



Introduction to Philosophy
Mr. Taylor O'Neill
Freedom Project Academy
Spring Term 2016



1:00 - 1:50 PM ET/ 12:00 - 12:50 pm CT
Tuesdays and Thursdays

Course Description: Philosophy is an introduction to the pursuit of wisdom and truth via human reason. The class gives an overview of the Western Philosophical Tradition, delving into the thought of both the ancient Greeks such as Socrates, Plato, and Aristotle, and the great Christian philosophers such as Saint Augustine, Saint Anselm, and Saint Thomas Aquinas. Students will not only strive to understand the minds of these great thinkers but to grapple with their ideas on a personal level.

Grading:

Weekly Questions	- 40%
Tests	- 35%
Final Paper	- 15%
Class Participation	- 10%

Weekly Questions: Students will be responsible for answering several questions that pertain to the week's reading. Each question requires a well thought out, 1 - 2 paragraph response unless stated otherwise. These will be due every Tuesday at 12:30 PM Eastern Time (11:30 AM Central Time). Assignments must be submitted on Canvas. Questions will be posted on Canvas under the 'Assignments' tab, under the group heading of 'Weekly Questions'. They will be posted as PDFs. Answers may either be submitted by upload of a file or text entry right on Canvas.

Tests: Students will be responsible for several tests throughout the course of the semester. Tests will be uploaded as PDFs. Students must upload a file with their answers. The tests will be open from 8:00 AM until 8:00 PM Eastern Time on the test day. The student's answers must be uploaded before that window closes. Each test will feature a pledge on the top

which ensures that students will not use aids (such as their books or notes) or work on the test with anyone. Submitting the test is an agreement to that pledge.

Final Paper: All students will be responsible for one final paper on a topic of their choosing. This paper will be due on the final week of class. The paper must be 5 - 6 pages in length, featuring Times New Roman, 12 point font. The paper must be a thesis paper with the topic approved by the instructor.

Class Participation: This covers a student's ability to engage in discussion in class, keep up with class discussion, having a working microphone, attending class, and arriving on time. All students will start with a 100% and will receive deductions for patterns of unexcused absences, tardiness, not following along, not participating in class, etc.

FPE Late Policy: *All unexcused late assignments will receive zero credit.* If a student is unable to turn an assignment in on time, they should inform the instructor as soon as possible to avoid the late penalty.

Assignment Schedule: Due to the fluid nature of the course, the numerous texts, etc., the schedule is always subject to change depending upon the pace of the class. The instructor will always, however, have at least the next two weeks' reading assignments uploaded so that students can read ahead. These assignments can be found on the Canvas calendar or under the 'Assignments' tab.

Assignment Submission: All work must be submitted to the instructor over Canvas. No work can be accepted over email. All communication between the instructor and student ought to happen over Canvas, as well.

Modules: All class recordings and slides will be uploaded under the 'Modules' tab.

Please feel free to contact me throughout the semester with any questions or concerns.

**Freedom Project Academy
Philosophy
Spring 2016 Schedule**

Introduction

Tuesday 01/26: Introduction

Thursday 01/28: What is Philosophy?

Read Sophie's World - What is Philosophy?

Read Chesterton

Tuesday 02/02: Pre-Socratics

Read Sophie's World - The Natural Philosophers

Socrates

Thursday 02/04: Introduction to Socrates

Read Sophie's World - Socrates

Tuesday 02/09: Socrates and the Allegory of the Cave

A (Alpha) Questions Due

Thursday 02/11: Euthyphro Part 1

Read the first half of Euthyphro

Tuesday 02/16: Euthyphro Part 2

Read the second half of Euthyphro

Thursday 02/18: **TEST I** - Review Day

Tuesday 02/23: Apology Part 1

Read the first half of the Apology

B (Beta) Questions Due

Thursday 02/ 25: Apology Part 2

Read the second half of the Apology

Tuesday 03/01: Roger Scruton on Beauty (Video)
Γ (Gamma) Questions Due

Thursday 03/03: Crito
Read Crito

Tuesday 03/08: Phaedo Part 1
Read the first third of the Phaedo

Thursday: 03/10: Phaedo Part 2
Read the second third of the Phaedo

Tuesday 03/15: Phaedo Part 3
Read the last third of the Phaedo
Δ (Delta) Questions Due

Thursday 03/17: Socrates on the Philosopher King and Democracy
Read the two excerpts on Philosopher King and Democracy

Tuesday 03/22: **TEST II - Review Day**

Aristotle

Thursday 03/24: Introduction to Aristotle & Simple Apprehension
Read Sophie's World - Aristotle

Tuesday 03/29: Easter Break - No Class

Thursday 03/31: Easter Break - No Class

Tuesday 04/05: The Four Causes
Read Mortimer Adler on the four causes
E (Epsilon) Questions Due

Thursday 04/ 07: Potency and Act
Read Adler on potency and act

Tuesday 04/12: Aristotle's Ethics
Read Adler - Ethics 1 & 2

Thursday 04/14: Aristotle's Ethics

Read Adler - Ethics 3 & 4

Tuesday 04/19: Extra Day on Aristotle

Z (Zeta) Questions Due

Thursday 04/21: **TEST III - REVIEW DAY**

St. Thomas Aquinas

Tuesday 04/26: Introduction to St. Thomas Aquinas

Read Sophie's World - The Middle Ages

Thursday 04/28: The 5 Ways of St. Thomas

Read Edward Feser's introduction to the 5 Ways.

Tuesday 05/03: The First Way

Read Feser on the First Way.

H (Eta) Questions Due

Thursday 05/05: The Second Way

Read Feser on the Second Way.

Tuesday 05/10: On Faith and Reason

Read Summa Contra Gentiles

Thursday 05/12: On the Nature of God as Known from Reason Alone

Read Summa Contra Gentiles

Θ (Theta) Questions Due

Tuesday 05/17: **TEST IV - Review Day**

Modern Philosophers

Thursday 05/19: Duns Scotus/William of Ockham and Voluntarism/Nominalism

Read Pope Benedict XVI's Regensburg Lecture

Tuesday 05/24: Descartes & Kierkegaard

[Read Sophie's World - Descartes](#)

[Read Sophie's World - Kierkegaard](#)

Thursday 05/26: David Hume and Immanuel Kant

[Read Sophie's World - Hume](#)

[Read Sophie's World - Kant](#)

Tuesday 05/31: John Locke and Thomas Hobbes

[Read Sophie's World - Locke](#)

[I \(Iota\) Questions Due](#)

Thursday 06/02: **TEST V** - Review and Karl Marx

[Final Paper Due](#)

Freedom Project Academy
Philosophy
Spring 2016 Schedule

Tuesday 01/26: Introduction

Thursday 01/28: What is Philosophy?

