

# The Experiment

The public career of the great Francis Bacon ended like a crude illustration of the specious maxim 'Crime doesn't pay'. As the highest judicial functionary of the realm he was found guilty of corruption and thrown into gaol. With all the executions, the granting of obnoxious monopolies, the decreeing of arbitrary arrests and the passing of prescribed verdicts, the years of his Lord Chancellorship rank among the darkest and most shameful in English history. After his exposure and confession it was his world renown as a humanist and philosopher that made his offences known far beyond the frontiers of the realm.

He was an old man when he was allowed to leave prison and return to his estate. His body was weakened by the efforts he had spent to bring about other people's ruin and by the sufferings other people had inflicted when they ruined him. But no sooner did he reach home than he plunged into the most intensive study of the natural sciences. He had failed in mastering men. Now he dedicated his remaining strength to investigating how best mankind could win mastery over the forces of nature.

His researches, devoted to practical matters, led him constantly out of the study into the fields, the gardens and to the stables on the estate. For hours on end he discussed with the gardeners the possibilities of grafting fruit trees, and told the dairymaids how to measure the milk yield of each cow. In this way a stableboy came to his notice. A valuable horse had fallen ill and the lad reported on its condition twice a day to the philosopher. His zeal and his powers of observation delighted the old man.

But one evening as he came into the stables he saw an old woman with the boy and heard her say:

'He's a bad man; look out! He may be a great lord, he may have made his pile, but he's bad for all that. He's your master, so do your work conscientiously, but always bear in mind he's bad.'

The philosopher did not hear the boy's answer for he turned about at once and went back into the house, but he found the lad's attitude towards him the next morning unchanged.

When the horse was well again he let the boy accompany him on many of his rounds and entrusted him with minor tasks. Little by little he fell into the habit of talking to him about various experiments. In doing this he did not bother to choose words that grown-ups commonly believe suited to the understanding of children, but spoke to him as to an educated man. In the course of his life he had associated with the greatest minds and had seldom been understood: not because he did not make himself clear, but because he made himself too clear. So he was not put out by the boy's difficulties; nevertheless, he patiently corrected him when the boy himself tried out the unfamiliar words.

The lad's main duty consisted in having to describe the objects he saw and the processes he experienced. The philosopher taught him how many words there were and how many were needed to describe the behaviour of a certain thing in such a way that it was more or less recognizable from the description and, above all, that it could be dealt with in accordance with the description. There were also some words that it was better not to use since, strictly speaking, they meant nothing: words like 'good', 'bad', 'beautiful', and so on.

The boy soon realized that there was no sense in calling a beetle 'ugly'. Even 'quick' was not good enough; you had to state how quickly it moved compared with other creatures of its size and what this enabled it to do. You had to put it on an inclined surface and on a flat one and make noises so that it ran away; or set out little scraps of prey towards which it could advance. You had only to busy yourself with it long enough and it 'quickly' lost its ugliness.

Once he had to describe the piece of bread that he was holding in his hand when the philosopher came upon him.

'Now here you may safely use the word "good",' said the old man, 'for bread is made for people to eat and can be good or bad for them. It is only in the case of larger substances created by nature and not, on the face of it, created for specific purposes and, above all, not purely for the use of man, that it is foolish to be satisfied with such words.'

The boy thought of his grandmother's remarks about his lordship.

He made rapid progress in grasping things, inasmuch as it was always something quite tangible that had to be grasped: that the horse recovered as a result of the treatment applied, or a tree withered as a result of the treatment applied. He grasped, too, that there must always remain a reasonable doubt as to whether the observed changes could really be owed to these measures. The boy scarcely took in the scientific significance of the great Bacon's mode of thought, but the manifest utility of all these undertakings fired him with enthusiasm.

This was how he understood the philosopher: a new era had dawned for the world. Mankind was enlarging its knowledge almost daily. And all knowledge was for the advancement of well-being and of human happiness. Science was the leading force. Science investigated the universe, everything that existed on earth – plants, animals, soil, water, air – so that greater use could be extracted from it. The important thing was not what you believed, but what you knew. People believed far too much and knew far too little. So one had to test everything, oneself, with one's hands, and speak only of things seen with one's own eyes and that could be of some use.

That was the new teaching and ever more people turned towards it, ready and eager to undertake the new tasks.

Books played a big part in this, even though there might be many bad ones. It was quite clear to the boy that he must find his

way to books if he wanted to be among those who were undertaking the new tasks.

Naturally he never came within reach of the library in the house. He had to wait for his lordship at the stables. The most he could do, if the old man had not appeared for several days, was to come across him in the park. Nevertheless, his curiosity about the study, where every night a lamp burnt late, waxed ever greater. From a hedge facing the room he could catch a glimpse of bookshelves.

He decided to learn to read.

That was by no means easy. The parish priest, to whom he went with his request, eyed him as though he were a spider on the breakfast table.

'Do you want to read the gospel of the Lord to the cows?' he asked irately. And the lad was lucky to get away without a thrashing.

So he had to adopt a different way.

There was a missal in the vestry of the village church. If you volunteered to pull the bell-ropes, you could get in. Now, if you could determine which passages the priest was singing at mass, it ought to be possible to find a connection between the words and the letters.

At all events, at mass the boy began to learn by heart the Latin words which the priest intoned, or at least some of them. It must be admitted that the way the priest articulated the words was uncommonly indistinct, and all too often he did not read the mass.

All the same, after a while the boy could repeat some introits sung by the priest. The head groom surprised him at this exercise behind the barn and thrashed him, for he thought the boy was trying to parody the priest. So he got his thrashing after all.

