a way that they deceived future ages, which admired the *Republic* without ever becoming aware of what was involved in its proposals.

2131 From Pythagoras (whether by way of Socrates or not) Plato derived the Orphic elements in his philosophy: the religious trend, the belief in immortality.

From Parmenides he derived the belief that reality is eternal and timeless, and that, on logical grounds, all change must be illusory.

From Heraclitus he derived the negative doctrine that there is nothing permanent in the sensible world. This, combined with the doctrine of Parmenides, led to the conclusion that knowledge is not to be derived from the senses, but is only to be achieved by the intellect. This, in turn fitted in well with his Pythagoreanism.

From Socrates he probably learnt his preoccupation with ethical problems, and his tendency to seek teleological rather than mechanical explanations of the world.

2140 Plato, like all mystics, has, in his beliefs, a core of certainty which is essentially incommunicable except by a way of life.

2168 The problem of finding a collection of “wise” men and leaving the government to them is thus an insoluble one. **That is the ultimate reason for democracy.**

However, just the effectiveness of the collective intelligence, relative independence of the constituents is a must for this system to work properly.

Chapter XIV Plato’s Utopia

2338 At this point, religion has, at first sight, a simple answer. God determines what is good and what bad; the man whose will is in harmony with the will of God is a good man. Yet this answer is not quite orthodox. Theologians say that God is good, and this implies that there is a standard of goodness which is Independent of God’s will. We are thus forced to face the question: Is there objective truth or falsehood in such a statement as “pleasure is good,” in the same sense as in such a statement as “snow is white”?

The statement must make sense objectively, if you wish to ask whether it is true or not. Assuming that ‘truth’ is understood (or defined or its axioms given), we must understand what is ‘pleasure’ and what is good.’

(i) We can map ‘pleasure state’ to neuroendocrinological syndromes. Thus, pleasure state is ‘objectively defined.’

If good is biologically characterized, loosely at least this is just a statement like ‘snow is white.’

Potential weak points are, e.g., the correctness of the map cannot be checked publicly.

There are two different categories of things characterized empirically. A species may be defined taxonomically, and you can confirm it publicly. Thus, things **publicly periaional and privately operational.**

Chapter XV. The Theory of Ideas

2384 This combination of the logic of Parmenides with the other-worldliness of Pythagoras and the Orphics produced a doctrine which was felt to be satisfying to both the intellect and the religious emotions; the result was a very powerful synthesis, which, with various modifications, influenced most of the great philosophers, down to and including Hegel. But not only philosophers were influenced by Plato. Why did the Puritans object to the music and painting and gorgeous ritual of the Catholic Church? You will find the answer in the tenth book of the *Republic*.

2402 Thus we arrive at the conclusion that opinion is of the world presented to the senses, whereas knowledge is of a super-sensible eternal world; for instance, **opinion is concerned with particular beautiful things, but knowledge is concerned with beauty in itself.**

2411 There is, however, something of great importance in Plato’s doctrine which is not traceable to his predecessors, and that IS the theory of “ideas” or “forms.”....But if the word “cat” means anything, it means something which is not this or that cat, but some kind of universal cattytness. This is not born when a particular cat is born, and does not die when it dies. In fact, it has no position in space or time; **it is “eternal.” This is the logical part of the doctrine. The arguments in its favour, whether ultimately valid or not, are strong,** and quite independent of the metaphysical part of the doctrine.

According to the metaphysical part of the doctrine, the word “cat” means a certain ideal

cat—"the cat," created by God, and unique.

2440 Philosophy, for Plato, is a kind of vision, the "vision of truth." It is not purely intellectual; it is not merely wisdom, but love of wisdom. Spinoza's "intellectual love of God" is much the same intimate union of thought and feeling.

2510 Plato's doctrine of ideas contains a number of obvious errors. But in spite of these it marks a ver important advance in philosophy, since **it is the first theory to emphasize the problem of universals**, which, in varying forms, has persisted to the present day.....**The absolute minimum of what remains**, even in the view of those most hostile to Plato, is this: that we cannot express ourselves in a language composed wholly of proper names, One must have also general words such as "man," "dog" "cat"; or, if not these, then relational words such as "similar," "before," and so on. Such words are not meaningless noises, and it is difficult to see how they can have meaning if the world consists entirely of particular things, such as are designated by proper names.

2519 **In the first place, Plato has no understanding of philosophical syntax.** I can say "Socrates is human," "Plato is human," and so on. In all these statements, the word "human" [is categorically distinct from the subjects.] **"Human" is an adjective**; it would be nonsense to say "human is human." Plato makes a mistake analogous to saying "human is human." He thinks that beauty is beautiful; he thinks that the universal "man" is the name of a pattern man created by God, of whom actual men are imperfect and somewhat unreal copies. **He fails altogether to realize how great is the gap between universals and particulars**; his "ideas" are really just other particulars....

Chapter XVI. Plato's Theory of Immortality

2674 Many eminent ecclesiastics, having renounced the pleasures of sense, and being not on their guard against others, became dominated by love of power, which led them to appalling cruelties and persecutions, nominal for the sake of religion.

2683 It is only through sight and hearing that we know anything about all this, and the true philosopher ignores sight and hearing. What, then, is left to him? First, logic and mathematics; but these are hypothetical, and do not justify any categorical assertion about the real world. The next step—and this is the crucial one—depends upon the idea of the good. Having arrived at this idea, the philosopher is supposed to know that the good is the real, and thus to be able to infer that the world of ideas is the real world. Later philosophers had arguments to prove **the identity of the real and the good, but Plato seems to have assumed it as self-evident**. If we wish to understand him, we must, hypothetically, suppose this assumption justified.

2692 There is absolute justice, absolute beauty, and absolute good, but they are not visible to the eye..... This point of view excludes scientific observation and experiment as methods for the attainment of knowledge.

2736 The connection that all knowledge is reminiscence is developed at greater length in the *Meno* (82 ff.).

2744 Only the sort of knowledge that is called a priori—especially logic and mathematics—can be possibly supposed to exist in every one independently of experience. In fact, This is the

only sort of knowledge (apart from mystic insight) that Plato admits to be really knowledge.

Chapter XVII. Plato's Cosmogony

Chapter XVIII. Knowledge and Perception in Plato

2907 there is nothing worthy to be called "knowledge" to be derived from the senses, and that the only real knowledge has to do with concepts. In this view, " $2 + 2 = 4$ " is genuine knowledge, but such a statement as "snow is white" is so full of ambiguity and uncertainty that it cannot find a place in the philosopher's corpus of truths.

2963 We now reach Plato's final argument against the identification of knowledge with perception. He begins by pointing out that we perceive *through* eyes and ears, rather than *with* them, ... we cannot know things through the senses alone, since through the senses alone we cannot know that things exist. Therefore knowledge consists in reflection, not in impressions, and perception is not knowledge, because it "has no part in apprehending truth, since it has none in apprehending existence."

To disentangle what can be accepted from what must be rejected in this argument against the identification of knowledge with perception is by no means easy. There are three interconnected theses that Plato discusses, namely:

(1) Knowledge is perception;

(2) Man is the measure of all things;

(3) Everything is in a state of flux.

(1) The first of these, with which alone the argument is primarily concerned, is hardly discussed on its own account except in the final passage with which we have just been concerned. Here it is argued that **comparison, knowledge of existence, and understanding of number, are essential to knowledge**, but cannot be included in perception since they are not effected through any sense-organ. The things to be said about these are different. Let us begin with likeness and unlikeness.

2987 **A percept is not knowledge, but merely something that happens**, and that belongs equally to the world of physics and to the world of psychology.

The percept is just an occurrence, and neither true nor false; the percept as filled out with words is a judgement, and capable of truth or falsehood. This judgement I call a "judgement of perception." The proposition "knowledge is perception" must be interpreted as meaning "knowledge is judgements of perception." It is only in this form that it is grammatically capable of being correct.

2996 To return to likeness and unlikeness, it is quite possible, when I perceive two colours simultaneously, for their likeness or unlikeness to be part of the datum. Plato's argument that we have no sense-organ for perceiving likeness and unlikeness ignores the cortex ... If there were only our judgement, it would be an arbitrary judgement, incapable of truth or falsehood. Since it obviously is capable of truth or falsehood, the likeness can subsist between A and B, and cannot be merely something "mental." The judgement "A is like B" is true (if it is true) in virtue of a "fact," just as much as the judgement "A is red" or "A is round." The mind is no more involved in the perception of likeness than in the perception of colour.

I come now to existence, **on which Plato lays great stress**.

3005 Existence belongs to everything, and is among the things that the mind apprehends by itself; without reaching existence, it is impossible to reach truth.

The argument here is that all that Plato says about existence is bad grammar, or rather

bad syntax.

To say “lions exist” means “there are lions,” i.e. “x is a lion’ is true for a suitable x.
” But we cannot say of the suitable x that it “exists”; we can only apply this verb to a
3014 description, complete or incomplete. ...

Now suppose that I am looking at a bright red patch. I may say “this is my present percept”; I may also say “my present percept exists”; but I must not say “this exists,” because the word “exists” is only significant when applied to a description as opposed to a name.*
This disposes of existence as one of the things that the mind is aware of in objects.

What is the definition or characterization of “... exists”?

I come now to understanding of numbers. Here there are two very different things to be considered: on the one hand, the propositions of arithmetic, and on the other hand, empirical propositions of enumeration..

3023 I should agree with Plato that arithmetic, and pure mathematics generally, is not derived from perception. ... To know that a mathematical proposition is correct, we do not have to study the world, but only the meanings of the symbols; ...

3042 Thus numbers are, in a certain precise sense, formal. ... But there is nothing in common among propositions “there are two so-and-so’s” except a common form. ... We may say, in a certain sense, that the symbol “two” means nothing, for, when it occurs in a true statement there is no corresponding constituent in the meaning of the statement. We may continue, if we like, to say that numbers are eternal, immutable, and so on, but we must add that they are logical fictions.

3056 The above considerations have shown that, while there is a formal kind of knowledge, namely logic and mathematics, which is not derived from perception, **Plato’s arguments as regards all other knowledge are fallacious.** This does not, of course, prove that his conclusion is false.

(2) I come now to the position of Protagoras, that man is the measure of all things, or, as it is interpreted, that each man is the measure of all things. Here it is essential to decide the level upon which the discussion is to proceed. It is obvious that, to begin with, we must distinguish between percepts and inferences. Among percepts, each man is inevitably
3068 confined to his own; what he knows of the percepts of others he knows by inference from his own percepts in hearing and reading.

But how about inferences? Are they equally personal and private? In a sense, we must admit that they are. What I am to believe, I must believe because of some reason that appeals to me. ...

3076 The Protagorean position, rightly interpreted, does not involve the view that I never make mistakes, but only that the evidence of my mistakes must appear to me. ... But all this presupposes that, **as regards inferences as opposed to percepts, there is some impersonal standard of correctness. If any inference that I happen to draw is just as good as any other, then the intellectual anarchy that Plato deduces from Protagoras** does in fact follow. On this point, therefore, which is an important one, Plato seems to be in the right. But the empiricist would say that perceptions are the test of correctness in inference in empirical material.

(3) The doctrine of universal flux is caricatured by Plato, and it is difficult to suppose that any one ever held it in the extreme form that he gives to it. continuous change requires a quantitative apparatus, the possibility of which Plato ignores. What he says on this subject, therefore, is largely beside the mark.

At the same time, **it must be admitted that, unless words, to some extent, had fixed meanings, discourse would be impossible.** Here again, however, it is easy to be too absolute.

Words do change their meanings; Here, again, we find that logic and mathematics are peculiar. Plato, under the influence of the Pythagoreans, assimilated other knowledge too much to mathematic. He shared this mistake with many of the greatest philosophers, but it was a mistake one the less.

Chapter XIX. Aristotle's Metaphysics

3095 Aristotle came at the end of the creative period in Greek thought, and after his death it was two thousand years before the world produced any philosopher who could be regarded as approximately his equal. Towards the end of this long period his authority had become almost as unquestioned as that of the Church, and in science, as well as in philosophy, had become a serious obstacle to progress.

3134 Aristotle, as a philosopher, is in many ways very different from all his predecessors. He is the first to write like a professor: his treatises are systematic, his discussions are divided into heads, he is a professional teacher, not an inspired prophet. His work is critical, careful, pedestrian, without an trace of Bacchic enthusiasm. The Orphic elements in Plato are watered down in Aristotle, and mixed with a strong dose of common sense; where he is Platonic, one feels that his natural temperament has been overpowered by the teaching to which he has been subjected. He is not passionate, or in any profound sense religious. *The errors of his predecessors were the glorious errors of youth attempting the impossible; his errors are those of age which cannot free itself of habitual prejudices. He is best in detail and in criticism; he fails in large construction, for lack of fundamental clarity and Titanic fire.*

Perhaps the best place is his criticism of the theory of ideas and his own alternative doctrine of universals.

3158 A substance is a "this", but a universal is a "such"—it indicates the sort of thing, not the actual particular thing..... The gist of the matter so far is that a universal cannot exist by itself, but only in particular things.

3169 However, the intellect evolved with feeble percepts, so individual was recognized far later than logic and basic math were incorporated into our Nevis system.

His doctrine on this point, as on many others, *is a common-sense prejudice pedantically expressed.*

The quality redness cannot exist without some subject, but it can exist without this or that subject; similarly a subject cannot exist without some quality, but can exist without this or that quality. *The supposed ground for the distinction between things and qualities thus seems to be illusory.*

The true ground of the distinction is, in fact, linguistic; it is derived from syntax.

3187 However, 'universal' must be sensed by fairly primitive organisms s well. Thus, 'linguistics' should not be emphasized.

If, therefore, I have failed to make Aristotle's theory of universals clear, that is (I maintain) because it is not clear.

There is another term which is important in Aristotle and in his scholastic followers, and that is the term "essence." This is be no means synonymous with "universal." Your "essence" is "what you are by your very nature."

3216 The view that forms are substances, which exist independently of the matter in which they are exemplified, seems to expose Aristotle to his own arguments against Platonic ideas.

The doctrine of matter and form in Aristotle is connected with the distinction of potentiality and actuality.

Chapter XX. Aristotle's Ethics

3501 Broadly speaking, there are three questions that we can ask about the ethics of Aristotle, or of any other philosopher: (1) Is it internally self-consistent? (2) Is it consistent with the remainder of the author's views? (3) does it give answers to ethical problems that are consonant to our own ethical feelings? If the answer to either the first or second question is in the negative, the philosopher in question has been guilty of some intellectual error. But if the answer to the third question is in the negative, we have no right to say that he is mistaken; we have only the right to say that we do not like him.

(1) On the whole, the Nicomachean Ethics is self-consistent.

(2) Aristotle's ethics is, at all points, consistent with his metaphysics.

(3) The acceptance of inequality is repugnant to much modern sentiment.

3536 There is in Aristotle an almost complete absence of what may be called benevolence or philanthropy.

More generally, there is an emotional poverty in the Ethics.

What he has to say is what will be useful to comfortable men of weak passions; but he has nothing to say to those who are possessed by a god or a devil, or whom outward misfortune drives to despair. For these reasons, in my judgement, *his Ethics, in spite of its fame, is lacking in intrinsic importance.*

Chapter XXI. Aristotle's Politics

3643 Monarchy is better than aristocracy, aristocracy is better than polity. But the corruption of the best is worst; therefore tyranny is worse than oligarchy, and oligarchy than democracy. In this way *Aristotle arrives at a qualified defense of democracy*; for most actual governments are bad, and therefore, among actual governments, democracies tend to be best.

Chapter XXII. Aristotle's Logic

3734 Aristotle's influence, which was very great in many different fields, was greatest of all in logic.

His present-day influence is so inimical to clear thinking that it is hard to remember how great an advance he made upon all his predecessors (including Plato), or how admirable his logical work would still seem.

3742 Aristotle's most important work in logic is the doctrine of the syllogism.

3758 This system was the beginning of formal logic, and, as such, was both important and admirable. But considered as the end, not the beginning, of formal logic, it is open to three

kinds of criticism:

- (1) Formal defects within the system itself.
- (2) Over-estimation of the syllogism, as compared to other forms of deductive argument.
- (3) Over-estimation of deduction as a form of argument.

On each of these three, something must be said.

(1) Formal defects. Let us begin with the two statements “Socrates is a man” and “all Greeks are men.” It is necessary to make a sharp distinction between these two, which is not done in Aristotelian logic. The statement “all Greeks are men” is commonly interpreted as implying that there are Greeks; without this implication, some of Aristotle’s syllogisms are not valid. Take for instance:

“All Greeks are men, all Greeks are white, therefore some men are white.” This is valid if there are Greeks, but not otherwise. If I were to say:

“All golden mountains are mountains, all golden mountains are golden, therefore some mountains are golden,” my conclusion would be false, though in some sense my premisses would be true.

3777

This purely formal error was a source of errors in metaphysics and theory of knowledge. Consider the state of our knowledge in regard to the two propositions “Socrates is mortal” and “all men are mortal.” In order to know the truth of “Socrates is mortal,” most of us are content to rely upon testimony... But when it comes to “all men are mortal,” the matter is different. The question of our knowledge of such general propositions is a very difficult one. Sometimes they are merely verbal: “all Greeks are men” is known because nothing is called “a Greek” unless it is a man. Such general statements can be ascertained from the dictionary; **they tell us nothing about the world except how words are used.** But “all men are mortal” is not of this sort; there is nothing logically self-contradictory about an immortal man.

Metaphysical errors arose through supposing that “all men” is the subject of “all men are mortal” in the same sense as that in which “Socrates” is the subject of “Socrates is mortal.” It made it possible to hold that, in some sense, “all men” denotes an entity of the same sort as that denoted by “Socrates.” This led Aristotle to say that in a sense a species is a substance. He is careful to qualify this statement, but his followers, especially Porphyry, showed less caution.

Another error into which Aristotle falls through this mistake is to think that a predicate of a predicate can be a predicate of the original subject. If I say “Socrates is Greek, all Greeks are human,” Aristotle thinks that “human” is a predicate of “Greek,” while “Greek” is a predicate of “Socrates,” and obviously “human” is a predicate of “Socrates.” But in fact “human” is not a predicate of “Greek.” **The distinction between names and predicates, or, in metaphysical language, between particulars and universals, is thus blurred, with disastrous consequences to philosophy.** One of the resulting confusions was to suppose that a class with only one member is identical with that one member. This made it impossible to have a correct theory of the number one, and led to endless bad metaphysics about unity.

3797

(2) Over-estimation of the syllogism. The syllogism is only one kind of deductive argument.... Again, within logic there are non-syllogistic inferences, such as: “A horse is an animal, therefore a horse’s head is an animal’s head.” valid syllogisms, in fact, are only some among valid deductions, and have no logical priority over others. **The attempt to give preeminence to the syllogism in deduction misled philosophers as to the nature of mathematical reasoning.**

(3) Over-estimation of deduction. The Greeks in general attached more importance to deduction as a source of knowledge than modern philosophers do. ...this argument is an induction, not a deduction. It has less cogency than a deduction, and yields only a probability, not a certainty; but on the other hand **it gives new knowledge, which deduction does not. All**

the Important inferences outside logic and pure mathematics are inductive, not deductive; the only exceptions are law and theology, each of which derives its first principles from an unquestionable text, viz. the statute books or the scriptures.

What, exactly, is meant by the word “category,” whether in Aristotle or in Kant and Hegel, must confess that I have never been able to understand. I do not myself believe that the term “category” is in any way useful in philosophy, as representing any clear idea.

3842 The conception of “substance,” like that of “essence,” is a transference to metaphysics of what is only a linguistic convenience. We find it convenient, in describing the world, to describe a certain number of occurrences as events in the life of “Socrates,” and a certain number of others as events in the life of “Mr. Smith.”

such a word as “France” (say) is only a linguistic convenience, and there is not a thing called “France” over and above its various parts. The same holds of “Mr. Smith”; it is a collective name for a number of occurrences. If we take it as anything more, it denotes something completely unknowable, and therefore no needed for the expression of what we know.

“Substance,” in a word, is a metaphysical mistake, due to transference to the world-structure of the structure of sentences composed of a subject and a predicate.

Metaphysics is, after all, a mistake from excessive emphasis of languages. However, since linguistic structure reflects the real world, it is not so straightforward to reject ‘substance.’

I conclude that the Aristotelian doctrines with which we have been concerned in this chapter are wholly false, with the exception of the formal theory of the syllogism, which is unimportant.

Chapter XXIII. Aristotle’s Physics

3872 In this chapter I propose to consider two of Aristotle’s books, the one called *Physics* and the one called *On the Heavens*. These two books are closely connected; the second takes up the argument at the point at which the first has left it. Both were extremely influential, and dominated science until the time of Galileo. Words such as “quintessence” and “sublunary” are derived from the theories expressed in these books. The historian of philosophy, accordingly, must study them, in spite of the fact that hardly a sentence in either can be accepted in the light of modern science.

3926 Aristotle rejects the void, as maintained by Leucippus and Democritus.

3935 The *Physics* ends with the argument for an unmoved mover, which we considered in connection with the *Metaphysics*. there is one unmoved mover, which directly causes a circular motion. Circular motion is the primary kind, and the only kind which can be continuous and infinite. The first mover has no parts or magnitude and is at the circumference of the world.

3943 The four terrestrial elements are not eternal, but are generated out of each other—fire is absolutely light, in the sense that its natural motion is upward; earth is absolutely heavy. Air is relatively light, and water is relatively heavy. This theory provided many difficulties for later ages. ... Copernicus, Kepler, and Galileo had to combat Aristotle as well as the Bible in establishing the view that the earth IS not the centre of the universe.

Chapter XXIV. Early Greek Mathematics and Astronomy

- 4097 Copernicus came to know something, though not much, of the almost forgotten hypothesis of Aristarchus, and was encouraged by finding ancient authority for his innovation.
- 4123 The Roman soldier who killed Archimedes was a symbol of the death of original thought that Rome caused throughout the Hellenic world.

Part III. Ancient Philosophy after Aristotle

Chapter XXV. The Hellenistic World

- 4181 After the third century BC there is nothing really new in Greek philosophy until Neoplatonism in the third century AD. But meanwhile the Roman world was being prepared for the victory of Christianity.
- 4230 Alexander survived as a legendary hero in the Mohammedan religion.
- 4324 The influence of non-Greek religion and superstition in the Hellenistic world was mainly, but not wholly, bad.

Chapter XXVI. Cynics and Sceptics

- 4372 The psychological preparation for the other-worldliness of Christianity begins in the Hellenistic period, and is connected with the eclipse of the City State. Down to Aristotle, Greek philosophers, though they might complain of this or that, **were, in the main, not cosmically despairing, nor did they feel themselves politically impotent.**
- 4388 All refined philosophy Diogenes held to be worthless; what could be known, could be known by the plain man.
- 4413 In this he resembled the Taoists and Rousseau and Tolstoy, but was more consistent than they were.
His doctrine, though he was a contemporary of Aristotle, belongs in its temper to the Hellenistic age. **Aristotle is the last Greek philosopher who faces the world cheerfully; after him, all have, in one form or another, a philosophy of retreat.**

That is, Medieval Age. See 4930 below as well.

In the early part of the 3rd century BC, the Cynic were the fashion, especially in Alexandria.