Read Sophie's World - What is Philosophy?

Read Chesterton

Tuesday 02/02: Pre-Socratics

Read Sophie's World - The Natural Philosophers

Thursday 02/04: Introduction to Socrates

Read Sophie's World - Socrates

Tuesday 02/09: Socrates and the Allegory of the Cave

Questions Due

Thursday 02/11: Euthyphro Part 1

Read the first half of Euthyphro

Tuesday 02/16: Euthyphro Part 2

Read the second half of Euthyphro

In Defense of Sanity

The Best Essays of G. K. Chesterton

Selected by Dale Ahlquist, Joseph Pearce,
and Aidan Mackey

Edited by Dale Ahlquist

IGNATIUS PRESS SAN FRANCISCO

CONTENTS

Foreword by Aidan Mackey	ix
Preface by Joseph Pearce	xi
Introduction by Dale Ahlquist	xv
1. Introduction to <i>The Defendant</i> (<i>The Defendant</i> , 1901)	1
2. A Defence of Skeletons (<i>The Defendant</i> , 1901)	5
3. On Certain Modern Writers and the Institution of the Family (<i>Heretics</i> , 1905)	10
4. On Running After One's Hat (<i>All Things Considered</i> , 1908)	21
5. Woman (<i>All Things Considered</i> , 1908)	25
6. A Piece of Chalk (<i>Tremendous Trifles</i> , 1909)	30
7. What I Found in My Pocket (<i>Tremendous Trifles</i> , 1909)	35
8. On Lying in Bed (<i>Tremendous Trifles</i> , 1909)	39
9. The Diabolist (<i>Tremendous Trifles</i> , 1909)	43
10. The Twelve Men (<i>Tremendous Trifles</i> , 1909)	48
11. The Shop of Ghosts (<i>Tremendous Trifles</i> , 1909)	52
12. The Romantic in the Rain (<i>A Miscellany of Men</i> , 1912)	57
13. The Mad Official (<i>A Miscellany of Men</i> , 1912)	61
14. The Mystagogue (<i>A Miscellany of Men</i> , 1912)	65
15. The Architect of Spears (<i>A Miscellany of Men</i> , 1912)	69
16. Don't (<i>Daily News</i> , May 7, 1910)	73
17. The Mystery of the Mystics (<i>Daily News</i> , August 30, 1901)	77
18. A Much Repeated Repetition (<i>Daily News</i> , March 26, 1904)	82
19. The Maxims of Maxim (<i>Daily News</i> , February 25, 1905)	86

20.	The Book of Job (<i>GKC as MC</i> , 1929)	91
21.	Cheese (<i>Alarms and Discursions</i> , 1910)	103
22.	On Gargoyles (<i>Alarms and Discursions</i> , 1910)	107
23.	The Fading Fireworks (<i>Alarms and Discursions</i> , 1910)	112
24.	The Furrows (<i>Alarms and Discursions</i> , 1910)	115
25.	The Meaning of Dreams (<i>Lunacy and Letters</i> , 1958)	118
26.	On Being Moved (<i>Lunacy and Letters</i> , 1958)	122
27.	The Pickwick Papers (<i>Appreciations and Criticisms of the Works of Charles Dickens</i> , 1911)	126
28.	The Bluff of the Big Shops (<i>The Outline of Sanity</i> , 1926)	136
29.	On Architecture (<i>Generally Speaking</i> , 1928)	144
30.	On Shakespeare (<i>Generally Speaking</i> , 1928)	149
31.	The Slavery of Free Verse (<i>Fancies vs. Fads</i> , 1923)	154
32.	Turning Inside Out (<i>Fancies vs. Fads</i> , 1923)	159
33.	On Turnpikes and Mediævalism (<i>All I Survey</i> , 1933)	169
34.	The Drift from Domesticity (<i>The Thing</i> , 1929)	173
35.	On Vulgarity (<i>Come to Think of It</i> , 1930)	183
36.	On a Humiliating Heresy (<i>Come to Think of It</i> , 1930)	187
37.	On Original Sin (<i>Come to Think of It</i> , 1930)	192
38.	On Jane Austen in the General Election (<i>Come to Think of It</i> , 1930)	196
39.	On Essays (<i>Come to Think of It</i> , 1930)	201
40.	On Evil Euphemisms (<i>Come to Think of It</i> , 1932)	205
41.	A Plea for Prohibition (<i>Sidelights</i> , 1932)	210
42.	The American Ideal (<i>Sidelights</i> , 1932)	213
43.	Marriage and the Modern Mind (<i>Sidelights</i> , 1932)	219
44.	Magic and Fantasy in Fiction (<i>Sidelights</i> , 1932)	225
45.	On the New Prudery (<i>Avowals and Denials</i> , 1934)	232
46.	On the Return of the Barbarian (<i>Avowals and Denials</i> , 1934)	237

47.	On Man: Heir of All the Ages (<i>Avowals and Denials</i> , 1934)	242
48.	On the Instability of the State (<i>Avowals and Denials</i> , 1934)	246
49.	The Romance of Childhood. (<i>All is Grist</i> , 1931)	250
50.	The Surrender upon Sex (<i>The Well and the Shallows</i> , 1935)	254
51.	Reflections on a Rotten Apple (<i>The Well and the Shallows</i> , 1935)	260
52.	Babies and Distributism (<i>The Well and the Shallows</i> , 1935)	270
53.	The Rout of Reason (<i>Where Are the Dead?</i> 1928)	274
54.	Mary Queen of Scots (<i>Revaluations</i> , 1931)	279
55.	George MacDonald (<i>GKC as MC</i> , 1929)	301
56.	Tolerating Other Religions (<i>Illustrated London News</i> , May 31, 1913)	308
57.	The Efficiency of the Police (<i>Illustrated London News</i> , April 1, 1922)	312
58.	About Beliefs (<i>As I Was Saying</i> , 1936)	316
59.	The Common Man (<i>The Common Man</i> , 1950)	321
60.	Two Stubborn Pieces of Iron (<i>The Common Man</i> , 1950)	330
61.	The Revival of Philosophy—Why? (<i>The Common Man</i> , 1950)	333
62.	If I Had Only One Sermon to Preach (<i>The Common Man</i> , 1950)	341
63.	Scipio and the Children (<i>The Spice of Life</i> , 1964)	351
64.	The Philosophy of Islands (<i>The Spice of Life</i> , 1964)	355
65.	The Artistic Side (<i>The Coloured Lands</i> , 1938)	361
66.	What Is Right with the World (<i>The Apostle and the Wild Ducks</i> , 1975)	365
67.	The Spice of Life (<i>The Spice of Life</i> , 1964)	376

of madness: for every woman is mad by the masculine standard. But let him find out that she is mad while her madness is more worth considering than anyone else's sanity.

