

THE  
UNWRITTEN  
PHILOSOPHY  
and  
other essays  
by  
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THE  
UNWRITTEN PHILOSOPHY  
AND OTHER ESSAYS

BY

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EDITED WITH AN  
INTRODUCTORY MEMOIR

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CAMBRIDGE  
AT THE UNIVERSITY PRESS

1950

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in the principle of life itself, in the soul of man and of universal nature, chords that can answer to the touch of harmonious sound. May it not be the most essential truth about the soul that it is, in some sort, an instrument of music?

Tradition, truly as I believe, reports that Pythagoras declared the soul to be, or to contain, a harmony—or rather a *harmonia*. For in Greek the word *harmonia* does not mean 'harmony', if 'harmony' conveys to us the concord of several sounds. The Greeks called that *symphonia*. *Harmonia* meant originally the orderly adjustment of parts in a complex fabric; then, in particular, the tuning of a musical instrument; and finally the musical scale, composed of several notes yielded by the tuned strings. What we call the 'modes' would be to the Greek *harmoniai*.

Pythagoras turned to the study of the musical scales; and in this field he made a discovery which gave him a clue to the whole structure of the world. He found that the concordant intervals of the musical scale can be exactly expressed in terms of ratios between numbers. It was only later that Greek musicians guessed that these ratios hold between the numbers of vibrations corresponding to the several notes. Pythagoras simply measured the lengths on the string of a monochord, stopped by a movable bridge. It came to light that the ratio of the octave is 1:2; of the fourth, 4:3; of the fifth, 3:2. These (which are still known to musicians as the 'perfect consonances') are the fixed intervals common to all the Greek scales, the variety of scales being obtained by varying the intervening or 'movable' notes. Observe further that the numbers which occur in these ratios are 1, 2, 3, 4—the sum of which is 10, the perfect number. Pythagoras would never have made the experiment, if he had not already divined that the order and beauty evoked by the art of music from the weltering chaos of sound—a matter, plainly enough, of measure, proportion, rhythm—might be reducible to the pure abstractions of number. To discover that these fundamental proportions, on which every scale is built, could be expressed so simply in ratios between the first four numbers was enough to flood any mathematician's soul with joy. To Pythagoras it came as a revelation, lighting up the framework of the moral, no less than of the natural, world.

First, in the microcosm of the individual, not only are strength and beauty dependent on proportions and rhythms of form, of which the Greek sculptors might determine the canon, but health—the virtue of the body—was interpreted as a proportion or equipoise of contending elements, which any excess might derange or finally destroy. And virtue—the health of the soul—likewise lay in the golden mean, imposing measure on the turbulence of passion, a temperance which excludes both excess and deficiency. In virtue the soul achieves moral order and beauty; its *harmonia* is in tune.

Dust as we are, the immortal spirit grows  
Like harmony in music, there is a dark  
Inscrutable workmanship that reconciles  
Discordant elements, makes them cling together  
In one society.

That the soul should be harmonised meant not only that its several parts should be in tune with one another, but, as one instrument in an orchestra must be in tune with all the rest, so the soul must reproduce the *harmonia* of the Cosmos. The phrase 'in tune with the infinite' is one that no musician, least of all a Greek musician, would use. The very essence of order is a measure or limit imposed upon the infinite or unlimited; and looking out into the world of Nature, Pythagoras saw here the secret of beauty and of rational truth.

For in the field of the eye, no less than of the ear, there is harmony or discord in the relations of colour, and there is measure and proportion in form. Music has its being in time, not in space; but space is peopled with extended bodies having surfaces whose shapes and colours, confounded in the darkness, are, as it were, recreated daily by the dawn of light. From the measurement of these surfaces we can reach the theorems of geometry, simple, perfect, and unalterably true. Moreover, the truths of geometry can be yet more abstractly expressed in numbers. So numbers and their properties and relations underlie the whole fabric of the world in space and time; and Pythagoras, in the language of his day, declared that numbers—not formless matter—were the 'nature of all things'.

It was Pythagoras who first gave to the visible world the name of Cosmos, a word which equally signifies order and beauty. Of his cosmogony only a few traces survive. These indicate that the two great principles of Nature are Light and Darkness, concretely conceived as Fire and the dark, cold vapour of primaeval Night filling the abyss of space. Imagine a spark or seed of Fire planted in the womb of unlimited Darkness. By the self-propagating power of light spreading outwards from this centre, a spherical realm of order and form and colour is won from the dominion of Night. This is the universe, the Cosmos, extending from earth at the centre to the sphere of the fixed stars. Between centre and circumference, the seven known planets (including sun and moon) are set, each like a jewel in its ring, in material orbits which carry them round; and these are spaced according to the intervals of a musical scale, the celestial *harmonia*.

The Pythagoreans suppose, says Aristotle, that the motion of bodies so huge as these and moving with so great a speed must produce a sound. Arguing so, and from the observation that their speeds, as measured by their distances, are in the same ratios as the concords of the musical scale, they assert that the sound given forth by the revolution of the heavenly bodies is a *harmonia* or scale. They explain that we do not hear this music because the sound is constantly in our ears from the very moment of birth and so cannot be distinguished by contrast with silence.

Such, in its earliest form, is the harmony of the spheres. 'The whole heaven', said the Pythagoreans, 'is harmony and number'—number because the essence of harmony lies, not in the sound, but in the numerical proportions, and these (I think we may add) constitute the soul of Nature, which thus, like the human soul, is itself a harmony. So the moral world is interfused with the physical. The harmony of heaven is perfect; but its counterpart in human souls is marred with imperfection and discord. This is what we call vice or evil. The attainment of that purity which is to release the soul at last from the wheel of incarnation, may now be construed as the reproduction, in the individual, of the cosmic harmony—the divine order of the world. Herein lies the secret of the power of music over the soul. Accordingly

it meant, not only taking in the spectacle of order and beauty in the visible heaven, but the active operation of thought in all the mathematical sciences which reveal the truths of number and form. Contemplation is the search for wisdom, not only the fruition. Among those whom the Greeks honoured as wise men, Pythagoras was the first to refuse the title and to call himself, not wise, but a lover of wisdom (*philo-sophos*), not a sage but a philosopher.

Such was the substance of the Paduan professor's discourse which came back to Lorenzo, and withdrew his mind into a world of speculation where Jessica could not follow. You will guess why I pushed my construction of that scene to a pitch that might seem overstrained. Which of the two has chosen the better part—Lorenzo, who sees neither the sky nor Jessica, but dwells in his mind's eye on the candle lighted by ancient wisdom in the darkness; or Jessica, content to watch her lover's eyes and to lie back dreaming on the earth, like Earth herself, all Danae to the stars?

The question is not easily answered. For the contrast between the two is not the contrast between Martha and Mary or Leah and Rachel. Both Lorenzo and Jessica have renounced and forgotten their immediate business of making ready for Portia the house she left in their charge. For this enchanted pause of contemplation they have sacrificed all duties of the practical life; even the musicians, posted in the Hall to greet their mistress, have been called forth into the air, as if to render audible to human ears the very tones of the quiring orbs. The choice lies rather between the active and the passive modes of contemplation. Does Lorenzo gain or lose by speculating upon the experience which Jessica is satisfied to enjoy, and spanning its depth with a structure of intellectual theory? There may be more than one answer to the question.

Two possible replies may be at once dismissed. The first I will call the brutal scientific reply: that the intellectual structure of Pythagorean cosmology is false to ascertained fact. We know that the earth does not stand still at the centre of a nest of revolving rings or spheres, carrying round the planets and fixed stars. For this and other reasons there can be no harmony of the spheres. The whole theory is an idle and obsolete fancy.

A second reply meets this criticism on its own level. This is the sentimental-aesthetic answer: what matter if all the facts are misconceived? The fancy (if you call it so) is beautiful in itself and touches emotions that we have a right to value. In your laboratory you may claim to have reduced the universe to a dust of atoms and the atoms themselves to electrical charges—but let us

that are of purer fire  
Imitate the starry quire.

The sentimental reply is just as superficial as the brutal objection and more contemptible. Pythagoras himself would have expelled the aesthete from his community; but he would have entreated the man of science to tell him more about electrons and protons. He would never admit that the beauty he sought was the rainbow in a bubble destined to burst at the touch of the crudest fact. The advance of truth could not subvert the dominion of beauty. This was the core of his faith. To some minds it may still appear sentimental, charged with a warmth of feeling which the intellect, if really free, would dissipate.

Let us, then, consider the system of Pythagoras first under the aspect of truth. Curiously enough, on this side, where it seems weakest, the theory is most easily defended. If we look beneath the surface details, we find at the centre an intuition which has guided the whole course of mathematical physics from its founder Pythagoras to the present day: 'The nature of things is Number.' If the intellect would embrace the universe with the grasp of knowledge, it must subdue the unlimited welter of qualities, assailing our senses with a bewildering host of colours and sounds, to the principle of quantity; it must weigh and measure and count. The key to intelligible order lies in the notion of limited quantity defining unlimited quality, as the key to harmony lies in a few definite intervals marked out in the indefinite range of sound. This was a theoretical discovery comparable to the greatest of all man's practical inventions, the alphabet. It cost the labour of many generations and perhaps of several peoples to perfect that invention, which enabled us to convey in writing the unlimited world of spoken thought by the combinations of some twenty-four

in the spirit, then the whole is true. Seek truth and beauty together; you will never find them apart. With the Angel of Truth your mind may wrestle, like Jacob: 'I will not let thee go except thou bless me'; but Beauty is the Angel of Annunciation, before whom the soul must be still as a handmaid: 'Be it unto me according to thy word.'

many cases, we must look for a moral motive behind theories that seem, on the surface, to have little or no bearing on the conduct of human life.

Let us turn now to the other factor, the cultural tradition, which gives to ancient philosophy, as a whole, a character distinct from mediaeval or modern thought. This is a matter of intellectual climate—the atmosphere breathed in common by all members of a given civilisation, speaking the same language. We come here to premisses and assumptions which are much less likely to be explicitly mentioned, precisely because they are the common property of all the philosophers, not points of difference such as emerge in controversy. No dispute can be carried on unless both parties have some fundamental standpoint on which they agree. This common basis is the last thing of which they are likely to be aware. Hence in the philosophic debate it is apt to pass almost wholly unmentioned.

I may here quote Dr Whitehead:

When you are criticising the philosophy of an epoch, do not chiefly direct your attention to those intellectual positions which its exponents feel it necessary explicitly to defend. There will be some fundamental assumptions which adherents of all the various systems within the epoch unconsciously presuppose.

Here is a plain warning that, if we would really understand what a philosopher says, we must keep a wakeful eye on what he does *not* say, because both he and his opponents take it for granted.

There are no personal motives for concealment here. The premisses now in question are not mentioned simply because they seem too obvious to be worth mentioning. This brings us to the consideration of the current language in which the philosophies of any given age must be expressed. Philosophy requires an exceptionally large proportion of abstract words; and the discipline of translating into, and out of, Greek and Latin has taught us that abstract words—as distinct from the names of tangible objects—have a strange habit of shifting their meanings. This happens within the continuous life of the language itself, by a process which is imperceptible because it occurs in response to wholly

unconscious needs. Take a word like *logos*. The Stoics borrowed the word, and much that it stood for, from Heraclitus; but no ancient Stoic could have told you how much meaning it had lost or gained in the two centuries between Heraclitus and Zeno. He would almost certainly assume that it meant to Heraclitus just what it meant to him. We may be sure that this is not true; but we, who think and write in English, have to contend with the further difficulty, that no modern word covers more than a fraction of the meaning that *logos* had for either Heraclitus or the Stoic. Modern philosophy is carried on mostly in terms that were translated from Greek into Latin, and then developed, along more or less diverging lines, in all the languages derived from Latin. Words are like coins. Shillings and half-crowns remain much the same in size and weight. Their constancy in appearance conceals from us the perpetual variations in their purchasing power. To realise that fully, we need a shock like the German period of inflation, when wages had to be paid twice a day because a pat of butter might cost a thousand marks in the morning, and two thousand in the evening. It is well to remind ourselves sometimes that everything written about ancient philosophy by modern scholars is, to a greater or less extent, vitiated and falsified by the linguistic exchange of currency, and by the underlying shift in the scope and content of concepts.

Even if we set aside the accidental difficulty of finding any modern equivalents for ancient words, there remains the problem dealt with by Ogden and Richards in their book called *The Meaning of Meaning*. When we speak of the meaning of a word, what is it, precisely, that we are talking about? This (as the readers of that book will know) is a very hard question to answer. All I can do is to offer a suggestion about the history of Greek philosophical terms.

The thought of the Greek race about the world—what it made of our natural environment—passed through two main stages: a magico-religious or mythical stage, and a philosophical or rational stage.

The mythical thinking of the earlier stage is partly rational: it offers explanations which satisfy an untrained and comparatively

childlike intelligence. But the *form* of these explanations resembles day-dreaming—or dreaming proper—rather than the directed logical thinking which is governed by an effort of conscious attention, and uses language and abstract concepts. Dream-thought is a kind of *passive* thinking—the mind seems to watch a train of visual images, which pass before it unsummoned, as if arising spontaneously from some inner source. It is a flow of images and symbols, not of intellectual concepts or abstract ideas. In these concrete images and symbols, what we call the ‘meaning’ is enveloped in a wealth of sensuous content, which to the rational mind may seem, on analysis, to be irrelevant. The meaning, or thought, or idea, is immersed and disguised in symbols and pictures, and can be extracted only by a deliberate subsequent effort of analysis.

This description applies to speculation in the mythical stage. Take, as a simple instance, the notion of cosmogony—the becoming or beginning of existence of an ordered world. The abstract notion of *becoming* was still merged in the concrete image of *birth*: the words *genesis*, *gignesthai*, continue to be used for both.

In the mythical stage the accompaniments and associations of birth, and therefore of sex, are still involved in any becoming—the parents who are married, the father who begets, the mother who brings forth. So mythical accounts of the origin of the world take the form of a *cosmogonia* or *theogonia*. Each new factor is introduced as the offspring of a marriage. In Hesiod, for example, cosmogony is an indistinguishable part of theogony, and the whole evolution takes the form of a genealogical tree.

So the concrete image of birth is richer in content than the abstract idea of becoming (beginning to exist). But if we describe the extra content as ‘associations’, we must remember that at first it consisted of elements that had never been *dissociated*. The abstract notion of becoming was only disengaged later, by eliminating the pictorial sex-imagery in the notion of birth.

