

# MARRIAGE IS A PRIVATE AFFAIR

- Chinua Achebe

'HAVE you written to your dad yet?' asked Nene one afternoon as she sat with Nnaemeka in her room at 16 Kasanga Street, Lagos.

'No, I've been thinking about it. I think it's better to tell him when I get home on leave!'

'But why? Your leave is such a long way off yet—six whole weeks. He should be let into our happiness now.'

Nnaemeka was silent for a while, and then began very slowly as if he groped for his words: 'I wish I were sure it would be happiness to him.'

'Of course it must,' replied Nene, a little surprised. 'Why shouldn't it?'

'You have lived in Lagos all your life, and you know very little about people in remote parts of the country.'

'That's what you always say. But I don't believe anybody will be so unlike other people that they will be unhappy when their sons are engaged to marry.'

'Yes, they are mot unhappy if the engagement is not arranged by them. In our case it's worse—you are not even an Ibo'.

This was said so seriously and so bluntly that Nene could not find speech immediately. In the cosmopolitan atmosphere of the city it has always seemed to her something of a joke that a person's tribe could determine whom he married.

At last she said, 'You don't really mean that he will object to your marrying me simply on that account? I had always thought you Ibos were kindly dispensed to other people.'

'So we are. But when it comes to marriage, well, it's not quite so simple. And this,' he added, 'is not peculiar to the Ibos. If your father were alive and lived in the heart of Ibibo-land he would be exactly like my father.'

'I don't know. But anyway, as your father is so fond of you, I'm sure he will forgive you soon enough. Come on then, be a good boy and send him a nice lovely letter....'

'It would not be wise to break the news to him by writing. A letter will bring it upon him with a shock. I'm quite sure about that.'

'All right, honey, suit yourself. You know your father.'

As Nnaemeka walked home that evening he turned over in his mind different ways of overcoming his father's opposition, especially now that he had gone and found a girl for him. He had thought of showing his letter to Nene but decided on second thoughts not to, at least for the moment. He read it again when he got home and couldn't help smiling to himself. He remembered Ugoye quite well, an Amazon of a girl who used to beat up all the boys, himself included, on the way to the stream, a complete dunce at school.

*I have found a girl who will suit you admirably—Ugoye Nweke, the eldest daughter of our neighbour, Jacob Nweke. She has a proper Christian upbringing. When she stopped schooling some years ago, her father (a man of sound judgment) sent her to live in the house of a pastor where she has received all the training a wife could need. Her Sunday School teacher has told me that she reads her Bible very fluently. I hope we shall begin negotiations when you come home in December.*

On the second evening of his return from Lagos Nnaemeka sat with his father under a cassia tree. This was the old man's retreat where he went to read his Bible when the parching December sun had set and a fresh, reviving wind blew on the leaves.

'Father,' began Nnaemeka suddenly, 'I have come to ask for forgiveness.'

'Forgiveness? For what, my son?' he asked in amazement, 'It's about this marriage question.'

'I can't—we must—I mean it is impossible for me to marry Nweke's daughter.'

'Impossible? Why?' asked his father.

'I don't love her.'

'Nobody said you did. Why should you?' he asked.

'Marriage today is different....'

'Look here, my son,' interrupted his father, 'nothing is different. What one looks for in a wife are a good character and a Christian background.' Nnaemeka saw there was no hope along the present line of argument.

'Moreover,' he said, 'I am engaged to marry another girl who has all of Ugoye's good qualities, and who ...'

His father did not believe his ears. 'What did you say?' he asked slowly and disconcertingly.

'She is a good Christian,' his son went on, 'and a teacher in a Girls' School in Lagos.'

'Teacher, did you say? If you consider that a qualification for a good wife I should like to point out to you. Nnaemeka, that no Christian women should teach. St. Paul in his letter to the Corinthians says that women should keep silence.' He rose slowly from his seat and paced forwards and backwards. This was his pet subject, and he condemned vehemently those church leaders who encouraged women to teach in their schools. After he had spent his emotion on a long homily he at last came back to his son's engagement, in a seemingly milder tone.

'Whose daughter is she, anyway?'

'She is Nene Atang.'

'What!' All the mildness was gone again. 'Did you say Nene Atang, what does that mean?'

'Nene Atang from Calabar. She is the only girl I can marry.' This was a very rash reply and Neaemeka expected the storm to burst. But it did not. His father merely walked away into his room. This was most unexpected and perplexed Neaemeka. His father's silence was infinitely more menacing than a flood of threatening speech. That night the old man did not eat.

When he sent for Neaemeka a day later he applied all possible ways of dissuasion. But the young man's heart was hardened, and his father eventually gave him up as lost.

'I owe it to you, my son, as a duty to show you what is right and what is wrong. Whoever put this idea into your head might as well have cut your throat. It is Satan's work.' He waved his son away.

'You will change your mind, Father, when you know Nene.'

'I shall never see her.' was the reply. From that night the father scarcely spoke to his son. He did not, however, cease hoping that he would realize how serious was the danger he was heading for. Day and night he put him in his prayers.

Nnaemeka, for his own part, was very deeply affected by his father's grief. But he kept hoping that it would pass away. If it had occurred to him that never in the history of his people had a man married

a women who spoke a different tongue, he might have been less optimistic. 'It has never been heard,' was the verdict of an old man speaking a few weeks later. In that short sentence he spoke for all of his people. This man had come with others to commiserate with Okeke when news went round about his son's behaviour. By that time the son had gone back to Lagos.

'It has never been heard,' said the old man again with a sad shake of his head.

'What did Our Lord say?' asked another gentleman.

'Sons shall rise against their Father's; it is there in the Holy book.'

'It is the beginning of the end,' said another.

The discussion thus tending to become theological, Madubogwu, a highly practical man, brought it down once more to the ordinary level.

'Have you thought of consulting a native doctor about your son?' he asked Nnaemeka's father.

'He isn't sick, was the reply.

'What is he then? The boy's mind is diseased and only a good herbalist can bring him back to his right senses. The medicine here requires is Amalile, the same that women apply with success to recapture their husbands' straying affection.

'Madubogwu is right,' said another gentleman. 'This thing calls for medicine.'

'I shall not call in a native doctor.' Nnaemeka's father was known to be obstinately ahead of his more superstitious neighbours in these matters. 'I will not be another Mrs Ochuba. If my son wants to kill himself let him do it with his own hands. It is not for me to help him.'

'But it was her fault,' said Madubogwu. 'She ought to have gone to an honest herbalist. She was a clever woman, nevertheless.'

'She was a wicked murderer,' said Jonathan who rarely argued with his neighbors because, he often said, they were incapable of reasoning. 'The medicine was prepared for her husband, it was his name they called in its preparation and I am sure it would have been perfectly beneficial to him. It was wicked to put it into the herbalist's food, and say you were only trying it out.'

Six months later, Nnaemeka was showing his young wife a short letter from his father:

*It amazes me that you could be so unfeeling as to send me your wedding picture. I would have sent it back. But on further thought I decided just to cut off your wife and send it back to you because I have nothing to do with her. How I wish that I had nothing to do with you either.*

When Nene read through this letter and looked at the mutilated picture her eyes filled with tears, and she began to sob.

'Don't cry, my darling,' said her husband. 'He is essentially good-natured and will one day look more kindly on our marriage.' But years passed and that one day did not come.

For eight years, Okeke would have nothing to do with his son, Nnaemeka. Only three times (when Nnaemeka asked to come home and spend his leave) did he write to him.

'I can't have you in my house,' he replied on one occasion. 'It can be of no interest to me where or how you spend your leave—or your life, for that matter.'

The prejudice against Nnaemeka's marriage was not confined to his little village. In Lagos, especially among his people who worked there, it showed itself in a different way. Their women, when they met at their village meeting, were not hostile to Nena. Rather, they paid her such excessive deference as to make her feel she was not one of them. But as time went on, Nene gradually broke through some of this prejudice and even began to make friends among them. Slowly and grudgingly they began to admit that she kept her home much better than most of them.

The story eventually got to the little village in the heart of the Ibo country that Nnaemeka and his young wife were a most happy couple. But his father was one of the few people in the village who knew nothing about this. He always displayed so much temper whenever his son's name was mentioned that everyone avoided it in his presence. By a tremendous effort of will he had succeeded in pushing his son to the back of his mind. The strain had nearly killed him but he had persevered, and won.

Then one day he received a letter from Nene, and in spite of himself he began to glance through it perfunctorily until all of a sudden the expression on his face changed and he began to read more carefully:

*Our two sons, from the day they learnt that they have a grandfather, have insisted on being taken to him. I find it impossible to tell them that you will not see them, I implore you to allow Nnaemeka to bring them for a short time during his leave next month. I shall remain here in Lagos....'*

The old man at once felt the resolution he had built up over so many years falling in. He was telling himself that he must not give in. He tried to steel his heart against all emotional appeals. I was a re-enactment of that other struggle. He leaned against a window and looked out. The sky was overcast with heavy black clouds and a high wind began to blow filling the air with dust and dry leaves. It was one of those rare occasions when even nature takes a hand in a human fight. Very soon it began to rain, the first rain in the year. It came down in large sharp drops and was accompanied by the lightning and thunder which mark a change of season. Okeke was trying hard not to think of his two grandsons. But he knew he was now fighting a losing battle. He tried to hum a favorite hymn but the patterning of.... Large raindrops on the roof broke up the tune. His mind immediately returned to the children. How could he shut his door against them? By a curious mental process he imagined them standing, sad and forsaken, under the harsh angry weather—shut out from his house.