This is not a digression. The whole value of the normal relations of man and woman lies in the fact that they first begin really to criticise each other when they first begin really to admire each other. And a good thing, too. I say, with a full sense of the responsibility of the statement, that it is better that the sexes should misunderstand each other until they marry. It is better that they should not have the knowledge until they have the reverence and the charity. We want no premature and puppyish "knowing all about girls." We do not want the highest mysteries of a Divine distinction to be understood before they are desired, and handled before they are understood. That which Mr. Shaw calls the Life Force, but for which Christianity has more philosophical terms, has created this early division of tastes and habits for that romantic purpose, which is also the most practical of all purposes. Those whom God has sundered, shall no man join.

It is, therefore, a question of what are really the co-educators' aims. If they have small aims, some convenience in organisation, some slight improvement in manners, they know more about such things than I. But if they have large aims, I am against them.

The Revival of Philosophy—Why?

The Common Man, 1950

The best reason for a revival of philosophy is that unless a man has a philosophy certain horrible things will happen to him. He will be practical; he will be progressive; he will cultivate efficiency; he will trust in evolution; he will do the work that lies nearest; he will devote himself to deeds, not words. Thus struck down by blow after blow of blind stupidity and random fate, he will stagger on to a miserable death with no comfort but a series of catchwords; such as those which I have catalogued above. Those things are simply substitutes for thoughts. In some cases they are the tags and tail-ends of somebody else's thinking. That means that a man who refuses to have his own philosophy will not even have the advantages of a brute beast, and be left to his own instincts. He will only have the used-up scraps of somebody else's philosophy; which the beasts do not have to inherit; hence their happiness. Men have always one of two things: either a complete and conscious philosophy or the unconscious acceptance of the broken bits of some incomplete and shattered and often discredited philosophy. Such broken bits are the phrases I have quoted: efficiency and evolution and the rest. The idea of being "practical," standing all by itself, is all that remains of a Pragmatism that cannot stand at all. It is impossible to be practical without a Pragma. And what would happen if you went up to the next practical man you met and said to the poor dear old duffer, "Where is your Pragma?" Doing the work that is nearest is obvious nonsense; yet it has been repeated in many albums. In nine cases out of ten it would mean doing the work that

we are least fitted to do, such as cleaning the windows or clouting the policeman over the head. "Deeds, not words" is itself an excellent example of "Words, not thoughts." It is a deed to throw a pebble into a pond and a word that sends a prisoner to the gallows. But there are certainly very futile words; and this sort of journalistic philosophy and popular science almost entirely consists of them.

Some people fear that philosophy will bore or bewilder them; because they think it is not only a string of long words, but a tangle of complicated notions. These people miss the whole point of the modern situation. These are exactly the evils that exist already; mostly for want of a philosophy. The politicians and the papers are always using long words. It is not a complete consolation that they use them wrong. The political and social relations are already hopelessly complicated. They are far more complicated than any page of mediæval metaphysics; the only difference is that the mediævalist could trace out the tangle and follow the complications; and the moderns cannot. The chief practical things of to-day, like finance and political corruption, are frightfully complicated. We are content to tolerate them because we are content to misunderstand them, not to understand them. The business world needs metaphysics—to simplify it.

I know these words will be received with scorn, and with gruff reassertion that this is no time for nonsense and paradox; and that what is really wanted is a practical man to go in and clear up the mess. And a practical man will doubtless appear, one of the unending succession of practical men; and he will doubtless go in, and perhaps clear up a few millions for himself and leave the mess more bewildering than before; as each of the other practical men has done. The reason is perfectly simple. This sort of rather crude and unconscious person always adds to the confusion; because he himself has two or three different motives at the same moment, and does

not distinguish between them. A man has, already entangled hopelessly in his own mind, (1) a hearty and human desire for money, (2) a somewhat priggish and superficial desire to be progressing, or going the way the world is going, (3) a dislike to being thought too old to keep up with the young people, (4) a certain amount of vague but genuine patriotism or public spirit, (5) a misunderstanding of a mistake made by Mr. H. G. Wells, in the form of a book on Evolution. When a man has all these things in his head, and does not even attempt to sort them out, he is called by common consent and acclamation a practical man. But the practical man cannot be expected to improve the impracticable muddle; for he cannot clear up the muddle in his own mind, let alone in his own highly complex community and civilisation. For some strange reason, it is the custom to say of this sort of practical man that "he knows his own mind." Of course this is exactly what he does not know. He may in a few fortunate cases know what he wants, as does a dog or a baby of two years old; but even then he does not know why he wants it. And it is the why and the how that have to be considered when we are tracing out the way in which some culture or tradition has got into a tangle. What we need, as the ancients understood, is not a politician who is a business man, but a king who is a philosopher.

I apologise for the word "king," which is not strictly necessary to the sense; but I suggest that it would be one of the functions of the philosopher to pause upon such words, and determine their importance and unimportance. The Roman Republic and all its citizens had to the last a horror of the word "king." It was in consequence of this that they invented and imposed on us the word "Emperor." The great Republicans who founded America also had a horror of the word "king"; which has therefore reappeared with the special qualification of a Steel King, an Oil King, a Pork King, or other

similar monarchs made of similar materials. The business of the philosopher is not necessarily to condemn the innovation or to deny the distinction. But it is his duty to ask himself exactly what it is that he or others dislike in the word "king." If what he dislikes is a man wearing the spotted fur of a small animal called the ermine, or a man having once had a metal ring placed on the top of his head by a clergyman, he will decide one way. If what he dislikes is a man having vast or irresponsible powers over other men, he may decide another. If what he dislikes is such fur or such power being handed on from father to son, he will enquire whether this ever occurs under commercial conditions to-day. But, anyhow, he will have the habit of testing the thing by the thought; by the idea which he likes or dislikes; and not merely by the sound of a syllable or the look of four letters beginning with a "R."

Philosophy is merely thought that has been thought out. It is often a great bore. But man has no alternative, except between being influenced by thought that has been thought out and being influenced by thought that has not been thought out. The latter is what we commonly call culture and enlightenment to-day. But man is always influenced by thought of some kind, his own or somebody else's; that of somebody he trusts or that of somebody he never heard of, thought at first, second or third hand; thought from exploded legends or unverified rumours; but always something with the shadow of a system of values and a reason for preference. A man does test everything by something. The question here is whether he has ever tested the test.