- 4430 What was best in the Cynic doctrine passed over into Stoicism, which was an altogether more complete and rounded philosophy.
- 4447 Scepticism was a lazy man's consolation, since it showed that ignorant to be as wise as the reputed men of learning.

It should be observed that Skepticism as a philosophy is not merely doubt, but **what may be called dogmatic doubt.**

4541 Scepticism, while it continued to appeal to some cultivated individuals until somewhere in the third century A.D., was contrary to the temper of the age, which was turning more and more to dogmatic religion and doctrines of salvation. Scepticism had enough force to make educated men dissatisfied with the State religions, but **it had nothing positive, even in the purely intellectual sphere, to offer in their place.**

Chapter XXVII. The Epicureans

4578 He had a very exceptional capacity for purely human friendship, and wrote pleasant letters to the young children of members of the community.

4655 It was through the problem of avoiding fear that Epicurus was led into theoretical philosophy. He held that two of the greatest sources of fear were religion and the dread of death, which were connected, since religion encouraged the view that the dead are unhappy. He therefore sought a metaphysic which would prove that the gods do not interfere in human affairs, and that the soul perishes with the body. **Most modern people think of religion as a consolation, but to Epicurus it was the opposite. Supernatural interference with the course of nature seemed to him a source of terror, and immortality fatal to the hope of release from pain.** Accordingly he constructed an elaborate doctrine designed to cure men of the beliefs that inspire fear.

4688 The poem of Lucretius On the Nature of Things.. Only one manuscript of it survived the Middle Ages, and that narrowly escaped destruction by bigots. ... he and Benjamin Franklin were Shelley's favorite authors.

... Lucretius was passionate, He feels towards Epicurus as towards a savior, and applies language of religious intensity to the man whom **he regards as the destroyer of religion...**

4718 From the beginning of Plato's Republic it is clear that the fear of punishment after death was common in fifth-century Athens...

4726 It is through the poem of Lucretius that the philosophy of Epicurus has chiefly become known to readers since the Renaissance. What has most impressed them, when they were not professional philosophers, is the contrast with Christian belief in such matters as **materialism, denial of Providence, and rejection of immortality.** What is especially striking to a modern reader is to have these views—which, now-a-days, are generally regarded as gloomy and depressing—presented as a gospel of liberation from the burden of fear.

... The age of Epicurus was a weary age, and extinction could appear as a welcome rest from travail of spirit.

4742 **But the fear of death is so deeply rooted in instinct that the gospel of Epicurus could not, at any time, make a wide popular appeal;** it remained always the creed of a cultivated minority. ... as men became increasingly oppressed by the miseries of our terrestrial existence, they demanded continually stronger medicine from philosophy or religion. The philosopher took refuge, with few exceptions, in Neoplatonism; the uneducated turned to various Eastern superstitions, and then, in continually increasing numbers, to Christianity, which, in its early form, placed all good in the life beyond the grave, thus offering men a gospel which was the exact opposite of that of Epicurus. Doctrines very similar to his, however, **were revived by the French philosophers at the end of the eighteenth century, and brought to England**

by Bentham and his followers; this was done in conscious opposition to Christianity, which these men regarded as hostility as Epicurus regarded the religions of his day.

Chapter XXVIII. Stoicism

4752 .. its founder Zeno was a materialist, whose doctrines were, in the main, a combination of Cynicism and Heraclitus; but **gradually, through an admixture of Platonism, the Stoics abandoned materialism, until, in the end, little trace of it remained.** Their ethical doctrine, it is true, changed very little, and was what most of them regarded as of the chief importance.

Stoicism is less Greek than any school of philosophy with which we have been hitherto concerned. The early Stoics were mostly Syrian, the later ones mostly Roman..

Socrates was the chief saint of the Stoics throughout their history.

Zeno had no practice with metaphysical subtleties.

4802 There are obvious logical difficulties about this doctrine. If virtue is really the sole good, a beneficent Providence must be solely concerned to cause virtue, yet the laws of Nature have produced abundance of sinners.

4827 The Stoic is not virtuous in order to do good, but does good in order to be virtuous. It has not occurred to him to love his neighbor as himself; love, except in a superficial sense, is absent from his conception of virtue.

4930 When we compare the tone of Marcus Aurelius with that of Bacon, or Locke, or Condorcet, we see **the difference between a tired and a hopeful age.** ... The Stoic ethic suited the times of Epictetus and Marcus Aurelius, because **its gospel was one of endurance rather than hope.**

5005 And again: "Love mankind. Follow God And it is enough to remember that Law rules all."

These passages bring out very clearly **the inherent contradictions in Stoic ethics and theology.** On the one hand, the universe is a rigidly deterministic single whole, in which all that happens is the result of previous causes. On the other hand, the individual will is completely autonomous, and no man can be forced to sin by outside causes. ...

5030 The Stoic ethic may therefore be stated as follows: Certain things are vulgarly considered goods, but this is a mistake; what is good is a will directed towards securing these false goods for other people. This doctrine involves no logical contradiction, but it loses all plausibility if we genuinely believe that what are commonly considered goods are worthless, for in that case the virtuous will might just as well be directed to quite other ends.

There is, in fact, an element of sour grapes in Stoicism. We can't be happy, but we can be good; let us therefore pretend that, so long as we are good, it doesn't matter being unhappy. This doctrine is heroic, and, in a bad world, useful; but it is neither quite true nor, in a fundamental sense, quite sincere.

5055 In theory of knowledge, **in spite of Plato, they accepted perception;** the deceptiveness of the senses, they held, was really false judgement, and could be avoided by a little care.

Another doctrine of theirs is theory of knowledge was more influential, though more questionable. **This was their belief in innate ideas and principles.**

5072 **By nature, the Stoics held, all human beings are equal.** This was in ideal which could not be consistently realized in the Roman Empire, but it influenced legislation, particularly in improving the status of women and slaves. Christianity took over this part of Stoic teaching along with much of the rest.

Chapter XXIX. The Roman Empire in Relation to Culture

Chapter XXX. Plotinus

5370 Plotinus (AD 204-270), the founder of Neoplatonism, is the last of the great philosophers of antiquity.

5381 To all of them. Christians and pagans alike, the world of practical affairs seemed to offer no hope, and only the Other World seemed worthy of allegiance. To the Christian, the Other World was the Kingdom of Heaven, to be enjoyed after death; to the Platonist, it was the eternal world of ideas, the real world as opposed to that of illusory appearance. **Christian theologians combined these points of view, and embodied much of the philosophy of Plotinus.**

Saint Augustine speaks of Plato's philosophy," and of Plotinus as a man in whom "Plato lived again," and who, if he had lived a little later, would have "changed a few words and phrases and become Christian."

5395 Plotinus is not only historically important. He represents, better than any other philosopher, an important type of theory.

5415 He has, in many respects, clarified Plato's teaching; ... His arguments against materialism are good, and his whole conception of the relation of soul and body is clearer than that of Plato or Aristotle.

like Spinoza, he has a certain kind of moral purity and loftiness, which is very impressive. He is always sincere, never shrill or censorious, invariably concerned to tell the reader, as simply as he can, what he believes to be important. Whatever one may think of him as a theoretical philosopher, it is impossible not to love him as a man.

5436 Plotinus' reverence does not extend to the atomists.

Aristotle plays a larger part than appears, as borrowings from him are often unacknowledged. One feels the influence of Parmenides at many points. The Plato of Plotinus is not so full-blooded as the real Plato. The theory of ideas, the mystical doctrines of the *Phaedo* and of Book VI of the Republic, and the discussion of love in the *Symposium*, make up almost the whole of Plato as he appears in the *Enneads* (as the books of Plotinus are called).

5443 **The metaphysics of Plotinus begins with a Holy Trinity: The One, Spirit and Soul.**

The One is somewhat shadowy. It is sometimes called God, sometimes the Good; it transcends Being, which is the first sequent upon the One. We must not attribute predicates to it, but only say "It is." (This is reminiscent of Parmenides.) **It would be a mistake to**

speak of God as “the All,” because God transcends the All. God is present through all things.

5455 Dean Inge uses “Spirit,” which is perhaps the best word available. But it leaves out the intellectual element which was important in all Greek religious philosophy after Pythagoras.

5473 Thus when we are “divinely possessed and inspired” we see not only nous, but also the One. **When we are thus in contact with the Divine, we cannot reason or express the vision in words;** that comes later. ”

5478 The experience of “ecstasy” (standing outside one’s own body) happened frequently to Plotinus.

5491 This brings us to Soul, the third and lowest member of the Trinity Soul, though inferior to nous, is the author of all living things. ... This might suggest the Gnostic view that the visible world is evil, but Plotinus does not take this view.

5512 There is in the mysticism of Plotinus nothing morose or hostile to beauty.

5568 Plotinus has a very vivid sense of a certain kind of abstract beauty.

5585 Sin is a consequence of free will, which Plotinus upholds as against the determinists, and, more particularly, the astrologers.

Let us now endeavor to sum up the merits and defects of the doctrine taught by Plotinus, and in the main accepted by Christian theology so long as it remained systematic and intellectual.

5595 It was fortunate that, while theology was almost the sole surviving mental activity, the system that was accepted was not purely superstitious, but preserved, though sometimes deeply buried, doctrines which embodied much of the work of Greek intellect and much of the moral devotion that is common to the Stoics and the Neoplatonists. This made possible the rise of the scholastic philosophy, and later, with the Renaissance, the stimulus derived from the renewed study of Plato, and thence of the other ancients.

5601 Gradually, however, subjectivism invaded men’s feeling as well as their doctrines. Science was no longer cultivated, and only virtue was thought important.

Plotinus is both an end and a beginning—an end as regards the Greeks, a beginning as regards Christendom.

Book Two. Catholic Philosophy

Introduction

5646 The medieval world, as contrasted with the world of antiquity, is characterized by **various forms of dualism.** ... The dualism of Latin and Teuton is an outcome of the barbarian invasion, but the others have older sources.

5657 Catholic philosophy is divided into two periods by the dark ages, during which, in Western

Europe, intellectual activity was almost non-existent. From the conversion of Constantine to the death of Boethius.

5713 The practice of a long line of bishops, culminating in Saint Ambrose, supplied the basis for Saint Augustine's political philosophy. Then came the barbarian invasion, followed by a long time of confusion and increasing ignorance. Between Boethius and Saint Anselm, a period of over five centuries, there is only one eminent philosopher, John the Scot, and he, as an Irishman, had largely escaped the various processes that were moulding the rest of the Western world.

Part I. The Fathers

Chapter I. The Religious Development of the Jews

5731 THE Christian religion, as it was handed over by the late Roman Empire to the barbarians, consisted of three elements: first, certain philosophical beliefs, derived mainly from Plato and the Neoplatonists, but also in part from the Stoics; second, a conception of morals and history derived from the Jews; and thirdly, certain theories, more especial) as to salvation, which were on the whole new in Christianity, though in part traceable to Orphism, and to kindred cults of the Near East.

5736 The most important Jewish elements in Christianity appear to me to be the following:

1. A sacred history
2. The existence of a small section of mankind whom God specially loves.
3. practical philanthropy, as an element in the Christian conception of virtue, seems to have come from the Jews.
4. The Law
5. The Messiah. The Jews believed that the Messiah would bring them temporal prosperity....

5809 What we have as the Book of Isaiah is the work of two different prophets, one before the exile and one after. the second of these, who is called by Biblical students Deutero-Isaiah, is the most remarkable of the prophets. He is the first who reports the Lord as saying "There is no god but I." He believes in the resurrection of the body, perhaps as a result of Persian influence.

5867 He negotiated with Rome, and was successful in securing complete autonomy. His family were high priests until Herod, and are known as the Hasmonean dynasts. In enduring and resisting persecution the Jews of this time showed immense heroism, although in defense of things that do no strike us as important, such as circumcision and the wickedness of eating pork.

5873 But for the heroic resistance of the Hasidim, the Jewish religion might easily have died out. ... Townsend, In his Introduction to the translation of the Fourth Book of Maccabees, says: "...it may well be that the world today owes the very existence of monotheism both in the East and in the West to the Maccabees."

5906 Its authors were members of the Hasidim, and their successors the Pharisees. ... It influenced New Testament doctrine, particularly as regards the Messiah, Sheol (hell), and demonology.

5947 Christians have learnt from the Gospels to think ill of Pharisees, yet the author of this book was a Pharisee, and he taught, as we have seen, those very ethical maxims which we think of as most distinctive of Christ's preaching.

5988 It was probably to Jewish and semi-Jewish circles that Christianity first appealed.

5993 Christianity powerfully stimulated anti-Semitism. Throughout the Middle Ages, Jews had no part in the culture of Christian countries.... It was only among Mohammedans, at the period, that Jews were treated humanely, and were able to pursue philosophy and enlightened speculation.

Chapter II. Christianity During the First Four Centuries

6018 Christianity, at first, was preached by Jews to Jews, as a reformed Judaism.

6023 Gnostics and Manichaeans continues to flourish until the government became Christian.

6040 One of the doctrines of a certain sect of Gnostics was adopted by Mahomet. They taught that Jesus was a mere man, and that the Son of God descended upon him at the baptism, and abandoned him at the time of the Passion. In support of this view they appealed to the text: "My God, my God, why hast thou forsaken me?" —a text which, **it must be confessed, Christians have always found difficult.**

6052 In proportion as Christianity became hellenized, it became theological.

6093 inspiration of the Scriptures is roved by the fact that the the prophets foretold the coming of the Messiah by the miracles, and by the beneficent effects of belief on the lives of the faithful. Some of these arguments are now considered out of date, but the last of them was still employed by William James. **All of them, until the Renaissance, were accepted by every Christian philosopher.**

6129 The Christians, for the most part, believed that they alone would go to heaven, and that the most awful punishments would, in the next world, fall upon the heathen. **The other religions which competed for favour during the third century had not this character.**

Chapter 3. Three Doctors of the Church

6195 Four men are called the Doctors of the Western Church: Saint Ambrose, Saint Jerome, Saint Augustine, and Pope Gregory the Great.

6201 **Civilization declined for centuries, and it was not until nearly a thousand years later** that Christendom again produced men who were their equals in learning and culture.

6389 The sense of sin, which was very strong in his day, came to the Jews as a way of reconciling self-importance with outward defeat. Yahweh was omnipotent, and Yahweh was specially interested in the Jews; why, then did they not prosper?

6406 Sin is what is essential to the direct relation, since it explains how a beneficent Deity can

cause men to suffer, and how, in spite of this, individual souls can be what is of most importance in the created world.

6491 As against the Manichaeans, who were dualists, Augustine came to believe that evil originates not from some substance, but from perverseness of will.

Chapter IV. Saint Augustine's Philosophy and Theology

6509 In Saint Augustine, on the other hand, original thinking in pure philosophy is stimulated by the fact that Platonism, in certain respects, is not in harmony with Genesis.

The first point to realize, if his answer is to be understood, is that **creation out of nothing, which was taught in the Old Testament, was an idea wholly foreign to Greek philosophy.**

6526 Why was the world not created sooner? Because there was no "sooner". Time was created when the world was created. God is eternal, in the sense of being timeless; in God there is no before and after, but only an eternal present. This leads Saint Augustine to a very admirable relativistic theory of time.

6538 The gist of the solution he suggests is that time is subjective.

6551 **Subjectivism led him to anticipate not only Kant's theory of time, but Descartes' *cogito*.** In his *Soliloquia* he says: "You, who wish to know, do you know you are? I know it. Whence are you? I know not. Do you feel yourself single or multiple? I know not. Do you feel yourself moved? I know not. Do you know that you think? I do." This contains not only Descartes' *cogito*, but his reply to Gassendi's *ambulo ergo sum*.² As a philosopher, therefore, Augustine deserves a high place.

6557 *The City of God* was an immensely influential book throughout the Middle Ages.

6699 The Jewish pattern of history, past and future, is such as to make a powerful appeal to the oppressed and unfortunate at all times. Saint Augustine adapted this pattern to Christianity, Marx to Socialism. To understand Marx psychologically, one should use the following dictionary:

Yahweh = Dialectical materialism

The Messiah = Marx

The Elect = The Proletariat

The Second Coming = The Revolution

Hell = Punishment of the Capitalism

The Millennium = The Communist Commonwealth

6733 But by God's free grace certain people, among those who have been baptized, are chosen to go to heaven; these are the elect. They do not go to heaven because they are good; we are all totally depraved, except in so far as God's grace, which is only bestowed on the elect, enables us to be otherwise. No reason can be given why some are saved and the rest damned;...

6745 It is strange that the last men of intellectual eminence before the dark ages were concerned,

²I walk, therefore, I am.

6750 not with saving Civilization or expelling the barbarians or reforming the abuses of the administration, but with preaching the merit of virginity and the damnation of unbaptized infants. Seeing that these were the preoccupations that the Church handed on to the converted barbarians, it is no wonder that the succeeding age surpassed almost all other fully historical periods in cruelty and superstition.

Chapter V. The Fifth and Sixth Centuries

6775 Nestorius was patriarch of Constantinople. The question at issue was the relation of Christ's divinity to His humanity. Were there two Persons, one human and one divine? This was the view held by Nestorius.

Saint Cyril, the advocate of unity, was a man of fanatical zeal. He used his position as patriarch to incite pogrom of the very large Jewish colony in Alexandria. His chief claim to fame is the lynching of Hypatia, a distinguished lady who, in an age of bigotry, adhered to the Neoplatonic philosophy and devoted her talents to mathematics.

6792 The persecution of Nestorianism by the Catholic government of Constantinople caused disaffection which helped the Mohammedans in their conquest of Syria.

Ephesus had learned to substitute the Virgin for Artemis, but has still the same intemperate zeal for its goddess as in the time of Saint Paul. ... In 449, after the death of Saint Cyril, a synod at Ephesus tried to carry the triumph further, and thereby fell into the heresy opposite to that of Nestorius; this is called the Monophysite heresy, and maintains that Christ has only one nature.

The Monophysites, like the Nestorians, refused to submit. Egypt, almost to a man, adopted their heresy, which spread up the Nile and as far as Abyssinia. The heresy of Egypt, like the opposite heresy of Syria, facilitated the Arab conquest. The heresy of the Abyssinians was given by Mussolini as one of his reasons for conquering them.

6810 Though an Arian, Theodoric was on good terms with the Church until his last years. In 523, the Emperor Justin proscribed Arianism, and this annoyed Theodoric. He had reason for fear, since Italy was Catholic, and was led by theological sympathy to side with the Emperor. He believed, rightly or wrongly, that there was a plot involving men in his own government. This led him to imprison and execute his minister, the senator Boethius, whose *Consolations of Philosophy* was written while he was in prison.

6821 Middle Ages were able to regard Boethius as orthodox, and to imbibe from him much Platonism which would otherwise have been viewed with suspicion.

6857 During the two centuries before his time and the ten centuries after it, I cannot think of any European man of learning so free from superstition and fanaticism.

Though Cyril was a saint, Boethius was not.

6885 In 568, three years after Justinian's death, Italy was invaded by a new and very fierce German tribe, the Lombards. Wars between and the Byzantines continued intermittently for two hundred years, until nearly the time of Charlemagne.

It was this period that ruined Italian Civilization. It was refugees from the Lombards who founded Venice, not, as tradition avers, fugitive from Attila.

Chapter VI. Saint Benedict and Gregory the Great

7064 Gregory was no friend to secular leaning. It was only from the eleventh century onward that the Church became friendly to learning.

7098 The period we have been considering is peculiar in the fact that, though its great men are inferior to those of many other epochs, their influence on future ages has been greater. Roman law, monasticism, and the papacy owe their long and profound influence very largely to Justinian, Benedict, and Gregory. *The men of the sixth century, though less civilized than their predecessors, were much more civilized than the men of the next four centuries,* and they succeeded in framing institutions that ultimately tames the barbarians.

Mahomet was born when Gregory was about thirty years old.

Part II. Schoolmen

Chapter VII. The Papacy in the Dark Age

7199 In the West, but not in the East, the laity were mostly illiterate for many centuries, and this gave the Church an advantage in the West which it did not possess in the East.

7233 The foundation of the Holy Roman Empire marks an epoch in medieval theory, though much less in medieval practice.

7434 Another reason which makes the year 1000 a turning-point is the cessation, at about this time, of conquest by both Mohammedans and northern barbarians, so so far at least as Western

Chapter VIII. John the Scot

7371 John the Scot, or Johannes Scotus, to which is sometimes added Eriugena or Erigena, is the most astonishing person of the ninth century.

7383 There is good reason to believe that, throughout the sixth, seventh, and eighth centuries, a knowledge of Greek, as well as a considerable familiarity with Latin classics, survived among the Irish.

7412 John supported free will, and this might have passed uncensured; but iWhat roused indignation iWas the purely philosophic character of his argument:-Not that he :Professed to controvert anything accepted in theology, but that he maintained the equal, or even superior, authority of a philosophy independent of revelation.

7434 John's greatest work was called (in Greek) On the Division of Nature. This book was

what, in scholastic times, would have been termed “realist”; that is to say, it maintained, with Plato, that universals are anterior to particulars.

7451 The class of things that both create and are created embraces the whole of the prime causes, or prototypes, or Platonic ideas. **The total of these prime causes is the Logos.** The world of ideas is eternal, and yet created. Under the influence of the Holy Ghost, **these prime causes give rise to the world of particular things, the materiality of which is illusory.** when it is said that God created things out of “nothing,” this “nothing” is to be understood as God Himself, in the sense in which He transcends all knowledge.

Creation is an eternal process: the substance of all finite things is God. The creature is not a being distinct from God. **The creature subsists in God, and God manifests himself in the creature in an ineffable manner.**

7457 Sin has its source in freedom.

7463 John’s independence of mind is shown by these heresies, and is astonishing in the ninth century.

Chapter IX. Ecclesiastic Reform in the Eleventh Century

7488 the conquests of the Normans in France and England saved those countries from further Scandinavian incursions.

The reform movement, in its earlier stages, was, in the minds of its promoters, actuated exclusively by moral motives.... But behind this purely moral motive there was another, at first perhaps unconscious, but gradually becoming more and more open. This motive was to complete the separation between clergy and laity, and in so doing, to increase the power of the former.

7646 It remains to say something of the intellectual revival in the eleventh century. ... Of these, the most important were Anselm and Roscelin, but some others deserve mention. All were monks connected with the reform movement.

7652 Saint Anselm is chiefly known to fame as the inventor of the “ontological argument” for the existence of God. As he put it, the argument is as follows: We define “God” as the greatest possible object of thought. Now if an object of thought does not exist, another, exactly like it, which does exist, is greater. Therefore the greatest of all objects of thought must exist, since, otherwise, another, still greater, would be possible. Therefore, God exists.

This argument has never been accepted by theologians. It was adversely criticized at the time; then it was forgotten till the latter half of the thirteenth century. Thomas Aquinas rejected it, and among theologians his authority has prevailed ever since. **But among philosophers it has had a better fate.** Descartes revived it in a somewhat amended form; Leibniz thought that it could be made valid by the addition of a supplement to prove that God is possible. Kant considered that he had demolished it once for all. In some sense, It underlies the system of Hegel and his followers, and reappears in Bradley’s principle: “What may be and must be, is.”