That night he hardly slept, from remorse—and a vague fear that he might die without making it up to them.

#### Answer the following questions:

1. What is the text 'Marriage is a Private Affair' about?
2. 'Marriage is a Private Affair'. Do you really agree with this point?
3. Describe how the relationship between Nnaemeka and his father Mr. Okeke Worsened.
4. Compare and contrast the family background of Nnaemeka and Nene.
5. Why did Mr. Okeke not accept Nene's daughter in law?
6. Write a few paragraphs describing the caste system in Nepal.

## CUSTOMS

- Clyde Kluckhohn

Clyde Kluckhohn (1905-1960), an American anthropologist, was educated at Harvard. He taught at the University of New Mexico and at Harvard and is known mainly for his studies of the Navaho Indians. As an undergraduate in Princeton, he became ill and was sent to New Mexico to recover. There he spent a great deal of time in Navaho country, learned the Navaho language, and developed a lifelong interest in Indian peoples. He is known mainly for his studies of the Navaho Indians and for his work on personality and culture. His books include *Mirror for Man* (1949), *Culture: A Critical Review of Concepts and Definitions* (1952) and *To the Foot of the Rainbow* (1952).

In this selection taken from *Mirror for Man*, Kluckhohn first defines culture and goes on to demonstrate the fact of cultural difference by means of a series of examples. At the same time he reminds us of "the inevitables of biology." Biologically speaking, Mankind is of course one species, and cultural differences, however great, are in the end all subordinated to "the same biological equipment" that serves all.

Why do the Chinese dislike milk and milk products? Why would the Japanese die willingly in a Banzai charge that seemed senseless to Americans? Why do some nations trace descent through the father, others through the mother, still others through both parents? Not because different peoples have different instincts, not because they were destined by God or fate to different habits, not because the weather is different in China and Japan and the United States. Sometimes shrewd common sense has an answer that is close to that of the anthropologist: "because they were brought up that way." By "culture" anthropology means the total life way of a people, the social legacy the individual acquires from his group. Or culture can be regarded as that part of the environment that is the creation of man.

This technical term has a wider meaning than the "culture" of history and literature. A humble cooking pot is as much a cultural product as is Beethoven sonata. In ordinary speech a man of culture is a man who can speak languages other than his own, who is familiar with history, literature, philosophy, or the fine arts. In some cliques that definition is

still narrower. The cultured person is one who can talk about James Joyce, Scarlatti, and Picasso. To the anthropologist, however, to be human is to be cultured, there is culture in general, and then there are the specific cultures such as Russian, American, British, Hottentot, Inca. The general abstract notion serves to remind us that we cannot explain acts solely in terms of the biological properties of the people concerned, their individual past experience, and the immediate situation. The past experience of other men in the form of culture enters into almost every event. Each specific culture constitutes a kind of blueprint for all of life's activities.

One of the interesting things about human beings is that they try to understand themselves and their own behavior, while this has been particularly true of Europeans in recent times, there is no group which has not developed a scheme or schemes to explain man's actions. To the insistent human query "why?" the most exciting illumination anthropology has to offer is that of the concept of culture. Its explanatory importance is comparable to categories such as evolution in biology, gravity in physics disease in medicine. A good deal of human behaviors can be understood, and indeed predicted, if we know a people's design for living. Many acts are neither accidental nor due to personal peculiarities nor caused by supernatural forces nor simply mysterious. Even those of us who pride ourselves on our individualism follow most of the time a pattern not of our own making. We brush our teeth on arising. We put on pants—not a loincloth or a grass skirt. We eat three meals a day—not four or five or two. We sleep in a bed—not in a hammock or on a sheep pelt. I do not have to know the individual and his life history to be able to predict these and countless other regularities, including many in the thinking process, of all Americans who are not incarcerated in jails or hospitals for the insane.

To the American woman a system of plural wives seems "instinctively" abhorrent. She cannot understand how any woman can fail to be jealous and uncomfortable if she must share her husband with other women. She feels it "unnatural" to accept such a situation. On the other hand, a Koryak woman of Siberia, For example, would find it hard to understand how a woman could be so selfish and so indesirous of feminine companionship in the home as to wish to restrict her husband to one mate.

some years ago I met in New York City a young man who did not speak a word of English and was obviously bewildered by American

ways, by "blood" he was as American as you or I, for his parents had gone from Indiana to China as missionaries. Orphaned in infancy, he was reared by a Chinese family in a remote village. All who met him found him more Chinese than American. The facts of his blue eyes and light hair were less impressive than a Chinese style of gait, Chinese arm and hand movement, Chinese facial expression, and Chinese modes of thought. The biological heritage was American, but the cultural training had been Chinese. He returned to China.

Another example of another kind: I once knew a trader's wife in Arizona who took a somewhat devilish interest in producing a cultural reaction. Guests who came her way were often served delicious sandwiches filled with a meat that seemed to be neither chicken nor tuna fish yet was reminiscent of both. To queries she gave no reply until each had eaten his fill. She then explained that what they had eaten was not chicken, not tuna fish, but the rich, white flesh of freshly killed rattlesnakes. The response was instantaneous—vomiting, often violent vomiting. A biological process is caught in a cultural web.

A highly intelligent teacher with long and successful experience in the public schools of Chicago was finishing her first year in an Indian school. When asked how her Navaho pupils compared in intelligence with Chicago youngsters, she replied, "Well, I just don't know. Sometimes the Indians seem just as bright. At other times they just act like dumb animals. The other night we had a dance in the high school. I saw a boy who is one of the best students in my English class standing off by himself. So I took him over to a pretty girl and told them to dance. But they just stood there with their heads down, they wouldn't even say anything." I inquired if she knew whether or not they were members of the same clan. "What difference would that make?"

"How would you feel about getting into bed with your brother?" The teacher walked off in a huff, but, actually, the two cases were quite comparable in principle. To the Indian the type of bodily contact involved in our social dancing has a directly sexual connotation. The incest taboos between members of the same clan are as severe as between true brothers and sisters. The shame of the Indians at the suggestion that a clan brother and sister should dance and the indignation of the white teacher at the idea that she should share a bed with an adult brother represent equally no rational responses, culturally standardized unreason.

All this does not mean that there is no such thing as raw human nature. The very fact that certain of the same institutions are found in all known societies indicates that at bottom all human beings are very much alike. The files of the Cross-Cultural Survey at Yale University are organized according to categories such as "marriage ceremonies," "life crisis rites," "incest taboos." At least seventy-five of these categories are represented in every single one of the hundreds of cultures analyzed. This is hardly surprising. The members of all human groups have about the same biological equipment. All men undergo the same poignant life experiences such as birth, helplessness, illness, old age, and death. The biological potentialities of the species are the blocks with which cultures are built. Some patterns of every culture crystallize around focuses provided by the inevitables of biology: the difference between the sexes, the presence of persons of different ages, the varying physical strength and skill of individuals. The facts of nature also limit culture forms. No culture provides patterns for jumping over trees or for eating iron ore.

#### **Exercises:**

1. In the opening paragraphs Kluckhohn gives us two different delineations of the word culture. Explain the difference between them.
2. What is the point Kluckhohn tries to make when at the end of paragraph 8, he sums up with the term "culturally standardized unreason?" Can you cite additional examples?
3. In paragraph 9, after citing several examples of cultural difference, Kluckhohn asserts that "at bottom all human beings are very much alike." Is he contradicting himself? Sum up Kluckhohn's arguments for both diversity and similarity.
4. Cultural differences can occur in many ways, often near to home. Describe a time when you encountered cultural difference—in a friend's house, with a fellow student, in some unfamiliar setting—and examine the effect on you as well as, perhaps, yours on the others involved.

#### **Answer the following questions:**

1. Define customs and describe its impact on the social psychological and behavioral aspect of our life.
2. "Customs are the man-made things which guide every member of a society." Explain it.

3. "Customs have a deep rooted impact on our manner, behavior and the way of thinking." justify it.
4. "Our total behavior is controlled by the customs of our community."
5. Explain it.
6. What does vomiting after the consumer's knowing about the source of delicious meat suggest? Have you ever experienced the similar incidents?

#### **KEEPING ERRORS AT BAY**

-Bertrand Russell

To avoid the various foolish opinions to which mankind are prone, no superhuman genius is required. A few simple rules will keep you, not from all error, but from silly error.

If the matter is one that can be settled by observation, make the observation yourself. Aristotle could have avoided the mistake of thinking that women have fewer teeth than men by the simple device of asking Mrs. Aristotle to keep her mouth open while he counted. He did not do so because he thought he knew. Thinking that you know when in fact you don't is a fatal mistake, to which we are all prone. I believe myself that hedgehogs eat black beetles, because I have been told that they do, but if I were writing a book on the habits of hedgehogs, I should not commit myself until I had seen one enjoying this unappetizing diet. Aristotle, however, was less cautious. Ancient and medieval authors knew all about unicorns and salamanders; not one of them thought it necessary to avoid dogmatic statements about them because he had never seen one of them.