This work of elimination and abstraction is not done all in a moment; it is a gradual process. The core of abstract meaning which rational thought is trying to isolate, remains surrounded by a penumbra of what will now be called ‘associations’. These

survive in poetry, because poets go on using concrete images in preference to prosaic concepts. Some of them the grammarian calls 'metaphors'; but a traditional metaphor is often not really the 'transference' of a word to a new sense. It may well be a fossilised association, holding together elements of thought that have become dissociated in the language of prose. After the primitive stage of genuine myth-making, there is a transitional period, in which the old images and symbols are retained, but with a nascent consciousness that they do go beyond the meaning proper.

In Hesiod himself they are on the way to becoming metaphor and allegory. When Hesiod speaks of the Muses as the daughters of Memory, that is not genuine myth. It is allegory—a thought that might be expressed in prose, but is more or less consciously disguised in language that is no longer meant literally. Pherecydes is a good example of the transitional phase. Aristotle mentions the old poets (*theologoi*) who made Zeus reign, not the first principle of things (Night, Chaos, Ocean). He then speaks of Pherecydes as belonging to a 'mixed class' who 'do not express themselves wholly in mythical terms'. The fragments of Pherecydes are in fact a mixture of myth, allegory, and literal statements.

Finally there may come a time when rational thinking consciously asserts itself, and the foremost intellects of the race awaken out of the dream of mythology. They perceive that the imagery of myth has become incredible and fantastic; and they demand literal, matter-of-fact truth. This happened in sixth-century Ionia, and what the Western world calls philosophy or science was born. The philosophers, trying to think clearly, discard the old representations. The aura of associations is dispelled, and the abstract concept—the tool of the new kind of thought—begins to emerge.

It is an easy fallacy (encouraged by dictionaries) to suppose that a word has at first a single sense—the sense that happens to be uppermost at its first occurrence in written records—and later accumulates other meanings. It is nearer the truth to say that the original meaning is a complex in which nearly all the later senses are inextricably confused. In etymology, if you dig down to the

root of a word, you will often find that there have sprung from that same root a multitude of words whose meanings are now so completely dissociated that we cannot detect any connection between them. The elaboration of the concept is only the deliberate continuation, on the conscious level, of a branching process that has been going on unconsciously ever since man began to think and speak. Perhaps the greater part of it was already done before he began to write.

I suspect that, in an Oxford tutorial, one of the commonest questions is: 'What exactly do you mean when you say so-and-so?' The question is as old as Socrates and indeed dates from his time. We know that Socrates was interested in the lectures of Prodicus, the first man who tried to draw fine distinctions between so-called synonyms. But philosophic speculation had been going on for a good while before it was clearly realised that the most important terms were still ambiguous. It is characteristic of Aristotle that he solved many current problems by the discovery that this or that term has several senses. It was very hard for the Greek, who knew no language but his own, to find out that one word was doing duty for a number of concepts which could be distinguished by careful definition. In this way it happened that philosophic discussion, all the way through, rested on tacit assumptions, which were enshrined in the ambiguities of language. It was taken for granted that associations and connections of thought covered by a single word faithfully reproduced associations and connections between things—that the structure of the Greek language reflected the structure of the world. Plato himself wrote a whole dialogue (the *Cratylus*) to dispel the belief that every thing has a name which naturally belongs to it and embodies its real nature. So long as that was believed, it was inevitably assumed that all the associations of a word stood for real properties of the thing whose name it was.

Perhaps I can illustrate what I mean by taking two concepts which have long ago reached a very high degree of abstraction—the concepts of *Time* and *Space*. The whole framework of Time and Space, in which we spend our lives, has undergone no change in the last two thousand years; and until very recently it seemed

philosophy it is assumed without question that the world had a birth in time, and will perish, to be succeeded by another. There is nothing whatever in the appearances of Nature to suggest such a daring theory. It is the primitive assumption of all cosmogony combined with the image of Time as a circle, in which the end is knit to the beginning. In Pythagoreanism appears the more precise doctrine of eternal recurrence: everything that happens now has happened before and will happen again for ever. The modern belief in a continuous progress of mankind from a brutish condition was stated, but could not establish itself in antiquity. Perhaps most people continued to hold, with Hesiod, that man had degenerated ever since the golden age. Plato naturally speaks of the rule of the philosopher, Virgil speaks of the reign of Augustus, as a return to the lost happiness of the past: *redeunt Saturnia regna*.

These cases illustrate the way in which not only physical and metaphysical theories, but the whole view of the course of human history, are governed by abstract schemes of conception that escape notice, because they so seldom need to be actually mentioned.

Pericles, to the Peloponnesian War and the early manhood of Plato, or of the history of England, from the struggle with Napoleon, through the golden age of Victoria, to the war of 1914 and the early manhood of the younger generation.

Perhaps you do not believe (as the ancients believed) that human affairs move in cycles and that history repeats itself. But the men of my Victorian generation, to whom the war came in middle life, are struck by two features which seem common to the opening of the fourth century at Athens and the present time in England. One is the collapse—whether it be temporary or permanent—of the belief in democracy. The other is what looks to us Victorians like a failure of nerve in the generation to whom the war came in their childhood. Perhaps both features are symptoms of the same trouble. To believe in democracy you must believe in the essential goodness of common humanity, and it is hard to keep that faith when you have seen humanity at war. And if men lose faith in one another, perhaps they must also lose faith in themselves. Despairing of freedom, they may seek refuge in authority; despairing of persuasion, they may pin their hopes on violence. One after another, we have seen countries with more or less democratic institutions submit to dictators. Some individuals who feel their hand too weak to steer their own boat, or do not know whither to steer it, climb on board the great vessel of the Roman Church—not a democratic institution, but a hierarchy securely dependent on the infallible wisdom at its head. Others have found a wisdom no less infallible in an economic interpretation of history, teaching them how to become the tools of inexorable destiny.

In fourth-century Greece we can see something analogous to this longing for a political or spiritual dictatorship, to relieve ordinary men of a responsibility they cannot face, and guide their lives to some goal they cannot choose for themselves. Some of Xenophon's works show a hankering after benevolent despotism. His political romance, the *Cyropaedia*, transfigures the autocrat of Persia into a paternal monarch. He even found a living exemplar in Agesilaus, who ruled Greece for some six years. Antisthenes seems to have made Heracles into an ideal mythical king, enduring his labours for the good of mankind. Finally there is Isocrates.

thought, who had studiously kept clear of politics and thereby avoided the fate that was to overtake him in old age. Callicles is not an historical character. He is the ideal representative of the man of the world—a young man looking forward, like Plato himself, to a career of statesmanship, and armed for it with a very different view of life, which he states at length and with astonishing force. He believes in the natural right of the strong man to rule the weak and take to himself the lion's share of all worldly advantages. The conventional idea that such self-assertion is unjust he regards as put about by the weak and inferior, who cannot hope to assert themselves and so praise equality—the watchword of democracy. He has no patience with the cant about self-restraint and moderation. He professes to believe that happiness is to be found in indulging every natural appetite to the full. Socrates attacks this position with equal or greater force. He tells Callicles that this life of selfish ambition, seeking the satisfaction of every desire as it arises, is 'an unending round of evils, the life of a robber and an outlaw, who can never be the friend of man or the friend of God'. Callicles is not convinced. He shrugs his shoulders, leaving Socrates to point out that every statesman Athens has ever had is condemned by the standard he has set up. Socrates declares himself to be the only true statesman; but, if he were to take Callicles' advice and enter public life without surrendering his own ideals, he would certainly be put to death.

The choice between a political career and the philosophic life was not a choice that the real Socrates had ever had to face. Plato is thinking here of his own problem. The *Gorgias* is his final answer to the friends who had pressed him to join them, and perhaps also to the impulse within himself which had tempted him to yield. Callicles is the devil's advocate. Socrates' forecast of his own death is echoed by a later passage in that letter I have already quoted. In the course of some general reflections on the giving of political advice, Plato there says how the prudent man should deal with his city.

If he thinks the constitution is bad, he should say so, unless he sees that to say so will be useless or will bring about his own death. He must

not have recourse to revolutionary violence. If that is the only possible expedient, he must refrain from action and pray for the best, both for himself and for his country.

That is the course finally taken by Plato himself. The long and painful period of indecision ended in the conclusion that he could never take part in the politics of a democratic state. And on this question he never changed his mind. In his retreat at the Academy he appears to us as completely detached from all that went on in the Assembly and the market-place as if the garden of the Academy had been the garden of Epicurus.

Callicles, in his spirited exhortation to Socrates to give up philosophy and play a man's part in active life, quotes, from the *Antiope* of Euripides, a famous debate between the Theban brothers, Zethus and Amphion, on this same contrast. Zethus urges Amphion, who had 'built the walls of Thebes with ravishing sound of his melodious lute', to give up the effeminate and unprofitable service of the Muse and take to agriculture, war, and politics. It is significant that this contrast between the active life and the contemplative should occur in a play of Euripides. Long ago, in the sixth century, the wise man had been the man of affairs, like Solon the lawgiver and others of the Seven Sages. The death of Pericles and the Peloponnesian War mark the moment when the men of thought and the men of action began to take different paths, destined to diverge more and more widely till the Stoic sage ceased to be a citizen of his own country and became a citizen of the universe. Pericles had been the last philosophic statesman. Socrates remarks in the *Phaedrus* that his loftiness of spirit was due to his converse with Anaxagoras, whose speculations about Nature and the intelligence that works in Nature had given Pericles an insight and breadth of view that he carried into his work as leader of the Assembly. After Pericles the men of thought, like Thucydides and Euripides, go into exile, voluntary or enforced. Socrates just fulfils his civic duties, but obeys the warning of his divine sign to keep out of politics. The task of winning, or losing, the war was left to business men like Cleon, or ambitious egoists like Alcibiades. When the war was over,

there was not a man in public life with whom Plato could bring himself to co-operate.

And yet, in Plato's eyes, this drifting apart of the men of thought and the men of action was a disastrous calamity—indeed, the root of the social evils of his time. His problem, as presented in the *Gorgias*, could not be solved simply by dropping all interest in the fate of society and becoming absorbed in abstract speculations. Philosophy meant to him what it had meant to Socrates—not the contemplative study of science or metaphysics, but the pursuit of wisdom, which is the same thing as human perfection and happiness. And man is a social creature; the individual cannot gain perfection and happiness by living for himself alone. There are parts of his nature that can find scope only in the life of society. Hence philosophy and active citizenship were not—or ought not to be—two alternative careers. They should be combined in a single life; and the only perfect solution was to reunite the two elements that had been drifting apart. This is the conclusion which Plato, in that letter I quoted, tells us he had reached before he first went to Sicily, in or about his fortieth year. The passage I read continues as follows:

At last I saw that the constitution of all existing States is bad and their institutions all but past remedy, without a combination of radical measures and fortunate circumstance. I was driven to affirm, in praise of true philosophy, that only from the standpoint of such philosophy could one take a true view of public and private right; and that, accordingly, the race of man would never see the end of trouble until the genuine lovers of wisdom should come to hold political power, or the holders of political power should, by some divine appointment, become genuine lovers of wisdom. It was in this mind that I first went to Italy and Sicily.

This visit to western Greece was probably due to a desire to make acquaintance with the Pythagorean communities of lower Italy. Unexpectedly it led Plato to form hopes that the rule of a philosophic prince might actually be established. At Tarentum he formed a lifelong friendship with Archytas, who was both a mathematician of great distinction and a man who, at the head of

has fallen under the dominion of the machine, which has come, not only to regulate his life, but to permeate his imagination and his ideals. We are not yet at the end of this stage. For the present our dream of the future centres in the machine. As our machinery becomes more and more automatic, we shall be able to escape from minding it for a larger number of hours in the day.

And with the supremacy of the machine there arises the ideal of *order*, which (as Professor Zimmern has remarked) we are substituting for the ideal of personal freedom, associated with democracy. There is no place more orderly than a factory, no place where personal eccentricities are less welcome. But if we are destined to model the whole of life on factory life, the question who is to manage the factory will become urgent; and about that we seem to be rather vague. Do we want to be ruled by dictators, or by a directorate of Marxian doctrinaires, or by a conspiracy of business men? We are like a firm advertising for a manager with no clear notion of the qualifications required, and not much liking the looks of any of the applicants.

Now Plato too, as we have seen, had lost the belief in liberty, if liberty was to mean that every man should do as he pleased, and in equality, if equality was to mean that any citizen was just as fit as any other to hold office in the State; and he thought that democracy at Athens had come to rest on those principles. He too desired to substitute the ideal of order; and the problem of the *Republic* is to discover a type of social order that shall be stable and harmonious. Not living in a mechanical age, he did not look for a model to the factory with its despotic manager or its board of directors. The principle that guided him was this. A social order cannot be stable and harmonious unless it reflects the unalterable constitution of human nature. More precisely, it must provide a frame within which the normal desires of any human being can find legitimate scope and satisfaction. A social system which starves or thwarts any important group of normal human desires will, sooner or later, be overthrown by the forces it has repressed, and, while it lasts, will warp and pervert them.

It is at this point, I believe, that Plato's thought takes a different direction from the philosophy of his master, Socrates. There are

two ways in which a man may approach the task of conceiving an ideal society. One is to start with the moral reformation of the individual, and then to imagine a society consisting of perfect individuals. That is the logical outcome of Socrates' mission to his fellow-citizens as described in the *Apology*. The other is to take individual human nature as we find it, and to construct a social order that will make the best of it as it is and as it seems likely to remain. This is the course taken by Plato in the *Republic*.

Let us consider for a moment Socrates' view of human nature. Socrates believed that in every human soul there is a faculty of insight, which, if once it could be cleared from the mists of prejudice and the illusions of pleasure which seems good when it is not, is capable of discerning where its own true happiness is to be found. The only thing in the world that is really and intrinsically good for man is the perfection of his own nature. All the other aims that we pursue—wealth and the pleasures it can buy, power and distinction, even bodily health—are in themselves valueless. To sacrifice any or all of them in the pursuit of perfection is really no sacrifice at all. We are only sacrificing what men call pleasure to gain happiness. Now, no one will believe this truth until he can see it for himself with the inward eye of his own soul; you cannot persuade him to act as if it were true until he knows it, with entire conviction, from his own experience. When he does know it in this complete sense, then he will act upon it unfailingly; his knowledge must determine his will, for no man will sacrifice his true happiness for pleasures he can see to be illusory. This knowledge is wisdom; and the man who gains it becomes thenceforth morally autonomous: everything he does is determined by his own inward light; he will not be guided by any external authority, but will claim the unconditional freedom of self-rule. Socrates did not concern himself directly with the reform of society. His mission was addressed to any individual who would listen to him. He spent his life trying to make individual men see for themselves the truth which he had seen, but could not teach them; for wisdom cannot be taught, or communicated by persuasion, or imposed by authority.