I will take one example out of a thousand that might be taken. What is the attitude of an ordinary man on being told of an extraordinary event: a miracle? I mean the sort of thing that is loosely called supernatural, but should more properly be called preternatural. For the word "supernatural" applies only to what is higher than man; and a good many modern miracles look as

if they came from what is considerably lower. Anyhow, what do modern men say when apparently confronted with something that cannot, in the cant phrase, be naturally explained? Well, most modern men immediately talk nonsense. When such a thing is currently mentioned, in novels or newspapers or magazine stories, the first comment is always something like, "But my dear fellow, this is the twentieth century!" It is worth having a little training in philosophy if only to avoid looking so ghastly a fool as that. It has on the whole rather less sense or meaning than saying, "But my dear fellow, this is Tuesday afternoon." If miracles cannot happen, they cannot happen in the twentieth century or in the twelfth. If they can happen, nobody can prove that there is a time when they cannot happen. The best that can be said for the sceptic is that he cannot say what he means, and therefore, whatever else he means, he cannot mean what he says. But if he only means that miracles can be *believed* in the twelfth century, but cannot be believed in the twentieth, then he is wrong again, both in theory and in fact. He is wrong in theory, because an intelligent recognition of possibilities does not depend on a date but on a philosophy. An atheist could disbelieve in the first century and a mystic could continue to believe in the twenty-first century. And he is wrong, in fact, because there is every sign of there being a great deal of mysticism and miracle in the twenty-first century; and there is quite certainly an increasing mass of it in the twentieth.

But I have only taken that first superficial repartee because there is a significance in the mere fact that it comes first; and its very superficiality reveals something of the subconsciousness. It is almost an automatic repartee; and automatic words are of some importance in psychology. Let us not be too severe on the worthy gentleman who informs his dear fellow that it is the twentieth century. In the mysterious depths of his being even that enormous ass does actually mean something. The point is that he cannot really explain what he means; and *that*

is the argument for a better education in philosophy. What he really means is something like this, "There is a theory of this mysterious universe to which more and more people were in fact inclined during the second half of the eighteenth and the first half of the nineteenth centuries; and up to that point at least, this theory did grow with the growing inventions and discoveries of science to which we owe our present social organisation—or disorganisation. That theory maintains that cause and effect have from the first operated in an uninterrupted sequence like a fixed fate; and that there is no will behind or within that fate; so that it must work itself out in the absence of such a will, as a machine must run down in the absence of a man. There were more people in the nineteenth century than in the ninth who happened to hold this particular theory of the universe. I myself happened to hold it; and therefore I obviously cannot believe in miracles." That is perfectly good sense; but so is the counter-statement; "I do not happen to hold it; and therefore I obviously can believe in miracles."

The advantage of an elementary philosophic habit is that it permits a man, for instance, to understand a statement like this, "Whether there can or can not be exceptions to a process depends on the nature of that process." The disadvantage of not having it is that a man will turn impatiently even from so simple a truism; and call it metaphysical gibberish. He will then go off and say: "One can't have such things in the twentieth century"; which really is gibberish. Yet the former statement could surely be explained to him in sufficiently simple terms. If a man sees a river run downhill day after day and year after year, he is justified in reckoning, we might say in betting, that it will do so till he dies. But he is not justified in saying that it cannot run uphill, until he really knows why it runs downhill. To say it does so by gravitation answers the physical but not the philosophical question. It only repeats

that there is a repetition; it does not touch the deeper question of whether that repetition could be altered by anything outside it. And that depends on whether there *is* anything outside it. For instance, suppose that a man had only seen the river in a dream. He might have seen it in a hundred dreams, always repeating itself and always running downhill. But that would not prevent the hundredth dream being different and the river climbing the mountain; because the dream is a dream, and there *is* something outside it. Mere repetition does not prove reality or inevitability. We must know the nature of the thing and the cause of the repetition. If the nature of the thing is a Creation, and the cause of the thing a Creator, in other words if the repetition itself is only the repetition of something willed by a person, then it is *not* impossible for the same person to will a different thing. If a man is a fool for believing in a Creator, then he is a fool for believing in a miracle; but not otherwise. Otherwise, he is simply a philosopher who is consistent in his philosophy.

A modern man is quite free to choose either philosophy. But what is actually the matter with the modern man is that he does not know even his own philosophy; but only his own phraseology. He can only answer the next spiritual message produced by a spiritualist, or the next cure attested by doctors at Lourdes, by repeating what are generally nothing but phrases; or are, at their best, prejudices.

Thus, when so brilliant a man as Mr. H. G. Wells says that such supernatural ideas have become impossible "for intelligent people," he is (for that instant) not talking like an intelligent person. In other words, he is not talking like a philosopher; because he is not even saying what he means. What he means is, not "impossible for intelligent men," but, "impossible for intelligent monists," or, "impossible for intelligent determinists." But it is not a negation of *intelligence* to hold any coherent and logical conception of so mysterious a

world. It is not a negation of intelligence to think that all experience is a dream. It is not unintelligent to think it a delusion, as some Buddhists do; let alone to think it a product of creative will, as Christians do. We are always being told that men must no longer be so sharply divided into their different religions. As an immediate step in progress, it is much more urgent that they should be more clearly and more sharply divided into their different philosophies.

If I Only Had One Sermon to Preach

The Common Man, 1950

If I had only one sermon to preach, it would be a sermon against Pride. The more I see of existence, and especially of modern practical and experimental existence, the more I am convinced of the reality of the old religious thesis; that all evil began with some attempt at superiority; some moment when, as we might say, the very skies were cracked across like a mirror, because there was a sneer in Heaven.

Now the first fact to note about this notion is a rather curious one. Of all such notions, it is the one most generally dismissed in theory and most universally accepted in practise. Modern men imagine that such a theological idea is quite remote from them; and, stated as a theological idea, it probably is remote from them. But, as a matter of fact, it is too close to them to be recognised. It is so completely a part of their minds and morals and instincts, I might almost say of their bodies, that they take it for granted and act on it even before they think of it. It is actually the most popular of all moral ideas; and yet it is almost entirely unknown as a moral idea. No truth is now so unfamiliar as a truth, or so familiar as a fact.

Let us put the fact to a trifling but not unpleasing test. Let us suppose that the reader, or (preferably) the writer, is going into a public-house or some public place of social intercourse; a public tube or tram might do as well, except that it seldom allows of such long and philosophical intercourse as did the old public-house. Anyhow, let us suppose any place where men of motley but ordinary types assemble; mostly poor because

WHAT IS PHILOSOPHY?

Dear Sophie,

Lots of people have hobbies. Some people collect old coins or foreign stamps, some do needlework, others spend most of their spare time on a particular sport.

A lot of people enjoy reading. But reading tastes differ widely. Some people only read newspapers or comics, some like reading novels, while others prefer books on astronomy, wildlife, or technological discoveries.