Many matters, however, are less easily brought to the test of experience. If, like most of mankind, you have passionate convictions on many such matters, there are ways in which you can make yourself aware of your own bias. If an opinion contrary to your own makes you angry, that is a sign that you are subconsciously aware of having no good reason for thinking as you do. If someone maintains that two and two are five, or that Iceland is on the equator, you feel pity rather than anger, unless you know so little of arithmetic or geography that his opinion shakes your own contrary. The most savage controversies are those about matters as to which there is no good evidence either way. Persecution is used in theology, not in arithmetic, because in arithmetic

there is knowledge, but in theology there is only opinion. So whenever you find yourself getting angry about a difference of opinion, be on your guard; you will probably find, on examination, that your belief is going beyond what the evidence warrants.

A good way of ridding yourself of certain kinds of dogmatism is to become aware of opinions held in social circles different from your own. When I was young, I lived much outside my own country—in France, Germany, Italy, and the United States. I found this very profitable in diminishing the intensity of insular prejudice, and read a newspaper belonging to a party that is not yours. If you cannot travel, seek out people with whom you disagree, and read a newspaper belonging to a party that is not yours. If the people and the newspaper seem so to them. In this opinion both parties may be right, but they cannot both be wrong. This reflection should generate a certain caution.

Becoming aware of foreign customs, however, does not always have a beneficial effect. In the seventeenth century, when the Manchus conquered China, it was the custom among the Chinese for the women to have small feet, and among the Manchus for the men to wear pigtails. Instead of each dropping their own foolish custom, they each adopted the foolish custom of the other, and the Chinese continued to wear pigtails until they shook off the dominion of the Manchus in the revolution of 1911.

For those who have enough psychological imagination, it is a good plan to imagine an argument with a person having a different bias. This has one advantage, and only one, as compared with actual conversation with opponents; this one advantage is that the method is not subject to the same limitations of time and space. Mahatma Gandhi deplored railways and steamboats and machinery; he would have liked to undo the whole of the industrial revolution. You may never have an opportunity of actually meeting anyone who holds this opinion, you will find it a good plan to test the arguments that occur to you by considering what Gandhi might have said in refutation of them. I have sometimes been led actually to change my mind as a result of this kind of imaginary dialogue, and, short of this, I have frequently found myself growing less dogmatic and cocksure through realizing the possible reasonableness of a hypothetical opponent.

Be very wary of opinions that flatter your self-esteem. Both men and women, nine times out of ten, are firmly convinced of the superior excellence of their own sex. There is abundant evidence on

both sides. If you are a man, you can point out that most poets and men of science are male; if you are a woman you can retort that so are most criminals. The question is inherently insoluble, but self-esteem conceals this from most people. We are all, from whatever part of the world we come from, persuaded that our own nation is superior to all the others. Seeing that each nation has its characteristic merits and demerits, we adjust our standard of values so as to make out that the merits possessed by our nation are the really important ones, while its demerits are comparatively trivial. Here, again, the rational man will admit that the question is one to which there is no demonstrably right answer. It is more difficult to deal with the self-esteem of man as man, because we cannot argue out the matter with some non-human mind. The only way I know of dealing with this general human conceit is to remind ourselves that man is a brief episode in the life of a small planet in a little corner of the universe, and that, for aught we know, other parts of the cosmos may contain beings as superior to ourselves as we are to jelly-fish.

Other passions besides self-esteem are common sources of error; of these perhaps the most important is fear. Fear sometimes operates directly, by inventing rumours of disaster in war-time, or by imagining objects of terror, such as ghosts' something comforting, such as the elixir of life, or heaven for ourselves and hell for our enemies. Fear has many forms—fear of death, fear of the dark, fear of the unknown, fear of the head, and that vague generalized fear that comes to those who conceal from themselves their more specific terrors. Until you have admitted your own fears to yourself, and have guarded yourself by a difficult effort of will against their myth-making power, you cannot hope to think truly about many matters of great importance, especially those with which religious beliefs are concerned. Fear is the main source of superstition, and one of the main sources of cruelty. To conquer fear is the beginning of wisdom, in the pursuit of truth as in the endeavour after a worthy manner of life.

#### Write answer to the following questions:

1. What is the theme of the text keeping Errors at Bay?
2. How can we avoid errors?
3. What are the causes and sources of our errors?

## WHO WAS TO BLAME?

-Anton Chekhov

As my uncle Pyotr Demyanitch, a lean, bilious high school teacher, exceedingly like a stale smoked fish with a stick through it, was getting ready to go to the high school, where he taught Latin, he noticed that the corner of his grammar book was nibbled by mice.

"I say, Praskovya," he said, going into the kitchen and addressing the cook, "how is it we have got mice here? Upon my word! Yesterday my top hat was nibbled, today they have disfigured my Latin grammar book ... At this rate they will soon begin eating my clothes!"

"What can I do? I did not bring them in!" answered Praskovya.

"We must do something! You had better get a cat, hand't you?"  
"I've got a cat, but what good is it?"

And Praskovya pointed to the corner where a white kitten, thin as a match, lay curled up asleep beside a broom.

"Why is it no good?" Asked Pyotr Demyanitch.

"It's young yet, and foolish. It's not two months old yet."

"H'm. .... Then it must be trained. It had much better be learning instead of lying there."

Saying this, Pyotr Demyanitch sighed with a careworn air and went out of the kitchen. The kitten raised his head, looked lazily after him, and shut his eyes again.

The kitten lay awake thinking. Off what? Unacquainted with real life, having no store of accumulated impressions, his mental processes could only be instinctive, and he could but picture life in accordance with the conceptions that he had inherited, together with his flesh and blood, from his ancestors, the tigers (see Darwin). His thoughts were of the nature of day-dreams. His feline imagination pictured something like the Arabian desert, over which flitted shadows closely resembling Praskovya, the stove, the broom. In the midst of the shadows there suddenly appeared a saucer of milk; the saucer began to grow paws, it began moving and displayed a tendency to run; the kitten made a bound, and with a thrill of bloodthirsty sensuality thrust his claws into it .... When the saucer had vanished into obscurity a piece of meat appeared, dropped by Praskovya; the meat ran away

with a cowardly squeak, but the kitten made a bound and got his claws into it... Everything that rose before the imagination of the young dreamer had for its starting-point leaps, claws, and teeth ... The soul of another is darkness, and a cat's soul more than most, but how near the visions just described are to the truth may be seen from the following fact: under the influence of his day-dreams the kitten suddenly leaped up, looked with flashing eyes at Praskovya, ruffled up his coat, and making one bound, thrust his claws into the cook's skirt. Obviously he was born a mouse catcher, a worthy son of his bloodthirsty ancestors. Fate had destined him to be the terror of cellars, store-rooms, and combins, and had it not been for education ... we will not anticipate, however.

On his way home from the high school, Pyotr Demyanitch went into a general shop and bought a mousetrap for fifteen kopecks. At dinner he fixed a little bit of his rissole' on the hook, and set the trap under the sofa, where there were heaps of the pupils' old exercise-books, which Praskovya used for various domestic purposes. At six o'clock in the evening, when the worthy Latin master was sitting at the table correcting his pupils' exercises, there was a sudden "klop!" so loud that my uncle started and dropped his pen. He went at once to the sofa and dropped his pen. He went at once to the sofa and took out the trap. A neat little mouse, the size of a thimble, was sniffing the wires and trembling with fear.

"Aha," muttered Pyotr Demyanitch, and he looked at the mouse malignantly, as though he were about to give him a bad mark. "you are cau-aught, wretch! Wait a bit! I'll teach you to eat my grammer books!"

Having gloated over his victim, Pyotr Demyanitch put the mousetrap on the floor and called:

"Praskovya, there's a mouse caught! Bring the kitten here!"

"I'm coming," responded Praskovya, and a minute later she came in with the descendant of tigers in her arms.

"Capital!" said Pyotr Demyanitch, rubbing his hands, "We will give him a lesson ... Put him down opposite the mousetrap ... that's it ... Let him sniff it and look at it ... that's it ..."

The kitten looked wonderingly at my uncle, at his armchair, sniffed the mousetrap in bewilderment, then, frightened probably by the glaring lamplight and the attention directed to him, made a dash and ran in terror to the door.

"Stop!" shouted my uncle, seizing him by the tail, "stop, you rascal! He's afraid of a mouse, the idiot! Look! It's a mouse! Look! Well? Look, I tell you!"

Pyotr Demyanitch took the kitten by the scruff of the neck and pushed him with his nose against the mousetrap.

"Look, you carrion! Take him and hold him, Praskovya ... Hold him opposite the door of the trap ... When I let the mouse-out, you let him go instantly ..... Do you hear? ... Instantly let go! Now!"

My uncle assumed a mysterious expression and lifted the door of the trap .... The mouse came out irresolutely, sniffed the air, and flew like an arrow under the sofa. ... The kitten on being released darted under the table with his tail in the air.

"It has got away! got away!" cried Pyotr Demyanitch, looking ferocious. "where is he, the scoundrel? Under the table? You wait. ...."

My uncle dragged the kitten from under the table and shook him in the air.

"Wretched little beast," he muttered, smacking him on the ear. "take that, take that! Will you shirk it next time? Wr-r-r- etch ..."