Clearly an argument with such a distinguished history is to be treated with respect, whether valid or not. The real question is: Is there anything we can think of which, by the mere fact that we can think of it, is shown to exist outside our thought? Every philosopher

would like to say yes, because a philosopher's job is to find out things about the world by thinking rather than observing. If yes is the right answer, there is a bridge from pure thought to things; if not, not. In this generalized form, Plato uses a kind of ontological argument to prove the objective reality of ideas. **But no one before Anselm had stated the argument in its naked logical purity. In gaining purity, it loses plausibility;** but this also is to Anselm's credit.

Anselm considers reason subordinate to faith. "I believe in order to understand," he says; following Augustine, he holds that without belief it is impossible to understand. God, he says, is not *just*, but *justice*.

7680 It is probable, also, that John the Scot had never heard of Proclus or read a line of Plotinus. Apart from the pseudo-Dionysius, the other source of Platonism in the Middle Ages was Boethius. This change in the conception of Plato had already been effected by Plotinus.

Chapter X. Mohammedan Culture and Philosophy

7707 It was the duty of the faithful to conquer as much of the world as possible for Islam, but there was to be no persecution of Christians, Jews, or Zoroastrians—the "people of the Book," as the Koran calls them, i.e., those who followed the teaching of a Scripture.

7723 the motive of their conquests was plunder and wealth rather than religion. **It was only in virtue of their lack of fanaticism that a handful of warriors were able to govern, without much difficulty; vast populations of higher Civilization and alien religion.**

The Persians, on the contrary, have been, from the earliest times, deeply religious and highly speculative. After their conversion, they made out of Islam something much more interesting, more religious, and more philosophical, than had been imagined by the Prophet and his kinsmen.

7751 The distinctive culture of the Muslim world, though it began in Syria, soon came to flourish most in the Eastern and Western extremities, Persia and Spain. The Syrians, at the time of the conquest, were admirers of **Aristotle, whom Nestorians preferred to Plato**, the philosopher favoured by Catholics.

7757 Meanwhile, in Persia, Muslims came in contact with India. It was from Sanskrit writings that they acquired, during the eighth century, their first knowledge of astronomy. About 830, Muhammad ibn Musa al-Khwarazmi, **a translator of mathematical and astronomical books from the Sanskrit**, published a book which was translated into Latin in the twelfth century, under the title *Algoritmi de numero Indorum*.

7762 Persian Civilization remained both intellectually and artistically admirable until the Invasion of the Mongols in the thirteenth century, from which it never recovered.

7774 Arabic philosophers were looked upon with suspicion by the populace, which was fanatical and bigoted; they owed their safety (when they were safe) to the protection of comparatively freethinking princes.

Two Mohammedan philosophers, one of Persia, one of Spain, demanded special notice; they are Avicenna and Averroes. Of these the former is the more famous among Mohammedans, the latter among Christians.

7785 like the Christian scholastics later, **he is occupied with the problem of universals**. Plato said they were anterior to things. Aristotle has two views, one when he is thinking, the other when he is combating Plato. This makes him ideal material for the commentator.

Avicenna invented a formula, which was repeated by Averroes and Albertus Magnus: "Thought brings about the generality in forms." From this it might be supposed that he did not believe in universals apart from thought. This, however, would be an unduly simple view. Genera—that is, universals—are he says, at once before things, in things, and after things. He explains this as follows. They are before things in God's understanding.

7813 Averroes holds that the existence of God can be proved by reason independently of revelation, a view also held by Thomas Aquinas. ... Averroes is more important in Christian than in Mohammedan philosophy.

7827 Arabic philosophy is not important as original thought. Men like Avicenna and Averroes are essentially commentators.

7830 Mohammedan Civilization ... showed no capacity for independent speculation in theoretical matters.

Between the Spanish Moors and the Christians, the Jews formed a useful link. The Spanish Jews produced one philosopher of importance, Maimonides. ... As against Aristotle he maintains that God created not only form, but matter, out of nothing.

Chapter XI. The Twelfth Century

7851 Undoubtedly their sense of the political triumph of the Church, in which they felt themselves participants, stimulated their intellectual initiative.

7868 The scholastics, however, they might revere Aristotle, showed more originality than any of the Arabs—more, indeed, than any one since Plotinus, the at any rate since Augustine.

7890 ecclesiastics generally were more virtuous than they had been before the reform movement.

7941 Dante is the last of the old type, Boccaccio the first of the new.

7947 York, where the first Christian Emperor had begun his reign, was, aptly enough, the scene of one of the most appalling mass-atrocities against Jews. The Jews, before the Crusades, had almost a monopoly of the trade in Eastern goods throughout Europe; after the Crusades, as a result of the persecution of Jews, this trade was largely in Christian hands.

Another and very different effect of the crusades was to stimulate literary intercourse with Constantinople.

7958 Plato no longer holds the first place. Third, there is a great belief in "dialectic" and in syllogistic reasoning; the general temper of the scholastics is minute and disputatious rather than mystical. Fourth, **the question of universals is brought to the fore by the discovery that Aristotle and Plato do not agree about it**; it would be a mistake to suppose, however, that universals are the main concern of the philosophers of this period.

8004 Abelard's chief importance is in logic and theory of knowledge. ... he holds that we do not predicate a *thing*, but a *word*. Thing, he says, resemble each other, and these resemblances give rise to universals. But the point of resemblance between two similar things is

not itself a thing; this is the mistake of realism.

All this, whether right or wrong, is certainly very able. The most modern discussions of the problem of universals have not got much further.

8027 We should ask how we actually determine universals.

As opposed to the dry scholastic method, there was strong mystical movement, of which Saint Bernard was the leader.

Chapter XII. The Thirteenth Century

8066 The great men of the thirteenth century were very great: Innocent III, Saint Francis, Frederick II, and Thomas Aquinas are, in their different ways, supreme representatives of their respective types.

8089 Innocent III. He ordered the great Crusade against the Albigenses, which rooted out heresy, happiness, prosperity, and culture from southern France.

8201 The Church, in the early thirteenth century, was in danger of a revolt scarcely less formidable than that of the sixteenth. From this it was saved, very largely, by the rise of the mendicant orders; Saint Francis and Saint Dominic did much more for orthodoxy than was done by even the most vigorous popes.

8213 In 1219, he travelled to the East and preached before the sultan ... unlike most Christian saints, he was more interested in the happiness of others than in his own salvation. Thomas of Celano said of him that he was more than a saint among saints; among sinners he was one of themselves.

8224 The Inquisition, founded seven years after his death, was, in several countries, chiefly conducted by Franciscans. The net result of Saint Francis's life was to create yet one more wealthy and corrupt order.

8235 The Dominicans were even more active than the Franciscans in the work of the Inquisition.

8241 They (**Dominicans**) devoted themselves to reconciling Aristotle and Christ; Albertus Magnus and Thomas Aquinas, both Dominicans, accomplished this task as well as it is capable of being accomplished. The authority of Thomas Aquinas was so overwhelming that subsequent Dominicans did not achieve much in philosophy; though Francis, even more than Dominic, had disliked learning, the **greatest names in the immediately following period are Franciscan: Roger Bacon, Duns Scotus, and William of Occam were all Franciscans.** What the friars accomplished for philosophy will be the subject of the following chapters.

Chapter XIII. Saint Thomas Aquinas

8246 THOMAS AQUINAS (b. 1225 or 1226, d. 1274) is regarded as the greatest of scholastic philosophers. In all Catholic educational institutions that teach philosophy his system has

to be taught as the only right one; this has been the rule since a rescript of 1879 by Leo XIII. Saint Thomas, therefore, is not only of historical interest, but is a living influence, like Plato, Aristotle, Kant, and Hegel-more, in fact, than the latter two.

8280 My purpose (he says) is to declare the truth which the Catholic Faith professes. But here I must have recourse to natural reason, since the gentiles do not accept the authority of Scripture. Natural reason, however, is deficient in the things of God; it can prove some parts of the faith, but not others. It can prove the existence of God and the immortality of the soul, but not the Trinity, the Incarnation, of the Last Judgement.

8286 no creature knows enough of it to be able to deduce God's existence from His essence. *On this ground, the ontological argument is rejected.*

8297 The existence of God is proved, as in Aristotle, *by the argument of the unmoved mover.* There are things which are only moved, and other things which both move and are moved. Whatever is moved is moved by something, and, since an endless regress is impossible, we must arrive somewhere a something which moves without being moved. This unmoved mover is God.

This should be regarded as his definition of God.

It might be objected that this argument involves the eternity of movement, which Catholics reject.

8303 *In the Summa Theologiae, five proofs of God's existence are given.*

First, the argument of the unmoved mover, as above.

Second, the argument of the First Cause, which again depends upon the impossibility of an infinite regress.

Third, that there must be an ultimate source of all necessity; this is much the same as the second argument.

Fourth, that we find various perfections in the world, and that these must have their source in something completely perfect.

However, what is 'perfect'? not characterized.

Fifth, that we find even lifeless things serving a purpose, which must be that of some being outside them, since only living things can have an internal purpose.

The Aquinas five proofs of the existence of God rely on three points:

(i) avoiding unbounded regression,

(ii) How can we create something qualitatively completely different?

(iii) Existence of perfection, ideals, etc.,

To avoid unbounded regression usually we believe that we need a starting point which is qualitatively different from the successors. This starting point must be superior to the successors due to the impossibility of 'improvements.'

Thus the idea of natural selection is really fundamental, demonstrating the crudeness of Aquinas' logic: it, however, requires a high free-energy source to start with, and some possibility of information preservation (memory).

8309 These prerequisite should be consequences of 'observability' = the existence of observers. This requires some sort of stability of the world. What are the consequences of stability?

To return to the *Summa contra Gentiles*, having proved the existence of God, we can now

say many things about Him, but these are all, in a sense, negative: *God's nature is only known to us through what it is not*. God is eternal, since He is unmoved; He is unchanging, since He contains no passive potentiality. ... God, there is no composition, therefore He is not a body, because bodies have parts.

cf. Propositions about infinity may be proved only through reductio ad absurdum.

God is His own essence since otherwise He would not be simple, but would be compounded of essence and existence. (This point is important.)

8326 We come now to a question which had already troubled both Plato and Aristotle. *Can God know particular things, or does He only know universals and general truths?*

Universal vs Particular: is this really dichotomous? Or more precisely, can we really know particular things? Are a thing at time t and at another time t' different? Is a thing existing for a time span already a universal concept?

The approach based on the evolutionary neural system tells us that initially, an observer only senses a sensory-equivalence class, a kind of a universal object. Thus, 'universal' is more general. For example, a beautiful flower exists because 'beauty' is sensed primarily.

An obvious objection to this idea is that even though feeble-sensed (and -minded) the observer is, the world consists of individual particulars. However, as already noted, this particular thing is a neural construct.

How can we operationally define a particular thing?

8332 A Christian, since he believes in Providence, must hold that God knows particular things; nevertheless there are weighty arguments against this view. Saint Thomas enumerates seven such arguments, and then proceeds to refute them. The seven arguments are as follows:

1. Singularity being signate matter, nothing immaterial can know it.
2. Singulars do not always exist, and cannot be known when they do not exist; therefore they cannot be known by an unchanging being.
3. Singulars are contingent, not necessary; therefore there can be no certain knowledge of them except when they exist.
4. Some singulars are due to volitions, which can only be known to the person willing.
5. Singulars are infinite in number, and the infinite as such is unknown.
6. Singulars are too petty for God's attention.
7. In some singulars there is evil, but God cannot know evil.

Aquinas replies that God knows singulars as their cause; that He knows things that do not yet exist, just as an artificer does when he is making something; that He knows future contingents, because He sees each thing in time as if present, He Himself being not in time; that He knows our minds and secret wills, and that He knows an infinity of things, although we cannot do so. He knows trivial things, because nothing is wholly trivial, and everything has some nobility; otherwise God would know only Himself. Moreover the order of the universe is very noble, and this cannot be known without knowing even the trivial parts. Finally, God knows evil things, because knowing anything good involves knowing the opposite evil.

8345 In God there is Will; His Will is His essence, and its principal object is the divine essence. In willing Himself, God wills other things also, for God is the end of all things. He wills even things that are not yet. He wills His own being and goodness, but other things, though He wills them, He does not will *necessarily*. *There is free will in God; a reason can be assigned for His volition, but not a cause.*

That is, fundamental randomness is God's free will.

He cannot will things impossible in themselves; for example. He cannot make contradiction true.

8356 There is a grave objection, which troubled Saint Augustine, and that is as to the transmission of original sin. It is the soul that sins, and if the soul is not transmitted, but created afresh, how can it inherit the sin of Adam? This is not discussed.

8367 Divine Providence does not exclude evil, contingency, free will, chance or luck. Evil comes through second causes, as in the case of a good artist with bad tools.

8373 Astrology is to be rejected, for the usual reasons. In answer to the question "Is there such a thing as fate?" Aquinas replies that we might give the name "fate" to the order impressed by Providence, but it is wiser not to do so, as "fate" is a pagan word. This leads to an argument that prayer is useful although Providence is unchangeable. (I have failed to follow this argument.)

8385 Aquinas is glad, at the end of a piece of reasoning, to quote texts showing that reason has led him to a conclusion in harmony with the Scriptures, but he does not appeal to authority until his result has been reached.

8402 The sacraments are valid even when dispensed by wicked ministers. This was an important point in Church doctrine.

8419 The sharpness and clarity with which he distinguished arguments derived from reason and arguments derived from revelation are admirable.

8425 however... The appeal to reason is, in a sense, insincere, since the conclusion to be reached is fixed in advance. ... Or take again the arguments professing to prove the existence of God.

That is, Russell must denounce 'debates.' How about proving theorems?

All of these, except the one from teleology in lifeless things, depend upon the supposed impossibility of a series having no first term. Every mathematician knows that there is no such impossibility; the series of negative integers ending with minus one is an instance to the contrary. But here again no Catholic is likely to abandon belief in God even if he becomes convinced that Saint Thomas's arguments are bad; he will invent other arguments, or take refuge in revelation.

8436 There is little of the true philosophical spirit in Aquinas. ... The finding of arguments for a conclusion given in advance is not philosophy, but special pleading. I cannot therefore feel that he deserves to be put on a level with the best philosophers either of Greece or of modern times.

Chapter XIV. Franciscan Schoolmen

8446 The Franciscans were not inclined to accept the authority of Saint Thomas.

8509 Duns Scotus was mainly interested in *evidence*, i.e., these kinds of things that can be known without proof. Of these there are three kinds: (1) Principles known by themselves, (2) things

known by experience, (3) our own actions. **But without divine illumination we can know nothing.**

Duns Scotus held that, since there is no difference between being and essence, the “principle of individuation”—i.e., that which makes one thing not identical with another—**must be form**, not matter. The principle of individuation was one of the important problems of the scholastic philosophy. In various forms, it has remained a problem to the present day. ...we may perhaps state the problem as follows:

8520 Among the properties of individual things, some are essential, others accidental; the accidental properties of a thing are those it can lose without losing its identity. The question now arises: give two individual things belonging to the same species, do they always differ in essence, or is it possible for the essence to be exactly the same in both? Saint Thomas holds the latter view as regards material substances, the former as regards those that are immaterial. Duns Scotus holds that there are always differences of essence between two different individual things. The view of Saint Thomas depends upon the theory that pure matter consists of undifferentiated parts, **which are distinguished solely by difference of position in space**. Thus a person, consisting of mind and body, may differ physically from another person solely by the spatial position of his body. (This might happen with identical twins, theoretically.) **Duns Scotus, on the other hand, holds that if things are distinct, they must be distinguished by some qualitative difference.** This view, clearly, is nearer to Platonism than is that of Saint Thomas.

8526 Various stages have to be traversed before we can state this problem in modern terms. The first step, which was taken by **Leibniz, was to get rid of the distinction between essential and accidental properties**, which, like many that the scholastics took over from Aristotle, turns out to be unreal as soon as we attempt to state it carefully. We thus have, **Instead of “essence,” “all the propositions that are true of the thing in question.”** (In general, however, **spatial and temporal position would still be excluded.**) Leibniz contends that it is impossible for two things to be exactly alike in this sense; this is his principle of the “identity of indiscernibles.” This principle was criticized by physicists, who maintained that two particles of matter might differ solely as regards position in space and time—a view which has been rendered more difficult by relativity, which reduces space and time to relations.

8532 **A further step is required in modernizing the problem, and that is, to get rid of the conception of “substance.”** When this is done, a “thing” has to be a bundle of qualities, since there is no longer any kernel of pure “thinghood.”

However, whether a bundle of properties is associated with an object or not, or more purely, ‘bundle-ness’ must be (at least implicitly) recognized. Even to recognize an individual object, we need a process of binding.

It would seem to follow that, if “substance” is rejected, we must take a view more akin to that of Scotus than to that of Aquinas. **This, however, involves much difficulty in connection with space and time.** I have treated the question as I see it, under the Reading “Proper Names,” in my *Inquiry into Meaning and Truth*.

William of Occam is, after Saint Thomas, the most important schoolman.

8594 Occam was mainly concerned to restore a pure Aristotle, freed from both Augustinian and Arabic influences.

8600 Occam is best known for a maxim which is not to be found in his works, but has acquired the name of “Occam’s razor.” This maxim says: “Entities are not to be multiplied without necessity.” Although he did not say this, he said something which has much the same

effect, namely: “It is vain to do with more what can be done with fewer.” That is to say, if everything in some science can be interpreted without assuming this or that hypothetical entity, there is no ground for assuming it. I have myself found this a most fruitful principle in logical analysis.

In logic, though apparently not in metaphysics, Occam was a nominalist; the nominalists of the fifteenth century* looked upon him as the founder of their school.

8617 A concept is a *natural sign*, a word is a *conventional sign*. We must distinguish when we are speaking of the word as a thing, and when we are using it as having meaning, otherwise we may fall into fallacies such as: “Man is a species, Socrates is a man, therefore Socrates is a species.”

8623 Understanding is of things, not of forms produced by the mind; these are not *what* is understood, but that *by* which things are understood.

‘forms produced by the mind’: there are two problems:

(i) is it really a product of mind?

(ii) Even if so, mind is not something independent of the world, so its production is not a mere artificial figment.

Universals, in logic, are only terms or concepts predicable of many other terms or concepts. *Universal, genus, species* are terms of second intention, and therefore cannot mean *things*.

8629 A universal is merely a sign of many things.

Is ‘universal’ in ‘universality class’ the same as the traditional universal: *universale post rem*?

As to this, Occam agrees with Aquinas, as against Averroes, Avicenna, and the Augustinians. Both hold that there are only individual things, individual minds, and acts of understanding. Both Aquinas and Occam, it is true, admit the *universale ante rem*,³ but only to explain creation; it had to be in the mind of God before He could create. But this belongs to theology, not to the explanation of human knowledge, which is only concerned with the *universale post rem*. In explaining human knowledge, Occam never allows universals to be things.

However, ‘universals’ are very useful in understanding the world. This is an empirical fact that must be respected duly. If there is nothing that may be recognized as ‘universal’, then non intelligence would emerge.

Socrates is similar to Plato, he says, but not in virtue of a third thing called similarity. Similarity is a term of second intention, and is in the mind. (All this is good.)

8641 ‘similarity is in the mid.’ However, ‘mind’ emerges in this world, so to conclude that it is a term of ‘second intention’ is simple-minded.

He continues: “The thing outside the soul which is not a sign is understood first by such knowledge (i.e., by knowledge which is individual), therefore the individual is known first, since everything outside the soul is individual.”

However, this is probably not, because feeble nervous system cannot recognize individuals.

Furthermore, what is ‘individual’? Occam seems to assume that it is recognized at once. This is not simple from the evolutionary epistemological point of view.

³universal prior in reality

He goes on to say that abstract knowledge always presupposes knowledge which is “intuitive” (i.e., of perception), and this is caused by individual things.

8653

This is not so simple, because only an equivalence class modulo sense organs is recognized.

By insisting on the possibility of studying logic and human knowledge Without reference to metaphysics and theology, Occam’s work encouraged scientific research.

8659

His attitude gave confidence to students of particular problems, for instance, his immediate follower Nicholas of Oresme (d. 1382), who investigated planetary theory. This man was, to a certain extent, a precursor of Copernicus; he set forth: both the geocentric and the heliocentric theories, and said that each would explain all the facts known in his day, so that there was no way of deciding between them.

After William of Occam there are no more great scholastics. The next period for great philosophers began in the late Renaissance.

Chapter XV. The Eclipse of the Papacy

8665

The thirteenth century had brought to completion a great synthesis, philosophical, theological, political, and social, which had been slowly built up by the combination of many elements.

8802

Wycliff (ca. 1320-84) illustrate, by his life and doctrine, the diminished authority of the papacy o the fourteenth century.

8852

The long centuries of asceticism were forgotten in a riot of art and poetry and pleasure. Even in Italy, it is true, the Middle Ages did not die without a struggle; Savonarola and Leonardo were born in the same year. But in the main the old terrors had ceased to be terrifying, and the new liberty of the spirit was found intoxicating. The intoxication could not last, but for the moment shut out fear. In this moment of joyful liberation the modern world was born.

Book Three. Modern Philosophy

Part I. From the Renaissance to Hume

Chapter I. General Characteristics

8900

THE period of history which is commonly called “modern” has a mental outlook which differs from that of the medieval period in many ways. Of these, **two are the most important: the diminishing authority of the Church, and the increasing authority of science. With these two, others are connected.** The culture of modern times is more lay than clerical. States increasingly replace the Church as the governmental authority that controls culture.

8912

“liberal,” that is to say, of the kind most naturally associated with commerce. To this there are important exceptions, especially in Germany; Fichte and Hegel, to take two examples, have an outlook which is totally)J unconnected with commerce.

8917

The authority of science, which is recognized by most philosophers of the modern epoch,

is a very different thing from the authority of the Church, since it is intellectual, not governmental. **No penalties fall upon those who reject it**; no prudential arguments influence those who accept it. ... Science pronounces only on whatever, at the time, appears to have been scientifically ascertained, **which is a small island in an ocean of nescience**.

8927 Russell forgets the most important point of science as an intellectual mode.

So far, I have been speaking of theoretical science, which: is an attempt to understand the world. Practical science, which is an attempt to change the world, has been important from the first, and has continually increased in importance, **until it has almost ousted theoretical science from men's thoughts**. The practical importance of science was **first recognized in connection with war; Galileo and Leonardo obtained government employment by their claim to improve artillery and the art of fortification**. From their time onwards, the part of the men of science in war has steadily grown greater.

8940 The moral and political anarchy of fifteenth-century Italy was appalling, and gave rise to the doctrines of Machiavelli. At the same time, the freedom from mental shackles led to an astonishing display of genius in art and literature. But such a society is unstable.

8945 Modern philosophy, however, has retained, for the most part, **an individualistic and subjective character**. This is very marked in Descartes, who builds up all knowledge from the certainty of his own existence... Locke, whose temperament is thoroughly objective, is forced reluctantly into the subjective doctrine that knowledge is of the agreement or disagreement of ideas—a view so repulsive to him that he escapes from it by violent inconsistencies. Berkeley, after abolishing matter, is **only saved from complete subjectivism by a use of God which most subsequent philosophers have regarded as illegitimate**. In Hume, the empiricist philosophy culminated in a scepticism which none could refute and none could accept. Kant and Fichte were subjective in temperament as well as in doctrine; Hegel saved himself by means of the influence of Spinoza. **Rousseau and the romantic movement extended subjectivity from theory of knowledge to ethics and Politics, and ended, logically, in complete anarchism such as that of Bakunin**. This extreme of subjectivism is a form of madness.