If I happen to be interested in horses or precious stones, I cannot expect everyone else to share my enthusiasm. If I watch all the sports programs on TV with great pleasure, I must put up with the fact that other people find sports boring.

Is there nothing that interests us all? Is there nothing that concerns everyone—no matter who they are or where they live in the world? Yes, dear Sophie, there are questions that certainly should interest everyone. They are precisely the questions this course is about.

What is the most important thing in life? If we ask someone living on the edge of starvation, the answer is food. If we ask someone dying of cold, the answer is warmth. If we put the same question to someone who feels lonely and isolated, the answer will probably be the company of other people.

But when these basic needs have been satisfied—will there still be something that everybody needs? Philosophers think so. They believe that man cannot live by bread alone. Of course everyone needs food. And everyone needs love and care. But there is something else—apart from that—which everyone needs, and that is to figure out who we are and why we are here.

Being interested in why we are here is not a “casual” interest like collecting stamps. People who ask such questions are taking part in a debate that has gone on as long as man has lived on this planet. How the universe, the earth, and life came into being is a bigger and more important question than who won the most gold medals in the last Olympics.

The best way of approaching philosophy is to ask a few philosophical questions:

How was the world created? Is there any will or meaning behind what happens? Is there a life after death? How can we answer these questions? And most important, how ought we to live? People have been asking these questions throughout the ages. We know of no culture which has not concerned itself with what man is and where the world came from.

Basically there are not many philosophical questions to ask. We have already asked some of the most important ones. But history presents us with many different answers to each question. So it is easier to ask philosophical questions than to answer them.

Today as well each individual has to discover his own answer to these same questions. You cannot find out whether there is a God or whether there is life after death by looking in an encyclopedia. Nor does the encyclopedia tell us how we ought to live. However, reading what other people have believed can help us formulate our own view of life.

Philosophers' search for the truth resembles a detective story. Some think Andersen was the murderer, others think it was Nielsen or Jensen. The police are sometimes able to solve a real crime. But it is equally possible that they never get to the bottom of it, although there is a solution somewhere. So even if it is difficult to answer a question, there may be one—and only one—right answer. Either there is a kind of existence after death—or there is not.

A lot of age-old enigmas have now been explained by science. What the dark side of the moon looks like was once shrouded in mystery. It was not the kind of thing that could be solved by discussion, it was left to the imagination of the individual. But today we know exactly what the dark side of the moon looks like, and no one can "believe" any longer in the Man in the Moon, or that the moon is made of green cheese.

A Greek philosopher who lived more than two thousand years ago believed that philosophy had its origin in man's sense of wonder. Man thought it was so astonishing to be alive that philosophical questions arose of their own accord.

It is like watching a magic trick. We cannot understand how it is

done. So we ask: how can the magician change a couple of white silk scarves into a live rabbit?

A lot of people experience the world with the same incredulity as when a magician suddenly pulls a rabbit out of a hat which has just been shown to them empty.

In the case of the rabbit, we know the magician has tricked us. What we would like to know is just how he did it. But when it comes to the world it's somewhat different. We know that the world is not all sleight of hand and deception because here we are in it, we are part of it. Actually, we are the white rabbit being pulled out of the hat. The only difference between us and the white rabbit is that the rabbit does not realize it is taking part in a magic trick. Unlike us. We feel we are part of something mysterious and we would like to know how it all works.

P.S. As far as the white rabbit is concerned, it might be better to compare it with the whole universe. We who live here are microscopic insects existing deep down in the rabbit's fur. But philosophers are always trying to climb up the fine hairs of the fur in order to stare right into the magician's eyes.

Are you still there, Sophie? To be continued . . .

Sophie was completely exhausted. Still there? She could not even remember if she had taken the time to breathe while she read.

Who had brought this letter? It couldn't be the same person who had sent the birthday card to Hilde Møller Knag because that card had both a stamp and a postmark. The brown envelope had been delivered by hand to the mailbox exactly like the two white ones.

Sophie looked at her watch. It was a quarter to three. Her mother would not be home from work for over two hours.

Sophie crawled out into the garden again and ran to the mailbox. Perhaps there was another letter.

She found one more brown envelope with her name on it. This time she looked all around but there was nobody in sight. Sophie ran to the edge of the woods and looked down the path.

No one was there. Suddenly she thought she heard a twig snap

deep in the woods. But she was not completely sure, and anyway it would be pointless to chase after someone who was determined to get away.

Sophie let herself into the house. She ran upstairs to her room and took out a big cookie tin full of pretty stones. She emptied the stones onto the floor and put both large envelopes into the tin. Then she hurried out into the garden again, holding the tin securely with both hands. Before she went she put some food out for Sherekhan.

"Kitty, kitty, kitty!"

Once back in the den she opened the second brown envelope and drew out the new typewritten pages. She began to read.

A STRANGE CREATURE

Hello again! As you see, this short course in philosophy will come in handy-sized portions. Here are a few more introductory remarks:

Did I say that the only thing we require to be good philosophers is the faculty of wonder? If I did not, I say it now: THE ONLY THING WE REQUIRE TO BE GOOD PHILOSOPHERS IS THE FACULTY OF WONDER.

Babies have this faculty. That is not surprising. After a few short months in the womb they slip out into a brand-new reality. But as they grow up the faculty of wonder seems to diminish. Why is this? Do you know?

If a newborn baby could talk, it would probably say something about what an extraordinary world it had come into. We see how it looks around and reaches out in curiosity to everything it sees.

As words are gradually acquired, the child looks up and says "Bow-wow" every time it sees a dog. It jumps up and down in its stroller, waving its arms: "Bow-wow! Bow-wow!" We who are older and wiser may feel somewhat exhausted by the child's enthusiasm. "All right, all right, it's a bow-wow," we say, unimpressed. "Please sit still." We are not enthralled. We have seen a dog before.

This rapturous performance may repeat itself hundreds of times before the child learns to pass a dog without going crazy. Or an elephant, or a hippopotamus. But long before the child learns to talk properly—

and long before it learns to think philosophically—the world will have become a habit.

A pity, if you ask me.

My concern is that you do not grow up to be one of those people who take the world for granted, Sophie dear. So just to make sure, we are going to do a couple of experiments in thought before we begin on the course itself.

Imagine that one day you are out for a walk in the woods. Suddenly you see a small spaceship on the path in front of you. A tiny Martian climbs out of the spaceship and stands on the ground looking up at you . . .

What would you think? Never mind, it's not important. But have you ever given any thought to the fact that you are a Martian yourself?