Now if we imagine this mission successfully accomplished, the

reform of society would follow. The outcome would be a group of individuals, each one of whom would be completely self-ruled and free. Not only would each man enjoy inward harmony (the conflict of desires within his own soul having been finally reconciled), but also there would be no conflict or competition between one individual and the rest. If any set of men could be finally convinced that the perfection of the human soul is the only object of any value in itself, the clash of competing egoisms would disappear. No one man's gain would be another's loss. Such a society would need no laws. There would be no distinction of ruler and subject, for each man would govern himself. There would be perfect equality and unlimited freedom. The name for such a state of society is Anarchy, or (if you think of the ruling faculty of insight as divine) Theocracy. The men who condemned Socrates for not recognising the gods whom Athens recognised, and for turning the minds of young men against traditional authority, were dimly aware that Socrates' mission pointed to a subversion of all existing institutions.

But it was left to the Stoics to follow up the consequences into the political field. From the Socratic premiss that human perfection is the only thing of real value, and that this virtue is wisdom, they deduced the ideal of the perfect sage, who alone is self-sufficient, happy, and free. To him all things that he can desire are lawful. So we find Zeno, the founder of Stoicism, rejecting, in theory, all existing forms of constitution. The wise man can only be a citizen of the universe. There is no such thing as the ideal State on earth. If men were perfect, they would all be members of the City of Zeus.

It is significant that Zeno is known to have criticised Plato's *Republic*, because it is not the City of Zeus. Plato, it is true, has his scheme for the production of the perfect man, deduced from the same Socratic principles, combined with his own conception of all that knowledge or wisdom implies. But he does not say: First make every individual perfect, and then you will need no laws or civic institutions. He is too much bent upon the reform of Greek society to be ready to postpone it to the millennium. So he turns to the other possible course: taking human nature as it is, and

making the best of it. Plato's commonwealth is not the City of Zeus or the Kingdom of Heaven. It is a reformed Greek city-state, surrounded by other city-states and by the outer world of barbarians, against which it may have to hold its own. Hence he does not contemplate the abolition of war, which figures in all modern Utopias. The problem he proposes for solution is: What are the least changes to be made in the highest existing form of society—the Greek city-state—which will put an end to intestine strife and faction, and harmonise the competing desires of human nature in a stable order?

Looking, then, to human nature as it is, Plato points to a given natural fact that any practical scheme must reckon with, namely, that men are not born all alike, but with temperamental differences sufficiently marked to group them in various types. It is not the business of education to smooth out these differences and level everyone up or down to the same pattern. Education should develop each type to the fullest life of which it is capable; and the social framework should provide a place in which that type can make its contribution to the life of the whole community, without sacrificing the fulfilment of its own characteristic desires.

First, then, we need a broad classification of human types, based on their dominant desires or motives. Now there was an old parable comparing human life to the Olympic festival, and dividing the people who went to such a festival into three classes, according to the motives which took them there. To some it was a fair or market, where they could buy and sell; their motive was gain. The competitors in the games went with a different purpose, to win honour and fame; their motive was a not ignoble ambition, or more generally the love of victory and power. Finally, there were the spectators, who sought neither gain nor honours, but went to contemplate a scene which must have been more attractive to Greek eyes than a football match in the Wembley Stadium. The three classes of visitors correspond to the three classes in Plato's State. These are not hereditary castes, but strata of society into which the citizens of each new generation are to be sorted out, solely on the ground of their natural temperament and abilities. First there is the money-making type—the lovers of wealth and

of the pleasures that wealth can buy. Second, the lovers of honour and power, who desire distinction in the active life. Third, the men whom Plato calls philosophers, the lovers of wisdom and knowledge, the spectators of all time and all existence—a phrase that recalls an anecdote about Pericles' friend Anaxagoras. When Anaxagoras was asked what he thought made life worth living, he replied: 'The study of the heavens and of the whole order of the world.'

Now, if it be true that men can be roughly grouped according to these temperamental varieties of dominant motive, and if society can avail itself of this natural fact, then there is a possibility of these divergent types pursuing each its own satisfaction, side by side, without competition and conflict. This is the key to Plato's solution of the social problem. He does not propose to convert all his citizens to the ideal of any one type, but rather to draft the individuals of each type, as soon as their dispositions can be ascertained, into their proper place, and to secure that they shall stay there and discharge their function. To him it seemed that what was wrong with existing society was that these types do not keep in their places. The acquisitive and the ambitious types are always trying—and trying successfully—to control the life of the State and to direct its action to the ends they value. Hence society is governed by men who cannot conceive of any higher aim than to make their own country the richest and the most powerful. Unfortunately, wealth and power are what Aristotle calls 'goods that can be fought for'; neither the individual nor the State can indulge an unlimited desire for either except at the expense of others. The only remedy that Plato could see was to transfer supreme political power to the third type. The object of their desire is not a competitive object. If a man gains wisdom, it is not at his neighbour's expense. On the contrary, the more wisdom he can gain, the better it will be for them, if they can take advantage of it. The advantage they should take is to constrain him—reluctant though he may be—to take control of the State. So we reach the central proposition of the *Republic*:

Unless [says Socrates] either the lovers of wisdom become kings in their cities, or those who are now called kings and potentates come

to love wisdom in the true sense and in sufficient measure—unless, in fact, political power and the pursuit of wisdom be united in the same persons, while the many natures which now take their several ways in one or the other direction are forcibly debarred from pursuing either separately, there can be no rest from troubles for the race of mankind, nor can this commonwealth that we have constructed in discourse ever, till then, grow into a possibility or see the light of day.

Who are these lovers of wisdom—philosophers—that they should rule over us? If the word 'philosopher' calls up before your mind an old gentleman with a long beard, bending over his study-table as he composes an article on some intricate problem of metaphysics, then you are in much the same position as Adeimantus in the *Republic*, who objects that specialists in philosophy, for the most part, become decidedly queer, not to say rotten, and even the better sort are entirely useless to their country. And you will find that Socrates assents to that objection. We must banish that picture of the philosopher from our imaginations. To Plato wisdom means, ultimately, what it had meant to Socrates—not only a knowledge of scientific or metaphysical truth but, above all, the knowledge of good and evil, the knowledge (as we say) of values. To possess wisdom is to know what is really good and worth living for; and that is the secret of happiness. It is true, Plato thought that such wisdom could be attained only by a small number of men, after an arduous intellectual training; but the claim of the philosopher to rule is based on his power to think clearly and the insight enabling him to assess the value of all objects of desire—to see that neither wealth nor power is the right aim either for the State or for the individual.

The institutions of Plato's commonwealth follow from the principles I have outlined. The principle that normal desires should be given a legitimate satisfaction dictates his solution of the problem that bulks so large in schemes of social reform—the redistribution of wealth. It excludes the idea, popular with some modern reformers, that wealth should be evenly distributed over the whole of society—a proposal commonly advanced by men who are not of the money-loving type, and contemplated without enthusiasm by the mass of mankind, even in Russia. Plato would

make over all material property to the acquisitive type—the lovers of money—who are to form the third and lowest class, the industrials. They desire wealth, and they shall have it. In the enjoyment of a moderate amount of property—for extremes of poverty and of wealth must be prohibited—they shall find the reward of fulfilling their social function, which is to supply the economic needs of the whole commonwealth. He will thus set this type to the kind of work it likes and is fitted for—necessary and useful work—and make it contented by allowing it the rewards it understands and desires.

But this class must not govern, and we must make sure that it shall not want to govern. This is to be done by making the possession of property incompatible by law with the possession of authority in the State. So long as political power can be combined with wealth, and either can be made a means to the other, the business man will leave his counting-house and try to grip the levers of the political machine. The only way to prevent that is to effect a complete divorce between the functions of government and the holding of private property and wealth. The money-lovers will not want to rule, if to be a ruler means living in monastic austerity on a bare subsistence. Accordingly this mode of life is decreed for both the two higher classes. They are deprived of property, partly for their own sakes, lest the love of wealth should assert itself in them, but also for the sake of making the task of government a forbidding and disagreeable business in the eyes of the industrials.

These higher classes are also to be deprived of family life, for reasons which have been used in defence of the celibacy of the clergy. Where the family exists, the very strong instincts associated with marriage and fatherhood must absorb a large part of any normal man's interest and energy. Plato wanted to diffuse this energy over the whole class, and to abolish the distinction of mine and thine in this field, as in the field of property. On the other hand, if you select the most intellectual and spiritual men and women to form the head of your hierarchy, and then decree that they shall be childless, you inevitably impoverish the stock of the race. Plato avoids this sterilisation of the highest type by laying

in democracy, which seems to be itself the consequence of a disastrous war. On the other hand, the philosophies which severally inspire the two systems are almost diametrically opposed; and I am inclined to think that the Bolsheviks are right if they regard Plato as an antiquated *bourgeois*, who would have repudiated dialectical materialism as founded on a false analysis of human nature.

Perhaps there is more truth in Wilamowitz's observation that, in the modern world, we find something comparable to Plato's State only in the structure of the Roman Church, culminating in the infallible authority of the triple crown. In Plato's latest work, the *Laws*, he tries to bring the institutions of the *Republic* closer to the given possibilities of actual life; and here there is a yet stronger resemblance to the Roman Church, which has found the secret of keeping a hold on human nature and has long outlived the Empire. In the institution of the Nocturnal Council, secretly watching over religion and morals, with powers of life and death, Plato has been said to have anticipated the Inquisition.

The likeness here is more than superficial. You will remember, in *The Brothers Karamazov*, Ivan's story of the Grand Inquisitor. An *auto-da-fé* has been held in Seville, in presence of the Cardinal and the court. Next day a stranger appears among the crowd in the market-place; and, though his coming is unobserved, he is instantly recognised. A healing virtue comes from the very touch of his garments. At the steps of the Cathedral he raises to life a child who is being brought to burial. In the confusion that follows, the Inquisitor passes by—an old man, tall and erect, with a withered face and sunken eyes, in which there is yet a gleam of light. He orders the arrest of the stranger, and at midnight visits him in the prison. He asks why he has come to hinder the work of the Church. The Church has relieved mankind of that intolerable burden of freedom, which the stranger had promised them. 'We have paid dearly for that promise', says the Inquisitor. 'For fifteen hundred years we have been wrestling with that freedom, and now it is ended. The people have brought their freedom to us, and laid it humbly at our feet.' The Church has given them, instead of freedom, authority; instead of knowledge, mystery. And men

rejoiced that they were again led like sheep. The terrible gift that had brought so much suffering was at last lifted from their hearts.

The stranger makes no answer. At the end he suddenly goes up to the old man and kisses him. The Inquisitor opens the prison door upon the dark streets, telling him to go, and never to come again. Afterwards, the memory of that kiss glows in the old man's heart, but he holds to his conviction.

If the ideal State of the *Laws* had ever become a living reality, we might imagine a parallel scene: Socrates arraigned for a second trial before the Nocturnal Council, and confronted with Plato in the president's chair. Socrates had held out the same gift of unlimited freedom and self-rule; and Plato had foreseen that mankind would not be able to bear it. So he devised this commonwealth, that the few who are wise might keep the conscience of the many who will never be wise.

But I cannot imagine the end of my story. All that I am sure of is that Plato's prisoner, unlike the Inquisitor's, would not have kept an unbroken silence.

## THE DOCTRINE OF EROS IN PLATO'S SYMPOSIUM

THE *Symposium* is held to be near in date to the *Phaedo*, in which the deliverance of Socrates by a self-chosen death from the Athenian prison becomes the symbol of the deliverance of man's soul from the prison-house of the body by its own passion for wisdom. Whichever of the two dialogues was finished first—and I suspect it was the *Phaedo*—Plato felt the need to hang beside the picture it gave of Socrates another picture as different as possible.

Every genuine drama has a physical atmosphere. The storm is as necessary to *King Lear* as the stillness after storm is to *The Tempest*. The atmosphere of the *Phaedo* is the twilight that precedes the night: 'the sun is still upon the mountains; he has not yet gone down'. It ends at sunset, with Socrates' mythical discourse about an Earthly Paradise for purified souls. The atmosphere of the *Symposium* is steeped in the brilliant light of Agathon's banquet, celebrating the victory of his play in the theatre. Socrates on his arrival, replying to the poet's welcome, speaks of his own wisdom as 'a sorry thing, questionable, like a dream; but you are young, and your wisdom is bright and full of promise—that wisdom which, two days ago, shone out before the eyes of more than thirty thousand Greeks'. And the *Symposium* ends at day-break, with Socrates arguing with the two drowsy poets till they fall asleep and he goes off to take a bath and to argue all the rest of the day at the Lyceum.

The *Phaedo* had brought out the ascetic strain in Socrates, the man of thought to whom the body with its senses and appetites is at best a nuisance. There was that strain in him. The Cynics were destined to fasten upon it and follow the track that leads from the denial of the flesh to a point where the sage will be found taking refuge in a dog-kennel—the tub of Diogenes ὁ κύνων—and advertising his singular virtue by outraging not only the graces but

the decencies of life. Plato's word for such men is ἀμουσος—uncultivated, ungracious, unmusical. Socrates was not such, but rather the chief and indispensable guest at the elegant young poet's table. If he was a man of superhuman self-restraint, that was not because there was nothing in his nature to restrain. He could drink more wine than anyone else, but no one had ever seen him drunk. He had not, as some later critics said, ignored or 'abolished' the passionate side of human nature; he had done something else with it. The man of thought was also the man of passion, constantly calling himself a 'lover', not in the vulgar sense—the speech of Alcibiades was to make that perfectly clear—but still a lover. The *Symposium* is to explain the significance of Eros to the lover of wisdom.

In the *Republic* Plato divides the soul into three parts: the reflective or rational, the spirited or passionate, and the concupiscent; and he defines the several virtues of wisdom, courage, temperance, and justice as they appear in the complex nature of man in his present state of imperfection. An essential point of this triple division is that each so-called 'part' of the soul is characterised by a peculiar form of desire. Moreover, these three forms of desire are themselves characterised by their peculiar objects. Thus, where Plato proves that the tyrannical man is of all men most miserable, he observes that each part of the soul has its own pleasure and its own characteristic desire and any one of the three may take control. The reflective part desires understanding and wisdom; the passionate aims at success, honour, and power; the concupiscent is so called because of the special intensity of the desires of nutrition and sex; it is acquisitive, loving money as a means to sensual gratification. There are, accordingly, three main types of human character determined by the dominance of one or another desire, three lives seeking respectively the pleasures of the contemplation of truth, of contentious ambition, and of material gain. The inferior pleasures are declared to be in some sense false and illusory. On the other hand, the two lower parts are not to be merely crushed and repressed. They will be positively better off, in respect of their own satisfaction, under the rule of reason than when left to themselves. And conversely, if either of the lower

parts usurps control, not only does it force the others to pursue false pleasures, but it does not even find the truest satisfaction of which it is itself capable. In this respect the lowest is the worst. A life dominated by unchecked sensual indulgence is the least pleasant of all.