8956 Scientific technique requires the cooperation of a large number of individuals organized under a single direction. Its tendency, therefore, **is against anarchism and even individualism**, since it demands a well-knit social structure. Unlike religion, it is ethically neutral: it assures men that they can perform wonders, but does not tell them what wonders to perform. **In this way it is incomplete**.

Chapter II. The Italian Renaissance

8993 Venice did not recover from Vasco da Gama's discovery of the Cape route to India (1497-8).

9004 Florence was the most civilized city in the world, and the chief source of the Renaissance. Almost all the great names in literature, and the earlier as well as some of the later of the great names in art, are connected with Florence.

9025 Lorenzo Valla, an Epicurean, and the man who proved the Donation of Constantine to be a forgery, who ridiculed the style of the Vulgate and accused Saint Augustine of heresy, was made apostolic secretary.

- 9052 French troops shocked the Italians by actually killing people in battle.
- 9057 The Renaissance was not a period of great achievement in philosophy ... More important still, it encouraged the habit of regarding intellectual activity as a delightful social adventure....
- 9108 A stable social system is necessary, but every stable system hitherto devised has hampered the development of exceptional artistic or intellectual merit. **How much murder and anarchy are we prepared to endure for the sake of great achievements such as those of the Renaissance?**

Chapter III. Machiavelli

- 9127 Machiavelli remarks that “all armed prophets have conquered and unarmed ones failed.”
- 9207 It is noted that Machiavelli never bases any political argument on Christian or biblical grounds.

Chapter IV. Erasmus and More

- 9324 It is the first appearance in literature, so far as I know, of the view set forth in Rousseau’s *Savoyard Vicar*, according to which true religion comes from the heart, not the head, and all elaborate theology is superfluous. This point of view has become increasingly common, and is now pretty generally accepted among Protestants. **It is, essentially, a rejection of Hellenic intellectualism by the sentimentalism of the North.**
- 9341 Erasmus, to whom Columbus was less interesting than the Argonauts.
- 9374 on this evidence he (More) was convicted of high treason, and beheaded. His property was given to Princess Elizabeth, who kept it to the day of he death.
- 9431 More’s *Utopia* was in many ways astonishingly liberal. ... It must be admitted, however, that life in More’s Utopia, as in most others, would be intolerably dull. **Diversity is essential to happiness**, and in Utopia there is hardly any.

Chapter V. The Reformation and Counter-Reformation

- 9450 The three great men of the Reformation and Counter-Reformation are Luther, Calvin, and Loyola. All three, intellectually, are medieval in philosophy.

Chapter VI. The Rise of Science

- 9488 Almost everything that distinguishes the modern world from earlier centuries is attributable to science, which achieved its most spectacular triumph in the seventeenth century
- 9505 The Church in the lifetime of Copernicus was more liberal than it became after the Council of Trent, the Jesuits, and the revived Inquisition had done their work.

- 9528 it is not what the man of science believes that distinguishes him, but how and why he believes it.
- 9654 The Inquisition was successful in putting an end to science in Italy, which did not revive there for centuries.
- 9716 The Copernican theory should have been humbling to human pride, but in fact the contrary effect was produced, for the triumphs of science revived human pride.

Chapter VII. Francis Bacon

- 9765 FRANCIS BACON (1561-1626), although his philosophy is in many ways unsatisfactory, has permanent importance as the founder of modern inductive method and the pioneer in the attempt at logical systematization of scientific procedure.
- 9829 Bacon's inductive method is faulty through insufficient emphasis on hypothesis.
- 9835 The problem of induction by simple enumeration remains unsolved to this day. Bacon was quite right in rejecting simple enumeration... John Stuart Mill framed four canons of inductive method, which can be usefully employed so long as the law of causality is assumed; but this law itself, he had to confess, is to be accepted solely on the basis of induction by simple enumeration.

Chapter VIII. Hobbes's Leviathan

- 9849 From Descartes to Kant, Continental philosophy derived much of its conception of the nature of human knowledge from mathematics,... English empiricism, on the other hand, was little influenced by mathematics, and tended to have a wrong conception of scientific method. Hobbes had neither of these defects.... In this respect, Hobbes's merit is great. ... He is vigorous, but crude; he wields the battle-axe better than the rapier. Nevertheless, his theory of the State deserves to be carefully considered, the more so as it is more modern than any previous theory, even that of Machiavelli.

Chapter IX. Descartes

- 10066 Rene Descartes (1596-1650) is usually considered the founder of modern philosophy, and I think, rightly. He is the first man of high philosophic capacity whose outlook is profoundly affected by the new physics and astronomy.
- 10112 When he went to Holland he took few books with him, but among them were the Bible and Thomas Aquinas.
- 10153 Cotes, the editor of the first English edition of Newton's *Principia*, argues eloquently that the vortex theory lead to atheism, while Newton's requires God to set the planets in motion in a direction not towards the sun.
- 10177 There remains, however, something that I cannot doubt: no demon, however cunning, could deceive me if I did not exist. I may have no body: this might be an illusion. But thought is different. "While I wanted to think everything false, it must necessarily be that I who

thought was something; and remarking that this truth, I think, therefore I am, was so solid and so certain that all the most extravagant suppositions of the sceptics were incapable of upsetting it, I judged that I could receive it without scruple as the first principle of the philosophy that I sought.”

This passage is the kernel of Descartes’s theory of knowledge, and contains what is most important in his philosophy. Most philosophers since Descartes have attached importance to the theory of knowledge, and their doing so is largely due to him. “I think, therefore I am” makes mind more certain than matter, and my mind (for me) more certain than the minds of others.

[C] more certain wrt mind.

There is thus, in all philosophy derived from Descartes, a tendency to subjectivism, and to regarding matter as something only knowable, if at all, by inference from what is known of mind.

10185 Descartes’s originality, therefore, should be admitted, though it consists less in inventing the argument than in perceiving its importance.

10201 Knowledge of external things must be by the mind, not by the senses.

10217 However, sensory organ and nervous system must have been inseparable at the beginning, so this statement is inaccurate at best. That is, Descartes’s claim must be reconsidered phylogenetically.

Moreover there are sometimes two different ideas of the same external object, e.g., the sun as it appears to the senses and the sun in which the astronomers believe. These cannot both be like the sun, and reason shows that the one which comes directly from experience must be the less like it of the two.

But these considerations have not disposed of the sceptical arguments which threw doubt on the existence of the external world. This can only be done by first proving the existence of God.

Descartes’s proofs of the existence of God are not very original; in the main they come from scholastic philosophy. They were better stated by Leibniz, and I will omit consideration of them until we come to him.

When God’s existence has been proved, the rest proceeds easily. Since God is good, He will not act like the deceitful demon whom Descartes has imagined as a ground for doubt. Now God has given me such a strong inclination to believe in bodies that He would be deceitful if there were none.

10232 That God is not deceitful is resulted from natural selection of minds. In Descartes God can always be replaced by Evolution.

The method of critical doubt, though Descartes himself applied it only half-heartedly, was of great philosophic importance. It is clear, as a matter of logic, that it can only yield positive results if scepticism is to stop somewhere. If there is to be both logical and empirical knowledge, there must be two kinds of stopping points: indubitable facts, and indubitable principles of inference. Descartes’s indubitable facts are his own thoughts-using “thought” in the widest possible sense. “I think” is his ultimate premiss. Here the word “I” is really illegitimate; he ought to state his ultimate premiss in the form “there are thoughts.” The word “I” is grammatically convenient, but does not describe a datum. When he goes on to say “I am a thing which thinks,” he is already using uncritically the apparatus of categories handed down by scholasticism. He nowhere proves that thoughts need a thinker, nor is

there reason to believe this except in a grammatical sense. The decision, however, to regard thoughts rather than external objects as the prime empirical certainties was very important, and had a profound effect on all subsequent philosophy.

10248 In the whole theory of the material world, Cartesianism was rigidly deterministic. ...
Consequently, Cartesians had difficulty about free will. And for those who paid more atten-
10256 tion to Descartes's science than to his theory of knowledge, it was not difficult to extend the
theory that animals are automata: why not say the same of man, and simplify the system by
making it a consistent materialism? This step was actually taken in the eighteenth century.

There is in Descartes an unresolved dualism between what he learnt from contemporary science and the scholasticism that he had been taught at La Flèche. This led him into inconsistencies, Consistency might have made him merely the founder of a new scholasticism, whereas inconsistency made him the source of two important but divergent schools of philosophy.

Chapter X. Spinoza

10264 Spinoza (1634-77) Is the noblest and most lovable of the great philosophers.
... He lived quietly making his living by polishing lenses.

10295 The metaphysical system of Spinoza is of the type inaugurated by Parmenides. There is only one substance, "God or Nature"; nothing finite is self-subsistent. Descartes admitted three substances, God and mind and matter... Spinoza would have none of this. For him, thought and extension were both attributes of God.

10303 Everything, according to Spinoza, is ruled by an absolute logical necessity. There is no such thing as free will in the mental sphere or chance in the physical world. Everything that happens is a manifestation of God's inscrutable nature, and it is logically impossible that events should be other than they are.

10335 He makes no appeal to unselfishness; he holds that self-seeking, in some sense, and more particularly self-preservation, govern all human behaviour. "No virtue can be conceived as prior to this endeavor to preserve one's own being." But his conception of what a wise man will choose as the goal of his self-seeking is different from that of the ordinary egoist: "The mind's highest good is the knowledge of God, and the mind's highest virtue is to know God." Emotions are called "passions"

10344 Spinoza regards time as unreal, and therefore all emotions which have to do essentially with an event as future or as past are contrary to reason.

Spinoza's outlook is intended to liberate men from the tyranny of fear. ... Unlike some other philosophers, he not only believed his own doctrines, but practiced them.

10394 We are told that no one can hate God, but, on the other hand, "he who loves God cannot endeavour that God should love him in return." ... He does not say that a man ought not to want God to love him; he says that a man who loves God cannot want God to love him. This is made plain by the proof, which says: "For, if a man shall so endeavour, he would desire (V, 17, Corol.) that God, whom he loves, should not be God, and consequently he would desire to feel pain (III, 19), which is absurd (III, 28)."

10419 Spinoza's metaphysic is the best example of what may be called "logical monism" ... The whole of this metaphysic is impossible to accept; it is incompatible with modern logic and with scientific method. Facts have to be discovered by observation, not by reasoning.

Chapter XI. Leibniz

10477 Leibniz (1646-1716) was one of the supreme intellects of all time, but as a human being he was not admirable. The philosophy he proclaimed was a shallow one; the other only in his manuscripts profound. It would be unhistorical to ignore Leibniz caricatured by Voltaire as Doctor Pangloss, but the other is of far greater philosophical importance.

10539 There is no such thing as vacuum; every possible point of view is filled by one actual monad, and by only one. No two monads are exactly alike; this is Leibniz's principle of the "identity of indiscernibles."

10547 Leibniz brought into their final form the metaphysical proofs of God's existence. Before examining the arguments in detail, it is as well to realize that modern theologians no longer rely upon them. Medieval theology is derivative from the Greek intellect.

10563 The ontological argument depends upon the distinction between existence and essence. ... When we describe a person, the question whether he is real or imaginary remains open, however minute our description may be. This is expressed in scholastic language by saying that, in the case of any finite substance, its essence does not imply its existence. But in the case of God, defined as the most perfect Being, Saint Anselm, followed by Descartes, maintains that essence does imply existence, on the ground that a Being who possesses all other perfections is better if He exists than if He does not, from which it follows that if He does not He is not the best possible Being.

10572 This proof defines God as the most perfect Being, i.e., as the subject of all perfections, and a perfection is defined as a "simple quality which is positive and absolute, and expresses without any limits whatever it does express." Leibniz easily proves that no two perfections, as above defined, can be incompatible. He concludes: "There is, therefore, or there can be conceived, a subject of all perfections, or most perfect Being. Whence it follows also that He exists, for existence is among the number of the perfections."

Kant countered this argument by maintaining that "existence" is not a predicate. Another kind of refutation results from my theory of descriptions. The argument does not, to a modern mind, seem very convincing, but it is easier to feel convinced that it must be fallacious than it is to find out precisely where the fallacy lies. The cosmological argument is more plausible than the ontological argument. It is a form of the First-Cause argument, which is itself derived from Aristotle's argument of the unmoved mover.

10579 In Leibniz the argument takes a somewhat different form. He argues that every particular thing in the world is "contingent," that is to say, it would be logically possible for it not to exist; and this is true, not only of each particular thing, but of the whole universe. Even if we suppose the universe to have always existed, there is nothing within the universe to show why it exists. But everything has to have a sufficient reason, according to Leibniz's philosophy; therefore the universe as a whole must have a sufficient reason, which must be outside the universe. This sufficient reason is God. The First-Cause argument rests on the assumption that every series must have a first term, which is false; for example, the series of

10587

10595 proper fractions has no first term. ... Though God exists necessarily, He was not compelled by logic to create the world; on the contrary, this was a free choice, motivated, but not necessitated, by His goodness.

It is clear that Kant is right in saying that this argument depends upon the ontological argument. If the existence of the world can only be accounted for by the existence of a necessary Being, then there must be a Being whose essence involves existence, for that is what is meant by a necessary Being. But if it is possible that there should be a Being whose essence involves existence, then reason alone, without experience, can define such a Being, whose existence will follow from the ontological argument; for everything that has to do only with essence can be known independently of experience—such at least is Leibniz’s view. The apparent greater plausibility of the cosmological as opposed to the ontological argument is therefore deceptive.

10603 The argument from the eternal truths is a little difficult to state precisely. ... Roughly, the argument is this: Such a statement as “it is raining” is sometimes true and sometimes false, but “two and two are four” is always true. All statements that have only to do with essence, not with existence, are either always true or never true. Those that are always true are called “eternal truths.” The gist of the argument is that truths are part of the contents of minds, and that an eternal truth must be part of the content of an eternal mind. There is already an argument not unlike this in Plato, where he deduces immortality from the eternity of the ideas. But in Leibniz the argument is more developed. He holds that the ultimate reason for contingent truths must be found in necessary truths. The argument here is as in the cosmological argument: there must be a reason for the whole contingent world, and this reason cannot itself be contingent, but must be sought among eternal truths. But a reason for what exists must itself exist; therefore eternal truths must, in some sense, exist, and they can only exist as thoughts in the mind of God. This argument is really only another form of the cosmological argument. It is, however, open to the further objection that a truth can hardly be said to “exist” in a mind which apprehends it.

10611 The argument from the pre-established harmony, as Leibniz states it, is only valid for those who accept his windowless monads which all mirror the universe. The argument is that, since all the clocks keep time with each other without any causal interaction, there must have been a single outside Cause that regulated all of them.

Leibniz’s argument, however, can be freed from dependence on his peculiar metaphysic, and transformed into what is called the argument from design. This argument contends that, on a survey of the known world, we find things which cannot plausibly be explained as the product of blind natural forces, but are much more reasonably to be regarded as evidences of a beneficent purpose.

10619 This argument has no formal logical defect; its premisses are empirical, and its conclusion professes to be reached in accordance with the usual canons of empirical inference. The question whether it is to be accepted or not turns, therefore, not on general metaphysical questions, but on comparatively detailed considerations.

However, the observation does not logically lead to the existence of God, unless you define God as such.

There is one important difference between this argument and the others, namely, that the God whom (if valid) it demonstrates need not have all the usual metaphysical attributes. He need not be omnipotent or omniscient; He may be only vastly wiser and more powerful than we are. The evils in the world may be due to His limited power. Some modern theologians have made use of these possibilities in forming their conception of God. But such speculations are remote from the philosophy of Leibniz, to which we must now return.

- 10626 One of the most characteristic features of that philosophy is the doctrine of many possible worlds. A world is “possible” if it does not contradict the laws of logic. There are an infinite number of possible worlds, all of which God contemplated before creating the actual world. Being good, God decided to create the best of the possible worlds, and He considered that one to be the best which had the greatest excess of good over evil. He could have created a world containing no evil, but it would not have been so good as the actual world. That is because some great goods are logically bound up with certain evils. To take a trivial illustration, a drink of cold water when you are very thirsty on a hot day may give you such great pleasure that you think the previous thirst, though painful, was worth enduring, because without it the subsequent enjoyment could not have been so great. For theology, it is not such illustrations that are important, but the connection of sin with free will. Free will is a great good, but it was logically impossible for God to bestow free will and at the same time decree that there should be no sin. God therefore decided to make man free, although he foresaw that Adam would eat the apple, and although sin inevitably brought punishment. The world that resulted, although it contains evil, has a greater surplus of good over evil than any other possible world; it is therefore the best of all possible worlds, and the evil that it contains affords no argument against the goodness of God.
- 10650 Most of the texts upon which we must rely for an understanding of his esoteric doctrine were first published in 1901 or 1903.
- 10667 He abstained from publishing, because he kept on finding evidence that Aristotle’s doctrine of the syllogism was wrong on some points; respect for Aristotle made it impossible for him to believe this, so he mistakenly supposed that the errors must be his own. Nevertheless he cherished through his life the hope of discovering a kind of generalized mathematics, which he called *Characteristica Universalis*, by means of which thinking could be replaced by calculation. ”
- 10675 Leibniz based his philosophy upon two logical premisses, the law of contradiction and the law of sufficient reason.
- 10683 One of the most definite statements of the basis of his metaphysics occurs in a letter to Arnauld:
- 10691 He goes on to explain that substances do not act on each other, but agree through all mirroring the universe, each from its own point of view. There can be no interaction, because all that happens to each substance is part of its own notion, and eternally determined if that substance exists.
 This system is evidently just as deterministic as that of Spinoza. Arnauld expresses his horror of the statement (which Leibniz had made): “That the individual notion of each person involves once for all everything that will ever happen to him.” Such a view is evidently incompatible with the Christian doctrine of sin and free will. Finding it ill received by Arnauld, Leibniz carefully refrained from making it public.
 For human beings, it is true, there is a difference between truth known by logic and truths known by experience. This difference arises in two ways. In the first place, although everything that happens to Adam follows from his notion, if he exists, we can only ascertain his existence by experience.
- 10699 Apart from God’s goodness, which leads Him to create the best possible world, there is no *a priori* reason why one thing should exist rather than another.

10724 Leibniz, in his private thinking, is the best example of a philosopher who uses logic as a key to metaphysics. This type of philosophy begins with Parmenides, and is carried further in Plato's use of the theory of ideas to prove various extra-logical propositions. Spinoza belongs to the same type, and so does Hegel. But none of these is so clear cut as Leibniz in drawing inference from syntax to the real world. This kind of argumentation has fallen into disrepute owing to the growth of empiricism. Whether any valid inferences are possible from language to non-linguistic facts is a question as to which I do not care to dogmatize; but certainly the inferences found in Leibniz and other a priori philosophers are not valid, since all are due to a defective logic. The subject-predicate logic, which all such philosophers in the past assumed, either ignores relations altogether, or produces fallacious arguments to prove that relations are unreal.

Leibniz is a dull writer, and his effect on German philosophy was to make it pedantic and arid.

Chapter XII. Philosophical Liberalism

10786 But in the Middle Ages, while mystics kept alive the original individualistic trends in Christian ethics, the outlook of most men, including the majority of philosophers, was dominated by a firm synthesis of dogma, law, and custom, which caused men's theoretical beliefs and practical morality to be controlled by a social institution, namely the Catholic Church: what was true and what was good was to be ascertained, not by solitary thought, but by the collective wisdom of Councils. The first important breach in this system was made by Protestantism, which asserted that General Councils may err. To determine the truth thus became no longer a social but an individual enterprise. Since different individuals reached different conclusions, the result was strife, and theological decisions were sought, no longer in assemblies of bishops, but on the battle-field.

10794 Meanwhile individualism had penetrated into philosophy. Descartes's fundamental certainty, "I think, therefore I am," made the basis of knowledge different for each person, since for each the starting-point was his own existence, not that of other individuals or of the community.

10802 Early liberalism was individualistic in intellectual matters, and also in economics, but was not emotionally or ethically self-assertive. This form of liberalism dominated the English eighteenth century, the founders of the American Constitution, and the French encyclopaedists.

10810 A new movement, which has gradually developed into the antithesis of liberalism, begins with Rousseau, and acquires strength from the romantic movement and the principle of nationality. In this movement, individualism is extended from the intellectual sphere to that of the passions, and the anarchic aspects of individualism are made explicit. The cult of the hero, as developed by Carlyle and Nietzsche, is typical of this philosophy. ... Byron was the poet of this movement; Fichte, Carlyle, and Nietzsche were its philosophers. ... This whole theory of life, therefore, is self-refuting, in the sense that its adoption in practice leads to the realization of something utterly different: a dictatorial state in which the individual is severely repressed.

10825 The first comprehensive statement of the liberal philosophy is to be found in Locke.

Chapter XIII. Locke's Theory of Knowledge

- 10879 JOHN LOCKE (1632-1704) is the apostle of the Revolution of 1688, the most moderate and the most successful of all revolutions. Its aims were modest, but they were exactly achieved...
- 10886 The years before the Revolution of 1688, when Locke could not, without grave risk, take any part, theoretical or practical, in English politics, were spent by him in composing his *Essay on the Human Understanding*. This is his most important book, and the one upon which his fame most securely rests; but his influence on the philosophy of politics was so great and so lasting that he must be treated as the founder of philosophical liberalism as much as of empiricism in theory of knowledge.
- 10894 His political doctrines, with the developments due to Montesquieu, are embedded in the American Constitution, and are to be seen at work whenever there is a dispute between President and Congress. The British Constitution was based upon his doctrines until about fifty years ago, and so was that which the French adopted in 1871.
- 10917 The theory that the physical world consists only of matter in motion was the basis of the accepted theories of sound, heat, light, and electricity.
- 10924 The theorist may retort that common sense is no more infallible than logic. But this retort, though made by Berkeley and Hume, would have been wholly foreign to Locke's intellectual temper.
A characteristic of Locke, which descended from him to the whole Liberal movement, is lack of dogmatism.
- 10975 His philosophy is piecemeal, like scientific work, not statuesque and all of pieces, like the great Continental systems of the seventeenth century.
- 10982 Having rejected innate ideas, he says:
"Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas; how comes it to be furnished? To this I answer in one word, from experience: in that all our knowledge is founded, and from that it ultimately derives itself" (Book II, Ch. I, Sec. 2).
- 10990 Perception, he says, is "the first step and degree towards knowledge, and the inlet of all the materials of it." This may seem, to a modern, almost a truism, since it has become part of educated common sense, at least in English-speaking countries. But in his day the mind was supposed to know all sorts of things a priori, and the complete dependence of knowledge upon perception, which he proclaimed, was a new and revolutionary doctrine.
- 10997 "Of General Terms," takes up an extreme nominalist position on the subject of universals. All things that exist are particulars, but we can frame general ideas, such as "man," that are applicable to many particulars, and to these general ideas we can give names. [C] but we cannot recognize as such with feeble perceptions. Their generality consists solely in the fact that they are, or may be, applicable to a variety of particular things; in their own being, as ideas in our minds, they are just as particular as everything else that exists.
- 11004 but the differences proceed by continuous gradations" " the boundaries of the species, whereby men sort them, are made by men."

11026 We experience the sensations, but not their causes; our experience will be exactly the same if our sensations arise spontaneously.