It is obviously unlikely that you will ever stumble upon a creature from another planet. We do not even know that there is life on other planets. But you might stumble upon yourself one day. You might suddenly stop short and see yourself in a completely new light. On just such a walk in the woods.

I am an extraordinary being, you think. I am a mysterious creature.

You feel as if you are waking from an enchanted slumber. Who am I? you ask. You know that you are stumbling around on a planet in the universe. But what *is* the universe?

If you discover yourself in this manner you will have discovered something as mysterious as the Martian we just mentioned. You will not only have seen a being from outer space. You will feel deep down that you are yourself an extraordinary being.

Do you follow me, Sophie? Let's do another experiment in thought:

One morning, Mom, Dad, and little Thomas, aged two or three, are having breakfast in the kitchen. After a while Mom gets up and goes over to the kitchen sink, and Dad—yes, Dad—flies up and floats around under the ceiling while Thomas sits watching. What do you think Thomas says? Perhaps he points up at his father and says: "Daddy's flying!" Thomas will certainly be astonished, but then he very often is. Dad does so many strange things that this business of a little flight over the breakfast table makes no difference to him. Every day Dad shaves with



a funny machine, sometimes he climbs onto the roof and turns the TV aerial—or else he sticks his head under the hood of the car and comes up black in the face.

Now it's Mom's turn. She hears what Thomas says and turns around abruptly. How do you think she reacts to the sight of Dad floating nonchalantly over the kitchen table?

She drops the jam jar on the floor and screams with fright. She may even need medical attention once Dad has returned respectably to his chair. (He should have learned better table manners by now!) Why do you think Thomas and his mother react so differently?

It all has to do with *habit*. (Note this!) Mom has learned that people cannot fly. Thomas has not. He still isn't certain what you can and cannot do in this world.

But what about the world itself, Sophie? Do you think *it* can do what it does? The world is also floating in space.

Sadly it is not only the force of gravity we get used to as we grow up. The world itself becomes a habit in no time at all. It seems as if in the process of growing up we lose the ability to wonder about the world. And in doing so, we lose something central—something philosophers try to restore. For somewhere inside ourselves, something tells us that life is a huge mystery. This is something we once experienced, long before we learned to think the thought.

To be more precise: Although philosophical questions concern us all, we do not all become philosophers. For various reasons most people get so caught up in everyday affairs that their astonishment at the world gets pushed into the background. (They crawl deep into the rabbit's fur, snuggle down comfortably, and stay there for the rest of their lives.)

To children, the world and everything in it is *new*, something that gives rise to astonishment. It is not like that for adults. Most adults accept the world as a matter of course.

This is precisely where philosophers are a notable exception. A philosopher never gets quite used to the world. To him or her, the world continues to seem a bit unreasonable—bewildering, even enigmatic.

Philosophers and small children thus have an important faculty in common. You might say that throughout his life a philosopher remains as thin-skinned as a child.

So now you must choose, Sophie. Are you a child who has not yet become world-weary? Or are you a philosopher who will vow never to become so?

If you just shake your head, not recognizing yourself as either a child or a philosopher, then you have gotten so used to the world that it no longer astonishes you. Watch out! You are on thin ice. And this is why you are receiving this course in philosophy, just in case. I will not allow you, of all people, to join the ranks of the apathetic and the indifferent. I want you to have an inquiring mind.

The whole course is free of charge, so you get no money back if you do not complete it. If you choose to break off the course you are free to do so. In that case you must leave a message for me in the mailbox. A live frog would be eminently suitable. Something green, at least, otherwise the mailman might get scared.

To summarize briefly: A white rabbit is pulled out of a top hat. Because it is an extremely large rabbit, the trick takes many billions of years. All mortals are born at the very tip of the rabbit's fine hairs, where they are in a position to wonder at the impossibility of the trick. But as they grow older they work themselves ever deeper into the fur. And there they stay. They become so comfortable they never risk crawling back up the fragile hairs again. Only philosophers embark on this perilous expedition to the outermost reaches of language and existence. Some of them fall off, but others cling on desperately and yell at the people nestling deep in the snug softness, stuffing themselves with delicious food and drink.

"Ladies and gentlemen," they yell, "we are floating in space!" But none of the people down there care.

"What a bunch of troublemakers!" they say. And they keep on chatting: Would you pass the butter, please? How much have our stocks risen today? What is the price of tomatoes? Have you heard that Princess Di is expecting again?

THE PHILOSOPHERS' PROJECT

Here we are again! We'll go directly to today's lesson without detours around white rabbits and the like.

I'll outline very broadly the way people have thought about philosophy, from the ancient Greeks right up to our own day. But we'll take things in their correct order.

Since some philosophers lived in a different age—and perhaps in a completely different culture from ours—it is a good idea to try and see what each philosopher's *project* is. By this I mean that we must try to grasp precisely what it is that each particular philosopher is especially concerned with finding out. One philosopher might want to know how plants and animals came into being. Another might want to know whether there is a God or whether man has an immortal soul.

Once we have determined what a particular philosopher's project is, it is easier to follow his line of thought, since no one philosopher concerns himself with the whole of philosophy.

I said *his* line of thought—referring to the philosopher, because this is also a story of men. Women of the past were subjugated both as females and as thinking beings, which is sad because a great deal of very important experience was lost as a result. It was not until this century that women really made their mark on the history of philosophy.

I do not intend to give you any homework—no difficult math questions, or anything like that, and conjugating English verbs is outside my sphere of interest. However, from time to time I'll give you a short assignment.

If you accept these conditions, we'll begin.

THE NATURAL PHILOSOPHERS

The earliest Greek philosophers are sometimes called *natural philosophers* because they were mainly concerned with the natural world and its processes.

We have already asked ourselves where everything comes from. Nowadays a lot of people imagine that at some time something must

have come from nothing. This idea was not so widespread among the Greeks. For one reason or another, they assumed that "something" had always existed.

How everything could come from nothing was therefore not the all-important question. On the other hand the Greeks marveled at how live fish could come from water, and huge trees and brilliantly colored flowers could come from the dead earth. Not to mention how a baby could come from its mother's womb!

The philosophers observed with their own eyes that nature was in a constant state of transformation. But how could such transformations occur?

How could something change from being substance to being a living thing, for example?

All the earliest philosophers shared the belief that there had to be a certain basic substance at the root of all change. How they arrived at this idea is hard to say. We only know that the notion gradually evolved that there must be a basic substance that was the hidden cause of all changes in nature. There had to be "something" that all things came from and returned to.

For us, the most interesting part is actually not what solutions these earliest philosophers arrived at, but which questions they asked and what type of answer they were looking for. We are more interested in how they thought than in exactly what they thought.