Next day Praskovya heard again the summons.

'Praskovya, there is a mouse caught! Bring the kitten here!"

after the outrage of the previous day the kitten had taken refuge under the stove and had not come out all night. When Praskovya pulled him out and, carrying him by the scruff of the neck into the study, set him out and, noticing that the kitten was backing away from the mousetrap, he trembled all over and mewed pitifully.

"Come, let him feel at home first," Pyotr Demyanitch commanded. "Let him look and sniff. Look and learn! Stop, Plague take you!" he shouted, noticing that the kitten was backing away from the mousetrap. "I'll thrash you! Hold him by the ear! That's it ..... Well now, set him down before the trap ...."

My uncle slowly lifted the door of the trap .... the mouse whisked under the very nose of the kitten, flung itself against Praskovya's hand and fled under the cupboard; the kitten, feeling himself free, took a desperate bound and retreated under the sofa.

"He's let another mouse go!" bawled Pyotr Demyanitch. "Do you call that a cat? Nasty little beast! Thrash him! thrash him by the mousetrap!"

When the third mouse had been caught, the kitten shivered all over at the sight of the mousetrap and its inmate, and scratched all Praskovya's hand .... After the fourth mouse my uncle flew into a rage, kicked the kitten, and said: "Take the nasty thing away! Get rid of it, Chuck it away! It's no earthly use!"

A year passed, the thin, frail kitten had turned into a solid and sagacious tomcat. One day he was on his way by the back yards to an amatory interview. He had just reached his destination when he suddenly heard a rustle, and thereupon Caught sight of a mouse which ran from a water-trough towards a stable; my hero's hair stood on end, he arched his back, hissed, and trembling all over, took to ignominious flight.

Alas! Sometimes I feel myself in the ludicrous position of the fleeing cat. Like the kitten, I had in my day the honour of being taught Latin by my uncle. Now, whenever I chance to see some work of classical antiquity, instead of being moved to eager enthusiasm, I begin recalling, *ut consecutivum*, the irregular verbs, the sallow grey face of my uncle, the ablative absolute .... I turn pale, my hair stands up on my head, and, like the cat, I take to ignominious flight.

#### Answer these questions

1. What is the main idea of the text who was to Blame?
2. Describe how the baby cat behave when it encountered with a mouse for the first time.
3. Describe the change in the behavior of the cat with the passage of time.
4. What does the text suggest? and what moral does it teach the readers?

## A TALE

- Bishweshwor Prasad Koirala

This is a tale of long long ago, when human beings were in competition with the gods. The gods, ever fearful of defeat in their life-and-death struggle with the demons, did not hesitate to request the help of mere mortals like Dadhichi and Dasharath. But whenever any of these inferior mortals aspired to become gods through penance, the gods grew wary of their erstwhile allies. That is why the gods sought to destroy the penance of people who abandoned all worldly pleasures. Their most successful emissaries of destruction were celestial nymphs.

In those days, one man realized that supreme knowledge could not be found in cities and villages. Among men, he felt, the path to godhood was blocked by social obligations and by the love of family and friends. So, to win supreme knowledge and godhood, he went to dwell alone in a remote jungle.

He lived in a small clearing surrounded by lofty trees. He ate wild roots and berries and drank water from the sparkling river that flowed by his hut. The air was filled with the songs of birds and the gentle murmur of the river. If a man could transcend his earthly condition anywhere on earth, that clearing was the place.

To triumph over the flesh, he squatted in front of seven-tongued fires in summer and plunged into ice-cold water in winter. He fasted for many days. Eventually, after much labor, he conquered his flesh and mind and lost his soul to God, achieving a state of unceasing meditative trance.

Now one full moon followed another. The seasons changed. The trees lost their leaves, put on new leaves, flowered, and lost their leaves again. Wild flowers blossomed and withered. The grass around him grew tall while the grass beneath him died. Termites built their nest on his legs. Yet the sage went on sitting motionlessly, in a deep meditative trance.

The leopards and cobras, the deer and the hare, surrounded him in perfect harmony. The fawns pressed through the ring of lions to cuddle up with him. Anxious not to break the tranquility of the holy place, the tigers and bears tiptoed meekly by. Only the young animals frolicked in the clearing.

Suffused by inner light, he achieved a state of unending ecstasy. He felt the brilliance of a thousand suns exploding within him. Has his goal then been accomplished?

When the sage's penance started to threaten the seat of heaven, and while he was still immersed in his long trance, Indra, the king of the gods, sent the comeliest and adroitest nymph of his court to the hermitage.

The nymph stripped off her clothes and stepped into the river, playfully sprinkling its water. She looked as vibrant, as majestic and enchanting, as a Himalayan peak touched by the first rays of the sun. Knee-deep in the river, she stooped to fill her hands with water, appearing as pure and chaste as the rājanigandha flower. Loveliest of all were her breasts, pointing downwards towards the water like twin raptors ready to pounce on their prey.

At that very moment, while the nymph was still in that spellbinding posture, the sage's eyes involuntarily opened. He did not see the changes around him; he did not notice the overgrown clearing, nor the termite hill which rose up to his chest. Instead, his gaze fell on the nymph. The sage perceived no disparity between his inner peace and the maiden who was now quivering like a willow sapling against the current. She was the living image of his last stage of penance, or the incarnation of his undying passion.

Slowly, the sage rose. Still fully experiencing his inner state of bliss, he advanced towards the glistening maiden. Soon after, they married in the jungle and made preparations to return to society. Just then, a great king and his entourage came to pay homage to the famous recluse. But, upon seeing the sage's young wife, the pilgrims turned away in dismay and shock.

The sage and his wife built a house in a village. Like their neighbors, they tilled the soil and led a simple domestic life. In the course of time they became the parents of two boys. They helped their neighbors in any way they could, nursing their sick, feeding their hungry, and bestowing upon them innumerable acts of kindness.

But their neighbors could never forgive his fall. They eyed with suspicion the erstwhile saint erecting a cow shed. At the sight of his wife carrying water from the well, they thought 'Is she an evil seductress who caused the saint's downfall?' And yet the sage never ceased to experience the ecstasy and bliss he felt in the jungle.

### Write answer to the following questions:

1. What is the text entitled 'A Tale' about?
2. Describe the relationship between gods and human beings in Ancient times.
3. Define penance and describe why did human beings practiced it in ancient times.
4. Why did gods try to destroy the penance of human beings?
5. How did the beautiful nymph destroy the hard penance of an ordinary man who was about to gain heavenly position through his penance?

## THE TURBO-PROP ENGINE

The efficiency of a turbo-jet engine varies with the speed and altitude at which it operates. Whilst it is very efficient at supersonic speeds and high altitudes, it is not suited to the low speeds involved in taking-off and landing. Under these conditions, thrust augmenters or after-burners are often required to boost the power, and this entails heavy fuel consumption and restricts the range of the aircraft. On the other hand, propeller-driven aircraft cannot attain speeds much in excess of 500 m.p.h., whereas at low speeds they have a much better performance. Since subsonic speeds are still acceptable for most civilian airliners, a type of engine known as the turbo-prop was developed, which combined some of the advantages of both jet and piston-driven engines.

In the turbo-jet, the turbine is required to develop enough power to drive the compressor only, whereas in the turbo-prop engine, it must supply power also for the propeller to which it is coupled by means of reduction gearing. As the propeller rotates, it drives rearwards a much larger column of air than that which is expelled from the jet-tube of the turbo-jet, but at a much lower velocity. Consequently it is quieter than the turbo-jet, since the volume of noise produced by an aircraft engine increases with the velocity of the air column. Most airports are situated in or near large centres of population, with the result that any reduction in the noise level is a decided advantage. Furthermore, a large proportion of the energy of the products of combustion is needed to drive the compressor and the airscrew. As this proportion increases, so the amount of thrust developed in the jet-pipe diminishes. In consequence, the destructive blasts of hot gas which emanate from the jet-pipe of the turbo-jet while taxiing on runways or taking-off are greatly reduced.

The main disadvantage of the turbo-prop engine is, of course, the limitation imposed on speed by the airscrew, as a result of which, it is likely to become obsolete on all except short-haul aircraft.

A more recent development in jet propulsion is the ducted-fan jet, in which the turbine drives a multi-bladed fan enclosed in a duct. A

## FREEDOM

- George Bernard Shaw (1856-1950)

### UNIT 1

Now remember, ladies and gentlemen, I have no time to talk the usual old nonsense about freedom tonight. Let us come to business. What is perfectly free person? Evidently a person who can do what he likes, when he likes and where he lies, or do nothing at all if he prefers it. Well, there is no such person; and there never can be any such person. Whether we like it or not, we must all sleep for one-third of our lifetime; wash and dress and undress; we must spend a couple of hours eating and drinking; we must spend nearly as much in getting about from place to place. For half the day we are slave to necessities which we cannot shirk, whether we are monarchs with a thousand servants or humble labourers with no servants but their wives. And the wives must undertake the additional heavy slavery of child-bearing if the world is still to be peopled.