Hence it appears that we are not to think of the soul as divided into reason, a thinking part, on the one side, and irrational appetite on the other; or of the internal conflict as between passionless reason, always in the right, and passion and desire, usually in the wrong. That analysis would point to an ascetic morality of the repression and mortification of the flesh, the extinction of passion and desire, leaving only dispassionate contemplation. Much of the *Phaedo* suggests a morality of that type; but there what is called 'the soul' is only the highest of the three parts, which alone is immortal; the other parts are called 'the body' or the flesh. The *Phaedo* is concerned with death and its significance for the perfect man. For him philosophy is a rehearsal of death, and death is deliverance from the flesh. But the *Republic* is concerned with this life and the best that can be made of our composite nature, in which all three forms of desire claim their legitimate satisfaction. Hence the conception of virtue is centred in the notion of a harmony of desires—a condition in which each part pursues its appropriate pleasure and finds its truest satisfaction, without thwarting or perverting the others. There is for each type of man one best possible balance or harmony of various desires. The condition may not be perfect; but it is more stable and happier than any other.

Beyond this lies an ideal solution, which would produce the perfect individual. In the later books of the *Republic* that solution is stated on the intellectual side. There is a higher education which might end in perfect knowledge and fashion the only type of man who ought to take control of human society—the philosopher-king. But the process is not purely intellectual; it involves the education of desire. This aspect is developed in the *Symposium*, in the theory of Eros, the name for the impulse of desire in all its forms. We are now to learn that the three impulses which shape three types of life are not ultimately distinct and irreducible

factors, residing in three separate parts of a composite soul, or some in the soul, some in the body. They are manifestations of a single force or fund of energy, called Eros, directed through divergent channels towards various ends. This conception makes possible a sublimation of desire; the energy can be redirected from one channel to another. The flow can be diverted upwards or downwards. The downward process is analysed in the eighth and ninth books of the *Republic*. It leads to the hell of sensuality in the tyrannical man. The upward process is indicated in the *Symposium*.

I must pass over the earlier speeches, which contribute suggestions about the nature of Eros that are either taken up or criticised in the discourse of Socrates. Last of the six speakers, Socrates follows after Agathon, the poet, who has given a sentimental and euphuistic panegyric of Eros as personified by the artist's imagination. Agathon professes to describe 'the nature of Eros himself', the most blessed of the gods, fairest and youngest, delicate and soft in form. He has every virtue: he is just, as neither doing nor suffering injustice; temperate, as the master of all pleasures, for no pleasure is stronger than Love; brave, for Ares himself cannot resist him; and wise, transforming anyone whom he touches into a poet.

Socrates then opens with a conversational criticism of Agathon. By a masterstroke of delicate courtesy he avoids making his host look foolish. He pretends that he himself had spoken of Eros in similar terms to Diotima, a wise priestess of Mantinea, and he represents the criticism as administered by Diotima to himself. This is a sufficient reason for the invention of Diotima. Socrates, moreover, can put forward the whole doctrine not as his own, but as hers, and so escape professing to know more about Eros than his fellow-guests.

Agathon's description of Eros as graced with every beauty and virtue is not a description of Eros at all, but of the object of Eros. Beauty and goodness are attributes, not of desire, but of the thing desired. This criticism points to a curious phenomenon of personification. The representations of Aphrodite and Eros in highly developed art, as an ideally beautiful woman and youth, are representations of the desirable, not of Desire—of the lovable, not

of Love. Henceforward it will be assumed that the object of Eros, in all its forms from lowest to highest, is something that can be called either the beautiful or the good, indifferently. Beauty and goodness may be manifested in a variety of forms, ranging through the whole scale of being. It is this variety of forms that distinguishes the several kinds of desire; but the passion itself is fundamentally the same.

Diotima had put the same argument to Socrates: that desire must lack that which it desires; but she had added that, if Eros lacks beauty and goodness, it does not follow that he is ugly and bad. He may be neither good nor bad. In mythical terms, Eros is neither god nor mortal, but a *daimon* intermediate between the two—one of those spirits through whom intercourse between the divine and mortal worlds is maintained. For the object of Eros is to be found in both worlds, the seen and the unseen; here there is visible beauty, a likeness of the invisible beauty yonder; and Eros lends to Psyche the wings that will carry her across the boundary. But the point here is that desire, in itself, is neutral, neither good nor bad; it takes its value from its object.

This object is first described in general terms: Eros is the desire for the possession of beauty and goodness, that is to say, of happiness. This desire is universal: 'All have a passion for the same things always.' The name Eros has been wrongly restricted in common speech to what is really only one form of this universal desire. Just as the word 'making' (ποίησις) really means creation of any kind, but has been misappropriated to one species—metrical composition, poetry—so the name of Eros is misappropriated to one species of passion, but really means 'any and every desire for good things and for happiness'. Diotima next alludes to the three types of life. Those who turn to seek it in many other directions, some in getting wealth, some in athletic pursuits, others in the pursuit of wisdom, are not called 'lovers' nor said to be 'in love'; the name has been usurped by those whose energy passes into one special form.

From this conception of a common fund of moving force Plato elsewhere draws an inference, based on experience. The amount of energy directed into one channel is withdrawn from the others,

as if only a limited quantity were available. In the *Republic* (588 B) the soul is imaged as a composite creature, part man, part lion, part many-headed monster. One who praises injustice is saying that it is profitable to feed and strengthen the multifarious monster and to starve and enfeeble the man, so as to leave him at the mercy of the other two. Again (485), where the language of Eros is used to define the philosophic nature by its essential passion for truth, the metaphor of channels is used. 'When a person's desires are set strongly in one direction, we know that they flow with corresponding feebleness in every other, like a stream whose waters have been diverted into a different channel. Accordingly when the flow of desires has set towards knowledge in all its forms, a man's desire will be turned to the pleasures which the soul has by itself and will abandon the pleasures of the body, if his love of wisdom be not feigned.' Socrates then goes on to explain how the whole character is shaped by this master passion.

We can now see more clearly how virtue of the ordinary kind, the harmony of desires in the complex nature, is effected by the readjustment of natural impulses. During this life the energy must flow along all the channels in due measure. Some part must go to preserve mortal life. The pleasure attached to bodily functions attracts the necessary force, and is innocent, if controlled and not mistaken for the end of life. Another part must go into the interests and duties of civic life. So the love of power is satisfied and rewarded with the honours bestowed by society. And the love of truth and goodness will be satisfied in the exercise of prudence or practical wisdom. The harmony of the three elements will be achieved by a right distribution of the available energy.

But this is not the end of the matter, or of Diotima's discourse. She now defines the common object of all desire as the possession of the good, with the significant addition 'for ever'. How can this be attained by the mortal creature? By means of the characteristic operation of love, generation. In all human beings there is the urge to bring to birth children, whether of the body or of the mind. The end is not the individual's immediate enjoyment of beauty, but the perpetuation of life by the creative act, to which Beauty ministers, like a birth-goddess, giving release from travail.

Procreation is the divine attribute in the mortal animal. Eros is, in the last resort, the desire for immortality.

Even in its lower forms Eros betrays this divine quality, whereby it reaches out to something beyond its immediate and apparent object—beyond any personal happiness that can be achieved and enjoyed during the individual's life. At its lowest level, in the animal form of sex-passion, its aim is the immortality of the species. 'Have you not perceived', says Diotima, 'that all animals are strangely affected when the desire comes upon them to produce offspring? They are all distraught with passion, first for union with one another and then for rearing the young creature: and for its sake the weakest will fight with the strongest and lay down their lives, or they will starve themselves to feed their young; there is nothing they will not do.' The reason is that the mortal nature seeks, within the limit of its power, to exist for ever and to be immortal. This it can achieve, not in its own person, but by leaving behind a new thing in place of the old. All mortal life is a perpetual renewal and change, not unchanging like the divine. This is the only immortality possible for the mortal race.

Discussing marriage regulations in his last work, the *Laws*, Plato writes: 'It is a man's duty to marry, remembering that there is a sense in which the human race by nature partakes of immortality—a thing for which the desire is implanted in man in all its forms; for the desire to be famous and not to lie nameless in the grave is a desire for immortality. The race of man is twin-born with all time and follows its course in a companionship that will endure to the end; and it is immortal in this way—by leaving children's children, so that the race remains always one and the same and partakes of immortality by means of generation' (721 B).

This passage mentions the desire for the immortality of fame. Diotima passes on to this: 'If you consider human ambition, you will marvel at its irrationality, unless you reflect on what I have said, and observe how strangely men are moved by the passion for winning a name, and laying up undying glory for all time.' This form of Eros is characteristic of the passionate or spirited part of the soul. Usually we think of the ambitions of this part as directed to the worldly success and advancement of the individual.

But here also desire reaches out to an immortality which the individual can never enjoy, and for this he will sacrifice all that he can enjoy and life itself.

There is, moreover, a third way in which the individual can perpetuate something of himself, namely by begetting children, not of his body, but of his mind. Of this kind are poets and creative artists, whose works survive and carry their thoughts to posterity. Still more the educator begets children of a fairer and more lasting kind, by planting his thoughts in living minds, where they will live again, to beget yet other generations of spiritual children. And with the educator is ranked the lawgiver—Lycurgus or Solon—who leaves laws and institutions as permanent means of training his fellow-citizens in virtue.

At this point Diotima pauses and says: 'Into these lesser mysteries of Eros, you, Socrates, may perhaps be initiated; but I know not whether you are capable of the perfect revelation—the goal to which they lead. I will not fail, on my part, to express it as well as I can; you must try to follow, to the best of your power.' I incline to agree with those scholars who have seen in this sentence Plato's intention to mark the limit reached by the philosophy of his master. Socrates had been the prince of those educators who can beget spiritual children in others' minds and help them to bring their own thoughts to birth. Had he gone further? Immortality in all the three forms so far described is immortality of the mortal creature, who may perpetuate his race, his fame, his thoughts, in another. The individual himself does not survive; he dies, and leaves something behind. This is immortality in time, not in an eternal world. All that is contained in the lesser mysteries is true, even if there be no other world, no enduring existence for any element in the individual soul. The disclosure of the other world—the eternal realm of the Ideas—is reserved for the greater mysteries that follow. If I am right in believing that Socrates' philosophy was a philosophy of life in this world, while Plato's was centred in another world, here is the point where they part company.

The line which here divides the lesser from the greater mysteries corresponds to the division between the two stages of education described in the *Republic*: the lower education in gymnastic and

music of the earlier books and the higher education of the philosopher in Book VII. In the *Republic* the transition is obscured by a long intervening discussion of other matters; the *Symposium* supplies the link. The end of that lower musical education was to produce in the soul reasonableness, harmony, rhythm, simplicity of character. These are likenesses, existing in individual souls, of the eternal Ideas of Temperance, Courage, and the other virtues. Such an image is, for him who can discern it, the noblest object of contemplation, and also the loveliest: it inspires Eros in the musical man, the love of the individual person in whom these images of goodness dwell. So music ends, where it should end, in the passion for beauty, not a passion for sensual pleasure. From this point the greater mysteries of the *Symposium* start. They describe the conversion of Eros from the love of a single beautiful and noble person to the love of the Beautiful itself. They correspond to the higher intellectual education of the *Republic*, where the eye of the soul is converted from the idols of the Cave to the upper world of sunlight and finally to the vision of the Good. In this last transformation Eros becomes a passion for immortality, not in time, but in the region of the eternal.

There are four stages in this progress. The first step is the detachment of Eros from the individual person and from physical beauty. The individual object is lost sight of in the realisation that all physical beauty is one and the same, in whatsoever individual it may appear.

The passions [writes Mr Santayana], in so far as they are impulses to action, entangle us materially in the flux of substance, being intent on seizing, transforming, or destroying something that exists; but at the same time, in so far as they quicken the mind, they are favourable to the discernment of essence; and it is only a passionate soul that can be truly contemplative. The reward of the lover, which also chastens him, is to discover that, in thinking he loved anything of this world, he was profoundly mistaken. Everybody strives for possession; that is the animal instinct on which everything hangs; but possession leaves the true lover unsatisfied: his joy is in the character of the thing loved, in the essence it reveals, whether it be here or there, now or then, his or another's. This essence, which for action was only a signal letting

loose a generic animal impulse, to contemplation is the whole object of love, and the sole gain in loving.<sup>1</sup>

Next, we must learn to value moral beauty in the mind above beauty of the body, and to contemplate the unity and kinship of all that is honourable and noble—a constant meaning of τὸ καλόν—in law and conduct.

The third stage reveals intellectual beauty in the mathematical sciences. Eros now becomes the philosophic impulse to grasp abstract truth and to discover that kind of beauty which the geometer finds in a theorem and the astronomer in the harmonious order of the heavenly bodies. By now we have lost sight of individual objects and the temporal images of beauty, and we have entered the intelligible world.

The final object—beyond physical, moral, and intellectual beauty—is the Beautiful itself. This is revealed to intuition 'suddenly'. The language here recalls the culminating revelation of the Eleusinian mysteries—the disclosure of sacred symbols or figures of the divinities in a sudden blaze of light. This object is eternal, exempt from change and relativity, no longer manifested in anything else, in any living thing, or in earth or heaven, but always 'by itself', entirely unaffected by the becoming or perishing of anything that may partake of its character. The act of acquaintance with it is the vision of a spectacle, whereby the soul has contact with the ultimate object of Eros and enters into possession of it. So man becomes immortal in the divine sense. As in the *Republic*, the union of the soul with Beauty is called a marriage—the sacred marriage of the Eleusinia—of which the offspring are, not phantoms like those images of goodness that first inspired love of the beautiful person, but true virtue, the virtue which is wisdom. For Plato believed that the goal of philosophy was that man should become a god, knowing good from evil with such clearness and certainty as could not fail to determine the will infallibly.

The final act of knowledge is described as an immediate intuition in which there is no longer any process of thought. The eye of the soul directly contemplates reality. We may, and perhaps

<sup>1</sup> G. Santayana, *The Realm of Essence* (Constable, 1928), p. 116.

must, conjecture that the description is based on some experience which Plato had at privileged moments. There is no warrant in tradition for supposing that he ever passed into a condition of trance or ecstasy. The Neoplatonists would have seized eagerly on any such tradition, had it existed in the school. He uses the language of the Eleusinian mysteries because it is appropriate to a sudden vision led up to by a long process of instruction and initiation. But the revelation at Eleusis, of course, no more involved ecstasy than does the elevation of the host. Perhaps Plato's experience should be called metaphysical, rather than religious—a recognition of ultimate truth. On the other hand, it is not purely intellectual, but a conversion of every element in the soul by the last transfiguration of Eros: and at that point the distinction between the metaphysical and the religious may become meaningless.