We know that they posed questions relating to the transformations they could observe in the physical world. They were looking for the underlying laws of nature. They wanted to understand what was happening around them without having to turn to the ancient myths. And most important, they wanted to understand the actual processes by studying nature itself. This was quite different from explaining thunder and lightning or winter and spring by telling stories about the gods.

So philosophy gradually liberated itself from religion. We could say that the natural philosophers took the first step in the direction of scientific reasoning, thereby becoming the precursors of what was to become science.

Only fragments have survived of what the natural philosophers said

and wrote. What little we know is found in the writings of Aristotle, who lived two centuries later. He refers only to the conclusions the philosophers reached. So we do not always know by what paths they reached these conclusions. But what we do know enables us to establish that the earliest Greek philosophers' project concerned the question of a basic constituent substance and the changes in nature.

THREE PHILOSOPHERS FROM MILETUS

The first philosopher we know of is *Thales*, who came from Miletus, a Greek colony in Asia Minor. He traveled in many countries, including Egypt, where he is said to have calculated the height of a pyramid by measuring its shadow at the precise moment when the length of his own shadow was equal to his height. He is also said to have accurately predicted a solar eclipse in the year 585 B.C.

Thales thought that the source of all things was water. We do not know exactly what he meant by that, he may have believed that all life originated from water—and that all life returns to water again when it dissolves.

During his travels in Egypt he must have observed how the crops began to grow as soon as the floods of the Nile receded from the land areas in the Nile Delta. Perhaps he also noticed that frogs and worms appeared wherever it had just been raining.

It is likely that Thales thought about the way water turns to ice or vapor—and then turns back into water again.

Thales is also supposed to have said that "all things are full of gods." What he meant by that we can only surmise. Perhaps, seeing how the black earth was the source of everything from flowers and crops to insects and cockroaches, he imagined that the earth was filled with tiny invisible "life-germs." One thing is certain—he was not talking about Homer's gods.

The next philosopher we hear of is *Anaximander*, who also lived in Miletus at about the same time as Thales. He thought that our world was only one of a myriad of worlds that evolve and dissolve in something he called the boundless. It is not so easy to explain what he meant by the boundless, but it seems clear that he was not thinking of a known substance in the way that Thales had envisaged. Perhaps he meant that

the substance which is the source of all things had to be something other than the things created. Because all created things are limited, that which comes before and after them must be "boundless." It is clear that this basic stuff could not be anything as ordinary as water.

A third philosopher from Miletus was *Anaximenes* (c. 570–526 B.C.). He thought that the source of all things must be "air" or "vapor." Anaximenes was of course familiar with Thales' theory of water. But where does water come from? Anaximenes thought that water was condensed air. We observe that when it rains, water is pressed from the air. When water is pressed even more, it becomes earth, he thought. He may have seen how earth and sand were pressed out of melting ice. He also thought that fire was rarefied air. According to Anaximenes, air was therefore the origin of earth, water, and fire.

It is not a far cry from water to the fruit of the earth. Perhaps Anaximenes thought that earth, air, and fire were all necessary to the creation of life, but that the source of all things was air or vapor. So, like Thales, he thought that there must be an underlying substance that is the source of all natural change.

NOTHING CAN COME FROM NOTHING

These three Milesian philosophers all believed in the existence of a single basic substance as the source of all things. But how could one substance suddenly change into something else? We can call this the *problem of change*.

From about 500 B.C., there was a group of philosophers in the Greek colony of Elea in Southern Italy. These "Eleatics" were interested in this question.

The most important of these philosophers was *Parmenides* (c. 540–480 B.C.). Parmenides thought that everything that exists had always existed. This idea was not alien to the Greeks. They took it more or less for granted that everything that existed in the world was everlasting. Nothing can come out of nothing, thought Parmenides. And nothing that exists can become nothing.

But Parmenides took the idea further. He thought that there was no

such thing as actual change. Nothing could become anything other than it was.

Parmenides realized, of course, that nature is in a constant state of flux. He perceived with his senses that things changed. But he could not equate this with what his reason told him. When forced to choose between relying either on his senses or his reason, he chose reason.

You know the expression "I'll believe it when I see it." But Parmenides didn't even believe things when he saw them. He believed that our senses give us an incorrect picture of the world, a picture that does not tally with our reason. As a philosopher, he saw it as his task to expose all forms of perceptual illusion.

This unshakable faith in human reason is called *rationalism*. A rationalist is someone who believes that human reason is the primary source of our knowledge of the world.

All Things Flow

A contemporary of Parmenides was *Heraclitus* (c. 540–480 B.C.), who was from Ephesus in Asia Minor. He thought that constant change, or flow, was in fact the most basic characteristic of nature. We could perhaps say that Heraclitus had more faith in what he could perceive than Parmenides did.

"Everything flows," said Heraclitus. Everything is in constant flux and movement, nothing is abiding. Therefore we "cannot step twice into the same river." When I step into the river for the second time, neither I nor the river are the same.

Heraclitus pointed out that the world is characterized by opposites. If we were never ill, we would not know what it was to be well. If we never knew hunger, we would take no pleasure in being full. If there were never any war, we would not appreciate peace. And if there were no winter, we could never see the spring.

Both good and bad have their inevitable place in the order of things, Heraclitus believed. Without this constant interplay of opposites the world would cease to exist.

"God is day and night, winter and summer, war and peace, hunger and satiety," he said. He used the term "God," but he was clearly not re-

ferring to the gods of the mythology. To Heraclitus, God—or the Deity—was something that embraced the whole world. Indeed, God can be seen most clearly in the constant transformations and contrasts of nature.

Instead of the term “God,” Heraclitus often used the Greek word *logos*, meaning reason. Although we humans do not always think alike or have the same degree of reason, Heraclitus believed that there must be a kind of “universal reason” guiding everything that happens in nature.

This “universal reason” or “universal law” is something common to us all, and something that everybody is guided by. And yet most people live by their individual reason, thought Heraclitus. In general, he despised his fellow beings. “The opinions of most people,” he said, “are like the playthings of infants.”

So in the midst of all nature’s constant flux and opposites, Heraclitus saw an Entity or one-ness. This “something,” which was the source of everything, he called God or *logos*.

Four Basic Elements

In one way, Parmenides and Heraclitus were the direct opposite of each other. Parmenides’ *reason* made it clear that nothing could change. Heraclitus’ *sense perceptions* made it equally clear that nature was in a constant state of change. Which of them was right? Should we let reason dictate or should we rely on our senses?

Parmenides and Heraclitus both say two things:

Parmenides says:

- a) that nothing can change, and
- b) that our sensory perceptions must therefore be unreliable.

Heraclitus, on the other hand, says:

- a) that everything changes (“all things flow”), and
- b) that our sensory perceptions are reliable.