These natural jobs cannot be shirked. But they involve other jobs which can. As we must eat we must first provide food; as we must sleep we must have beds and bedding in houses with fireplaces and coals; as we must walk through the streets, we must have clothes to cover our nakedness. Now, food and houses and clothes can be produced by human labour. But when they are produced it by their labour, and then steal it from them. If you are too lazy to get about from place to place on your own legs you can make a slave of a horse. And what you do to a horse or a bee you can also do to a man or a woman or a child if you can get the upper hand of them by force or fraud or trickery of any sort, or even by teaching them that it is their religious duty to sacrifice their freedom to yours.

So beware! If you allow any person, or class of persons, to get upper hand of you, they will shift all that part of their slavery to Nature that can be shifted on to your shoulders; and you will find yourself working from eight to fourteen hours a day when, if you had only yourself and your family to provide for, you could do it quite comfortably in half

the time or less. The object of all honest Governments should be to prevent your being imposed on in this way. But the object of most actual Governments, I regret to say, is exactly the opposite. They enforce your slavery an call it freedom. But they also regulate your slavery, keeping the greed of your masters within certain bounds. When chattel slavery of the negro sort costs more than wage slavery, they abolish chattel slavery and make you free to choose between one employment, or one master, and another; and this they call a glorious triumph for freedom, though for you it is merely the key of the street. When you complain, they promise that in future you shall govern the country or yourself. They redeem this promise by giving you a vote, and having a general election every five years or so. At the election, two of their rich friends ask for your vote for to spite the other—a choice which leaves you no freer than you were before, as it does not reduce your hours of labour by a single minute. But the newspaper assure you that your vote has decided the election, and that this constitutes you a free citizen in a democratic country. The amazing thing about it is that you are fool enough to believe them.

## UNIT 2

Now mark another big difference between then natural slavery of man to Nature and the unnatural slavery of man to man. Nature is kind to her slaves. If she forces you to eat and drink, she makes eating and drinking so pleasant that when we can afford it we eat and drink too much. We must sleep or go mad; but then sleep is so pleasant that we have great difficulty in getting up in the morning. And firesides and families seem so pleasant to the young that they get married and join building societies to realize their dreams. Thus, instead of resenting our natural wants as slavery, we take the greatest pleasure in their satisfaction. We write sentimental songs in praise of them. A tramp can earn his supper by singing 'Home, Sweet Home.'

The slavery of man to man is the very opposite of this. It is hateful to the body and to the spirit. Our poets do not praise it; they proclaim that no man is good enough to be another man's master. The latest of the great Jewish prophets, a gentleman named Marx, spent his

life in proving that there is no extremity of selfish cruelty at which the slavery of man to man will stop if it be not stopped by law. You can see for yourself that it produces a state of continual civil war—called the class war—between the slaves and their masters, organized as trade unions on one side and employers federations on the other. Saint Thomas More, who has just been canonized, held that we shall never have a peaceful and stable society until this struggle is ended by the abolition of slavery altogether and the compulsion of everyone to do his share of the world's work with his own hands and brains, and not to attempt to put it on anyone else.

Naturally the master class, through its Parliaments, schools and newspapers, makes the most desperate efforts to prevent us from realizing our slavery. Fromm ou earliest years we are taught that our country is the land of the free, and that our freedom was won for us for ever by our forefathers when they made King John sign Magna Carta—when they defeated gthe Spanish Armada—when they cut off King Charles's head—when they made King William accept the Bill of Rights—when they issued and made good the American Declaration of Independence—when they won the battles of Waterloo and Trafalgar on the playing fields of Eton—and when only the other day, they unintentionally changed the German; Austrian, Russian and Ottoman Empires into republics. When we grumble, we are told that all our miseries are our own doing because we have the vote. Whe we say: 'What good is the vote?' we have told that we have Factory Acts and the Wage Board, and free education, and the New Deal, and the dole: and what more could any reasonable man ask for? We are reminded that the rich are taxed a quarter, a third, or even a half and more, of hteir incomes; bu the poor are never reminded that they have to pay that much of their wages as rent in addition to having to work twice as long every day as they would need if they were free.

Whenever famous writers protest against this imposture—say, Voltaire and Rousseau and Tom Paine in the eighteenth century, or Cobbett and Shelley, Karl Marx and Lassalle in the nineteenth, or Lenin and Trotsky in the twentieth—you are taught that they are atheists and libertines, murderers and scoundrels; and often it is made a criminal

offence to buy or sell their books. If their disciples make a revolution, England immediately makes war on them and lends money to the other Powers to join her in forcing the revolutionists to restore the slave order. When this combination was successful at Waterloo, the victory was advertised as another triumph for British freedom; and the British wage slaves, instead of going into mourning like Lord Byron, believed it all and cheered enthusiastically. When the revolution wins as it did in Russia in 1922, the fighting stops, but the abuse, the calumnies, the lies continue until the revolutionized State grows into a first-rate military Power. Then our diplomats, after having for years denounced the revolutionary leaders as the most abominable villains and tyrants, have to do a right turn and invite them to dinner.

### UNIT 3

Now though this prodigious mass of humbug is meant to delude the enslaved class only, it ends in deluding the master class much more completely. A gentleman whose mind has been formed at a preparatory school for the sons of gentlemen, followed by a public school and university course, is much more thoroughly taken in by the falsified history and dishonest political economy and snobbery taught in these places than any worker can possibly be, because the gentleman's education teaches him that he is a very fine fellow, superior to the common run of men whose duty it is to brush his clothes, carry his parcels, and earn his income for him; and as he thoroughly agrees with this view of himself, he honestly believes that the system which has placed him in such an agreeable situation and done such justice to his merits is the best of all possible systems, and that he should shed his blood, and yours, to the last drop in its defence. But the great mass of our rack-rented, underpaid, treated-as-inferiors, cast-off-on-the-dole workers cannot feel so sure about it as the gentlemen. The facts are too harshly against it. In hard times, such as we are now passing through, their disgust and despair sometimes lead them to kick over the traces, upset everything, and have to be rescued from more gangsterism by some Napoleonic genius who has a fancy for being an emperor and who has the courage and brains and energy to jump at the chance. But

the slaves who give three cheers for emperor might just as well have made a cross on a British or American ballot paper as far as their freedom is concerned.

So far I have mentioned nothing but plain, natural and historical facts. I draw no conclusions, for that would lead me into controversy; and controversy would not be fair when you cannot answer me back. I am never controversial over the wireless. I do not even ask you to draw your own conclusions, for you might draw some very dangerous ones unless you have the right sort of head for it. Always remember that though nobody likes to be called a slave it does not follow that slavery is a bad thing. Great men, like Aristotle, have held that law and order and government wuld be impossible unless the persons the people have to obey are beautifully dressed and decorated, robed and uniformed, speaking with a special accent, travelling in first class carriages or the most expensive cars or on best-groomed and best bred horses, and never cleaning their own boots or doing anything for themselves that can possibly be done by ringing a bell and ordering some common person to do it. And this means, of course, that they must be made very rich without any other obligation than to produce an impression of almost godlike superiority on the minds of common people. In short, it is contended, you must make men ignorant idolators before they will become obedient workers and law-abiding citizens.

To prove this, we are reminded that although nine out of ten voters are common workers, it is with the greatest difficulty that a few of them can be persuaded to vote for members of their won class. When women were enfranchised and given the right to sit in Parliament, the first use they made of their votes was to defeat all the women candidates who stood for the freedom of the workers and had given them years of devoted and distinguished service. They elected only one woman—a titled lady of great wealth and exceptionally fascinating personality.

Now this, it is said, is human nature; and you cannot change human nature. On the other hand, it is maintained that human nature is the easiest thing in the world to change if you catch it young enough, and that the idolatry of slave class and the arrogance of the master class are themselves entirely artificial products of education and of a

propaganda that plays upon our infants long before they have left their cradles. An opposite mentality could, it is argued, be produced by a contrary education and propaganda. You can turn the point over in your mind for yourself; do not let me prejudice you one way or the other. The practical question at the bottom of it all is how the income of the whole country can be distributed from the day. If the earth is cultivated agriculturally in vast farms with motor ploughs and chemical fertilizers, and industrially in huge electrified factories full of machinery that a girl can handle, the product may be so great that an equal distribution of it would provide enough to give the unskilled labourers as much as managers and the men of the scientific staff. But do not forget that when you hear tales of modern machinery enabling one girl to produce as much as a thousand men could produce in the reign of good Queen Anne, that this marvelous increase included things like needles and steel pens and matches, which we can neither eat nor drink nor wear. Very young children will eat needles and matches eagerly—but the diet is not a nourishing one. And though we can now cultivate the sky as well as the earth, by drawing nitrogen from it to increase and improve the quality of our grass—and, consequently, of our cattle and milk and butter and eggs—Nature may have tricks up her sleeves to check us if the chemists exploit her too greedily.

#### UNIT 4

And now to sum up. Wipe out from your dreams of freedom the hope of being able to do as you please all the time. For at least twelve hours of your day Nature orders you to do certain things, and will kill you if you don't do them. This leaves twelve hours for working and here again Nature will kill you unless you either earn your living or get somebody else to earn it for you. If you live in a civilized country your freedom is restricted by the laws of the land, enforced by the police, who oblige you to do this and not to do that, and to pay rates and taxes. If you do not obey these laws the courts will imprison you and, if you go too far, kill you. If the laws are reasonable and are impartially administered you have no reason to complain, because they increase your freedom by protecting you against assault, highway robbery, and disorder generally.