To return to the theory of Eros: the energy which carries the soul in this highest flight is the same that is manifested at lower levels in the instinct that perpetuates the race and in every form of worldly ambition. It is the energy of life itself, the moving force of the soul; and the soul was defined by Plato precisely as the one thing that has the power of self-motion. The Platonic doctrine of Eros has been compared, and even identified, with modern theories of sublimation. But the ultimate standpoints of Plato and of Freud seem to be diametrically opposed. Modern science is dominated by the concept of evolution, the upward development from the rude and primitive instincts of our alleged animal ancestry to the higher manifestations of rational life. The conception was not foreign to Greek thought. The earliest philosophical school had taught that man had developed from a fish-like creature, spawned in the slime warmed by the heat of the sun. But Plato had deliberately rejected this system of thought. Man is for him the plant whose roots are not in earth but in the heavens. In the myth of transmigration the lower animals are deformed and degraded types, in which the soul which has not been true to its celestial affinity may be imprisoned to work out the penalty of its fall. The self-moving energy of the human soul resides properly in the highest part, the immortal nature. It does not rise from beneath, but rather sinks from above when the spirit is ensnared

in the flesh. So, when the energy is withdrawn from the lower channels, it is gathered up into its original source. This is indeed a conversion or transfiguration; but not a sublimation of desire that has hitherto existed only in the lower forms. A force that was in origin spiritual, after an incidental and temporary declension, becomes purely spiritual again. The opposition to Freud is not merely due to misunderstanding and prejudice. It is due to the fact that the religious consciousness of Christianity has been, almost from the first, under the influence of Platonism.

I adopted the view that Diotima's words to Socrates on the threshold of the greater mysteries, where she doubts if he can follow her further, indicate that Plato is going beyond the historic Socrates. It has been objected that this interpretation makes Plato 'guilty of the arrogance of professing that he has reached philosophical heights to which the historical Socrates could not ascend'. But the best commentary on the *Symposium* is to be found in the *Divine Comedy*. Dante, as a man, was far more arrogant than Plato; but it was not arrogance that made him represent Virgil as taking leave of him at the threshold of the Earthly Paradise, before his flight from Earth to Heaven. Dante has passed the seven circles of Purgatory and is now purified of sin. Virgil, who has guided him so far, stands for human wisdom or philosophy, which can lead to the Earthly Paradise, but not to the Heavenly. The analogy is not complete. Dante's guide to the higher region is the Christian revelation, the divine wisdom symbolised by Beatrice—not a further development of human philosophy, but a God-given addition. But if there is some analogy, Plato might mean that his own philosophy, centred in another world, lay beyond the explicit doctrine of his master, though it might be implicit in his life and practice. That is not to deny that Socrates was the ideal philosopher, who lived (though he never taught) what Plato intends to teach. Nor is it to say that Plato claimed to be a greater philosopher than Socrates, any more than Dante claimed to be a better poet than Virgil.

However that may be, Virgil's farewell words exactly express the doctrine of Eros:<sup>1</sup>

<sup>1</sup> *Purgatorio*, Canto xxvii, lines 115 ff.

of showing that the past they love is not out of date. But one purpose of this course of lectures should be to point out that the ancients were not moderns in the stage of infancy or adolescence. The Graeco-Roman culture was a self-contained growth, with its own infancy, adolescence, maturity, and decay. After the Dark Age and the Middle Ages, the modern science of Nature starts at the Renaissance with a fresh motive impulse. The questions it asks are different questions. Its method is a new method, dictated by the need to meet those new questions with an appropriate answer.

You know better than I do what you are trying to find out here in your laboratories, and how and why you go about your task. I am told that you proceed by a method of tentative hypotheses, suggested by careful observation of facts, and controlled by no less careful experiment. Your objective has been described (at least till very recently) as the discovery of laws of cause and effect, invariable sequences of phenomena. And your motive—what is your motive? Shall we say: a pure and dispassionate love of truth for its own sake? I will accept that answer gladly; long may it remain as true as it is now in Cambridge. But there are some people who think that truth is the same thing as usefulness, and that the study of Nature really aims at the control of natural forces as a means to a further end. Some, again, would define that end as the increase of wealth and material comfort, and increase of power, which may itself be used to destroy, not only the comfort, but the lives, of our competitors in the scramble for wealth. Hence the subsidies lavished on natural science by War Departments and captains of industry. Hence the unabashed emergence of Nordic physics in central Europe and of proletarian physics farther east. Your very protons and electrons are suspected of capitalist or Marxian sympathies. Your neutrons are not to be politically neutral.

Now if that is a roughly true picture of natural science in the last four centuries, it differs in every respect—in method, in objective, and in underlying impulse—from the physical speculation of antiquity. My purpose is to bring out these differences and to raise, if I cannot wholly answer, the question why they exist.

First, let me indicate the limits of my subject. Other speakers

are to deal with Greek mathematics and biology. 'Science and Philosophy' in the title of this lecture must be taken to mean what the Greeks called Physics or 'the inquiry into the nature of things'. In this field all the most important and original work was done in the three centuries from 600 to 300 B.C. After Aristotle's death in 322 physics fell into the background; philosophers became pre-occupied with the quest of a moral or religious faith that would make human life bearable. In those first three centuries no line was drawn distinguishing philosophy from the study of Nature. Before Aristotle there were no separate branches of natural science. The word for science (knowledge, ἐπιστήμη) was applied rather to mathematics, because mathematics deals with exactly defined unchanging objects and demonstrable truths, and so could claim to yield knowledge in the fullest sense. Physics was known as 'the inquiry into the nature of things'. We should speak of it rather by its older name, natural philosophy. Accordingly, we are now concerned only with the natural philosophy of the period ending with the school of Aristotle.

Let us begin with method and procedure. In this period, down to and including Aristotle's master, Plato, philosophy perpetuated the traditional form of exposition—the cosmogonical myth, a narrative describing the birth or formation of an ordered universe. Such myths are found all over the world, in societies where science has never begun to exist. They exhibit two main patterns, singly or in combination: the evolutionary and the creational. In the one the world is born and grows like a living creature; in the other it is designed and fashioned like a work of art. The formula is familiar: 'In the beginning the earth was without form and void; and darkness was upon the face of the deep.' Or, in more refined language: 'In the beginning was an indefinite incoherent homogeneity.' The initial assumption is that the complex, differentiated world we see has somehow arisen out of a state of things which was both simple and disorderly.

The earliest Greek school at Miletus in the sixth century followed the evolutionary scheme. The original condition of things was water or mist. Cosmogony then proceeds to tell how this

primitive moisture was condensed to form the solid core of earth, and rarefied into the encompassing air and the heavenly fires. Then, within this elemental order, life was born in the slime warmed by the sun's heat. This evolutionary tradition culminated in the Atomism of Democritus, towards the end of the fifth century. His system, with slight modifications, was adopted, after Aristotle's death, by Epicurus, and reproduced by Lucretius for the Roman public in the first century B.C. For Democritus the original state of things was a chaos of minute solid bodies, moving incalculably in all directions in a void, colliding, and forming vortices in which ordered worlds arise, by necessity and chance without design. There are innumerable worlds, some being formed, others falling to pieces, scattered through unlimited empty space.

The alternative pattern, preferred by Plato for moral and religious reasons, is the creational. The world is like a thing not born but made, containing evidences of intelligent and intelligible design. Necessity and chance play only a subordinate part, subdued (though not completely subdued) to the purposes of a divine Reason. For convenience Plato retained the old narrative form of exposition; but neither he nor Aristotle believed that the cosmos had any beginning in time or will ever come to an end. So Plato's myth of creation in the *Timaeus* is really a disguised analysis of the complex world into simpler factors, not a literal history of its development from a disorderly condition that once actually existed.

For Plato and Aristotle there is only one world, a spherical universe bounded by the fixed stars. Plato held that it was animated by a World-Soul, whose intelligence is responsible for those elements of rational order which we can discern in the structure. Blind necessity and chance are also at work, producing results which no good intelligence could desire; but they are in some degree subordinated to co-operate with benevolent Reason. For this Reason Aristotle substitutes a vaguely personified Nature, who always aims at some end.

Now, whichever of the two patterns be adopted—the evolutionary or the creational—cosmogony deals dogmatically with matters wholly beyond the reach of direct observation. You must, indeed, look at the world to see that there is a solid earth at the

centre, surrounded by layers of water, air, and fire; but no one had observed the primitive disorderly condition, or how order arose from it, and life came to be born. Nor did it occur to the ancients that their imaginative reconstruction of the past could be checked by any experimental test. For example, Anaximenes, the third philosopher of the Milesian School, held that as the primitive air or mist passed from the gaseous state to the liquid, as water, and from the liquid to the solid, as earth and stones, it became colder and also denser, more closely packed. On this showing ice ought to take up less room than water. But Anaximenes never set out a jar of water on a frosty night so as to find out how much the water would shrink when turned to ice. The result would have surprised him. It is still stranger to our minds that no critic should have thought of confirming or confuting him by this means.

This neglect of experiment is connected with the traditional form of exposition. Physical theories were stated, not as hypotheses, but as a narrative of what happened in the remotest past: 'In the beginning' there was water, or mist, or qualities like hot and cold, or atoms of definite sizes and shapes. Who could decide which of these accounts was to be preferred? A physicist could do little more than accuse others of inconsistency; he could not prove his own doctrine to be true. 'We are all inclined', says Aristotle, 'to direct our inquiry not by the matter itself, but by the views of our opponents; and, even when interrogating oneself, one pushes the inquiry only to the point at which one can no longer find any objections' (*De Caelo* 294 B 7). On the other hand, these early philosophers did good service by thinking out a number of alternative possibilities, some of which might bear fruit later. Atomism, which has recently borne astonishing fruit, might not have been thought of, if Democritus had not allowed his reason to outrun his senses, and assert a reality which the senses can never perceive, and no means of observation then existing could verify.

So much for differences of method. My second point is the difference in objective: what it was that the ancients were bent upon discovering.

Both types of cosmogony can be regarded as answering the question: what things really and ultimately *are*? Suppose you say

that the objects we see around us are compounds of earth, water, air, and fire, and that earth, water and fire themselves were originally formed from air, by condensation or rarefaction. You will then hold that everything now really and ultimately consists of air, in different states of density. Or you may say that everything really consists of atoms. On these lines the evolutionary type of cosmogony will declare that the real nature of things is to be found in their matter. Your philosophy will then be materialistic; and you may go on to say (as Democritus did) that the soul consists of specially mobile spherical atoms, and that all our thoughts and feelings are to be explained in terms of the motions and collisions of minute impenetrable bodies. To some this may sound fantastic; but there are still people who would like to believe something of the sort, and there are signs that the Epicurean philosophy is again becoming popular.

To this question of the real nature of things, the creational type returned a different answer. It found this real nature, not in the matter, but in the form. That was because it looked on the world as a product of craftsmanship; and the essence of such products lies in their form.

A potter is moulding clay. You ask, what is this thing he is making? A teapot. What is a teapot? A vessel with a spout to pour the tea through, a lid to keep it hot, and a handle to hold the thing by without burning your fingers. You now understand the nature of the object in the light of the purpose dictating its essential features. The material is not essential: you can make a teapot of clay or of silver or of any rigid stuff that holds liquid. The essence or real being or substance of the thing is its form. Now suppose that the world is like a teapot in being a work of design. Matter will then exist for the sake of the form that is to be realized. The essence of living creatures will be the perfect form into which they grow. It is manifest in the full-grown tree, not in the seed. The real nature must be sought in the end, not in the beginning, and the end irresistibly suggests the aim of conscious or unconscious purpose. This type of cosmology reached its perfection in Plato and Aristotle, in deliberate opposition to materialism.

But whether the answer be matter or form, both types tell us

what things really *are*; they do not confine themselves to the question, how things *behave*. Here is the second point of difference between ancient and modern natural philosophy. At all times the quest is for something permanent, and therefore knowable, in the ceaseless flow of appearances. For the ancients this permanent something is substance, whether substance be understood as tangible material substance or as the intangible essence of the specific form.

Aristotle takes both into account: he speaks of the material and formal 'causes' of things. Neither is a 'cause' in our sense of the word. They are the two constituents, which answer the question: what *is* this thing? The moderns, on the other hand, are concerned, not so much with what things are, as with how they behave. By a cause we mean some phenomenon or event which regularly precedes some other phenomenon or event, called its 'effect'. We are looking for those invariable connections or sequences which are known as 'laws of nature'. Such laws do not describe the internal nature of things, but rather the constant relations between them.

Why was there this difference of objective—the ancients defining the substance of things, the moderns formulating sequences of events? One reason was that, for the ancients, the pre-eminent science, setting the pattern of all organised knowledge, was geometry. Geometry alone had developed a method and technique of establishing necessary truths—proving conclusions that must be accepted by anyone who accepted the premisses. And the method of geometrical reasoning was leading to a continual and triumphant progress in discovery. No wonder that the search for something certain and knowable in the physical world should follow this brilliant example and unconsciously imitate its methods.

Now geometry is not at all concerned to describe the sequence of events in time. It has no use for observation or experiment. It starts from a definition, stating, for instance, what the triangle essentially is. It then goes on to deduce from that definition and a few other explicit premisses, a whole string of necessary properties of the triangle: its angles are equal to two right angles, and so on. If you can exhaust these necessary properties, you will

This manner of approach has a further consequence. When we pass from the abstract and timeless objects of geometry to the changing things in this visible world, we find that individual men, unlike the triangle, have also many properties that are not essential. A man may be tall or short, white or black, wise or foolish. Besides the essential core of properties, without any one of which he would not be a man at all, there is, in any particular man, a fringe of attributes which he may or may not have, may acquire or lose without ceasing to be human. These attributes are called 'accidental' or 'contingent', as opposed to 'essential' and 'necessary'. If your object is to define the universal essence common to all men, you will rule out these accidental properties of individuals as beyond the scope of knowledge. And the words 'accidental', 'contingent' suggest chance—what is not determined one way or the other, but may or may not be so. The notion of chance is very obscure, and I cannot pursue it; but I believe that ancient views of the world allowed more scope for chance than is commonly recognised.