11033 This difficulty has troubled empiricism down to the present day.

No one has yet succeeded on inventing a philosophy as once credible and self-consistent.

11040 Locke's ethical doctrines are interesting, partly on their own account, partly as an anticipation of Bentham. ... A few quotations will make this clear.

11048 "Things are good or evil only in relation to pleasure or pain. That we call 'good' which is apt to cause or increase pleasure, or diminish pain, in us."

"What is it moves desire? I answer, happiness, and that alone."

"Happiness, in its full extent, is the utmost pleasure we are capable of."

"The necessity of pursuing true happiness [is] the foundation of all liberty."

"The preference of vice to virtue [is] a manifest wrong judgement."

"The government of our passions [is] the right improvement of liberty."*

The last of these statements depends, it would seem, upon the doctrine of rewards and punishments in the next world. God has laid down certain moral rules; those who follow them go to heaven, and those who break them risk going to hell. The prudent pleasure-seeker will therefore be virtuous. With the decay of the belief that sin leads to hell, it has become more difficult to make a purely self-regarding argument in favor of a virtuous life.

11104 His argument, in a nutshell, is: "We only desire pleasure. But, in fact, many men desire, not pleasure as such, but proximate pleasure. This contradicts our doctrine that they desire pleasure as such, and is therefore wicked." Almost all philosophers, in their ethical systems, first lay down a false doctrine, and then argue that wickedness consists in acting in a manner that proves it false, which would be impossible if the doctrine were true. Of this pattern Locke affords an example.

Chapter XIV. Locke's Political Philosophy

11112 IN the years 1689 and 1690, just after the Revolution of 1688, Locke wrote his two *Treatises on Government*, of which the second especially is very important in the history of political ideas. The first of these two treatises is a criticism of the doctrine of hereditary power. It is a reply to Sir Robert Filmer's *Patriarcha: or The Natural Power of Kings*, which was published in 1680,...

11161 The defeat of theories of divine right, in England, was due to two main causes. One was the multiplicity of religions; the other was the conflict for power between the monarchy, the aristocracy, and the higher bourgeoisie.

11196 It is curious that the rejection of the hereditary principle in politics has had almost no effect in the economic sphere in democratic countries. (In totalitarian states, economic power has been absorbed by political power.) We still think it natural that a man should leave his property to his children; that is to say, we accept the hereditary principle as regards economic power while rejecting it as regards political power. ... I am merely pointing out that it exists, and that most men are unconscious of it.

11218 Calvinism—came chiefly from the rich middle class, who were lenders rather than borrowers. Accordingly first Calvin, then other Protestants, and finally the Catholic Church, sanctioned

“usury.” Thus natural law came to be differently conceived, but no one doubted there being such a thing.

Many doctrines which survived the belief in natural law owe their origin to it; for example, laissez-faire and the rights of man. These doctrines are connected, and both have their origins in puritanism.

Chapter XV. Locke’s Influence

11519 FROM the time of Locke down to the present day, there have been in Europe two main types of philosophy, and one of these owes both its doctrines and its method to Locke, while the other was derived first from Descartes and then from Kant. Kant himself thought that he had made a synthesis of the philosophy derived from Descartes and that derived from Locke; but this cannot be admitted, at least from a historical point of view, for the followers of Kant were in the Cartesian, not the Lockean, tradition. The heirs of Locke are, first Berkeley and Hume; second, those of the French philosophers who did not belong to the school of Rousseau; third, Bentham and the philosophical Radicals; fourth, with important accretions from Continental philosophy, Marx and his disciples.

11525 The victory of the Newtonian cosmology diminished men’s respect for Descartes and increased their respect for England.... .

11533 Shelley’s *Necessity of Atheism*, for which he was expelled from Oxford, is full of Locke’s influence.

Until the publication of Kant’s Critique of Pure Reason in 1781, it might have seemed as if the older philosophical tradition of Descartes, Spinoza, and Leibniz were being definitely overcome by the newer empirical method. This newer method, however, had never prevailed in German universities, and after 1792 it was held responsible for the horrors of the Revolution. Recanting revolutionaries such as Coleridge found in Kant an intellectual support for their opposition to French atheism. The Germans, in their resistance to the French, were glad to have a German philosophy to uphold them. Even the French, after the fall of Napoleon, were glad of any weapon against Jacobinism. All these factors favoured Kant.

11545 Kant, like Darwin, gave rise to a movement which he would have detested. Kant was a liberal, a democrat, a pacifist, but those who professed to develop his philosophy were none of these things. Or, if they still called themselves Liberals, they were Liberals of a new species. Since Rousseau and Kant, there have been two schools of liberalism, which may be distinguished as the hard-headed and the soft-hearted. The hard-headed developed, through Bentham, Ricardo, and Marx, by logical stages into Stalin; the soft-hearted, by other logical stages, through Fichte, Byron, Carlyle, and Nietzsche, into Hitler. This statement, of course, is too schematic to be quite true, but it may serve as a map and a mnemonic. ...

Leaving politics on one side, let us examine the differences between the two schools of philosophy, which may be broadly distinguished as the Continental and the British respectively.

There is first of all a difference of method. British philosophy is more detailed and piecemeal than that of the Continent; when it allows itself some general principle, it sets to work to prove it inductively by examining its various applications. Thus Hume, after announcing that there is no idea without an antecedent impression, immediately proceeds to consider the following objection: suppose you are seeing two shades of colour which are similar but not identical, and suppose you have never seen a shade of colour intermediate between the two, can you nevertheless imagine such a shade? He does not decide the question, and con-

siders that a decision adverse to his general principle would not be fatal to him, because his principle is not logical but empirical.

11576 Berkeley invented a wholly new argument; but Hume—in whom the new philosophy comes to completion—rejected metaphysics entirely, and held that nothing can be discovered by reasoning on the subjects with which metaphysics is concerned. This view persisted in the empirical school, while the opposite view, somewhat modified, persisted in Kant and his disciples.

1562 The sort of ethic that is called “noble” is less associated with attempts to improve the world than is the more mundane view that we should seek to make men happier. This is not surprising. Contempt for happiness is easier when the happiness is other people’s than when it is our own. Usually the substitute for happiness is some form of heroism. This affords unconscious outlets for the impulse to power, and abundant excuses for cruelty. Or, again, what is valued may be strong emotion; this was the case with the romantics. This led to a toleration of such passions as hatred and revenge; Byron’s heroes are typical, and are never persons of exemplary behaviour. The men who did most to promote human happiness were—as might have been expected—those who thought happiness important, not those who despised it in comparison with something more “sublime.” Moreover, a man’s ethic usually reflects his character, and benevolence leads to a desire for the general happiness. Thus the men who thought happiness the end of life tended to be the more benevolent, while those who proposed other ends were often dominated, unconsciously, by cruelty or love of power.

11597 Most of the opponents of Locke’s school had an admiration for war, as being heroic and involving a contempt for comfort and ease. Those who adopted a utilitarian ethic, on the contrary, tended to regard most wars as folly.

11611 Enlightened self-interest is, of course, not the loftiest of motives, but those who decry it often substitute, by accident or design, motives which are much worse, such as hatred, envy, and love of power. On the whole, the school which owed its origin to Locke, and which preached enlightened self-interest, did more to increase human happiness, and less to increase human misery, than was done by the schools which despised it in the name of heroism and self-sacrifice. I do not forget the horrors of early industrialism, but these, after all, were mitigated within the system.

Chapter XVI. Berkeley

11627 GEORGE BERKELEY (1685-1753) is important in philosophy through his denial of the existence of matter—a denial which he supported by a number of ingenious arguments. He maintained that material objects only exist through being perceived. To the objection that, in that case, a tree, for instance, would cease to exist if no one was looking at it, he replied that God always perceives everything; if there were no God, what we take to be material objects would have a jerky life, suddenly leaping into being when we look at them; but as it is, owing to God’s perceptions, trees and rocks and stones have an existence as continuous as common sense supposes. This is, in his opinion, a weighty argument for the existence of God. A limerick by Ronald Knox, with a reply, sets forth Berkeley’s theory of material objects:

There was a young man who said, “God

Must think it exceedingly odd
If he finds that this tree
Continues to be
When there's no one about in the Quad.”

REPLY

Dear Sir:

Your astonishment's odd:

I am always about in the Quad.

And that's why the tree

Will continue to be,

Since observed by

Yours faithfully,

God.

11644 Westward the course of empire takes its way, on account of which the town of Berkeley in California was called after him.

11650 He thinks he is proving that all reality is mental; what he is proving is that we perceive qualities, not things, and that qualities are relative to the percipient.

11664 That **sense data are mental** is a thesis which Philonos supports

11686 Whatever is immediately perceived is an idea; and can any idea exist out of the mind?

11693 Hylas urges that certain traces in the brain are causes of sensations, but Philonos retorts that “the brain, being a sensible thing, exists only in the mind.”

11701 Berkeley's argument consists of two parts. On the one hand, he argues that we do not perceive material things, but only colours, sounds, etc., and that these are “mental” or “in the mind.” His reasoning is completely cogent as to the first point, but **as to the second it suffers from the absence of any definition of the word “mental.”** He relies, in fact, upon the received view that everything must be either material or mental, and that nothing is both. When he says that we perceive qualities, not “things” or “material substances,” and that there is no reason to suppose that the different qualities which common sense regards as all belonging to one “thing” inhere in a substance distinct from each and all of them, his reasoning may be accepted. **But when he goes on to say that sensible qualities—including primary qualities—are “mental,” the arguments are of very different kinds,** and of very different degrees of validity. There are some attempting to prove logical necessity, while others are more empirical. Let us take the former first.

11708 Philonous says: **“Whatever is immediately perceived is an idea: and can any idea exist out of the mind?” This would require a long discussion of the word “idea.”** If it were held that thought and perception consist of a relation between subject and object, it would be possible to identify the mind with the subject, and to maintain that there is nothing “in” the mind but only objects “before” it. Berkeley discusses the view that we must distinguish the act of perceiving from the object perceived, and that the former is mental while the latter is not. His argument against this view is obscure, and necessarily so, since, **for one who believes in mental substance, as Berkeley does, there is no valid means of refuting it.** He says: “That any immediate object of the senses should exist in an unthinking substance, or exterior to all minds, is in itself an evident contradiction.” There is here a fallacy, analogous to the following: “It is impossible for a nephew to exist without an uncle; now Mr. A is a nephew; therefore it is logically necessary for Mr. A to have an uncle.” It is, of course,

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logically necessary given that Mr. A is a nephew, but not from anything to be discovered by analysis of Mr. A. So, **if something is an object of the senses, some mind is concerned with it; but it does not follow that the same thing could not have existed without being an object of the senses.**

11723 There is a somewhat analogous fallacy as regards what is conceived. Hylas maintains that he can conceive a house which no one perceives, and which is not in any mind. Philonous retorts that whatever Hylas conceives is in his mind, so that the supposed house is, after all, mental. Hylas should have answered: "I do not mean that I have in mind the image of a house; when I say that I can conceive a house which no one perceives, what I really mean is that I can understand the proposition 'there is a house which no one perceives,' or, better still, 'there is a house which no one either perceives or conceives.'" This proposition is composed entirely of intelligible words, and the words are correctly put together. Whether the proposition is true or false, I do not know; but I am sure that it cannot be shown to be self-contradictory. Some closely similar propositions can be proved. For instance: the number of possible multiplications of two integers is infinite, therefore there are some that have never been thought of. Berkeley's argument, if valid, would prove that this is impossible. The fallacy involved is a very common one. We can, by means of concepts drawn from experience, construct statements about classes some or all of whose members are not experienced. Take some perfectly ordinary concept, say "pebble"; this is an empirical concept derived from perception. But it does not follow that all pebbles are perceived, **unless we include the fact of being perceived in our definition of "pebble."** Unless we do this, the concept "unperceived pebble" is logically unobjectionable, in spite of the fact that it is logically impossible to perceive an instance of it.

However, this means the existence of the so far not perceived pebble; we believe any pebble is potentially perceptible, and the belief will be empirically checked as often as you wish.

11731 Schematically, the argument is as follows. Berkeley says: "Sensible objects must be sensible. A is a sensible object. Therefore A must be sensible." But if "must" indicates logical necessity, the argument is only valid if A must be a sensible object. The argument does not prove that, from the properties of A other than its being sensible, it can be deduced that A is sensible. It does not prove, for example, that colours intrinsically indistinguishable from those that we see may not exist unseen. We may believe on physiological grounds that this does not occur, but such grounds are empirical; so far as logic is concerned, there is no reason why there should not be colours where there is no eye or brain.

I come now to Berkeley's empirical arguments. **To begin with, it is a sign of weakness to combine empirical and logical arguments,** for the latter, if valid, make the former superfluous.

11753 In the second Dialogue Philonous sums up the discussion, so far as it has gone, in the words: "Besides spirits, all that we know or conceive are our own ideas."

11760 **But we must now ask ourselves what we mean by "perceiving."** Philonous maintains that, as regards sensible things, their reality consists in their being perceived; but he does not tell us what he means by perception.

11768 One obvious difference between perceived and unperceived events is that the former, but not the latter, can be remembered. Is there any other difference?

Recollection is one of a whole genus of effects which are more or less peculiar to the phenomena that we naturally call "mental." These effects are connected with habit. Habit and memory, when described in physicalist terms, are not wholly absent in dead matter; the difference, in this respect, **between living and dead matter, is only one of degree.**

In this view, to say that an event is "perceived" is to say that it has effects of certain

11782 kinds, and there is no reason, either logical or empirical, for supposing that all events have effects of these kinds.

Theory of knowledge suggests a different standpoint. We start, here, not from finished science, but from whatever knowledge is the ground for our belief in science. This is what Berkeley is doing. Here it is not necessary, in advance, to define a “percept.” The method, in outline, is as follows. **We collect the propositions that we feel we know without inference, and we find that most of these have to do with dated particular events.** These events we define as “percepts.” Percepts, therefore, are those events that we know without inference; or at least, to allow for memory, such events were at some time percepts. We are then faced with the question: Can we, from our own percepts, infer any other events? Here four positions are possible, of which the first three are forms of idealism.

11790 (1) We may deny totally the validity of all inferences from my present percepts and memories to other events. This view must be taken by any one who confines inference to deduction.

...

(2) **The second position, which is solipsism as ordinarily understood, allows some inference from my percepts, but only to other events in my own biography.** Take, for example, the view that, at any moment in waking life, there are sensible objects that we do not notice. We see many things without saying to ourselves that we see them; at least, so it seems. Keeping the eyes fixed in an environment in which we perceive no movement, we can notice various things in succession, and we feel persuaded that they were visible before we noticed them; but before we noticed them they were not data for theory of knowledge. **This degree of inference from what we observe is made unreflectingly** by everybody, even by those who most wish to avoid an undue extension of our knowledge beyond experience.

11797 (3) The third position—which seems to be held, for instance, by Eddington—is that **it is possible to make inferences to outlier events analogous to those** in our own experience, ... we have no right to infer events experienced by no one and not forming part of any “mind.” This view may be defended on the ground that all inference to events which lie outside my observation is by analogy, ...

11804 (4) **The fourth position is that of common sense and traditional physics,** according to which there are, in addition to my own experiences and other people’s, also events which no one experiences—for example, the furniture of my bedroom when I am asleep and it is pitch dark. G. E. Moore once accused idealists of holding that trains only have wheels while they are in stations, on the ground that passengers cannot see the wheels while they remain in the train. Common sense refuses to believe that the wheels suddenly spring into being whenever you look, but do not bother to exist when no one is inspecting them. When this point of view is scientific, it bases the inference to unperceived events on causal laws.

I do not propose, at present, to decide between these four points of view. The decision, if possible at all, can only be made by an elaborate investigation of non-demonstrative inference and the theory of probability. **What I do propose to do is to point out certain logical errors** which have been committed by those who have discussed these questions.

11812 Berkeley, as we have seen, thinks that there are logical reasons proving that only minds and mental events can exist. This view, on other grounds, is also held by Hegel and his followers. I believe this to be a complete mistake. Such a statement as “there was a time before life existed on this planet,” whether true or false, cannot be condemned on grounds of logic, any more than “there are multiplication sums which no one will have ever worked out.” To be observed, or to be a percept, is merely to have effects of certain kinds, and there is no logical reason why all events should have effects of these kinds.

There is, however, another kind of argument, which, while it does not establish idealism as a metaphysic, does, if valid, establish it as a practical policy. It is said that a proposition which is unverifiable has no meaning; that verification depends upon percepts; and that,

11819 therefore, a proposition about anything except actual or possible percepts is meaningless. I think that this view, strictly interpreted, would confine us to the first of the above four theories, and would forbid us to speak about anything that we have not ourselves explicitly noticed. If so, it is a view that no one can hold in practice, which is a defect in a theory that is advocated on practical grounds. The whole question of verification, and its connection with knowledge, is difficult and complex; I will, therefore, leave it on one side for the present.

I conclude that there is no a priori objection to any one of our four theories.

It remains to be asked whether any meaning can be attached to the words “mind” and “matter.”

11834 My own definition of “matter” may seem **unsatisfactory; I should define it as what satisfies the equations of physics.** There may be nothing satisfying these equations; in that case either physics or the concept “matter” is a mistake. If we reject substance, “matter” will have to be a logical construction. Whether it can be any construction composed of events—which may be partly inferred—is a difficult question, but by no means an insoluble one.

As for “mind,” when substance has been rejected a mind must be some group or structure of events. The grouping must be effected by some relation which is characteristic of the sort of phenomena we wish to call “mental.” We may take memory as typical. We might—though this would be rather unduly simple—**define a “mental” event as one which remembers or is remembered.** Then the “mind” to which a given mental event belongs is the group of events connected with the given event by memory-chains, backwards or forwards.

It will be seen that, according to the above definitions, a mind and a piece of matter are, each of them, a group of events.

Chapter XVII. Hume

11844 **DAVID HUME (1711-76) is one of the most important among philosophers, because he developed to its logical conclusion the empirical philosophy of Locke and Berkeley, and by making it self-consistent made it incredible.** He represents, in a certain sense, a dead end: in his direction, it is impossible to go further. To refute him has been, ever since he wrote, a favorite pastime among metaphysicians. For my part, I find none of their refutations convincing nevertheless, **I cannot but hope that something less sceptical than Hume’s system may be discoverable.**

11850 His chief philosophical work, the *Treatise of Human Nature*, was written while he was living in France during the years 1734 to 1737. ... no one noticed the book; **as he says himself, “it fell dead-born from the press.”** “But,” he adds, “being naturally of a cheerful and sanguine temper, I very soon recovered from the blow.” ... **He shortened the *Treatise* by leaving out the best parts and most of the reasons for his conclusions;** the result was the *Inquiry into Human Understanding*, for a long time much better known than the *Treatise*. **It was this book that awakened Kant from his “dogmatic slumber”;** he does not appear to have known the *Treatise*.

11860 “**Abstract ideas are in themselves individual, however they may become general in their representation.**” This theory, which is a modern form of nominalism, has two defects, one logical, the other psychological. ...

11895 **Hume banished the conception of substance from psychology,** as Berkeley had banished it from physics. There is, he says, **no impression of self, and therefore no idea of self** (Book I, Part IV, Sec. VI). “For my part, when I enter most intimately into what I call myself, I always stumble on some particular perception or other, of heat or cold, light or shade, love

or hatred, pain or pleasure. I never catch myself at any time without a perception, and never can observe anything but the perception.” There may, he ironically concedes, be some philosophers who can perceive their selves; “but setting aside some metaphysicians of this kind, I may venture to affirm of the rest of mankind, that they are nothing but a bundle or collection of different perceptions, which succeed each other with inconceivable rapidity, and are in a perpetual flux and movement.”

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This repudiation of the idea of the Self is of great importance. Let us see exactly what it maintains, and how far it is valid. Ideas of unperceived things or occurrences can always be defined in terms of perceived things or occurrences, and therefore, by substituting the definition for the term defined, we can always state what we know empirically without introducing any unperceived things or occurrences. As regards our present problem, all psychological knowledge can be stated without introducing the “Self.” **Further, the “Self,” as defined, can be nothing but a bundle of perceptions, not a new simple “thing.” In this I think that any thoroughgoing empiricist must agree with Hume.**

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It does not follow that there is no simple Self; it only follows that we cannot know whether there is or not, and that the Self, except as a bundle of perceptions, cannot enter into any part of our knowledge. This conclusion is important in metaphysics, as getting rid of the last surviving use of “substance.” It is important in theology, as abolishing all supposed knowledge of the “soul.” It is important in the analysis of knowledge, since it shows that the category of subject and object is not fundamental. In this matter of the ego Hume made an important advance on Berkeley.

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The most important part of the whole Treatise is the section called “Of Knowledge and Probability.” Hume does not mean by “probability” the sort of knowledge contained in the mathematical theory of probability, such as that the chance of throwing double sixes with two dice is one thirty sixth. This knowledge is not itself probable in any special sense; it has as much certainty as knowledge can have. **What Hume is concerned with is uncertain knowledge, such as is obtained from empirical data by inferences that are not demonstrative.** This includes all our knowledge as to the future, and as to unobserved portions of the past and present. In fact, it includes everything except, on the one hand, direct observation, and, on the other, logic and mathematics. The analysis of such “probable” knowledge led Hume to certain sceptical conclusions, which are equally difficult to refute and to accept. **The result was a challenge to philosophers, which, in my opinion, has still not been adequately met.**

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The three relations that depend not only on ideas are identity, spatio-temporal relations, and causation. In the first two, the mind does not go beyond what is immediately present to the senses. (Spatio-temporal relations, Hume holds, can be perceived, and can form parts of impressions.) Causation alone enables us to infer some thing or occurrence from some other thing or occurrence: “’Tis only causation, which produces such a connexion, as to give us assurance from the existence or action of one object, that ’twas followed or preceded by any other existence or action.”

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In the Cartesian philosophy, as in that of the Scholastics, the connection of cause and effect was supposed to be necessary, as logical connections are necessary. The first really serious challenge to this view came from Hume, with whom the modern philosophy of causation begins. ... Hume begins by observing that the power by which one object produces another is not discoverable from the ideas of the two objects...

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... It must be experience, because the connection is not logical; and it cannot be merely the experience of the particular events A and B, since we can discover nothing in A by itself which should lead it to produce B. **The experience required, he says, is that of the constant conjunction of events of the kind A with events of the kind B.** He points out that when,

11954 in experience, two objects are constantly conjoined, we do in fact infer one from the other. (When he says “infer,” he means that perceiving the one makes us expect the other; he does not mean a formal or explicit inference.) “Perhaps, the necessary connection depends on the inference,” not vice versa. That is to say, the sight of A causes the expectation of B, and so leads us to believe that there is a necessary connection between A and B. The inference is not determined by reason, since that would require us to assume the uniformity of nature, which itself is not necessary, but only inferred from experience.

Hume is thus led to the view that, when we say “A causes B,” we mean only that A and B are constantly conjoined in fact, not that there is some necessary connection between them. “We have no other notion of cause and effect, but that of certain objects, which have been always conjoined together We cannot penetrate into the reason of the conjunction.”