But as society is constituted at present, there is another far more intimate compulsion on you; that of your landlord and that of your employers. Your landlord may refuse to let you live on his estate if you go to chapel instead of to church, or if you vote for anybody but his nominee, or if you practice osteopathy, or if you open a shop. Your employer may dictate the cut, colour and condition of your clothes, as well as your hours of work. He can turn you into the street at any moment to join the melancholy band of lost spirits called the unemployed. In short, his power over you is far greater than that of any political dictator could possibly be. Your only remedy at present is the trade union weapon of the strike, which is only the old oriental device of starving on your enemy's doorstep until he does you justice. Now, as the police in this country will not allow you to starve on your employer's doorstep, you must starve on your own—if you have one. The extreme form of the strike—the general strike of all workers at the same moment—is also the extreme form of human folly, as, if completely carried out it would extinguish the human race in a week. And the workers would be the first perish. The general strike is trade unionism gone mad. Sane trade unionism would never sanction more than one big strike at a time, with all the other trades working overtime to support it.

#### UNIT 5

Now let us put the case in figures. If you have to work for twelve hours a day, you have no freedom at all. If you work eight hours a day you have four hours a day to do what you like with, subject to the laws of the land and your possession of money enough to buy an interesting book or pay for a seat at the pictures, or, on a half-holiday, at a football match, or whatever your fancy may be. But even here Nature will interfere a good deal; for if your eight hours' work has been of a hard physical kind, and when you get home you want to spend your four hours in reading my books to improve your mind, you will find yourself fast asleep in half a minute, and your mind will remain in its present benighted condition.

I take it, then, that nine out of ten of us desire more freedom, and that this is why we listen to wireless talks about it. As long as we go on as we are—content with a vote and a dole—the only advice we

can give one another is that of Shakespeare's Iago: 'Put money in thy purse.' But as we get very little money into our people are taking money out of it, Iago's advice is not very practical. We must change our politics before we gassing about freedom because the people of England in the lump don't know what freedom is—never having had any. Always call freedom by its old English name of leisure; and keep clamouring for more leisure and more money to enjoy it in return for an honest share of work. And let us stop singing 'Rue Britannia', until we make it true. Until we do, let us never vote for a parliamentary candidate who talks about our freedom and our love of liberty; for whatever political name he may give himself, he is sure to be at bottom an anarchist who wants to live on our labour without being taken up by the police for it as he deserves.

And now suppose we at last win a lot more leisure and a lot more money than we are accustomed to. What are we going to do with them? I was taught in my childhood that Satan will find mischief still for idle hands to do. I have seen men come into a fortune and lose their happiness, their health and finally their lives by it as certainly as if they had taken daily doses of rat poison instead of champagne and cigars. It is not at all easy to know what to do with leisure unless we have been brought up to it.

I will therefore leave you with a conundrum to think over. If you had your choice, would you work for eight hours a day and retire with a full pension at forty-five, or would you rather work for four hours a day and keep on working until you are seventy? Now, don't send the answer to me, please! Talk it over with your wife.

## KNOWLEDGE AND WISDOM

(fairly advanced. Concise and lucid thought, in subtly-devised sentences) Most people would agree that, although our age far surpasses all previous ages in knowledge, there has been no correlative increase in wisdom. But agreement ceases as soon as we attempt to define 'wisdom' and consider means of promoting it. I want to ask first what wisdom is, and then what can be done to teach it.

There are several factors that contribute to wisdom. Of these I should put first a sense of proportion; the capacity to take account of all the important factors in a problem and to attach to each its due weight this had become more difficult than it used to be owing to the extent and complexity of the specialized knowledge required of various kinds of technicians. Suppose, for example, that you are engaged in research in scientific medicine. The work is difficult and is likely to absorb the whole of your intellectual energy. You have not time to consider the effect which your discoveries or inventions may have outside the field of medicine. You succeed (let us say), as modern medicine has succeeded, in enormously lowering the infant death-rate, not only in Europe and America, but also in Asia and Africa. This has the entirely unintended result of making the food supply inadequate and lowering the standard of life in the most populous parts of the world. To take an even more spectacular example, which is in everybody's mind at the present time: you study the composition of the atom from a disinterested desire for knowledge, and incidentally place in the hands of powerful lunatics the means of destroying the human race. In such ways the pursuit of knowledge may become harmful unless it is combined with wisdom; and wisdom in the sense of comprehensive vision is not necessarily present in specialists in the pursuit of knowledge. The essence of wisdom is emancipation, as far as possible, from the tyranny of the here and the now. We cannot help the egoism of our senses. Sight and sound and touch are bound up with our own bodies and cannot be made impersonal. Our emotions start similarly from ourselves. An infant feels hunger or discomfort, and is unaffected except by his own physical condition. Gradually, with the years, his horizon widens, and, in proportion as his thoughts and feelings become less personal and less concerned with his own physical states, he achieves growing wisdom. This is, of course, a matter of degree. No one can view the world with complete impartiality; and if anyone could, he would hardly be able to remain alive. But it is possible to make a continual approach towards impartiality: on the one hand, by knowing things somewhat remote in time or space; and, on the other hand, by giving such things their due weight in our feelings. It is this approach towards impartiality that constitutes growth in wisdom.

Can wisdom in this sense be taught? And, if it can, should the teaching of it be one of the aims of education? I should answer both these questions in the affirmative.

I have said that in some degree wisdom can be taught. I think that this teaching should have a larger intellectual element than has been customary in what has been thought of as moral instruction. The disastrous results of hatred and narrow-mindedness to those who feel them can be pointed out incidentally in the course of giving knowledge. I do not think that knowledge and morals ought to be too much separated. It is true that the kind of skill has little to do with wisdom. But it should be supplemented in education by wider surveys calculated to put it in its place in the total of human activities. Even the best technicians should also be good citizens; and this or that sect or nation. With every increase of knowledge and skill, wisdom becomes more necessary, for every such increase augments our capacity for realizing our purposes, and therefore augments our capacity for evil, if our purposes are unwise. The world needs wisdom as it has never needed it before; and if knowledge continues to increase, the world will need wisdom in the future even more than it does now.

## OF STUDIES

- FRANCIS BACON (1561 – 1626)

Studies serve for delight, for ornament, and for ability. Their chief use for delight, is in privateness and retiring, for ornament is in discourse, and for ability, is in the judgement and disposition of business. For expert men can execute and perhaps judge of particulars, one by one, but the general counsels, and the plots and marshalling of affairs, come best from those that are learned. To spend too much time in studies is sloth; to use them too much for ornament, is affectation; to make judgement wholly by their rules, is the humour of scholar. They perfect nature and are perfected by experience: for natural abilities are like natural plants that need proyning by study; and studies themselves do give forth directions too much at large, except they be bounded in

by experience. Crafty men contemn studies; simple men admire them; and wise men use them: for they teach not their own use; but that is a wisdom without them, and above them, won by observation.

Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse; but to weigh and consider. Some books are to be tasted, other to be swallowed, and some few to be chewed and digested, that is some books are to be read only parts; others to be read but not curiously, and some to be read wholly and with diligence and action. Some books also may be read by deputy, and extracts made of them by others, but that would be only in the less important arguments and the meaner sort of books, else distilled books are like common distilled waters, flashy things.

Reading maketh a full man; conference a ready man; and writing an exact man. And therefore if man write little; he had need have a great memory; if he confer little, he had need have a great memory; if he confer little, he had need have a present wit, and if he read little, he had need have much cunning, to seem to know that he doth not.

Histories make man wise, poets witty; the mathematics subtle; natural philosophy deep; moral grave; logic and rhetoric able to contend. Abeunt studia in mores. (studies pass into the character). Nay there is no stand or impediment in the wit, but may be wrought out by fit studies: like as diseases of the body may have appropriate exercise. Bowling is good for the stone and reins, shooting for the lungs and breast, gentle walking for the stomach; riding for the head, and the like. So if a man's wit be wandering, let him study the mathematics, for in demonstration if his wit be called away never so little, he must begin again. If his wit be not apt to distinguish or find differences, let him study the schoolmen; for they are *cymini sectores*. If he be not apt to beat over matters, and to call up one thing to prove and illustrate another, let him study the lawyer's case. So every defect of the mind may have a special receipt.

## **Straight and Crooked Thinking**

If we observe the actions of men, whether as individuals or as groups, and whether scientists or non-scientists, we find that they frequently fall into avoidable error because of a failure to reason correctly. There are many reasons for this, though only a few can be dealt with here.

The first difficulty is bound up with (related to) the use of words. It frequently happens that what one person means when he uses a certain word is different from what others mean. Consider, for example, the words intelligence, oxygen, accurate and average. In intelligence we face the problem that a word may not mean only one thing, but many – in this instance a very complicated set of aptitudes and abilities whose number and characteristics are not agreed upon by the specialists who study the phenomenon, and are even less understood by the layman (non-specialist). In oxygen we have a different problem, for although both a research chemist and a chemical manufacturer identify the word theoretically with the elements with the element O, in practice they have different concepts about it. Thus if the researcher performed a delicate experiment, using the manufacturer's oxygen, it might easily be a failure since the so-called O, whether used as a solid, liquid or gas, would almost certainly contain other substances. Hence another difficulty about words is that they often do not differentiate clearly enough between several varieties of the 'same' thing.