If so, that is because the ancients were not thinking of Nature, as we think, in terms of invariable laws of cause and effect. When you arrive at that notion, chance must disappear. Every event must have another event before it as cause, and before that yet another, and so on for ever. Order and Necessity will now cover the whole field, usurping the old domain of the accidental, contingent, disorderly, unknowable. So the belief in universal law led modern science to complete determinism. Miracles were not to happen. The gods were either eliminated or pushed back to an imaginary beginning, with the honorary title of First Cause—honorary, because no one really believed that there could be such a thing as a first cause. And man himself was asked to surrender the inveterate belief in his own freedom, lest he should break in upon the chain of necessary events and start a fresh and unpredictable series. In order that Nature may work like a perfect machine, man must keep in his place as a part of the machine. The ancients, in the period we are considering, were not troubled by this question of freedom, because they did not think of Nature as a perfect machine.

That word 'machine' brings me to my third point: the question

of the motive or driving impulse behind the two traditions of natural philosophy, the ancient and the modern. The difference in objective carries with it two different ways of looking at Nature. Scientific inquiry must select and concentrate attention upon certain aspects of the world, ignoring other aspects as irrelevant. And this selection is determined by interest, some feeling of need or desire, some value set upon this or that end in life.

Now it is a truism that the era of modern science with its mechanistic view of Nature has coincided with the era of mechanical invention, from Leonardo to Marconi. You will notice also that two of the later lectures in this series will deal with the relation of science to industry, in the Middle Ages and in modern times. But there is no lecture on the relation of ancient science to industry. The reason is that natural philosophy as pursued in the classical period had no bearing whatsoever on mechanical inventions. It was for this lack of interest in the means of production that the ancient philosophers were denounced in the first year of Queen Victoria by Lord Macaulay in his essay on Francis Bacon. Macaulay exalts Bacon as the apostle of modern scientific progress. A philosopher of our own day has recognised in Bacon the prophet of Big Business. There is surely some connection between the two descriptions. But listen for a moment to Macaulay's panegyric:

The chief peculiarity of Bacon's philosophy seems to us to have been this, that it aimed at things altogether different from those which his predecessors proposed to themselves. This was his own opinion. . . . What then was the end which Bacon proposed to himself? It was, to use his own emphatic expression, 'fruit'. It was the multiplying of human enjoyments and the mitigating of human sufferings. . . .

Two words form the key of the Baconian doctrine, Utility and Progress. The ancient philosophy disdained to be useful and was content to be stationary. . . . It could not condescend to the humble office of ministering to the comfort of human beings. . . . Once indeed Posidonius, a distinguished writer of the age of Cicero and Caesar, so far forgot himself as to enumerate, among the humbler blessings which mankind owed to philosophy, the discovery of the principle of the arch, and the introduction of the use of metals. . . . Seneca vehemently

varied pleasures, but on untroubled peace of mind; and that the pursuit of wealth and power had made man less happy even than his primitive ancestors before they found out the use of fire and the working of metals. As Lucretius says:

If a man would order his life by a true principle, for him a frugal subsistence joined to a contented mind will be great riches; for he whose needs are small will never be in want. But men desired to be famous and powerful, hoping that their fortunes might rest on a firm foundation, and wealth might enable them to lead a tranquil life. But all in vain. . . .

Man labours to no purpose and wastes his life in fruitless cares, because he has not learnt what is the true end of possession, and up to what point true pleasure goes on increasing. This by slow degrees has carried life out into the deep sea, and stirred up from their lowest depths the mighty billows of war.

If my train of thought has been sound, this difference of motive and consequent interest—in the last resort a question of human values—lies at the root of the other differences we have noted. The arts of peace, as they were called in Macaulay's day, are now openly described in terms of the art of war. In Russia a party of labourers, who have painfully learnt what hard work means, are said to be despatched as 'shock troops' to 'the agricultural front'. All wars, as Plato remarked, are made for the purpose of getting money and the material things that money can buy. It is now admitted that industry at home and commerce abroad are a warfare waged for the same purpose. There is also the class war, to decide whether the money and the goods shall go to the rich or to the poor. I have suggested that, for economic reasons, the ancient study of Nature was not drawn into this perennial struggle. So it was suffered to remain as part of the pursuit of peaceful wisdom and of a happiness independent of wealth and even of material comfort. The fruits it gathered from the Tree of Knowledge were not the Baconian fruits of utility and progress.

## A RITUAL BASIS FOR HESIOD'S *THEOGONY*

PROFESSOR Mazon has recently described Hesiod's *Theogony* as 'a genealogy interrupted by episodes'. These episodes are myths, and Professor Mazon rightly remarks that their authenticity ought not to be suspected merely because they interrupt the genealogy, or because they are not consistent with one another. The texts produced by higher critics, who have given rein to such suspicions, leave the impression that the poem consists mainly of interpolations, like a bad sponge consisting mostly of holes. They are approaching the point at which the critics of the Pauline Epistles, having condemned them all, one after another, were left with no means of knowing what a genuine Pauline Epistle would be like. If the game was to go on, it was necessary to restore at least one to serve as a criterion for rejecting the remainder; and when that had been done, most of the others crept back again one by one into the canon.

This paper is inspired by the hope of rescuing some of the so-called episodes now jettisoned from the *Theogony*. I shall call in question what seems to be the current view, that the narrative parts of the poem are a mere patchwork of unconnected stories drawn from a variety of sources: Homer's account of the Olympian society; local cult-legends; other myths universally current in Greece; and a few stories too crudely indecent to be acknowledged as Hellenic.<sup>1</sup> I shall argue that the bulk of the episodes fit into the pattern of a very old myth of Creation, known to us from eastern sources and ultimately based on ritual.

Hesiod's own programme, laid down in the prelude, mentions three elements that are to figure in the poem: (1) theogony proper, i.e. the generations of the gods; (2) cosmogony, or the formation of the physical world-order and the creation of mankind; and (3) the story of how the gods took possession of

<sup>1</sup> So Ziegler in Roscher, *Lex. Myth.* s.v. 'Theogonien'.

Olympus under the supreme kingship of Zeus, who apportioned to the other gods their several provinces and honours.

(1) We can quickly pass over the first element—the genealogies of the gods. Hesiod gives three main lines of descent: (a) The children of Night prove to be a list of allegorical abstractions: Death, Sleep, the Fates, and all the afflictions which plague mankind. (b) The children of the Sea (Pontos), including a Dragon of the Waters with a brood of monsters, of whom we shall hear more later on. (c) Finally there are the offspring of Ouranos and Gaia: the earlier generation of Titans, Cyclopes, and the Hundred-Armed, and the second generation of the sons of Cronos, Zeus and the other Olympians and their descendants. These genealogies, though bewilderingly complicated, can be understood as an effort to combine in one pantheon a very miscellaneous collection of supernatural beings, ranging from the most concrete and anthropomorphic to the barest allegorical abstractions.

(2) Setting aside the genealogies, we come next to the second factor, cosmogony: 'how at the first the gods and earth came into being, and the rivers, and the swelling rage of the boundless sea, and the shining stars, and the broad heaven above' (108-10). The cosmogony, so announced in the prelude, follows immediately. It is quite short, occupying seventeen lines of which three or four are possibly spurious (116-32).

We are here told how the main divisions of the existing cosmos came into being: the earth with its dry land and seas, and the sky above with its stars. The veil of mythological language is so thin as to be quite transparent. Ouranos and Gaia, for instance, are simply the sky and the earth that we see every day. They are not here supernatural persons with mythical biographies and adventures. Even when Earth is said to 'give birth' to the mountains and the sea, Hesiod himself tells us that this is conscious metaphor: a 'birth' can only follow upon a marriage, but here it occurs 'without love or marriage', ἄτερ φιλότητος ἐφιμέρου (132). The metaphor means no more than that this cosmogony is of the evolutionary type. There are no personal gods to make the world

out of pre-existing materials according to the alternative pattern, the creational. The personal gods come later, when the world-order is already complete.

At that moment (132) Gaia and Ouranos suddenly become mythical persons, who marry and have children—Gaia is now a goddess, who can plot with her son Cronos to mutilate her husband Ouranos. We have passed into the world of myth, where the characters acquire the solidity and opaqueness of anthropomorphic individuals, with the whole apparatus of human motive and action.

(3) The remainder of the poem—the third of our three elements—moves in this genuine mythical atmosphere. It is a story of the adventures which led from the birth of the earliest gods to the final establishment of Zeus, triumphant over his enemies, as king of the gods and of the universe.

My object is to show that we have here not 'a genealogy interrupted by episodes', but a sequence of episodes, most of which once formed parts of a connected pattern, interrupted by genealogies, which serve to explain how the characters in the mythical action came into existence. The sequence of episodes itself constitutes what is, in essence, a hymn to Zeus and also a hymn of Creation—a mythical account of the beginning of things, immeasurably more primitive in character than the evolutionary cosmogony that precedes it. These two elements—the cosmogony and the hymn of Creation—are not in origin what Hesiod has made them, two chapters in a single story. The hymn is based on a genuine myth of enormous antiquity, itself founded on ritual. The cosmogony, on the other hand, has almost completely emerged from the atmosphere of myth. It is only just on the wrong side of the line we draw between mythical thinking and the earliest rational philosophy—the system of the Milesians.

#### CONTENTS OF THE COSMOGONY

Let us look first at the cosmogony.

I can only deal very shortly with its contents. I think it can be shown to conform to a pattern which also appears in the Orphic

cosmogonies and underlies the Ionian systems of philosophy from Anaximander onwards.

(1) 'First of all Chaos came into being.' There should be no doubt about the meaning of *Chaos*.<sup>1</sup> Etymologically, the word means a yawning gap; and in the Greek poets, including Hesiod himself (*Theog.* 700), it denotes the gap or void space between sky and earth. Ibycus (29), Bacchylides (v, 27) and Aristophanes (*Birds*, 192) all speak of birds as flying in or through this space (διὰ τοῦ χάους, ἐν χάει).

A gap or yawn *comes into being* (Hesiod says γένητο, not ἦν) by the separation of two things that were formerly together. What these things were we learn from a fifth-century Ionian system, preserved by Diodorus (1, 7).<sup>2</sup> It opens with the words: 'Originally, heaven and earth had one form (μίαν ιδέαν), their natures being mingled; then, when these bodies had taken up their stations apart from one another, the world embraced the whole order now seen in it.' Diodorus cites as parallel the famous lines of Euripides' Melanippe: 'The tale is not mine—I had it from my mother: how heaven and earth were once one form, and when they were separated apart, they gave birth to all things.'

Orpheus (Apollonius Rhodius, *Argon.* 1, 496) sang 'how earth and heaven and sea were once joined together in one form, and by deadly strife were separated from each other', then the heavenly bodies, mountains and rivers (dry land and water) were formed; and finally all living things.

Thus all these cosmogonies begin with a primal unity, which is separated apart, when the sky is lifted up from the earth, leaving the yawning gap of void or air between.

(2) By the opening of the gap, the broad bosom of Earth is revealed (γαῖα εὐρύστερνος), and Eros. Eros is an allegorical figure.

<sup>1</sup> Most modern discussions of this term are vitiated by the introduction of the later idea of infinite empty space, and by modern associations with disorder. I do not think Chaos is ever described as ἀπειρον, and if it were, that would mean no more than 'immeasurable', as when the word is used of the earth or the sea.

<sup>2</sup> This system is now ascribed (Diels-Kranz *Vors.* 5, II, 135) to Democritus; but there is no mention of atoms.

(5) Then comes the distinction of the dry land from the sea: 'Earth gave birth to the high hills and to the sea (Pontos) with swelling waves.' This was *not* the result of a marriage, but ἄτερ φιλότητος ἐφιμέρου, another act of separation.

So again, in the Ionian systems, the last stage is the separation of dry from moist, when part of the earth is dried by the sun's heat, and the seas shrink into their beds.

The world-order is now complete as we see it, with its four great divisions: earth, sea, the gap of air, and starry sky above. From first to last the process is the separation or division, out of a primal indistinct unity, of parts which successively became distinct regions of the cosmos.

This cosmogony, as I have remarked, is not a myth, or rather it is *no longer* a myth. It has advanced so far along the road of rationalisation that only a very thin partition divides it from those early Greek systems which historians still innocently treat as purely rational constructions. Comparison with those systems shows that, when once the cosmic order has been formed, the next chapter should be an account of the origin of life. In the philosophies, life arises from the interaction or intercourse of the separated elements: animal life is born of the action of the heavenly heat on the moist slime of earth. This is the rationalised equivalent of the marriage of Heaven and Earth. And sure enough this marriage follows immediately in Hesiod: Gaia lay with Ouranos and brought forth the Titans. And so the genealogies begin—the theogony proper.

But here comes the sudden change I mentioned.

These gods are supernatural persons, with human forms and characters and well-known biographies. So at this point we turn back into that world of mythical representation which the rationalised cosmogony had left so far behind. Sky and Earth are re-transformed into a god and goddess, whose love and hate are depicted in all too human terms.

Here, where the mythical hymn to Zeus begins with the birth of the eldest gods, we must leave Hesiod for the moment to note a curiously close parallel to this sudden shift from rationalised cosmogony back to pure myth.

The first three chapters of Genesis contain two alternative accounts of Creation. The first account, in its present form, was composed not earlier than the Exile; it is considerably later than Hesiod, it may even be later than Anaximander. In this Hebrew cosmogony, moreover, we find nearly the same sequence of events. Let us recall what happened on the six days of Creation.

(1) There is the original confusion, the unformed watery mass wrapped in darkness. Light appears, divided from darkness, as day from night.

(So Hesiod's gap opened and Day was born from Night.)

(2) The sky as a solid firmament (στερέωμα) is lifted up to form a roof separating the heavenly waters, whence the rain comes, from the waters on the earth.

(This corresponds to Hesiod's Earth generating the sky as a secure seat for the gods. There is the same duplication that we noted.)

(3) The dry land is separated from the sea, and clothed with plants and trees.

(4) The heavenly bodies, sun, moon, and stars are made.

(As in the Greek myths and philosophies, their formation follows that of the earth.)

(5) & (6) Then came the moving creatures with life—birds, fishes, and creeping things—and finally man.

(Thus life appears when the cosmic frame is complete.)

The most striking difference from the Greek cosmogonies is that Hebrew monotheism has retained the Divine Creator as the sole first cause. Otherwise there are no mythical personifications, no allegorical figures like Eros or Phanes. And the action of the Elohim is confined to the utterance of the creative word. He has become extremely abstract and remote. If you eliminate the divine command: 'Let there be' so-and-so, and leave only the event commanded: 'There was' so-and-so, and then link these events in a chain of natural causation, the whole account is transformed into a quasi-scientific evolution of the world-order. The process is the same as in the Greek cosmogonies—separation or differentiation out of a primitive confusion. And as measured

by the absence of allegorical personifications, Genesis is less mythical than Hesiod's *Theogony*, and even closer to the rationalised system of the Milesians.