11969 Let us now ask ourselves what we are to think of Hume’s doctrine. It has two parts, one objective, the other subjective. The objective part says: When we judge that A causes B, what has in fact happened, so far as A and B are concerned, is that they have been frequently observed to be conjoined, i.e., A has been immediately, or very quickly, followed by B; we have no right to say that A must be followed by B, or will be followed by B on future occasions. Nor have we any ground for supposing that, however often A is followed by B, any relation beyond sequence is involved. In fact, causation is definable in terms of sequence, and is not an independent notion.

11983 If Hume’s objective doctrine is right, we have no better reason for expectations in psychology than in the physical world. Hume’s theory might be caricatured as follows: “The proposition ‘A causes B’ means ‘the impression of A causes the idea of B.’” As a definition, this is not a happy effort.

11991 We must therefore examine Hume’s objective doctrine more closely. (1) in causation there is no indefinable relation except conjunction or succession; (2) induction by simple enumeration is not a valid form of argument. Empiricists in general have accepted the first of these theses and rejected the second.

I do not wish, at the moment, to discuss induction, which is a large and difficult subject; for the moment, I am content to observe that, if the first half of Hume’s doctrine is admitted, the rejection of induction makes all expectation as to the future irrational, ... I mean that, taking even our firmest expectations, such as that the sun will rise tomorrow, there is not a shadow of a reason for supposing them more likely to be verified than not. With this proviso, I return to the meaning of “cause.”

12021 Hume’s real argument is that, while we sometimes perceive relations of time and place, we never perceive causal relations, which must therefore, if admitted, be inferred from relations that can be perceived. The controversy is thus reduced to one of empirical fact: Do we, or do we not, sometimes perceive a relation which can be called causal? Hume says no, his adversaries say yes, and it is not easy to see how evidence can be produced by either side.

12035 Hume is not content with reducing the evidence of a causal connection to experience of frequent conjunction... The conclusion is one of complete scepticism:

12042 “All probable reasoning is nothing but a species of sensation. ’Tis not solely in poetry and music, we must follow our taste and sentiment, but likewise in philosophy. When I am convinced of any principle, ’tis only an idea, which strikes more strongly upon me. When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence. Objects have no discoverable connexion together; nor is it from any other principle but custom operating upon the imagination, that we can draw any inference from the appearance of one to the existence of another.”

The ultimate outcome of Hume’s investigation of what passes for knowledge is not what

12057 we must suppose him to have desired. The sub-title of his book is: “An attempt to introduce the experimental method of reasoning into moral subjects.” It is evident that he started out with a belief that scientific method yields the truth, the whole truth, and nothing but the truth; he ended, however, with the conviction that belief is never rational, since we know nothing. After setting forth the arguments for scepticism (Book I, Part IV, Sec. I), he goes on, not to refute the arguments, but to fall back on natural credulity. “Nature, by an absolute and uncontrollable necessity has determined us to judge as well as to breathe and feel; nor can we any more forbear viewing certain objects in a stronger and fuller light, upon account of their customary connexion with a present impression, than we can hinder ourselves from thinking as long as we are awake, or seeing the surrounding bodies, when we turn our eyes towards them in broad sunshine. **Whoever has taken the pains to refute this total scepticism, has really disputed without an antagonist, and endeavored by arguments to establish a faculty, which nature has antecedently implanted in the mind, and rendered unavoidable.** My intention then in displaying so carefully the arguments of that fantastic sect, is only to make the reader sensible of the truth of my hypothesis, **that all our reasonings concerning causes and effects are derived from nothing but custom; and that belief is more properly an act of the sensitive, than of the cogitative part of our natures.**”

12064 “The sceptic,” he continues (Book I, Part IV, Sec. II), “still continues to reason and believe, even **though he asserts that lie cannot defend his reason by reason**; and by the same rule he must assent to the principle concerning the existence of body, tho’ he cannot pretend by any arguments of philosophy to maintain its veracity ... **We may well ask, wha causes us to believe in the existence of body? But ’tis vain to ask, whether there be body or not? That is a point, which we must take for granted in all our reasonings.**”

The above is the beginning of a section “Of scepticism with regard to the senses.” After a long discussion, this section ends with the following conclusion:

12072 “This sceptical doubt, both with respect to reason and the senses, is a malady, which can never be radically cured, but must return upon us every moment, however we may chase it away, and sometimes may seem entirely free from it **Carelessness and inattention alone can afford us any remedy.** For this reason I rely entirely upon them; and take it for granted, whatever may be the reader’s opinion at this present moment, that an hour hence he will be persuaded there is both an external and internal world.”

12080 **Hume’s philosophy, whether true or false, represents the bankruptcy of eighteenth-century reasonableness.** He starts out, like Locke, with the intention of being sensible and empirical, taking nothing on trust, but seeking whatever instruction is to be obtained from experience and observation. **But having a better intellect than Locke’s, a greater acuteness in analysis, and a smaller capacity for accepting comfortable inconsistencies, he arrives at the disastrous conclusion that from experience and observation nothing is to be learnt.** There is no such thing as a rational belief We cannot help believing, but no belief can be grounded in reason. It was inevitable that such a **self-refutation of rationality should be followed by a great outburst of irrational faith.** The quarrel between Hume and Rousseau is symbolic:

12087 Rousseau was mad but influential, Hume was sane but had no followers. **Subsequent British empiricists rejected his scepticism without refuting it.** Rousseau and his followers agreed with Hume that no belief is based on reason, but thought the heart superior to reason, and allowed it to lead them to convictions very different from those that Hume retained in practice. **German philosophers, from Kant to Hegel, had not assimilated Hume’s arguments.** I say this deliberately, in spite of the belief which many philosophers share with Kant, that his Critique of Pure Reason answered Hume. In fact, these philosophers—**at least Kant and Hegel**—**represent a pre-Humian type of rationalism, and can be refuted by Humian arguments.** The philosophers who cannot be refuted in this way are those who do not pretend

to be rational, such as Rousseau, Schopenhauer, and Nietzsche.

12102 **It is therefore important to discover whether there is any answer to Hume within the framework of a philosophy that is wholly or mainly empirical. If not, there is no intellectual difference between sanity and insanity.** The lunatic who believes that he is a poached egg is to be condemned solely on the ground that he is in a minority, or rather—since we must not assume **democracy—on the ground that the government does not agree with him.** This is a desperate point of view, and it must be hoped that there is some way of escaping from it.

12109 **Hume's scepticism rests entirely upon his rejection of the principle of induction.** The principle of induction, as applied to causation, says that, if A has been found very often accompanied or followed by B, and no instance is known of A not being accompanied or followed by B, then it is probable that on the next occasion on which A is observed it will be accompanied or followed by B. **If the principle is to be adequate, a sufficient number of instances must make the probability not far short of certainty. If this principle, or any other from which it can be deduced, is true, then the causal inferences which Hume rejects are valid, not indeed as giving certainty, but as giving a sufficient probability for practical purposes.**

This could be done by the existence of intelligence coupled with evolution.

If this principle is not true, every attempt to arrive at general scientific laws from particular observations is fallacious, and Hume's scepticism is inescapable for an empiricist. The principle itself cannot, of course, without circularity, be inferred from observed uniformities, since it is required to justify any such inference. It must therefore be, or be deduced from, an independent principle not based upon experience. To this extent, **Hume has proved that pure empiricism is not a sufficient basis for science. But if this one principle is admitted, everything else can proceed in accordance with the theory that all our knowledge is based on experience.** It must be granted that this is a serious departure from pure empiricism, and that those who are not empiricists may ask why, if one departure is allowed, others are to be forbidden. These, however, are questions not directly raised by Hume's arguments. What these arguments prove—and I do not think the proof can be controverted—is **that induction is an independent logical principle, incapable of being inferred either from experience or from other logical principles, and that without this principle science is improbable.**

However, infinite chain and finite chain of reasoning need not be the same as in series, and qualitatively different conclusions could be derived. If infinite-time empirical results are obtained it may be different from finite

Part II. From Rousseau to the Present Day

Chapter XVIII. The Romantic Movement

12120 The romantic movement was no, in its beginnings, **connected with philosophy, though it**
12127 **came before long to have connections with it. With politics, through Rousseau, it was connected from the first.** But before we can understand its political and philosophical effects we must consider it in its most essential form, **which is as a revolt against received ethical and aesthetic standards.**

The first great figure in the movement is Rousseau, but to some extent he only expressed already existing tendencies.

- 12142 Rousseau appealed to the already existing cult of sensibility, and gave it a breadth and scope that it might not otherwise have possessed.
- 12170 The romantic movement is characterized, as a whole, by the substitution of aesthetic for utilitarian standards.
- 12221 **It is not the psychology of the romantics that is at fault: it is their standard of values.** They admire strong passions, of no matter what kind, and whatever may be their social consequences. Romantic love, especially when unfortunate, is strong enough to win their approval, but most of the strongest passions are destructive-hate and resentment and jealousy, remorse and despair, outraged pride and the fury of the unjustly oppressed, martial ardour and contempt for slaves and cowards. Hence the type of man encouraged by romanticism, especially of the Byronic variety, is violent and anti-social, an anarchic rebel or a conquering tyrant.
- 12228
- 12236 **Revolt of solitary instincts against social bonds is the key to the philosophy,** the politics, and the sentiments, not only of what is commonly called the romantic movement, but of its progeny down to the present day.
- 12250 Not only passionate love, but every friendly relation to others, is only possible, to this way of feeling, in so far as the others can be regarded as a projection of **one's own Self**. This is feasible if the others are blood-relations, and the more nearly they are related the more easily it is possible. ...
- 12257 **The principle of nationality, of which Byron was a protagonist, is an extension of the same "philosophy."**
Belief in blood and race is naturally associated with anti-Semitism.
- 12273 **The romantic movement, in its essence, aimed at liberating human personality from the fetters of social convention and social morality.** In part, these fetters were a mere useless hindrance to desirable forms of activity, for every ancient community has developed rules of behaviour for which there is nothing to be said except that they are traditional. But egoistic passions, when once let loose, are not easily brought again into subjection to the needs of society. **Christianity had succeeded, to some extent, in taming the Ego, but economic, political, and intellectual causes stimulated revolt against the Churches, and the romantic movement brought the revolt into the sphere of morals.**

Chapter XIX. Rousseau

- 12401 **In theology he made an innovation which has now been accepted by the great majority of Protestant theologians.** Before him, every philosopher from Plato onwards, if he believed in God, offered intellectual arguments in favour of his belief. ... **Modern Protestants who urge us to believe in God, for the most part, despise the old "proofs," and base their faith upon some aspect of human nature—emotions of awe or mystery, the sense of right and wrong, the feeling of aspiration, and so on.** This way of defending religious belief was invented by Rousseau. It has become so familiar that his originality may easily not be appreciated by a modern reader, unless he will take the trouble to compare Rousseau with (say) Descartes or Leibniz.
- 12408
- 12512 Rousseau has not that profound respect for private property that characterized Locke and his disciples.

12570 *The Social Contract* became the Bible of most of the leaders in the French Revolution, but no doubt, as is the fate of Bibles, it was not carefully read and was still less understood by many of its disciples.

Chapter XX. Kant

12587 PHILOSOPHY in the eighteenth century was dominated by the British empiricists, of whom Locke, Berkeley, and Hume may be taken as the representatives. In these men there was a conflict, of which they themselves appear to have been unaware, between their temper of mind and the tendency of their theoretical doctrines. In their temper of mind they were socially minded citizens, by no means self-assertive, not unduly anxious for power, and in favour of a tolerant world where, within the limits of the criminal law, every man could do as he pleased. *They were good-natured, men of the world, urbane and kindly.*

12602 Berkeley took an important step towards ending this inconsistency. For him, there are only minds and their ideas; the physical external world is abolished. But he still failed to grasp all the consequences of the epistemological principles that he took over from Locke. *If he had been completely consistent, he would have denied knowledge of God and of all minds except his own. From such denial he was held back* by his feelings as a clergyman and as a social being.

Hume shrank from nothing in pursuit of theoretical consistency, but felt no impulse to make his practice conform to his theory. Hume denied the Self, and threw doubt on induction and causation.

12617 *In Germany, the reaction against Hume's agnosticism took a form far more profound and subtle than that which Rousseau had given to it. Kant, Fichte, and Hegel developed a new kind of philosophy, intended to safeguard both knowledge and virtue from the subversive doctrines of the late eighteenth century.* In Kant, and still more in Fichte, the subjectivist tendency that begins with Descartes was carried to new extremes; in this respect, there was at first no reaction against Hume. As regards subjectivism, the reaction began with Hegel, who sought, through his logic, to establish a new way of escape from the individual into the world.

The whole of German idealism has affinities with the romantic movement. These are obvious in Fichte, and still more so in Schelling; they are least so in Hegel.

12632 There are certain common characteristics of the German idealists, which can be mentioned before embarking upon detail.

The critique of knowledge, as a means of reaching philosophical conclusions, is emphasized by Kant and accepted by his follower. There is an emphasis upon mind as opposed to matter, which leads in the end to the assertion that only mind exists. There is a vehement rejection of utilitarian ethics in favour of systems which are held to be demonstrated by abstract philosophical arguments. There is a scholastic tone which is absent in the earlier French and English philosophers; Kant, Fichte, and Hegel were university professors, addressing learned audiences, not gentlemen of leisure addressing amateurs. Although their effects were in part revolutionary, they themselves were not intentionally subversive; Fichte and Hegel were very definitely concerned in the defence of the State. The lives of all of them were exemplary and academic; their views on moral questions were strictly orthodox. *They made innovations in theology, but they did so in the interests of religion.*

12640 Hume, by his criticism of the concept of causality, awakened him from his dogmatic slumbers—so at least he says, but the awakening was only temporary, and he soon invented a soporific which enabled him to sleep again.

12674 He separates two distinctions which, in Leibniz, are confounded. On the one hand there is the distinction between “analytic” and “synthetic” propositions; on the other hand, the distinction between “a priori” and “empirical” propositions. Something must be said about each of these distinctions.

An “analytic” proposition is one in which the predicate is part of the subject; for instance, “a tall man is a man,” or “an equilateral triangle is a triangle.” Such propositions follow from the law of contradiction; to maintain that a tall man is not a man would be self-contradictory. A “synthetic” proposition is one that is not analytic. All the propositions that we know only through experience are synthetic.

12684 But Kant, unlike Leibniz and all other previous philosophers, will not admit the converse, that all synthetic propositions are only known through experience. This brings us to the second of the above distinctions.

An “empirical” proposition is one which we cannot know except by the help of sense-perception, either our own or that of some one else whose testimony we accept. The facts of history and geography are of this sort; so are the laws of science, whenever our knowledge of their truth depends on observational data. An “a priori” proposition, on the other hand, is one which, though it may be elicited by experience, is seen, when known, to have a basis other than experience. A child learning arithmetic may be helped by experiencing two marbles and two other marbles, and observing that altogether he is experiencing four marbles. But when he has grasped the general proposition “two and two are four” he no longer requires confirmation by instances; the proposition has a certainty which induction can never give to a general law. All the propositions of pure mathematics are in this sense a priori.

12692 Hume had proved that the law of causality is not analytic, and had inferred that we could not be certain of its truth. Kant accepted the view that it is synthetic, but nevertheless maintained that it is known a priori. He maintained that arithmetic and geometry are synthetic, but are likewise a priori. He was thus led to formulate his problem in these terms:

How are synthetic judgements a priori possible?

The answer to this question, with its consequences, constitutes the main theme of *The Critique of Pure Reason*.

Kant’s solution of the problem was one in which he felt great confidence. He had spent twelve years in looking for it, but took only a few months to write his whole long book after his theory had taken shape. In the preface to the first edition he says: “I venture to assert that there is not a single metaphysical problem which has not been solved, or for the solution of which the key at least has not been supplied.” In the preface to the second edition he compares himself to Copernicus, and says that he has effected a Copernican revolution in philosophy.

12701 According to Kant, the outer world causes only the matter of sensation, but our own mental apparatus orders this matter in space and time, and supplies the concepts by means of which we understand experience. Things in themselves, which are the causes of our sensations, are unknowable; they are not in space or time, they are not substances, nor can they be described by any of those other general concepts which Kant calls “categories.” Space and time are subjective, they are part of our apparatus of perception. But just because of this, we can be sure that whatever we experience will exhibit the characteristics dealt with by geometry and the science of time. If you always wore blue spectacles, you could be sure

of seeing everything blue (this is not Kant's illustration). Similarly, since you **always wear spatial spectacles in your mind, you are sure of always seeing everything in space**. Thus geometry is a priori in the sense that it must be true of everything experienced, but we have no reason to suppose that anything analogous is true of things in themselves, which we do not experience.

Space and time, Kant says, are not concepts; they are forms of "intuition" (The German word is "Anschauung"), which means literally "looking at" or 'view.'" The word "intuition", though the accepted translation is not altogether a satisfactory one.)

12718 A large part of *The Critique of Pure Reason* is occupied in showing the fallacies that arise from applying space and time or the categories to things that are not experienced. When this is done, so Kant maintains, we find ourselves troubled by "antinomies" —that is to say, by mutually contradictory propositions each of which can apparently be proved. Kant gives four such antinomies, each consisting of thesis and antithesis.

In the first, the thesis says: "The world has a beginning in time, and is also limited as regards space." The antithesis says: "The world has no beginning in time, and no limits in space; it is infinite as regards both time and space."

The second antinomy proves that every composite substance both is, and is not, made up of simple parts.

The thesis of the third antinomy maintains that there are two kinds of causality, one according to the laws of nature, the other that of freedom; the antithesis maintains that there is only causality according to the laws of nature.

The fourth antinomy proves that there is, and is not, an absolutely necessary Being.

12727 This part of the Critique greatly influenced Hegel, whose dialectic proceeds wholly by way of antinomies.

In a famous section, Kant **sets to work to demolish all the purely intellectual roofs of the existence off God**. He makes it clear that he has other reasons for believing in God; these he was to set forth later in *The Critique of Practical Reason*. But for the time being his purpose is purely negative.

There are, he says, only three proofs of God's existence by pure reason; these are the ontological proof, the cosmological proof, and the physico-theological proof.

The ontological proof, as he sets it forth, defines God as the ens realissimum, the most real being; i.e., the subject of all predicates that belong to being absolutely. It is contended, by those who believe the proof valid, that, since "existence" is such a predicate, this subject must have the predicate "existence," i.e., must exist. Kant objects that existence is not a predicate. A hundred thalers that I merely imagine may, he says, have all the same predicates as a hundred real thalers.

12736 The cosmological proof says: If anything exists, then an absolutely necessary Being must exist; now I know that I exist; therefore an absolutely necessary Being exists, and this must be the ens realissimum. Kant maintains that the last step in this argument is the ontological argument over again, and that it is therefore refuted by what has been already said.

The physico-theological proof is the familiar argument from design, but in a metaphysical dress. It maintains that the universe exhibits an order which is evidence of purpose. This argument is treated by Kant with respect, but he points out that, at best, **it proves only an Architect, not a creator**, and therefore cannot give an adequate conception of God. He concludes that "the only theology of reason which is possible is that which is based upon moral laws or seeks guidance from them."

God, freedom, and immortality, he says, are the three "ideas of reason." But although pure reason leads us to form these ideas, it cannot itself prove their reality. The importance of these ideas is practical, i.e., connected with morals. The purely intellectual use of reason

leads to fallacies; its only right use is directed to moral ends.

- 12754 **There are two sorts of imperative:** the hypothetical imperative, which says “You must do so-and-so if you wish to achieve such-and-such an end”; and the categorical imperative, which says that a certain kind of action is objectively necessary, without regard to any end. The categorical imperative is synthetic and a priori. Its character is deduced by Kant from the concept of Law:
- 12788 The most important part of *The Critique of Pure Reason* is the doctrine of space and time.
- 12796 **Kant, like Berkeley and Hume, though in not quite the same way, goes further, and makes the primary qualities also subjective.** Kant does not at most times question that our sensations have causes, which he calls “things-in-themselves” or “noumena.” **What appears to us in perception, which he calls a “phenomenon,” consists of two parts: that due to the object, which he calls the “sensation,” and that due to our subjective apparatus, which, he says, causes the manifold to be ordered in certain relations.** This latter part he calls **the form of the phenomenon**. This part is not itself sensation, and therefore not dependent upon the accident of environment; it is always the same, since we carry it about with us, and it is a priori in the sense that it is not dependent upon experience. A pure form of sensibility is called a “pure intuition” (*Anschauung*); there are two such forms, namely space and time, one for the outer sense, one for the inner.
- 12805 **To prove that space and time are a priori forms, Kant has two classes of arguments, one metaphysical, the other epistemological, or, as he calls it, transcendental.**
- 12814 Kant holds that Euclidean geometry is known a priori, although it is synthetic, i.e., not deducible from logic alone.
- 12823 To be precise, the chart is euclidean. Thus, the opinion that Kant was wrong about a priori because our space is not Euclidean is a very superficial opinion.
- The first of the metaphysical arguments concerning space says: “Space is not an empirical concept abstracted from external experiences. For in order that certain sensations may be referred to something outside me [i.e., to something in a different position in space from that in which I find myself], and further in order that I may be able to perceive them as outside and beside each other, and thus as not merely different, but in different places, the presentation of space must already give the foundation [zum Grunde liegen].” Therefore external experience is only possible through the presentation of space.
- The phrase “outside me [i.e., in a different place from that in which I find myself]” **is a difficult one. As a thing-in-itself, I am not anywhere, and nothing is spatially outside me;** it is only my body as a phenomenon that can be meant. Thus all that is really involved is what comes in the second part of the sentence, namely that I perceive different objects as in different places. The image which arises in one’s mind is that of a cloak-room attendant who hangs different coats on different pegs; the pegs must already exist, but the attendant’s subjectivity arranges the coats.
- 12831 **There is here, as throughout Kant’s theory of the subjectivity of space and time, a difficulty which lie seems to have never felt.** What induces me to arrange objects of perception as I do rather than otherwise? Why, for instance, do I always see people’s eyes above their mouths and not below them? According to Kant, the eyes and the mouth exist as things in themselves, and cause my separate percepts, but nothing in them corresponds to the spatial arrangement that exists in my perception. Contrast with this the physical theory of colours. We do not suppose that in matter there are colours in the sense in which our percepts have

colours, but we do think that different colours correspond to different wave-lengths. Since waves, however, involve space and time, there cannot, for Kant, be waves in the causes of our percepts. If, on the other hand, the space and time of our percepts have counterparts in the world of matter, as physics assumes, then geometry is applicable to these counterparts, and Kant's arguments fail. Kant holds that the mind orders the raw material of sensation, but never thinks it necessary to say why it orders it as it does and not otherwise.

Kant assumes that the space is 'created' mentally by some capability imparted to us. "but never thinks it necessary to say why it orders it as it does and not otherwise" Evolutionary biologically (via self-consistency argument) we can say that to survive or to win the competition a particular 'form' is required.

In regard to time this difficulty is even greater, because of the intrusion of causality. I perceive the lightning before I perceive the thunder; a thing-in-itself A caused my perception of lightning, and another thing-in-itself B caused my perception of thunder, but A was not earlier than B, since time exists only in the relations of percepts. Why, then, do the two timeless things A and B produce effects at different times? This must be wholly arbitrary if Kant is right, and there must be no relation between A and B corresponding to the fact that the percept caused by A is earlier than that caused by B. The second metaphysical argument maintains that it is possible to imagine nothing in space, but impossible to imagine no space. It seems to me that no serious argument can be based upon what we can or cannot imagine; but I should emphatically deny that we can imagine space with nothing in it. You can imagine looking at the sky on a dark cloudy night, but then you yourself are in space, and you imagine the clouds that you cannot see. Kant's space is absolute, like Newton's, and not merely a system of relations. But I do not see how absolute empty space can be imagined.