Another common error connected with words consists in confusing a word or a name with a fact. The course of scientific progress has been frequently slowed down by (1) assuming the existence of something to account for a certain phenomenon, (2) giving the assumed substance a name, e.g. phlogiston, ether, etc. and (3) implying that the phenomenon has been satisfactorily accounted for (explained).

Apart from the misuse of words, mistakes in logic can occur. Thus an example is recorded of a young sociologist, investigating literacy in a certain community, who discovered from the official records that over (more than) 50 percent of the population were females. He subsequently found that approximately 70 percent of the population

were literate. When he had obtained this data he summed it up and drew conclusions as follows:  
Most of the population are females;  
Most of the population are literate;  
Most females are literate.

This was, of course, an unreasonable inference, as the investigator himself realized as soon as he had re-examined his chain of reasoning more carefully.

Another mistake is to confuse cause and effect. This may easily occur at the beginning of an investigation, but if it remains uncorrected it can be considered as primarily a by-product of insufficient experimentation. To illustrate this, the following case noted over the ages that whenever an individual became ill with a fever, the body parasite left him. They therefore made the correlation that the parasites kept them healthy. Later, however, reverse was true: in fact the parasites transmitted several kinds of fever, and then left the sick person when the latter's bodies became too hot to live on.

Some other factors which may influence reasoning are (a) faulty analogizing, (b) the inhibiting effect on further research of concepts which have been widely accepted as satisfactory, (c) the role of authority as a bar to the re-consideration of a problem. As regards the first of these, it should be emphasized that the process of tackling one problem by analogizing from another has frequently yielded valuable results, as in the case of air-pressure (see unit 3). On the other hand, it may lead to the adoption of a totally false hypothesis, as when the idea of the atom as an infinitely small piece of solid matter was obtained by analogizing from the world of visible appearances. This erroneous viewpoint blocked progress in this field for many decades. Similarly, the comparison of the movement of light to a wave – an analogy which had actually provided a satisfactory explanation of the observed phenomena during most of the nineteenth century – tended subsequently to interfere with the development of the equally valid concept of light as a stream of particles. This example also illustrates the second factor enumerated above. As far as the third factor is concerned, the history of science shows many instances in which the force of authority has operated in such a manner as to build up an exceedingly powerful resistance to

further investigation: in some cases centuries elapsed before this resistance was eventually broken down, as happened in cosmology, for example.

Thus in addition to the chances of going astray outlined in the previous Unit, the scientific investigator shares with the ordinary citizen the possibilities of falling into errors of reasoning in the ways we have just indicated, and many others as well (in addition). The more he knows of this important subject, therefore, the better equipped he will be to attain success in his work; and the straighter he thinks, the more successfully he will be able to perform his functions as a citizen.

### SUSPENSION BRIDGES

Suspension bridges are frequently constructed in preference to other types of bridge, especially where relatively light traffic has to be carried over long spans, since they are more economical in material and are extremely strong. There are in existence suspension bridges with main spans of more than 300 feet, the entire weight of the deck being supported from above by cables (usually only two or four in number) suspended between two towers at either side of the river. The cables are composed of thousands of wires, made of high-tensile steel, which are galvanized to resist corrosion. Two or three hundred of these wires, each of about 0.19 inch in diameter, are clamped together to form a single strand, and the whole cable may consist of a considerable number of such strands compacted and bound together with wire. In constructing the cable, two distinct methods may be adopted. The wires may either be twisted into strands, the strands then sometimes being twisted round a central strand to form the completed cable, or they may be spun parallel to each other, and clamped together at intervals. This latter method obviously involves a much longer spinning operation, since each wire or small group of wires must be spun and adjusted to the correct sag individually, whereas the strands of twisted wire can be erected as units, provided that they are not so heavy as to be unmanageable. However, on bridges with very long spans, there are certain advantages in the parallel wire method of spinning the cable. The cables are normally made continuous through the tops of the towers, down through side towers, where these exist, and thence into the

anchorage. They bear on specially constructed saddles on the towers, which are shaped to accommodate them, the saddles being either fixed so that the cables may slide over them, or mounted on rollers so that they move with any movement of the cables. In view of the enormous pull exerted by the heavy cables, their ends must be secured in firm anchorages, and unless they can be embedded in sound natural rock, constructions of masonry or concrete must be provided strong enough to withstand the severe pressure put upon them. The cable strands are normally looped round strand-shoes, which are in turn connected by chains to an anchor-plate embedded in the base of the anchorage. At intervals along the main span, cast-steel cable-bands are attached to the cables, gripping them firmly and excluding moisture from them and from these bands suspenders of wire-rope or chains hang down. Since these suspenders have to take the weight of the deck to which they are attached, they must have a high tensile strength. On advantage of using the braced-chain suspenders have to take the weight of the deck, the depth of the truss varying with the length of the span.

### THE SCIENTIFIC ATTITUDE

What is the nature of the scientific attitude, the attitude of the man or woman who studies and applies physics, biology, chemistry, geology, engineering, medicine or any other science?

We all know that science plays an important role in the societies in which we live. Many people believe, however, that our progress depends on two different aspects of science. The first of these is the application of the machines, products and systems of applied knowledge that scientists and technologists develop. Through technology, science improves the structure of society and helps man to gain increasing control over his environment. New fibres and drugs, faster and safer means of transport, new systems of applied knowledge (physics, operational research, etc.) are some examples of this aspect of science.

The second aspect is the application by all members of society, from the government official to the ordinary citizen, of the special methods of thought and action that scientists use in their work.

What are these special methods of thinking and acting? First of all, it seems that a successful scientist is full of curiosity—he wants to

find out how and why the universe works. He usually directs his attention towards problems which he notices have no satisfactory explanation, and his curiosity makes him look for underlying relationships even if the data available seem to be unconnected. Moreover, he thinks he can improve the existing conditions, whether of pure or applied knowledge, and enjoys trying to solve the problems which this involves.

He is a good observer, accurate, patient and objective and applies persistent and logical thought to the observations he makes. He utilizes the facts he observes to the fullest extent. For example, trained observers obtain a very large amount of information about a star (e.g. distance, mass, velocity, size, etc.) mainly from the accurate analysis of the simple lines that appear in a spectrum.

He is skeptical—he does not accept statements which are not based on the most complete evidence available—and therefore rejects authority as the sole basis for truth. Scientists always check statements and make experiments carefully and objectively to verify them.

Furthermore, he is not only critical of the work of others, but also of his own, since he knows that man is the least reliable of scientific instruments and that a number of factors tend to disturb impartial and objective investigation.

Lastly, he is highly imaginative since he often has to look for relationships in data which are not only complex but also frequently incomplete. Furthermore, he needs imagination if he wants to make hypothesis of how processes work and how events take place. These seem to be some of the ways in which a successful scientist or technologist thinks and acts.

### THE MOTHER OF A TRAITOR

One of talk endlessly about Mothers. For several weeks enemy hosts had surrounded the city in a tight ring of steel; by night fires were lit and the flames peered through the inky blackness at the walks of the city like a myriad red eyes—they blazed malevolently, and their menacing glare evoked gloomy thoughts within the beleaguered city.

From the walls they saw the enemy noose draw tighter; saw the dark shadows hovering about the fires and heard the neighing of

well-fed horses, the clanging of weapons, the loud laughter and singing of men confident of victory—and what can be more jarring to the ear than the songs and laughter of the enemy?

The enemy had thrown corpses into all the streams that fed water to the city, they had burned down the vineyards around the walls, trampled the fields, cut down the orchards—the city was now exposed on all sides, and nearly every day the cannon and muskets of the enemy showered it with lead and iron.

Detachments of war-weary, half-starved soldiers trooped sullenly through the narrow streets of the city; from the windows of houses issued the groans of the wounded, the cries of the delirious, the prayers of women and the wailing of children. People spoke in whispers, breaking off in the middle of sentence, tensely alert; was not that the enemy advancing?

Worst of all were nights; in the nocturnal stillness the groans and cries were more distinctly audible; black shadows crept stealthily from the gorges of the distant mountains towards the half-demolished walls, hiding the enemy camp from view, and over the black ridges of the mountains rose the moon like a lost shield dented by sword blows.

And the people in the city, despairing of succor, worn out by toil and hunger, their hope of salvation waning from day to day, the people in the city stared in horror at that moon, at the gorges and noisy camp of the enemy. Everything spoke to them of death, and not a star was there in the sky to give them consolation.

They were afraid to light the lamps in the houses, and a heavy darkness enveloped the streets, and in this darkness, like a fish stirring in the depths of a river, a woman draped from head to foot in a black cloak moved soundlessly.

When they saw her, people whispered to one another:

'Is it she?'

'It is she?'

And they withdrew into the niches under archways or hurried past her with lowered heads. The patrol chiefs warned her sternly:

Abroad again, Monna Marinna? Take care, you may be killed and nobody will bother to search for the culprit....

She drew herself up and stood waiting, but the patrols passed by, either not daring or else scorning to raise their hand, against her the armed men avoided her like a corpse and left alone in the darkness, she continued her solitary wandering from street to street, soundless, and black like the incarnation of the city's misfortune, while all about her, as though pursuing her, melancholy sounds issued from the night; the groans, cries, prayers and the sullen murmur of soldiers who had lost all hope of victory.