When we turn to the second account of Creation in Genesis ii-iii, we find ourselves back once more in the world of myth. The utterly remote Elohim of the first chapter is replaced by an anthropomorphic Jahweh, who moulds man out of dust, breathes life into his nostrils, plants a garden with trees, takes the man's rib and makes out of it a woman, walks in the garden in the cool of the day, and speaks to Adam with a human voice. The substance of the story also is composed of genuine myths: the woman Eve and the trouble she brings recall Hesiod's Pandora; there is the myth explaining man's mortality by failure to eat the fruit of the tree of life; and so on.

These myths may represent the concluding episodes in a primitive Creation myth. The earlier part, dealing with the formation of the world-order before man was made, has been suppressed by the priestly compilers of Genesis. They substituted for it their own expurgated and semi-philosophical cosmogony in the first chapter.

There is thus a curious parallel between Hesiod and Genesis. In both we find a prosaic cosmogony followed by a shift back into the world of poetry, peopled by the concrete human figures of mythical gods. This is no mere accident. In each case the cosmogony is the final product of a long process of rationalisation, in which the expurgation of mythical imagery has been carried so far that the result might almost be mistaken for a construction of the intellect reasoning from observation of the existing world. Only when we reflect on certain features do we realise that it can be nothing of the kind. There is nothing whatever in the obvious appearance of the world to suggest that the sky ever had to be lifted up from the earth, or that the heavenly bodies were formed after the earth, and so on. The same remark applies to the slightly more rationalised cosmogonies of the Ionian philosophers. They follow the same pattern, which pattern could never have been designed by inference from the observation of nature.

Now the value of the parallel I have drawn with Hebrew cosmogony lies in the fact that the Old Testament has preserved

elsewhere other traces of the original myth of Creation which the priestly authors of Genesis have largely obliterated. This myth has been restored by scholars, and, what is more, traced to its origin in ritual. And behind this Palestinian myth and ritual lie the Babylonian Hymn of Creation and the corresponding New Year rites. If we follow this track, we shall, I believe, discover the framework of those episodes which make up the third element in Hesiod's *Theogony*—the mythical hymn to Zeus.

#### THE OPENING OF CHAOS

We may start from that curious feature I have emphasised: the fact that, both in Hesiod and Genesis, the separation of sky from earth occurs twice over. We will take the two versions of this event separately.

First there is the opening of the gap and the appearance of light in the primaeval darkness. Turning from Hesiod's cosmogony to the hymn which follows, we find that this event has its counterpart in the first episode of the myth. Fifty years ago Andrew Lang pointed out that the mutilation of the sky-god by his son Cronos could be 'explained as a myth of the violent separation of the earth and sky, which some races, for example the Polynesians, supposed to have originally clasped each other in a close embrace'. I quote these words from Frazer's *Adonis* (I, 283); and this explanation is adopted by Nilsson in his *History of Greek Religion* (p. 73).

After mentioning the Orphic world-egg, Nilsson writes: 'Still more crude is the cosmogonic myth in Hesiod. Ouranos (the sky) settled down upon Gaia (the earth), completely covering her, and hid their children in her entrails. Gaia persuaded her son Kronos to part them by cutting off the genitalia of Ouranos. There are curious parallels in the Egyptian myth of Keb and Nut, the earth-god and the goddess of heaven, and in the Maori myth of Rangi and Papa.'

In this myth we read:<sup>1</sup> 'From Rangi, the Heaven, and Papa, the Earth, sprang all men and things; but sky and earth clave together,

<sup>1</sup> Tylor, *Primitive Culture* I, 322.

of Jahweh slaying the dragon Rahab or Leviathan. Here is one of many:

God is my king of old, working salvation in the midst of the earth.  
Thou didst divide the sea by thy strength; thou brakest the heads  
of the dragons in the waters.

Thou breakest the heads of leviathan in pieces. . . .

The day is thine, the night also is thine; thou hast prepared the light  
and the sun.

Thou hast set all the borders of the earth: thou hast made summer and  
winter.<sup>1</sup>

Here the dividing of the waters by the firmament is equated with the breaking of the dragon in pieces. It is followed by the creation of light and the sun, the ordering of the seasons, and fixing of the borders of the earth.

Now in Hesiod, one of the most exciting episodes is the slaying of the dragon by Zeus. This is one of the passages which the editors condemn on account of some inconsistency and dislocation. Among the descendants of Pontos we find the half-human dragon Echidna, who in marriage with Typhaon produces a brood of monsters (*Theog.* 295 ff.). Later (820), after the expulsion of the Titans from heaven, comes the battle of Zeus with the dragon Typhoeus, here the child of Earth and Tartarus. The whole of nature is involved in the turmoil of this terrific struggle. After his victory, Zeus, like Marduk, is established as king over the gods, and apportions to them their stations in the world-order.

On the strength of the Hebrew and Babylonian parallels (not to mention others), I claim that the battle of Zeus and the dragon Typhoeus is an original feature of the Greek Creation myth, which should be followed by the lifting up of the sky and the formation of the heavenly bodies. Of this sequel just a trace remains in the cosmogony, where the earth gives birth to the heaven and the shining stars—the second of those two separations of heaven and earth which we have noted.

It is now possible to explain why this separation occurs twice.

<sup>1</sup> Ps. lxxiv. 12-17.

In the rationalised cosmogonies it is inexplicable; but the reason appears in the myth. There the work of creation is the exploit of a personal god—Marduk, Jahweh, Zeus—who can bring light out of darkness, order out of formlessness, only by first triumphing over the powers of evil and disorder embodied in the dragon of the waters and her brood of monsters.<sup>1</sup> But this exploit must happen *somewhere*: the drama requires a stage. Also the hero must have a birth and history; and if he is to be the son of Heaven and Earth, his parents must have become distinct before they could marry and have a child.

Hence the necessity that the whole story should begin with the gap coming into being. In Hesiod's cosmogony, this simply happens: the first event has no cause behind it. But in myth all events are apt to have personal causes. So we find that Ouranos and Gaia are forced apart by Cronos, before the gods can be born, including Zeus himself. The result is this curious duplication. Heaven and earth are first separated in order to give birth to the god, who will create the world by separating heaven from earth as the two parts of the dragon.

But it is high time for me to fulfil the promise of my title which suggests that Hesiod's *Theogony* is, in the last resort, based on ritual. So far I have only argued that his all-but philosophical cosmogony is a rational reflection of his mythical hymn of Zeus, just as Genesis i is a reflection of the myths of Jahweh and Marduk. But I have only dealt with two episodes in the myth. In the light of the oriental material we can now go further and ask whether other episodes in the hymn of Zeus will not fit into a connected pattern, and whether this pattern may not be referred ultimately to a sequence of ritual acts.

It is now certainly established that the killing of Leviathan by Jahweh or of Tiamat by Marduk was not what Frazer called a 'quaint fancy' of primitive and problematical savages, sitting round the fire and speculating on the origin of the world. Nor was this conflict an isolated event without a context. Biblical

<sup>1</sup> Roscher, *Lex.* s.v. 'Ophion'. Jensen suggested that the battle of Χρόνος-Κρόνος with Ophioneus in Pherecydes' cosmogony is equivalent to the battle of Marduk and Tiamat.

students<sup>1</sup> have made out that the Psalms celebrating it belong to a group of liturgical songs, which were recited, as part of the Temple worship, at the Feast of Tabernacles. This feast inaugurated the New Year; and in its dramatic ritual the events these Psalms describe were annually re-enacted.

It is inferred from the Psalms that the fight with the dragon was one episode in the drama, in which, as throughout the festival, the part of Jahweh was taken by the king. There was also a triumphal procession, conducting the divine king in his chariot up the hill of Zion to be enthroned in the temple. Emblems of new vegetation, fertility, and moisture were carried and waved as a charm to secure a sufficiency of rain for the coming year. There are also signs that, at some point in the king's progress, there was another ritual combat. The procession was assailed by the powers of darkness and death, who are also the enemies of Israel, the kings of the earth who took counsel together against the Lord's anointed. The god who wields the thunder intervened to save his royal son and to dash his enemies in pieces. This episode has a parallel in the annual ritual at Abydos in Egypt. The procession conducting Osiris to his shrine was attacked by a band representing Set and his followers, who were repelled by a company led by Horus. At Jerusalem there was probably also a sacred marriage in a grove, commemorated by the booths made of branches from which the festival took its name, Tabernacles.

It appears, then, that the slaying of the dragon by the king-god, which was the initial act of creation, was one feature in the dramatic ritual of the New Year festival. What is the connection between a New Year festival and the myth of Creation?

This question has been convincingly answered by oriental scholars. The festival was much more than the civic inauguration of another year. It was in the first place a ceremony whose magical efficacy was to secure, during the coming year, the due supply of rain and the consequent fertility of plants and animals, on which man's life depends. This purpose was never forgotten. It is stated in the simplest terms by the prophet Zechariah (xiv. 16), who

<sup>1</sup> Prof. W. O. E. Oesterley in *Myth and Ritual*, chap. vi; A. R. Johnson in *The Labyrinth*.

foretells that, when the Lord is King over the whole earth, every one that is left of all the nations which came against Jerusalem shall go up from year to year to worship the King, the Lord of Hosts, and to keep the feast of Tabernacles—'And it shall be, that whoso will not come up. . . upon them shall be no rain.'

So the central figure in the New Year rites was the rain-maker, the divine king. But at the advanced stage of civilisation we are now considering in Babylon, Egypt, and Palestine, the king has become much more than a rain-making magician. To control the rain is to control the procession of the seasons and their powers of drought and moisture, heat and cold; and these again are linked with the orderly revolutions of sun, moon, and stars. The king is thus regarded as the living embodiment of the god who instituted this natural order and must perpetually renew and maintain its functioning for the benefit of man. The king embodies that power and also the life-force of his people, concentrated in his official person. He is the maintainer of the social order; and the prosperity of the nation depends upon his righteousness, the Hebrew *Sedek*, the Greek *δικη*. He protects his people from the evil powers of death and disorder, as well as leading them in war to victory over their enemies.

The purpose of the New Year festival is to renovate—to recreate—the ordered life of the social group and of the world of nature, after the darkness and defeat of winter. The power which gives one more turn to the wheel of the revolving year is vested in the king, but derived from the god whom he embodies, the god who first set the wheel in motion. So the rites are regarded as an annual re-enactment of Creation.

Commenting on the features common to the New Year festivals of Babylon and Egypt, Professor Oesterley remarks<sup>1</sup> that, while there are many gods,

there is one who assumes supremacy in the role of productive creator; and the earthly king is identified with him. Osiris among the Egyptians, and Marduk among the Babylonians, are the supreme gods, and in each case the earthly king is identified with his god. During the annual New Year Festival held in honour of the deity he is proclaimed king;

<sup>1</sup> *Myth and Ritual*, p. 123.

and this is graphically set forth in the drama of his ascent upon his throne; he is thereby acknowledged as lord of creation. The mystery-rite not only symbolised, but was believed actually to bring about, the revivification of Nature.

Now, what Osiris was to the Egyptians, and what Marduk was to the Babylonians, that Jahweh was to the Israelites. The New Year Festival of the Israelites was held on the first day of the Feast of Tabernacles (Sukkoth), when the Kingship of their God Jahweh was celebrated, and he was worshipped and honoured as Lord of Creation. By his will . . . the produce of the soil during the coming year would be abundant; thus, annually there was the renewed manifestation of His creative power, so that every New Year Festival was a memorial of the Creation, since at each New Year the land was recreated. . . . It may be said that the New Year Festival was, as it were, a repetition of the Creation.

To the same effect Professor Hooke has written of the Babylonian ceremony:

It was, in a literal sense, the making of a New Year, the removal of the guilt and defilement of the old year, and the ensuring of security and prosperity for the coming year. By this ceremony was secured the due functioning of all things, sun, moon, stars, and seasons, in their appointed order. Here lies the ritual meaning of Creation: there is a new creation year by year, as a result of these ceremonies. The conception of creation in this stage of the evolution of religion is not cosmological but ritual. It has not come into existence in answer to speculations about the origin of things, but as a ritual means of maintaining the necessary order of things essential for the well-being of the community.<sup>1</sup>

We can now define the relation between the Creation myth and the New Year rites. It is the relation called 'aetiological'. Here the Babylonian evidence is conclusive. We possess a large part of the myth in the tablets now misleadingly entitled 'The Epic of Creation'. This is not an epic, but a hymn. Epics do not reflect ritual action; nor were they recited as incantations to reinforce the efficacy of a rite every time it was performed. This document is a hymn to Marduk, recounting his exploits in creating and ordering the world of gods and men.

<sup>1</sup> *Origins of Early Semitic Ritual*, p. 19.

We know, moreover, that, on the fourth day of the New Year festival of the spring equinox, this hymn was recited, from beginning to end, by the high priest, shut up alone in the sanctuary. This was done before the king arrived to take the leading part in the principal ceremonies.

Further, fragments of a priestly commentary on the ritual explain that a whole series of actions performed by the king symbolised the exploits of Marduk in the story of Creation. That story is, in fact, the aetiological myth of the New Year festival.

Now we know that an aetiological myth is not really the historical record of a supernatural series of events instituting the rite which professes to re-enact these events on a miniature scale. The rite itself is the only historical event, repeated annually. Every spring the king-god actually recreates the natural and social order. The myth is a transcription of that performance on a higher plane, where the corresponding actions are imagined as performed once for all by the god whom the king is conceived to embody and represent. But that god is simply a projection, made up of the official character and functions of the king, abstracted from the accidental human personality who is invested with those functions so long as his vitality lasts in full vigour. When he grows old or dies, the divine character is transmitted to a successor. The god is related to the individual king as the Platonic Idea to a series of particulars which for a time manifest its character. The myth is similarly the universalised transcript of the recurrent ritual action, projected on to the superhuman plane.

It follows that the contents of the Creation myth are not 'quaint fancies', or baseless speculations; nor are they derived from the observation of natural phenomena. Starting from the given appearance of the starry sky above our heads and the broad earth at our feet, no one but a lunatic under the influence of hashish could ever arrive at the theory that they were originally formed by splitting the body of a dragon in half. But suppose you start with a ritual drama, in which the powers of evil and disorder, represented by a priestly actor with a dragon's mask, are overcome by the divine king, as part of a magical regeneration of the natural and social order. Then you may compose a hymn, in which this

Among the descendants of Pontos is the dragon Echidna with her consort Typhaon and their brood of monsters.