The transcendental argument, which is best stated in the *Prolegomena*, is more definite than the metaphysical arguments, and is also more definitely refutable. 'Geometry', as we now know, is a name covering two different studies. On the one hand, there is pure geometry, which deduces consequences from axioms, without inquiring whether the axioms are "true"; this contains nothing that does not follow from logic, and is not "synthetic," and has no need of figures such as are used in geometrical textbooks. On the other hand, there is geometry as a branch of physics, as it appears, for example, in the general theory of relativity; this is an empirical science, in which the axioms are inferred from measurements, and are found to differ from Euclid's. Thus of the two kinds of geometry one is a priori but not synthetic, while the other is synthetic but not a priori. This disposes of the transcendental argument.

We have, on this view, two spaces, one subjective and one objective, one known in experience and the other merely inferred. But there is no difference in this respect between space and other aspects of perception, such as colours and sounds. All alike, in their subjective forms, are known empirically; all alike, in their objective forms, are inferred by means of a maxim as to causation. There is no reason whatever for regarding our knowledge of space as in any way different from our knowledge of colour and sound and smell.

The "thing-in-itself" was an awkward element in Kant's philosophy, and was abandoned by his immediate successors, who accordingly fell into something very like solipsism. Kant's inconsistencies were such as to make it inevitable that philosophers who were influenced by him should develop rapidly either in the empirical or in the absolutist direction; it was, in fact, in the latter direction that German philosophy moved until after the death of Hegel.

His immediate successor Schelling (1775-1854) was more amiable, but not less subjective.

Chapter XXI. Currents of Thought in the Nineteenth Century

- 12913 The romantic revolt passes from Byron, Schopenhauer, and Nietzsche to Mussolini and Hitler; the rationalist revolt begins with the French philosophers of the Revolution, passes on, somewhat softened, to the philosophical radicals in England, then acquires a deeper form in Marx and issues in Soviet Russia.
- 13005 The romantic form of revolt is very different from the rationalist form, though both are derived from the French Revolution and the philosophers who immediately preceded it. **The romantic form is to be seen in Byron in an unphilosophical dress, but in Schopenhauer and Nietzsche it has learnt the language of philosophy.** It tends to emphasize the will at the expense of the intellect, to be impatient of chains of reasoning, and to glorify violence of certain kinds. In practical politics it is important as an ally of nationalism. In tendency, if not always in fact, it is definitely hostile to what is commonly called reason, and tends to be anti-scientific. Some of its most extreme forms are to be found among Russian anarchists, but in Russia it was the rationalist form of revolt that finally prevailed. It was Germany, always more susceptible to romanticism than any other country, that provided a governmental outlet for the anti-rational philosophy of naked will.
- 13014 So far, the philosophies that we have been considering have had an inspiration which was traditional, literary, or political. But there were two other sources of philosophical opinion, namely science and machine production. **The second of these began its theoretical influence with Marx, and has grown gradually more important ever since. The first has been important since the seventeenth century, but took new forms during the nineteenth century.**
What Galileo and Newton were to the seventeenth century, Darwin was to the nineteenth. **Darwin's theory had two parts.** On the one hand, there was the doctrine of evolution, which maintained that the different forms of life had developed gradually from a common ancestry.
...
- 13030 Darwin himself was a liberal, but his theories had consequences in some degree inimical to traditional liberalism. **The doctrine that all men are born equal, and that the differences between adults are due wholly to education, was incompatible with his emphasis on congenital differences between members of the same species.** If, as Lamarck held, and as Darwin himself was willing to concede up to a point, acquired characteristics were inherited, this opposition to such views as those of Helvetius could have been somewhat softened; but it has appeared that only congenital characteristics are inherited, apart from certain not very important exceptions. **Thus the congenital differences between men acquire fundamental importance.**
- 13038
- 13047 Marx himself, though his doctrines are in some respects pre-Darwinian, wished to dedicate his book to Darwin.
- 13055 While biology has militated against a mechanistic view of the world, modern economic technique has had an opposite effect. Until about the end of the eighteenth century, **scientific technique, as opposed to scientific doctrines, had no important effect upon opinion. It was only with the rise of industrialism that technique began to affect men's thought. And even then, for a long time, the effect was more or less indirect.** Men who produce philosophical theories are, as a rule, brought into very little contact with machinery. The romantics noticed and hated the ugliness that industrialism was producing in places hitherto beautiful,

and the vulgarity (as they considered it) of those who had made money in “trade.” This led them into an opposition to the middle class which sometimes brought them into something like an alliance with the champions of the proletariat.

13063 The most important effect of machine production on the imaginative picture of the world is an immense increase in the sense of human power.

Chapter XXII. Hegel

13094 At the end of the nineteenth century, the leading academic philosophers, both in America and in Great Britain, were largely Hegelians.

13101 Hegel’s philosophy is very difficult—he is, I should say, the hardest to understand of all the great philosophers.

13259 Glorification of the State begins, so far as modern times are concerned, with the Reformation.

13285 It will be seen that Hegel claims for the State much the same position as Saint Augustine and his Catholic successors claimed for the Church.

13302 Such is Hegel’s doctrine of the State—a doctrine which, if accepted, justifies every internal tyranny and every external aggression that can possibly be imagined.

13380 This illustrates an important truth, namely, that the worse your logic, the more interesting the consequences to which it gives rise.

Chapter, XXIII. Byron

Chapter XXIV. Schopenhauer

13510 Schopenhauer acknowledges three sources of his philosophy, Kant, Plato, and the Upanishads, but I do not think he owes as much to Plato as he thinks he does.

13534 Schopenhauer retained the thing-in-itself, but identified it with will.

13610 **More important than pessimism was the doctrine of the primacy of the will.** It is obvious that this doctrine has no necessary logical connection with pessimism, and those who held it after Schopenhauer frequently found in it a basis for optimism. In one form or another, the doctrine that will is paramount has been held by many modern philosophers, notably Nietzsche, Bergson, James, and Dewey. It has, moreover, acquired a vogue outside the circles of professional philosophers. **And in proportion as will has gone up in the scale, knowledge has gone down.** This is, I think, the most notable change that has come over the temper of philosophy in our age. **It was prepared by Rousseau and Kant, but was first proclaimed in its purity by Schopenhauer.**

13620 NIETZSCHE (1844-1900) regarded himself, rightly, as the successor of Schopenhauer, to whom, however, he is superior in many ways, particularly in the consistency and coherence of his doctrine.

Chapter XXV. Nietzsche

- 13628 Nietzsche's superman is very like Siegfried, except that he knows Greek. This may seem odd, but that is not my fault.
- 13653 **Nietzsche's criticism of religions and philosophies is dominated entirely by ethical motives.** He admires certain qualities which he believes (perhaps rightly) to be only possible for an aristocratic minority; the majority, in his opinion, should be only means to the excellence of the few, and should not be regarded as having any independent claim to happiness or well-being. He alludes habitually to ordinary human beings as the "bungled and botched," and sees no objection to their suffering if it is necessary for the production of a great man. Thus the whole importance of the period from 1789 to 1815 is summed up in Napoleon: "The Revolution made Napoleon possible: that is its justification. We ought to desire the anarchical collapse of the whole of our civilization if such a reward were to be its result. Napoleon made nationalism possible: that is the latter's excuse." Almost all of the higher hopes of this century, he says, are due to Napoleon. He is fond of expressing himself paradoxically and with a view to shocking conventional readers. He does this by employing the words "good" and "evil" with their ordinary connotations, and then saying that he prefers "evil" to "good." His book, *Beyond Good and Evil*, really aims at changing the reader's opinion as to what is good and what is evil, but professes, except at moments, to be praising what is "evil" and decrying what is "good." He says, for instance, that it is a mistake to regard it as a duty to aim at the victory of good and the annihilation of evil; this view is English, and typical of "that blockhead, **John Stuart Mill,**" **a man for whom he has a specially virulent contempt. Of him he says:**
- 13661 "I abhor the man's vulgarity when he says 'What is right for one man is right for another'; 'Do not do to others that which you would not that they should do unto you.'* Such principles would fain establish the whole of human traffic upon mutual services, so that every action would appear to be a cash payment for something done to us. The hypothesis here is ignoble to the last degree: it is taken for granted that there is some sort of equivalence in value between my actions and thine."
- 13671
- 13680 He is not, however, a worshipper of the State; far from it. He is a passionate individualist, a believer in the hero.
- 13706 Nietzsche's objection to Christianity is that it caused acceptance of what **he calls "slave morality."** **1!** is curious to observe the contrast between his arguments and those of the French philosophers who preceded the Revolution. They argued that Christian dogmas are untrue; that Christianity teaches submission to what is deemed to be the will of God, whereas self-respecting human beings should not bow before any higher Power; and that the Christian Churches have become the allies of tyrants, and are helping the enemies of democracy to deny liberty and continue to grind the faces of the poor. **Nietzsche is not interested in the metaphysical truth of either Christianity or any other religion; being convinced that no religion is really true, he judges all religions entirely by their social effects.**
- 13767 I will admit that I agree with Nietzsche in thinking Dostoevsky's prostration contemptible. **A certain uprightness and pride and even self-assertion of a sort, I should agree, are elements in the best character; no virtue which has its roots in fear is much to be admired.**
- There are two sorts of saints: the saint by nature, and the saint = from fear.** The saint by nature has a spontaneous love of mankind; he does good because to do so gives him happiness. The saint from fear, on the other hand, like the man who only abstains from theft because of the police, would be wicked if he were not restrained by the thought of hell-fire

or of his neighbours' vengeance. Nietzsche on only imagine the second sort of saint; he is so full of fear and hatred that spontaneous love of mankind seems to him impossible.

13853 For my part, I agree with Buddha as I have imagined him. But I do not know how to prove that he is right by any argument such as can be used in a mathematical or a scientific question. I dislike Nietzsche because he likes the contemplation of pain, because he erects conceit into a duty, because the men whom he most admires are conquerors, whose glory is cleverness in causing men to die. **But I think the ultimate argument against his philosophy, as against any unpleasant but internally self-consistent ethic, lies not in an appeal to facts, but in an appeal to the emotions.** Nietzsche despises universal love; I feel it the motive power to all that I desire as regards the world. His followers have had their innings, but we may hope that it is coming rapidly to an end.

Chapter XXVI. The Utilitarians

13869 **Bentham bases his whole philosophy on two principles, the "association principle," and the "greatest-happiness principle."** ... In essence the doctrine is the same as the more modern theory of the "conditioned reflex," based on Pavlov's experiments. The only important difference is that Pavlov's conditioned reflex is physiological, whereas the association of ideas was purely mental...

13912 **His gradual evolution towards Radicalism had two sources: on the one hand, a belief in equality, deduced from the calculus of pleasures and pains; on the other hand, an inflexible determination to submit everything to the arbitrament of reason as he understood it.** His love of equality early led him to advocate equal division of a man's property among his children, and to oppose testamentary freedom. In later years it led him to oppose monarchy and hereditary aristocracy, and to advocate complete democracy, including votes for women. **His refusal to believe without rational grounds led him to reject religion, including belief in God;** it made him keenly critical of absurdities and anomalies in the law, however venerable their historical origin. He would not excuse anything on the ground that it was traditional. From early youth he was opposed to imperialism, whether that of the British in America, or that of other nations; he considered colonies a folly. It was through **the influence of James Mill that Bentham was induced to take sides in practical politics. James Mill was twenty-five years younger than Bentham,** and an ardent disciple of his doctrines.

13928 His son John Stuart Mill, who was born in 1808, carried on a somewhat softened form of the Benthamite doctrine to the time of his death in 1873.

Throughout the middle portion of the nineteenth century, the influence of the Benthamites on British legislation and policy was astonishingly great, considering their complete absence of emotional appeal.

13936 He maintains that only the principle of utility can give a criterion in morals and legislation, and lay the foundation of a social science.

13945 John Stuart Mill, in his Utilitarianism, offers an argument which is so fallacious that it is hard to understand how he can have thought it valid. He says: Pleasure is the only thing desired; therefore pleasure is the only thing desirable. He argues that the only things visible are things seen, the only things audible are things heard, and similarly the only things

13953 desirable are things desired. He does not notice that a thing is "visible" if it can be seen,

but “desirable” if it ought to be desired. Thus “desirable” is a word presupposing an ethical theory; we cannot infer what is desirable from what is desired.

Again: if each man in fact and inevitably pursues his own pleasure, there is no point in saying he ought to do something else. Kant urged that “you ought” implies “you can”; conversely, if you cannot, it is futile to say you ought. **If each man must always pursue his own pleasure, ethics is reduced to prudence:** you may do well to further the interests of others in the hope that they in turn will further yours. Similarly in politics all co-operation is a matter of log-rolling. From the premisses of the utilitarians no other conclusion is validly deducible.

13970 the pleasure is because of the desire, not vice versa.

Ethics is necessary because men’s desires conflict. The primary cause of conflict is egoism: most people are more interested in their own welfare than in that of other people. But conflicts are equally possible where there is no element of egoism. One man may wish everybody to be Catholic, another may wish everybody to be Calvinist. Such non-egoistic desires are frequently involved in social conflicts **Ethics has a twofold purpose: First, to find a criterion by which to distinguish good and bad desires; second, by means of praise and blame, to promote good desires and discourage such as are bad.**

13978 We found ourselves faced with a similar question in relation to Nietzsche. His ethic differs from that of the utilitarians, since it holds that only a minority of the human race have ethical importance—the happiness or unhappiness of the remainder should be ignored. **I do not myself believe that this disagreement can be dealt with by theoretical arguments such as might be used in a scientific question.** Obviously those who are excluded from the Nietzschean aristocracy will object, and thus the issue becomes political rather than theoretical. The utilitarian ethic is democratic and anti-romantic. Democrats are likely to accept it, but those who like a more Byronic view of the world can, in my opinion, be refuted only practically, not by considerations which appeal only to facts as opposed to desires.

The Philosophical Radicals were a transitional school. Their system gave birth to two others, of more importance than itself, namely Darwinism and Socialism.

“Free competition,” as understood by the Benthamites, was, by no means really free. Darwinian competition was not of this limited sort.

13995 Ricardo, who was intimately associated with Bentham, Malthus, and James Mill, taught that the exchange value of a commodity is entirely due to the labour expended in producing it. He published this theory in 1817, and eight years later Thomas Hodgskin, an ex-naval officer, published the first Socialist rejoinder, *Labour Defended Against the Claims of Capital*.

14003 He argued that if, as Ricardo taught, all value is conferred by labour, then all the reward ought to go to labour; the share at present obtained by the landowner and the capitalist must be mere extortion. Meanwhile Robert Owen, after much practical experience as a manufacturer, had become convinced of the doctrine which soon came to be called Socialism. (The first use of the word “Socialist” occurs in 1827, when it is applied to the followers of Owen.) Machinery, he said, was displacing labour, and laissez faire gave the working classes no adequate means of combating mechanical power. The method which he proposed for dealing with the evil was the earliest form of modern Socialism.

Although Owen was a friend of Bentham, who had invested a considerable sum of money in Owen’s business, the Philosophical Radicals did not like his new doctrines; in fact, the advent of Socialism made them less Radical and less philosophical than they had been.

- 14012 Hodgskin secured a certain following in London, and James Mill was horrified. He wrote:
 “Their notions of property look ugly; ... they seem to think that it should not exist, and that the existence of it is an evil to them. Rascals, I have no doubt, are at work among them The fools, not to see that what they madly desire would be such a calamity to them as no hands but their own could bring upon them.”
- This letter, written in 1831, may be taken as the beginning of the long war between Capitalism and Socialism. In a later letter, James Mill attributes the doctrine to the “mad nonsense” of Hodgskin, and adds: “These opinions, if they were to spread, would be the subversion of civilized society; worse than the overwhelming deluge of Huns and Tartars.”
- Socialism, in so far as it is only political or economic, does not come within the purview of a history of philosophy. But in the hands of Karl Marx Socialism acquired a philosophy. His philosophy will be considered in the next chapter.

Chapter XXVII. Karl Marx

- 14019 In one aspect, Marx is an outcome, like Hodgskin, of the Philosophical Radicals, continuing their rationalism and their opposition to the romantics. In another aspect he is a revivifier of materialism, giving it a new interpretation and a new connection with human history. In yet another aspect he is the last of the great system-builders, the successor of Hegel, a believer, like him, in a rational formula summing up the evolution of mankind.

At the university he was influenced by the still prevalent Hegelianism, as also by Feuerbach’s revolt against Hegel towards materialism.

- 14035 Marx, like Bentham and James Mill, will have nothing to do with romanticism; it is always his intention to be scientific. His economics is an outcome of British classical economics, changing only the motive force. Classical economists, consciously or unconsciously, aimed at the welfare of the capitalist, as opposed both to the landowner and to the wage-earner; Marx, on the contrary, set to work to represent the interest of the wage-earner. He had in youth—as appears in the Communist Manifesto of 1848—the fire and passion appropriate to a new revolutionary movement, as liberalism had had in the time of Milton.

- 14043 He called himself a materialist, but not of the eighteenth-century sort. His sort, which, under Hegelian influence, he called “dialectical,” differed in an important way from traditional materialism, and was more akin to what is now called instrumentalism. The older materialism, he said, mistakenly regarded sensation as passive, and thus attributed activity primarily to the object. In Marx’s view, all sensation or perception is an interaction between subject and object; the bare object, apart from the activity of the percipient, is a mere raw material, which is transformed in the process of becoming known. Knowledge in the old sense of passive contemplation is an unreal abstraction; the process that really takes place is one of handling things. “The question whether objective truth belongs to human thinking is not a question of theory, but a practical question,” he says. “The truth, i.e., the reality and power, of thought must be demonstrated in practice.

- 14052 I think we may interpret Marx as meaning that the process which philosophers have called the pursuit of knowledge is not, as has been thought, one in which the object is constant while all the adaptation is on the part of the knower. On the contrary, both subject and object, both the knower and the thing known, are in a continual process of mutual adaptation. He calls the process “dialectical” because it is never fully completed. Knowledge in the old

sense of passive contemplation is an unreal abstraction; the process that really takes place is one of handling things. "The question whether objective truth belongs to human thinking is not a question of theory, but a practical question," he says. "The truth, i.e., the reality and power, of thought must be demonstrated in practice. The contest as to the reality or non-reality of a thought which is isolated from practice, is a purely scholastic question.... Philosophers have only interpreted the world in various ways, but the real task is to alter it.

14060 So far as I know, Marx was the first philosopher who criticized the notion of "truth" from this activist point of view.

14069 The doctrine is called the "materialist conception of history." This is a very important thesis; in particular, it concerns the history of philosophy. I do not myself accept the thesis as it stands, but I think that it contains very important elements of truth.

14112 The truth of the matter is really fairly simple. What is conventionally called "philosophy" consists of two very different elements. On the one hand, there are questions which are scientific or logical; these are amenable to methods as to which there is general agreement. On the other hand, there are questions of passionate interest to large numbers of people, as to which there is no solid evidence either way. For one reason or another, we all find it impossible to maintain an attitude of sceptical detachment on many issues as to which pure reason is silent. A "philosophy," in a very usual sense of the word, is an organic whole of such extrarational decisions. It is in regard to "philosophy" in this sense that Marx's contention is largely true. But even in this sense a philosophy is determined by other social causes as well as by those that are economic. War, especially, has its share in historical causation; and victory in war does not always go to the side with the greatest economic resources.

14121 Marx fitted his philosophy of history into a mould suggested by Hegelian dialectic, but in fact there was only one triad that concerned him: feudalism, represented by the landowner; capitalism, represented by the industrial employer; and Socialism, represented by the wage-earner. Hegel thought of nations as the vehicles of dialectic movement; Marx substituted classes.

14128 Considered purely as a philosopher, Marx has grave shortcomings. He is too practical, too much wrapped up in the problems of his time. His purview is confined to this planet, and, within this planet, to Man. Since Copernicus, it has been evident that Man has not the cosmic importance which he formerly arrogated to himself.

Really? Who is the observer to construct philosophy?

No man who has failed to assimilate this fact has a right to call his philosophy scientific.

14137 Broadly speaking, all the elements in Marx's philosophy which are derived from Hegel are unscientific, in the sense that there is no reason whatever to suppose them true.

Perhaps the philosophic dress that Marx gave to his Socialism had really not much to do with the basis of his opinions. It is easy to restate the most important part of what he had to say without any reference to the dialectic. He was impressed by the appalling cruelty of the industrial system as it existed in England a hundred years ago, which he came to know thoroughly through Engels and the reports of Royal Commissions.

14163 Until Rousseau, the philosophical world had a certain unity. This has disappeared for the time being, but perhaps not for long. It can be recovered by a rationalistic reconquest of

men's minds, but not in any other way, since claims to mastery can only breed strife.

Chapter XXVIII. Bergson

- 14172 Bergson's irrationalism made wide appeal quite unconnected with politics, for instance to Bernard Shaw, whose *Back to Methuselah* is pure Bergsonian.
- 14197 Bergson's philosophy, unlike most of the systems of the past, is dualistic: the world, for him, is divided into two disparate portions, on the one hand life, on the other matter, or rather that inert something which the intellect views as matter. The whole universe is the clash and conflict of two opposite motions: life, which climbs upward, and matter, which falls downward. L...
- 14469 The whole of Bergson's theory of duration and time rests throughout on the elementary confusion between the present occurrence of a recollection and the past occurrence which is recollected. But for the fact that time is so familiar to us, the vicious circle involved in his attempt to deduce the past as what is no longer active would be obvious at once.
- 14512 The confusion of subject and object is not peculiar to Bergson, but is common to many idealists and many materialists. Many idealists say that the object is really the subject, and many materialists say that the subject is really the object. They agree in thinking these two statements very different, while yet holding that subject and object are not different. In this respect, we may admit, Bergson has merit, for he is as ready to identify subject with object as to identify object with subject. As soon as this identification is rejected, his whole system collapses: first his theories of space and time, then his belief in real contingency, then his condemnation of intellect, and finally his account of the relations of mind and matter.

object/subject switch must be discussed.

Chapter XXIX. William James

- 14533 WILLIAM JAMES (1842-1910) was primarily a psychologist, but was important in philosophy on two accounts: he invented the doctrine which he called "radical empiricism," and he was one of the three protagonists of the theory called "pragmatism" or "instrumentalism." In later life he was, as he deserved to be, the recognized leader of American philosophy. He was led by the study of medicine to the consideration of psychology; his great book on the subject, published in 1890, had the highest possible excellence.
- 14538 There were two sides to William James's philosophical interests, one scientific, the other religious. On the scientific side, the study of medicine had given his thoughts a tendency towards materialism, which, however, was held in check by his religious emotions. His religious feelings were very Protestant, very democratic, and very full of a warmth of human kindness. He refused altogether to follow his brother Henry into fastidious snobbishness. "The prince of darkness," he said, "may be a gentleman, as we are told he is, but whatever the God of earth and heaven is, he can surely be no gentleman." This is a very characteristic pronouncement.
- 14547 James's doctrine of radical empiricism was first published in 1894, in an essay called "Does 'Consciousness' Exist?" The main purpose of this essay was to deny that the subject-object relation is fundamental. It had, until then, been taken for granted by philosophers that

14555 there is a kind of occurrence called “knowing,” in which one entity, the knower or subject, is aware of another, the thing known or the object. The knower was regarded as a mind or soul; the object known might be a material object, an eternal essence, another mind, or, in self-consciousness, identical with the knower. **Almost everything in accepted philosophy was bound up with the dualism of subject and object.** The distinction of mind and matter, the contemplative ideal, and the traditional notion of “truth,” all need to be radically reconsidered if the distinction of subject and object is not accepted as fundamental.