Philosophers could hardly disagree more than that! But who was right? It fell to *Empedocles* (c. 490–430 B.C.) from Sicily to lead the way out of the tangle they had gotten themselves into.

He thought they were both right in one of their assertions but wrong in the other.

Empedocles found that the cause of their basic disagreement was that both philosophers had assumed the presence of only one element. If this were true, the gap between what reason dictates and what "we can see with our own eyes" would be unbridgeable.

Water obviously cannot turn into a fish or a butterfly. In fact, water cannot change. Pure water will continue to be pure water. So Parmenides was right in holding that "nothing changes."

But at the same time Empedocles agreed with Heraclitus that we must trust the evidence of our senses. We must believe what we see, and what we see is precisely that nature changes.

Empedocles concluded that it was the idea of a single basic substance that had to be rejected. Neither water nor air alone can change into a rosebush or a butterfly. The source of nature cannot possibly be one single "element."

Empedocles believed that all in all, nature consisted of four elements, or "roots" as he termed them. These four roots were *earth, air, fire, and water*.

All natural processes were due to the coming together and separating of these four elements. For all things were a mixture of earth, air, fire, and water, but in varying proportions. When a flower or an animal dies, he said, the four elements separate again. We can register these changes with the naked eye. But earth and air, fire and water remain everlasting, "untouched" by all the compounds of which they are part. So it is not correct to say that "everything" changes. Basically, nothing changes. What happens is that the four elements are combined and separated—only to be combined again.

We can make a comparison to painting. If a painter only has one color—red, for instance—he cannot paint green trees. But if he has yellow, red, blue, and black, he can paint in hundreds of different colors because he can mix them in varying proportions.

An example from the kitchen illustrates the same thing. If I only have flour, I have to be a wizard to bake a cake. But if I have eggs, flour, milk, and sugar, then I can make any number of different cakes.

It was not purely by chance that Empedocles chose earth, air, fire,



and water as nature's "roots." Other philosophers before him had tried to show that the primordial substance had to be either water, air, or fire. Thales and Anaximenes had pointed out that both water and air were essential elements in the physical world. The Greeks believed that fire was also essential. They observed, for example, the importance of the sun to all living things, and they also knew that both animals and humans have body heat.

Empedocles might have watched a piece of wood burning. Something disintegrates. We hear it crackle and splutter. That is "water." Something goes up in smoke. That is "air." The "fire" we can see. Something also remains when the fire is extinguished. That is the ashes—or "earth."

After Empedocles' clarification of nature's transformations as the combination and dissolution of the four "roots," something still remained to be explained. What makes these elements combine so that new life can occur? And what makes the "mixture" of, say, a flower dissolve again?

Empedocles believed that there were two different forces at work in nature. He called them *love* and *strife*. Love binds things together, and strife separates them.

He distinguishes between "substance" and "force." This is worth noting. Even today, scientists distinguish between *elements* and *natural forces*. Modern science holds that all natural processes can be explained as the interaction between different elements and various natural forces.

Empedocles also raised the question of what happens when we perceive something. How can I "see" a flower, for example? What is it that happens? Have you ever thought about it, Sophie?

Empedocles believed that the eyes consist of earth, air, fire, and water, just like everything else in nature. So the "earth" in my eye perceives what is of the earth in my surroundings, the "air" perceives what is of the air, the "fire" perceives what is of fire, and the "water" what is of water. Had my eyes lacked any of the four substances, I would not have seen all of nature.

Something of Everything in Everything

Anaxagoras (500–428 B.C.) was another philosopher who could not agree that one particular basic substance—water, for instance—might be transformed into everything we see in the natural world. Nor could he accept that earth, air, fire, and water can be transformed into blood and bone.

Anaxagoras held that nature is built up of an infinite number of minute particles invisible to the eye. Moreover, everything can be divided into even smaller parts, but even in the minutest parts there are fragments of all other things. If skin and bone are not a transformation of something else, there must also be skin and bone, he thought, in the milk we drink and the food we eat.

A couple of present-day examples can perhaps illustrate Anaxagoras' line of thinking. Modern laser technology can produce so-called holograms. If one of these holograms depicts a car, for example, and the hologram is fragmented, we will see a picture of the whole car even though we only have the part of the hologram that showed the bumper. This is because the whole subject is present in every tiny part.

In a sense, our bodies are built up in the same way. If I loosen a skin cell from my finger, the nucleus will contain not only the characteristics of my skin: the same cell will also reveal what kind of eyes I have, the color of my hair, the number and type of my fingers, and so on. Every cell of the human body carries a blueprint of the way all the other cells are constructed. So there is “something of everything” in every single cell. The whole exists in each tiny part.

Anaxagoras called these minuscule particles which have something of everything in them *seeds*.

Remember that Empedocles thought that it was “love” that joined the elements together in whole bodies. Anaxagoras also imagined “order” as a kind of force, creating animals and humans, flowers and trees. He called this force mind or intelligence (*nous*).

Anaxagoras is also interesting because he was the first philosopher we hear of in Athens. He was from Asia Minor but he moved to Athens at the age of forty. He was later accused of atheism and was ultimately forced to leave the city. Among other things, he said that the sun was



not a god but a red-hot stone, bigger than the entire Peloponnesian peninsula.

Anaxagoras was generally very interested in astronomy. He believed that all heavenly bodies were made of the same substance as Earth. He reached this conclusion after studying a meteorite. This gave him the idea that there could be human life on other planets. He also pointed out that the Moon has no light of its own—its light comes from Earth, he said. He thought up an explanation for solar eclipses as well.

P.S. Thank you for your attention, Sophie. It is not unlikely that you will need to read this chapter two or three times before you understand it all. But understanding will always require some effort. You probably wouldn't admire a friend who was good at everything if it cost her no effort.

The best solution to the question of basic substance and the transformations in nature must wait until tomorrow, when you will meet Democritus. I'll say no more!

Sophie sat in the den looking out into the garden through a little hole in the dense thicket. She had to try and sort out her thoughts after all she had read.

It was as clear as daylight that plain water could never turn into anything other than ice or steam. Water couldn't even turn into a watermelon, because even watermelons consisted of more than just water. But she was only sure of that because that's what she had learned. Would she be absolutely certain, for example, that ice was only water if that wasn't what she had learned? At least, she would have to have studied very closely how water froze to ice and melted again.

Sophie tried once again to use her own common sense, and not to think about what she had learned from others.

Parmenides had refused to accept the idea of change in any form. And the more she thought about it, the more she was convinced that, in a way, he had been right. His intelligence could not accept that "something" could suddenly transform itself into "something completely different." It must have taken quite a bit of courage to come right out and say it, because it meant denying all the natural changes