In the Babylonian hymn, Tiamat plans to avenge Apsu, with the help of monsters born of the sea. She exalts Kingu among her first-born to be king over her other children, much as Gaia chose Cronos to take the lead among the Titans.

(3) Both poems then tell of the birth of the young God—Marduk, Zeus—who is to become king and order the world of men and gods.

This part of the story of Zeus is of Cretan origin. Once more the old king tries to destroy his sons who will rob him of his kingship, and is defeated by a stratagem.

It will be remembered how in the Palaikastro hymn the fertility aspect of the young Zeus appears when he leads the dancing Kouretes, and is invoked to bring fruitfulness for the coming year.

In Hesiod Zeus releases the Hundred-Armed and the Cyclopes, who give him the thunder that will assure his kingship.

As Nilsson remarks, a fertility god who is annually reborn must also die annually. The death of Zeus was a part of the Cretan myth which the Greeks suppressed.

It is noteworthy that the death of Marduk does not figure in the Creation myth; but we possess tablets recording the ritual of his death and resurrection, which somehow accompanied the New Year festival. The ritual resembled that of Tammuz; and, while Bel-Marduk was in the underworld, the hymn of Creation was sung as an incantation to secure his return to life.

(4) Hesiod's story is here interrupted by the genealogy of Iapetus, which leads to the cheating of Zeus by Prometheus, the theft of fire, and the creation of woman to plague mankind. These events, which imply that man has already been created, are obviously out of place. At line 617 Hesiod goes back to the release of the Hundred-Armed. Zeus gives them the food of immortality, and they undertake to fight the Titans, who are attacking Olympus. The battle is indecisive until Zeus, now armed with the thunder, intervenes. The Titans are blasted and imprisoned in Tartarus.

These Titans who assail Olympus can hardly be the same as the children of Ouranos called Titans in the earlier genealogy. We

I am not at all concerned to deny that the economic interpretation of history has thrown into relief certain neglected factors which have had some influence on the course of religious and philosophic speculation. I have long believed that at least some philosophic and scientific concepts have a social origin, in one sense of that highly ambiguous phrase. In a book published thirty years ago I tried to trace some of them back to collective representations current in pre-scientific ages and preserved in later myth and poetry. But at that time I had never heard of dialectical materialism, and my speculations (for what they were worth) were entirely independent of Marxian doctrine. Now that I have made some study of that doctrine, I can see further light to be gained from that quarter. The history of philosophy may be brought into closer touch with the history of other forms of human activity, provided that the influence of economic and other social factors can be measured and appraised dispassionately.

But here at once—over that word ‘dispassionately’—I find myself at issue with my Marxian friends. They will not admit that either the philosophers themselves, or the scholar who interprets them, can be dispassionate or disinterested. For the Marxian there can be no light without heat; indeed the more light he sees, the hotter he becomes.

The reason appears plainly in that passage I quoted from Engels. The Marxian doctrine took shape a century ago, when the Industrial Revolution had produced an acute crisis in the class-war, and Europe seemed to be in the birth-throes of a social revolution, which proved to be abortive. The Communist Manifesto was issued in 1848; and since then it has become the fighting creed of a very energetic political party. The members of such a party find strength in the conviction that their opponents, even in the sphere of abstract thought and scholarship, are not merely mistaken, but selfishly clinging to their wealth and social position. Their own generous sympathy with the oppressed is further strengthened by an interpretation of all history which assures them that they are on the right side, that is to say, on the side which is bound to win. If they even tried to be dispassionate, their attitude would be worse than wrong: it would be ‘unhistorical’.

(1) First, there is the question of scientific truth. Can it be claimed for any of the Ionian systems, from Anaximander to Epicurus, that they were solidly based on grounds which any candid inquirer would be bound to accept?

Mr Farrington opens his account of the Ionians by asserting, as 'a fact which anyone can confirm', that 'the kind of things that Anaximander was saying in his book *On Nature* were the same kind of things that an up-to-date writer puts forward to-day in a scientific handbook of the universe'.<sup>1</sup> He then gives an outline of Anaximander's system in modern terms, omitting its archaic features, and so incidentally obliterating all traces of those social origins which Mr Thomson has rightly emphasised. Finally, Mr Farrington tells us that Anaximander knew that he had arrived, 'by looking at the universe about him and thinking about what he saw' (i.e., by observation and reflection), at a new kind of knowledge, which he thought 'could be trusted to make its way by itself with intelligent people, and would be found useful to humanity'.

This statement, no doubt, represents part of the truth; but it fails to account for those features which Mr Farrington omits. What sort of observation could have taught Anaximander that the earth is a cylindrical drum, three times as broad as it is high; or that the fixed stars, the moon, and the sun, in that order, are respectively distant from the earth by 9, 18, and 27 times the diameter of the earth? Yet he made these assertions with the same dogmatic confidence as all the rest. These are *not* the same kind of things that we find in up-to-date scientific handbooks, because the modern man of science is restrained by a conception of scientific method of which none of these Ionians had any inkling.

All the Ionian systems were, in fact, chiefly concerned with matters beyond the reach of observation. They speculated about the way in which an ordered world might have arisen from some sort of chaos; about the ultimate constituents of material bodies; and about the possible origin of life, on the assumption that life was not supernaturally created.

If we take Anaximander's cosmogony with all its archaic

<sup>1</sup> Op. cit. p. 19.

features, it can, I believe, be shown to be a rationalisation of an ancient Creation myth. The social origin of his philosophy is to be found there, not in the economic conditions of sixth-century Miletus. He inherited from mythical thought a scheme of cosmogony in which the operating factors had originally been conceived as personal gods. Expurgating the factors he could recognise as mythical, he substituted for the gods the operation of powers, such as 'the hot' and 'the cold', which he took to be unquestionably natural. But he kept the fundamental framework of the myth. The structure of his system was not the outcome of unbiased reflection on observed phenomena.

This work of rationalising expurgation was, of course, a very remarkable step towards what we call natural science. But it was, in essence, a dogmatic speculation, with no more claim to have established truth on grounds which any intelligent person must accept than had any of the other Ionian systems which followed.

This remark holds good of atomism, a theory which was not inferred from observation, but derived from the earlier Pythagorean doctrine that all things are made of 'numbers'—numbers conceived in a material fashion, as both geometrical points and indivisible units of which bodies consist. That doctrine had given rise to a logical and mathematical debate, carried on by the Eleatics, who denied the real existence of plurality and change. The atomism of Democritus was an expedient to restore reality to these obvious facts. Two other systems were put forward with the same object by Empedocles and Anaxagoras. They had just as much, and just as little, claim to have proved any scientific truth; and in some respects they were more plausible than atomism.

Atomism never advanced an inch beyond the point to which it was carried by Epicurus. It could not advance until it was revived two thousand years later by modern science, armed with the microscope and a habit of testing its hypothesis by experiment. Atomism then turned out to be a more useful hypothesis than its rivals, though within living memory it has been transformed out of all recognition. But its success in recent times is no warrant for exalting ancient atomism as if it had been established scientific truth, or for calling it (as Mr Farrington does) 'the most assured

stupid majority. But Mr Thomson insinuates that Plato's purpose was to perpetuate the exclusive domination of his own class. Perhaps the inconsistency was due to 'dishonest thinking'. At the best, we might hope that the pretence of keeping the masses in ignorance for their own good concealed from Plato himself, as well as from others, his secret desire to secure the pre-eminence of the cultured squire. But neither of our critics would let him off with this rather shabby excuse. The propaganda forming the substance of elementary education is, we are told, deliberate and calculated lying.

Once more, let us turn from these accusations to the text of the *Republic*. The education there outlined, so far from being 'fantastic', is (as Plato remarks) simply the traditional Athenian education in poetry and music, with the addition of a university course in pure mathematics and the discussion of moral concepts. It laid down the basic pattern which has persisted through the Middle Ages into our own classical schools and universities. In the elementary stage, the modifications proposed by Plato consist chiefly in the expurgation of the myths from which the Greek child derived his notions of divine and heroic character. The fictions of the poets are denounced, not merely as politically inexpedient, but as false. In particular the gods ought to be represented as entirely good and truthful—incapable of causing any evil or of deluding mankind. More than any other Greek writer, Plato insists on the supreme value, not only of knowing the truth, but of truthfulness. 'A love of truth and a hatred of falsehood that will not tolerate untruth in any form' is declared to be the master-passion of the philosophic rulers, on which all their other qualifications depend.<sup>1</sup> It seems strange that, in the all-important sphere of education, their business should be to disseminate calculated lies, in order to secure their own social predominance. But if that was not their business, how (we may be asked) could Plato use the expression 'noble lie', which will be found in some translations of a single passage in the *Republic*? It occurs nowhere else.

The answer is that 'noble lie' is simply a mistranslation of the

<sup>1</sup> *Rep.* 475, 485, 490.

phrase *γενναῖόν τι ἐν ψευδομένους*.<sup>1</sup> *Γενναῖον* means 'noble' only in the sense in which we might speak of a 'noble sirloin of beef': the word, and its equivalent *οὐκ ἄγεννής*, are frequently used by Plato for anything that is on a grand scale, or impressive, or spirited. Much more important is the plain fact that *ψεῦδος* cannot, in this context, mean a 'lie', if a lie is a false statement made with intent to deceive. *ψεῦδος* has a wide range of meaning; it can cover any statement which is not a literal prosaic statement of fact. Myth, poetry, fable, romance are all *ψεῦδος*, *fiction*. Davies and Vaughan's rendering of *γενναῖόν τι ἐν ψευδομένους* by 'a single spirited fiction' is pretty close to Plato's meaning. The expression is used to introduce an allegorical myth, which the founders of the ideal state may hope to incorporate in its traditions, so that in time it will be accepted by all the citizens, including the rulers themselves. The first lesson this myth conveys is that the citizens must think of their native land as a mother to be defended from all attack, and of their fellow-citizens as brothers born of the same soil. Secondly, the symbolism of Hesiod's races of Gold, Silver, and Iron, is employed to illustrate the fundamental thesis, that men are not all born with the same natural capacities. Society, therefore, should be so stratified that the wisest—in whatever stratum they may be born—shall rise to the top as rulers, and the rest find their level in lower strata, performing, for the good of the whole, the useful functions of which they prove capable.

Such is the so-called 'noble lie', denounced by our Marxian friends as poisonous propaganda. But I submit that a philosopher who offers for universal acceptance a myth or legend embodying, in allegorical imagery, what he holds to be the most important of political truths, is not poisoning anyone's mind with a calculated lie. Further, it is plainly false to accuse Plato of designing this fiction in order to perpetuate the domination of his own class—a 'hereditary aristocracy of cultured gentlemen'—and to keep the 'toiling masses' in permanent subjection. For this very allegory declares that, if the rulers find a child of their own whose metal is alloyed with iron or brass, 'they must, without the least pity, assign him the station proper to his nature, and thrust him out

<sup>1</sup> *Rep.* 414 B.

not indeed in possession of a revealed religion; but he thought that absolute truth might be discoverable in the realm of morals as well as in the field of mathematical science. If so, it could be discovered by the exercise of intuitive reason, a faculty which he sometimes declares to be present in every human soul.<sup>1</sup> When it had been discovered it would provide a faith that might be propagated without reproach. But strait is the gate and narrow the way that leads to wisdom. Ultimate truth was not (as Mr Crossman suggests) a sort of trade secret of the 'ruling class', arbitrarily withheld from the stupid majority because it would poison them. Anyone may have access to it, in the same sense that it is now open to anyone to grasp the theory of relativity. But the multitude can never be philosophers. They must accept moral truth on trust from those who know. It will be conveyed to them in the imaginative symbolism of poetry and myth. If this is to be called propaganda, we must equally apply that term to the parables in which Christ taught the fishermen of Galilee. Plato constantly calls it 'true belief'. He nowhere speaks of it as belief which, although false, will be useful to the ruling class.

Moral truth was, to Plato's mind, inseparable from religious truth. Mr Farrington gallantly upholds the religion of Epicurus in contrast with the religion of Plato. When we compare the two, we find that neither philosopher proposed to interfere with the traditional state-cults, to which they both conformed. Conformity, of course, did not imply belief in the mythical accounts of the gods. Both attempted to reform popular conceptions of the anthropomorphic gods in accordance with the ethical principles they respectively maintained. Yet Plato is accused of a 'reactionary reimposition of a mass of traditional cults' and of recommending 'the maintenance of all the traditional beliefs', knowing them to be false; whereas Epicurus is praised for accepting 'the religion of the people' and for reforming the 'popular theology' of the average man.<sup>2</sup> An impartial critic (if there were such a person) might wonder how the average man could be expected to feel any religious devotion towards gods who were (like Epicurus himself) egoistic hedonists, as indifferent to human concerns as

<sup>1</sup> *Rep.* 518.

<sup>2</sup> Pp. 101, 155.

Epicurus was to all that went on outside his garden and the circle of his friends. The Marxist does not defend the Epicurean religion as true, or as having any sound scientific foundation; but he views with equanimity the social consequences of assuring the wicked man that, if he pursues his own personal pleasure, he has nothing to fear from gods who do exist but are as selfish as himself. The Platonists were not alone in preferring a type of religion which taught that the gods were good and cared for man, and that wickedness which escaped punishment here would be punished after death. The doctrine of immortality and a better lot for the initiate was not a feature of those state-cults, which are alleged to have been kept up by the aristocracy for the sake of their class interests. It belonged to the mysteries, and in particular to the Orphic mysteries. In these, as at Eleusis, distinctions of nationality and class, even the distinction of freeman and slave, were ignored. Orphism really was a popular movement, just because it transcended these distinctions and, like Christianity, held out hope to the poor and oppressed. It was closely related to Pythagoreanism, and Plato's doctrine of immortality was deeply influenced by both. Mr Farrington never mentions Orphism at all. No reader of his book could guess that such a popular religious movement had ever existed. It would not fit into his picture of the oligarch Plato, disseminating 'such ideas as would make the unjust distribution of the rewards and toils of life seem a necessary part of the eternal constitution of things'. This can only mean that the author of the *Republic* taught immortality and the redress of earthly injustice after death, because he wished to perpetuate injustice in this life.

Epicurus, it is true, abolished the terrors of hell; but he also abolished the joys of heaven. Mr Farrington speaks of his doctrine, that the personality is annihilated at the moment of death, as conveying 'a healing balm to all that needed it'.<sup>1</sup> I wonder how many readers have found a healing balm in the third book of Lucretius. I do not know how common the horror of death may be among normal people; but, where it exists, is it not often the prospect of extinction that horrifies them? If so, the fear of death,

<sup>1</sup> P. 125.