A citizen and a mother, she thought of her son and her country: for at the head of the men who were destroying her town was her son, her gay, handsome, heartless son. Yet, not so long ago she had looked upon him with pride regarding him as her precious gift to her country, a beneficent force she had brought forth to aid the people of the city where she herself had been born and reared. Her heart was bound by hundreds of invisible threads to these ancient stones with which her forefathers had built their homes and raised the walls of the city; to the soil wherein lay buried the bones of her kinsfolk, to the legends, the songs and the hopes of the people. And now this heart had lost a loved one and it wept. She weighed in her heart as on scales her love for her son and her love for her native city, and she could not tell which weighed the more.

And so she wandered thus by night through the streets, and many, failing to recognize her, drew back in fear, mistaking her black figure for the incarnation of Death that was so near to all of them, and when they did recognize her, they turned silently away from the mother of a traitor.

But one day in a remote corner by the city walls she saw another woman, kneeling beside a corpse, so still that she seemed part of the earth. The woman was praying, her overhead the sentries spoke in low tones, their weapons grating against the stone.

The traitor's mother asked:

'Your husband?'

'No.'

'Your brother?'

'My son. My husband was killed thirteen days ago my son today.'

And rising from her keens, the mother of the slain man said humbly: 'The Madonna sees all and knows all, and I am grateful to her!'

'For what?' asked the first, and the other replies:

'Now that he has died honorably fighting for his country I can say that I feared for him: he was light-hearted, too fond of revelry and I feared that he might betray his city, as did the son of Marianna, the enemy of God and Man, the leader of our foes, may he be so cursed and the womb that bore him!'

'My son has come to be your enemy. Either kill me or open the gates that I may go to him...'

'You are a human being, and your country must be precious to you; your son is as much an enemy to you as to each one of us.'

'I am his mother. I love him and feel that I am to blame for what he has become!'

Then they took counsel with one another and decided:

'It would not be honourable to kill you for the sins of your son. We know that you could not have led him to commit this terrible sin, and we can understand your distress. But the city does not need you even as a hostage; your son cares nought for you, we believe that he has forgotten you, fiend that he is and there is your punishment if you think you have deserved it. We believe that is more terrible than death itself!'

'Yes,' she said. 'It is indeed more terrible.'

And so they opened the gates and suffered her to leave the city and watched long from the battlements as she departed from her native soil, now drenched with the blood her son had spilt. She walked slowly, for her feet were reluctant to tear themselves away from this soil, and she bowed to the corpses of the city's defenders, kicking aside a broken weapon in disgust, for all weapons are abhorrent to mothers save those that protect life.

She walked as though she carried a precious phial of water beneath her cloak and feared to spill a drop and as her figure grew smaller and smaller to those who watched from the city wall, it seemed to them that with her went their dejection and hopelessness.

They saw her pause halfway and throwing back the hood of her cloak turn back and gaze long at the city. And over in the enemy's

camp they saw her alone in the field and figures dark as her own approached her cautiously. They approached and inquired who she was and whence she had come.

'Your leader is my son', she said, and not one of the soldiers doubted it. They fell in beside her, singing his praise, saying how clever and brave he was, and she listened to them with head proudly raised, showing no surprise, for her son could not be otherwise.

And now, at last, she stood before him whom she had known nine months before his birth, him whom she had never felt apart from her own heart. In silk and velvet he stood before her, his weapons studded with precious stones. All was as it should be, thus had she seen him so many times in her dreams-rich famous and admired.

'Mother!' he said, kissing her hands. 'Thou hast come to me, thou art with me, and tomorrow I shall capture that accursed city!'

Intoxicated with his prowess, crazed with the thirst for more glory, he answered her with the arrogant heat of youth:

'I was born into the world and for the world, and I mean to make the world quake with wonder of me! I have spared this city of thy sake, it has been like a thorn in my flesh and has retarded my swift rise to fame. But now tomorrow I shall smash that nest of obstinate fools!'

'Where every stone knows and remembers them as a mountains speak of me that is what I wish!'

'Ah yes, I have not forgotten the, Mother. I need them too, for only in men's memory are heroes immortal!'

She said: 'A hero is he who creates life in defiance of death, who conquers death....'

'No,!' he objected. 'the destroyer is as glorious as the builder of a city. See, we do not know who it was that built Rome-Aeneas or Romulus-yet we know well the name of Alaric and the other heroes who destroyed the city....'

'Which outlived all names', the mother reminded him.

Thus they conversed until the sun sank to rest; less and less frequently did she interrupt his wild speech, lower sank her proud head.

A mother creates, she protects, and to speak to her of destruction means to speak against her; but he did not know this, he did not know that he was negating her reason for existence.

A Mother is always opposed to death; the hand that brings death into the house of men, is hateful and abhorrent to Mothers. But the son did not perceive this, for he was blinded by the cold glitter of glory that deadens the heart.

Nor did he know that a Mother can be as clever and ruthless as she is fearless, when the life she creates and cherishes is in question.

She sat with bowed head, and through the opening in the leader's richly appointed tent she saw the city where first she had felt the sweet tremor of life within her and the anguished convulsion of the birth of this child who now thirsted for destruction.

The crimson rays of sun dyed the walls and towers of the city blood-red, cast a baleful glare on the windowpanes so that the whole city seemed to be a mass of wounds with the crimson sap of life flowing from each gash. Presently the city turned black as a corpse and the stars shone above it like funeral candles.

She saw the dark houses where people feared to light candles so as not to attract the attention of the enemy saw the streets steeped in gloom and rank with the stench of corpses, heard the muffled whispers of people awaiting death-she saw it all, all that was near and dear to her stood before her, dumbly awaiting her decision and she felt herself the mother of all those people in her city.

Clouds descended from the black peaks into the valley and swooped down like winged steeds upon the doomed city.

'We may attack tonight; said her son, 'if the night is dark enough! It is hard to kill when the sun shines in your eyes and the glitter of the weapons blinds you, many a blow goes awry,' he remarked, examining his sword.

The mother said to him: 'Come, my son, lay thy head on my breast and rest, remember how gay and kind, thou wert as a child and how everyone loved thee....'

He obeyed her, laid his head in her lap and closed his eyes, saying: 'I love only glory and I love thee for having made me as I am.'

'And women?' she asked bending over him.

'There are many, one tires of them as of everything that is too sweet.'

'And dost thou not desire children?' she asked finally.

'What for? That they might be killed? Someone like me will kill them; that will give me pain and I shall be too old and feeble to avenge them.'

'Thou art handsome, but as barren as a streak of lightning,' she said with a sigh.

'Yes, like lightning... he replied, smiling.

And he dozed there on his mother's breast like a child.

Then, covering him with her black cloak, she plunged a knife into his heart, and with a shudder he died, for who knew better than she where her son's heart beat. And, throwing his corpse at the feet of the astonished sentries, she said addressing the city:

As a citizen, I have done for my country all I could: as a Mother I remain with my son! It is too late for me to bear another, my life is of no use to anyone.'

And the knife, still warm with his blood, her blood, she plunged with a firm hand into her own breast and against she struck true, for an aching heart is not hard to find.

## ROAD FOUNDATION

In planning a road, extensive preliminary surveys must be carried out to determine the precise line of the road, and to work out how much earth will require to be moved and what quantities of surfacing material will be needed. A second purpose of the surveys will be to take samples of the different soils encountered at different depths by boring, in order to decide whether they are suitable for use or whether they must be replaced by imported fill. This is of great importance, since various types of soil have properties which result in low bearing capacities. Failure in road surfaces are usually attributable to insufficient preparation and compaction of the sub-grade—that is, the soil on which the surface of the road is laid. Certain soils, such as clay or peat, are unstable, either because they are largely impermeable and hence difficult to drain or because they cannot be properly compacted. It is sometimes possible to stabilize some soils with cement, but in most cases it will be necessary to excavate the soil to a considerable depth and to replace it by a

suitable granular soil. The most stable sub-grade soils are gravel or sand, both being readily compactable and easy to drain. It is often unnecessary to excavate these soils to a depth of more than three or four inches, and, if sufficient supplies are available they can be used as filling material, particularly on embankments, where the soil must be capable of high degree of compaction.

The stability of a soil is largely dependent on an unchanging moisture-content, and to assist this, adequate drainage is necessary, although in the case of heavy clays no form of drainage is very effective.

Mechanical excavation is carried out by a variety of machines, including the shovel and drag-line excavator. The choice of plant used will depend on how deep a cut is required and also on how accessible the cut is. After the soil has been excavated to the appropriate depth and filled, it is compacted by a roller until it is firm. Following this, it is common practice to lay a sub-base over the sub-grade soil in order to strength it, and to ensure that the traffic base is normally composed of granular material with good drainage characteristics, and will vary in depth according to the nature of the sub-grade, and also according to what thickness of concrete is to be laid above it.

It is essential that the sub-base should be compacted to a uniform density, since the density of a soil is closely related to its bearing capacity. The compacted soil is then covered either with a sealing coat of tar, or with rolls of waterproof paper to object of which is to prevent liquid cement from the concrete base from seeping into it. Thus weakening the lower layers of the concrete and increasing the moisture content of the base.