For my part, I am convinced that James was right on this matter, and would, on this ground alone, deserve a high place among philosophers. I had thought otherwise until he, and those who agreed with him, persuaded me of the truth of his doctrine. But let us proceed to his arguments.

Consciousness, he says, “is the name of a nonentity, and has no right to a place among first principles. Those who still cling to it are clinging to a mere echo, the faint rumor left behind by the disappearing ‘soul’ upon the air of philosophy.” There is, he proceed to his arguments.

14564 There is, he continues, ‘no aboriginal stuff or quality of being, contrasted with that of which material objects are made, out of which our thoughts of them are made.’ He explains that he is not denying that our thoughts perform a function which is that of knowing, and **that this function may be called “being conscious.”** What he is denying might be put crudely as the view that consciousness is a “thing.” He holds that there is “only one primal stuff or material,” out of which everything in the world is composed. This stuff he calls “pure experience.” Knowing, he says, is a particular sort of relation between two portions of pure experience. **The subject-object relation is derivative:** “experience, I believe, has no such inner duplicity.” A given undivided portion of experience can be in one context a knower, and in another something known.

He defines “pure experience” as “the immediate flux of life which furnishes the material to our later reflection.”

14573 It will be seen that this doctrine abolishes the distinction between mind and matter, if regarded as a distinction between two different kinds of what James calls “stuff.” Accordingly those who agree with James in this matter advocate what they call “**neutral monism,**” according to which the material of which the world is constructed is neither mind nor matter, **but something anterior to both.** James himself did not develop this implication of his theory; on the contrary, his use of the phrase “pure experience” points to a perhaps unconscious Berkeleyan idealism. **The word “experience” is one often used by philosophers, but seldom defined.** Let us consider for a moment what it can mean.

14581 What do we mean by “experience”? The best way to find an answer is to ask: What is the difference between an event which is not experienced and one which is? Rain seen or felt to be falling is experienced, but rain falling in the desert where there is no living thing is not experienced. Thus we arrive at our first point: there is no experience except where there is life. But experience is not coextensive with life. Many things happen to me which I do not notice; these I can hardly be said to experience. Clearly I experience whatever I remember, but some things which I do not explicitly remember may have set up habits which still persist. The burnt child fears the fire, even if he has no recollection of the occasion on which he was burnt. **I think we may say that an event is “experienced” when it sets up a habit.** (Memory is one kind of habit.) It is obvious that habits are only set up in living organisms.

14589 A burnt poker does not fear the fire, however often it is made red-hot. On common-sense grounds, therefore, we shall say that “experience” is not coextensive with the “stuff” of the world. I do not myself see any valid reason for departing from common sense on this point.

14633 conceivable effects of a practical kind the object may involve. James, in elucidation, says

that the function of philosophy is to find out what difference it makes to you or me if this or that world-formula is true. In this way theories become instruments, not answers to enigmas.

Ideas, we are told by James, become true in so far as they help us to get into satisfactory relations with other parts of our experience: "An idea is 'true' so long as to believe it is profitable to our lives." Truth is one species of good, not a separate category. Truth happens to an idea; it is made true by events. It is correct to say, with the intellectualists, that a true idea must agree with reality, but "agreeing" does not mean "copying." "To 'agree' in the widest sense with a reality can only mean to be guided either straight up to it or into its surroundings, or to be put into such working touch with it as to handle either it or something connected with it better than if we disagreed." He adds that "the 'true' is only the expedient in the way of our thinking ... in the long run and on the whole of course." In other words, "our obligation to seek truth is part of our general obligation to do what pays."

14643 In a chapter on pragmatism and religion he reaps the harvest. "We cannot reject any hypothesis if consequences useful to life flow from it." "if the hypothesis of God works satisfactorily in the widest sense of the word, it is true." "We may well believe, on the proofs that religious experience affords, that higher powers exist and are at work to save the world on ideal lines similar to our own."

I find great intellectual difficulties in this doctrine. It assumes that a belief is "true" when its effects are good. If this definition is to be useful—and if not it is condemned by the pragmatist's test—we must know (a) what is good, (b) what are the effects of this or that belief, and we must know these things before we can know that anything is "true," since it is only after we have decided that the effects of, a belief are good that we have a right to call it "true." The result is an incredible complication. Suppose you want to know whether Columbus crossed the Atlantic in 1492. You must not, as other people do, look it up in a book. You must first inquire what are the effects of this belief, and how they differ from the effects of believing that he sailed in 1491 or 1493. This is difficult enough, but it is still more difficult to weigh the effects from an ethical point of view. You may say that obviously 1492 has the best effects, since it gives you higher grades in examinations. But your competitors, who would surpass you if you said 1491 or 1493, may consider your success instead of theirs ethically regrettable. Apart from examinations, I cannot think of any practical effects of the belief except in the case of a historian.

14652

This is a very trivial quibble. We must use uniform logic to be simple or to manage information processing expence. Evolution time scale must be considered.

But this is not the end of the trouble. You must hold that your estimate of the consequences of a belief, both ethical and factual, is true, for if it is false your argument for the truth of your belief is mistaken. But to say that your belief as to consequences is true is, according to James, to say that it has good consequences, and this in turn is only true if it has good consequences, and so on ad infinitum. Obviously this won't do.

This infinite regression criticism applies whenever we characterize 'truth' by something else, because we must know that the characterization of the truth is true, but checking the condition, whose validity must be checked, etc.

Is there any difficulty (of the same sort) for evolution-biological value system? The point is: the penalty is severe. However, what Russell points out implies that we need a device to truncate infinite regression.

Notice that, we may not be able to tell that the truth is really true, but we can remove judgement absed on wrong truth without regression. Then, the question is how harmful the remaining not obviously untrue judgements are. We seem to have a precise truth judgement mechnaism. How come? Evolvability is one strong constraints. Natural selection is rather rigorous.

14661

Can it answer Wigner's question as to the unreasonable effectiveness of math?

14670

We come here to a fundamental difference between James's religious outlook and that of religious people in the past. James is interested in religion as a human phenomenon, but shows little interest in the objects which religion contemplates. He wants people to be happy, and if belief in God makes them happy let them believe in Him. This, so far, is only benevolence, not philosophy; **it becomes philosophy when it is said that if the belief makes them happy it is "true."** To the man who desires an object of worship this is unsatisfactory. He is not concerned to say, "If I believed in God I should be happy"; he is concerned to say, "I believe in God and therefore I am happy." And when he believes in God, he believes in Him as he believes in the existence of Roosevelt or Churchill or Hitler; God, for him, is an actual Being, not merely a human idea which has good effects. It is this genuine belief that has the good effects, not James's emasculate substitute. It is obvious that if I say "Hitler exists" I do not mean "the effects of believing that Hitler exists are good." And to the genuine believer the same is true of God.

James's doctrine is an attempt to build a superstructure of belief upon a foundation of scepticism, and like all such attempts it is dependent on fallacies. In his case the fallacies spring from an attempt to ignore all extra-human facts. Berkeleian idealism combined with scepticism causes him to substitute belief in God for God, and to pretend that this will do just as well. **But this is only a form of the subjectivistic madness which is characteristic of most modern philosophy.**

Chapter XXX. John Dewey

14723

Dewey's interests are biological rather than mathematical, and he conceives thought as an evolutionary process. ... all reality is temporal, and process, though evolutionary, is not, as for Hegel, the unfolding of an eternal idea.

14732

So far, I am in agreement with Dewey. Nor is this the end of my agreement. Before embarking upon discussion of the points as to which I differ, **I will say a few words as to my own view of "truth."**

The first question is: What sort of thing is "true" or "false"? The simplest answer would be: a sentence. ... Sentences in different languages may have the same significance, and it is the significance, not the words, that determines whether the sentence is "true" or "false." When you assert a sentence, you express a "belief," which may be equally well expressed in a different language. The "belief," whatever it may be, is what is "true" or "false" or "more or less true." Thus we are driven to the investigation of "belief."

Unless belief is connected to deeds, its truth value is trivial = unimportant. In the following he discusses the actual consequence of the belief; truth value of the belief is 'computed' by its behavioral or physical consequence.

Now a belief, provided it is sufficiently simple, may exist without being expressed in words. ... Suppose, for instance, in descending a staircase, you make a mistake as to when you have got to the bottom: you take a step suitable for level ground, and come down with a bump. ... One can say, then: your organism was adjusted in a manner which would have been suitable if you had been at the bottom, but in fact was not suitable. This failure of adjustment constituted error, and one may say that you were entertaining a false belief.

The *test* of error in the above illustration is **surprise**. I think this is true generally of beliefs that can be tested. ... But although surprise is a good criterion when it is applicable, it does not give the *meaning* of the words "true" and "false," and is not always applicable.

14759

... Sometimes experimental tests are possible to determine truth and falsehood, but some-

times they are not; when they are not, the alternative nevertheless remains, and is significant.

14777 Dewey makes *inquiry* the essence of logic, not truth or knowledge.

14854 Dr. Dewey's world, it seems to me, is one in which human beings occupy the imagination; the cosmos of astronomy, though of course acknowledged to exist, is at most times ignored. His philosophy is a power philosophy, though not, like Nietzsche's, a philosophy of individual power; it is the power of the community that is felt to be valuable. It is this element of social power that seems to me to make the philosophy of instrumentalism attractive to those who are more impressed by our new control over natural forces than by the limitations to which that control is still subject.

14863 The attitude of man towards the non-human environment has differed profoundly at different times. The Greeks, with their dread of hubris and their belief in a Necessity or Fate superior even to Zeus, carefully avoided what would have seemed to them insolence towards the universe. The Middle Ages carried submission much further: humility towards God was a Christian's first duty. Initiative was cramped by this attitude, and great originality was scarcely possible. The Renaissance restored human pride, but carried it to the point where it led to anarchy and disaster. Its work was largely undone by the Reformation and the Counter-reformation. But modern technique, while not altogether favorable to the lordly individual of the Renaissance, has revived the sense of the collective power of human communities. Man, formerly too humble, begins to think of himself as almost a God. The Italian pragmatist Papini urges us to substitute the "Imitation of God" for the "Imitation of Christ."

14872 In all this feel a grave danger, the danger of what might be called cosmic impiety. The concept of "truth" as something dependent upon facts largely outside human control has been one of the ways in which philosophy hitherto has inculcated the necessary element of humility. When this check upon pride is removed, a further step is taken on the road towards a certain kind of madness—the intoxication of power which invaded philosophy with Fichte, and to which modern men, whether philosophers or not, are prone. I am persuaded that this intoxication is the greatest danger of our time, and that any philosophy which, however unintentionally, contributes to it is increasing the danger of vast social disaster.

Chapter XXXI. The Philosophy of Logical Analysis

14874 IN philosophy ever since the time of Pythagoras there has been an opposition between the men whose thought was mainly inspired by mathematics and those who were more influenced by the empirical sciences. Plato, Thomas Aquinas, Spinoza, and Kant belong to what may be called the mathematical party; Democritus, Aristotle, and the modern empiricists from Locke onwards, belong to the opposite party.

In our day a school of philosophy has arisen which sets to work to eliminate Pythagoreanism from the principles of mathematics, and to combine empiricism with an interest in the deductive parts of human knowledge. The aims of this school are less spectacular than those of most philosophers in the past, but some of its achievements are as solid as those of the men of science.

The origin of this philosophy is in the achievements of mathematicians who set to work to purge their subject of fallacies and slipshod reasoning. ...

14890 Georg Cantor defined all "infinite" collection as one which has parts containing as many terms as the whole collection contains. On this basis he was able to build up a most interesting mathematical theory of infinite numbers, thereby taking into the realm of exact logic

a whole region formerly given over to mysticism and confusion.

The next man of importance was Frege, who published his first work in 1879, and his definition of "number" in 1884; but, in spite of the epoch-making nature of his discoveries, he remained wholly without recognition until I drew attention to him in 1903. It is remarkable that, before Frege, every definition of number that had been suggested contained elementary logical blunders. It was customary to identify "number" with "plurality." But an instance of "number" is a particular number, say 3, and an instance of 3 is a particular triad. The triad is a plurality, but the class of all triads-which Frege identified with the number 3-is a plurality of pluralities, and number in general, of which 3 is an instance, is a plurality of pluralities of pluralities. The elementary grammatical mistake of confounding this with the simple plurality of a given triad made the whole philosophy of number, before Frege, a tissue of nonsense in the strictest sense of the term "nonsense."

From Frege's work it followed that arithmetic, and pure mathematics generally, is nothing but a prolongation of deductive logic. This disproved Kant's theory that arithmetical propositions are "synthetic" and involve a reference to time. The development of pure mathematics from logic was set forth in detail in *Principia Mathematica*, by Whitehead and myself. It gradually became clear that a great part of philosophy can be reduced to something that may be called "syntax," though the word has to be used in a somewhat wider sense than has hitherto been customary. Some men, notably Carnap, have advanced the theory that all philosophical problems are really syntactical, and that, when errors in syntax are avoided, a philosophical problem is thereby either solved or shown to be insoluble. I think this is an overstatement, but **there can be no doubt that the utility of philosophical syntax in relation to traditional problems is very great.**

14915

I will illustrate its utility by a brief explanation of what is called the theory of descriptions. By a "description" I mean a phrase such as "The present President of the United States," in which a person or thing is designated, not by name, but by some property which is supposed or known to be peculiar to him or it. Such phrases had given a lot of trouble. Suppose I say "The golden mountain does not exist," and suppose you ask "What is it that does not exist?" It would seem that, if I say "It is the golden mountain," I am attributing some sort of existence to it. Obviously I am not making the same statement as if I said, "The round square does not exist." This seemed to imply that the golden mountain is one thing and the round square is another, although neither exists. The theory of descriptions was designed to meet this and other difficulties.

According to this theory, when a statement containing a phrase of the form "the so-and-so" is rightly analysed, the phrase "the so-and-so" disappears. For example, take the statement "Scott was the author of Waverley." The theory interprets this statement as saying:

"One and only one man wrote Waverley, and that man was Scott." Or, more fully:

"There is an entity c such that the statement ' x wrote Waverley' is true if x is c and false otherwise; moreover c is Scott."

The first part of this, before the word "moreover," is defined as meaning: "The author of Waverley exists (or existed or will exist)." "There is no entity c such that ' x is golden and mountainous' is true when x is c , but not otherwise." With this definition the puzzle as to what is meant when we say "The golden mountain does not exist" disappears. "Existence," according to this theory, can only be asserted of descriptions. We can say "The author of Waverley exists," but to say "Scott exists" is bad grammar, or rather bad syntax. This clears up two millennia of muddle-headedness about "existence," beginning with Plato's *Theaetetus*.

One result of the work we have been considering is to dethrone mathematics from the lofty place that it has occupied since Pythagoras and Plato, and to destroy the presumption

against empiricism which has been derived from it. Mathematical knowledge, it is true, is not obtained by induction from experience; our reason for believing that 2 and 2 are 4 is not that we have so often found, by observation, that one couple and another couple together make a quartet. In this sense, mathematical knowledge is still not empirical. But it is also not a priori knowledge about the world. It is, in fact, merely verbal knowledge! "3" means "2 + 1," and "4" means "3 + 1." Hence it follows (though the proof is long) that "4" means the same as "2 + 2." Thus mathematical knowledge ceases to be mysterious. It is all of the same nature as the "great truth" that there are three feet in a yard.

Physics, as well as pure mathematics, has supplied material for the philosophy of logical analysis. This has occurred especially through the theory of relativity and quantum mechanics. What is important to the philosopher in the theory of relativity is the substitution of space-time for space and time. Common sense thinks of the physical world as composed of "things" which persist through a certain period of time and move in space. Philosophy and physics developed the notion of "thing" into that of "material substance," and thought of material substance as consisting of particles, each very small, and each persisting throughout all time. Einstein substituted events for particles; each event had to each other a relation called "interval," which could be analysed in various ways into a time-element and a space-element. The choice between these various ways was arbitrary, and no one of them was theoretically preferable to any other. Given two events A and B, in different regions, it might happen that according to one convention they were simultaneous, according to another A was earlier than B, and according to yet another B was earlier than A. No physical facts correspond to these different conventions. From all this it seems to follow that events, not particles, must be the 'stuff' of physics. What has been thought of as a particle will have to be thought of as a series of events. The series of events that replaces a particle has certain important physical properties, and therefore demands our attention; but it has no more substantiality than any other series of events that we might arbitrarily single out. Thus "matter" is not part of the ultimate material of the world, but merely a convenient way of collecting events into bundle.

Quantum theory reinforces this conclusion, but its chief philosophical importance is that it regards physical phenomena as possibly discontinuous. It suggests that, in an atom (interpreted as above), a certain state of affairs persists for a certain time, and then suddenly is replaced by a finitely different state of affairs. Continuity of motion, which had always been assumed, appears to have been a mere prejudice. The philosophy appropriate to quantum theory, however, has not yet been adequately developed. I suspect that it will demand even more radical departures from the traditional doctrine of space and time than those demanded by the theory of relativity.

While physics has been making matter less material, psychology has been making mind less mental. We had occasion in a former chapter to compare the association of ideas with the conditioned reflex. The latter, which has replaced the former, is obviously much more physiological. (This is only one illustration; I do not wish to exaggerate the scope of the conditioned reflex.) Thus **from both ends physics and psychology have been approaching each other, and making more possible the doctrine of "neutral monism" suggested by William James's criticism of "consciousness."** The distinction of mind and matter came into philosophy from religion, although, for a long time, it seemed to have valid grounds. I think that both mind and matter are merely convenient ways of grouping events. Some single events, I should admit, belong only to material groups, but others belong to both kinds of groups, and are therefore at once mental and material.

This doctrine effects a great simplification in our picture of the structure of the world. Modern physics and physiology throw a new light upon the ancient problem of perception. If there is to be anything that can be called "perception," it must be in some degree an effect

of the object perceived, and it must more or less resemble the object if it is to be a source of knowledge of the object. The first requisite can only be fulfilled if there are causal chains which are, to a greater or less extent, independent of the rest of the world. According to physics, this is the case. Light-waves travel from the sun to the earth, and in doing so obey their own laws. This is only roughly true. Einstein has shown that light-rays are affected by gravitation. When they reach our atmosphere, they suffer refraction, and some are more scattered than others. When they reach a human eye, all sorts of things happen which would not happen elsewhere, ending up with what we call "seeing the sun." But although the sun of our visual experience is very different from the sun of the astronomer, it is still a source of knowledge as to the latter, because "seeing the sun" differs from "seeing the moon" in ways that are causally connected with the difference between the astronomer's sun and the astronomer's moon. What we can know of physical objects in this way, however, is only certain abstract properties of structure. We can know that the sun is round in a sense, though not quite the sense in which what we see is round; but we have no reason to suppose that it is bright or warm, because physics can account for its seeming so without supposing that it is so. Our knowledge of the physical world, therefore, is only abstract and mathematical.

Modern analytical empiricism, of which I have been giving an outline, differs from that of Locke, Berkeley, and Hume by its incorporation of mathematics and its development of a powerful logical technique. It is thus able, in regard to certain problems, to achieve definite answers, which have the quality of science rather than of philosophy. It has the advantage, as compared with the philosophies of the system-builders, of being able to tackle its problems one at a time, instead of having to invent at one stroke a block theory of the whole universe. Its methods, in this respect, resemble those of science. I have no doubt that, in so far as philosophical knowledge is possible, it is by such methods that it must be sought; I have also no doubt that, by these methods, many ancient problems are completely soluble. There remains, however, a vast field, traditionally included in philosophy, where scientific methods are inadequate. This field includes ultimate questions of value; science alone, for example, cannot prove that it is bad to enjoy the infliction of cruelty. Whatever can be known, can be known by means of science; but things which are legitimately matters of feeling lie outside its province. Philosophy, throughout its history, has consisted of two parts inharmoniously blended: on the one hand a theory as to the nature of the world, on the other an ethical or political doctrine as to the best way of living. The failure to separate these two with sufficient clarity has been a source of much confused thinking. Philosophers, from Plato to William James, have allowed their opinions as to the constitution of the universe to be influenced by the desire for edification: knowing, as they supposed, what beliefs would make men virtuous, they have invented arguments, often very sophisticated, to prove that these beliefs are true. For my part I reprobate this kind of bias, both on moral and on intellectual grounds. Morally, a philosopher who uses his professional competence for anything except a disinterested search for truth is guilty of a kind of treachery. And when he assumes, in advance of inquiry, that certain beliefs, whether true or false, are such as to promote good behaviour, he is so limiting the scope of philosophical speculation as to make philosophy trivial; the true philosopher is prepared to examine all preconception. When any limits are placed, consciously or unconsciously, upon the pursuit of truth, philosophy becomes paralysed by fear, and the ground is prepared for a government censorship punishing those who utter "dangerous thoughts"-in fact, the philosopher has already placed such a censorship over his own investigations. Intellectually, the effect of mistaken moral considerations upon philosophy has been to impede progress to an extraordinary extent. I do not myself believe that philosophy can either prove or disprove the truth of religious dogmas, but ever since Plato most philosophers have considered it part of their business to produce "proofs" of immortality and the existence of God. They have found fault with the proofs of their predecessors-Saint Thomas rejected

Saint Anselm's proofs, and Kant rejected Descartes'-but they have supplied new ones of their own. In order to make their proofs seem valid, they have had to falsify logic, to make mathematics mystical, and to pretend that deepseated prejudices were heaven-sent intuitions. All this is rejected by the philosophers who make logical analysis the main business of philosophy. They confess frankly that the human intellect is unable to find conclusive answers to many questions of profound importance to mankind, but they refuse to believe tha' there is some "higher" way of knowing, by which we can discover truths hidden from science and the intellect. For this renunciation they have been rewarded by the discovery that many questions, formerly obscured by the fog of metaphysics, can be answered with precision, and by objective methods which introduce nothing of the philosopher's temperament except the desire to understand. Take such questions as: What is number? What are space and time? What is mind, and what is matter? I do not say that we can here and now give definitive answers to all these ancient questions, but I do say that a method has been discovered by which, as in science, we can make successive approximations to the truth, in which each new stage results from an improvement, not a rejection, of what has gone before. In the welter of conflicting fanaticisms, one of the few unifying forces is scientific truthfulness, by which I mean the habit of basing our beliefs upon observations and inferences as impersonal, and as much divested of local and temperamental bias, as is possible for human beings. To have insisted upon the introduction of this virtue into philosophy, and to have invented a powerful method by which it can be rendered fruitful, are the chief merits of the philosophical school of which I am a member. The habit of careful veracity acquired in the practice of this philosophical method can be extended to the whole sphere of human activity, producing, wherever it exists, a lessening of fanaticism with an increasing capacity of sympathy and mutual understanding. In abandoning a part of its dogmatic pretensions, philosophy does not cease to suggest and inspire a way of life.