He had not yet succeeded in finding the place in the missal with the words which the priest sang when a great catastrophe occurred, putting an end for the time being to his efforts to learn to read. His lordship fell mortally ill.

He had been ailing all the autumn and had not recovered by the winter when he drove in an open sledge to an estate a few miles off. The boy was allowed to accompany him. He stood on the runners at the back next to the coachman's box.

The visit was paid, the old man was plodding back to the sledge, escorted by his host, when he saw a frozen sparrow lying on the path. Halting, he turned it over with his stick.

'How long has it been lying here do you think?' the boy, trotting behind him with a hot-water bottle, heard him ask his host.

The answer was: 'Anything from an hour to a week or more.'

The little old man walked on deep in thought and took a very abstracted farewell of his host.

'The flesh is still quite fresh, Dick,' he said, turning round to the boy as the sledge drove off.

They made their way at a good pace, for dusk was falling over the snow-covered fields and it was rapidly growing colder. Thus it came about that, as they turned into the gates of the courtyard, a chicken, having apparently escaped from the coop, was run over. The old man followed the coachman's attempts to avoid the starkly flapping chicken and made a sign to stop when the manœuvre failed.

Working his way out of his rugs and furs, he left the sledge and, his arm supported by the boy, he went back to the spot where the chicken lay, despite the coachman's warnings of the cold.

It was dead.

The old man told the lad to pick it up.

'Take out the entrails,' he ordered.

'Can't it be done in the kitchen?' asked the coachman seeing his master standing frailly in the cold wind.

'No, it's better here,' he said. 'I am sure Dick has a knife on him and we need the snow.'

The boy did as he was told and the old man, who had evidently forgotten his illness and the cold, himself stooped down and,

with an effort, picked up a handful of snow. Carefully he stuffed the snow inside the chicken.

The boy understood. He, too, gathered up snow and handed it to his teacher till the chicken was entirely filled with snow.

'It should keep fresh like this for weeks,' said the old man with animation. 'Put it on cold flagstones in the cellar.'

He walked the short distance to the door, a trifle exhausted and leaning heavily on the boy who carried the snow-stuffed chicken under his arm.

As he stepped into the hall he shivered with the cold.

The next morning he lay in a high fever.

The boy trailed about dejectedly and tried wherever he could to pick up news of his teacher's condition. He learnt little. The life of the great estate went on unchanged. Things took a turn only on the third day: he was called to the study.

The old man lay on a narrow wooden bed under many rugs, but the windows stood open, so it was cold. Nevertheless, the sick man seemed aglow. In a tremulous voice he enquired after the state of the snow-filled chicken.

The lad told him it looked as fresh as ever.

'That's good,' said the old man with satisfaction. 'Give me further news in two days' time.'

As he went away the boy regretted that he had not brought the chicken with him. The old man seemed to be less ill than they made out in the servants' hall.

Twice a day he changed the snow, putting in fresh, and the chicken was still unblemished when he made his way again to the sickroom.

He met with quite extraordinary obstacles.

Doctors had come from the capital. The corridor buzzed with whispering, commanding and obsequious voices and there were unfamiliar faces everywhere. A servant, who was carrying a dish covered with a large cloth, rudely turned him away.

Several times throughout the morning and afternoon he made

vain attempts to reach the sickroom. The strange doctors appeared to be trying to settle down in the great mansion. They seemed to him like huge black birds settling on a sick man who was now defenceless. Towards evening he hid in a closet in the corridor where it was very cold. He shivered all the time, but considered this a good thing, since the chicken must be kept cold at all costs in the interests of the experiment.

During the dinner hour the black tide receded a little and the boy was able to slip into the sickroom.

The invalid lay alone; everyone was at dinner. A reading lamp with a green shade stood by the small bed. The old man had a peculiarly shrivelled face of a waxy pallor. The eyes were closed, but the hands moved restlessly on the stiff covers. The room was very hot; they had shut the windows.

The boy took a few steps towards the bed, clutching the chicken as he held it out, and said in a low voice several times: 'My lord!' He got no answer. The invalid did not, however, seem to be asleep, for his lips moved every now and again, as though he were speaking.

The boy decided to rouse his attention, convinced of the importance of further instructions for the experiment. But even before he could tweak the covers – he had had to lay the chicken in its box on a chair – he felt himself seized from behind and pulled away. A fat man with a grey face glared at him as if he were a murderer. He tore himself free with great presence of mind and, in one bound, caught up the box and made off through the door.

In the corridor he fancied a manservant coming up the stairs had seen him. That was bad. How was he to prove that he had come at his lordship's bidding, in the conduct of an important experiment? The old man was completely in the doctors' power; the closed windows in the room showed it.

And now he saw a servant crossing the courtyard on his way to the stables. So he went without his supper and, after he had put the chicken into the cellar, crept into the forage loft.

The enquiry hanging over him made his sleep uneasy. It was with fear that he emerged from his hiding-place the next morning.

No one paid any attention to him. There was a terrible coming and going in the courtyard. His lordship had died towards morning.

All day the boy went about as though stunned by a blow on the head. He felt he would never get over the loss of his teacher. As he went into the cellar with a bowl of snow in the late afternoon, his grief at the loss turned into grief for the unfinished experiment and he shed tears over the box. What would become of the great discovery?

Returning to the courtyard – his feet seemed to him so heavy that he looked back to see whether his footprints were not deeper than usual – he found that the London doctors had not yet left. Their carriages were still there.

Despite his aversion, he made up his mind to confide the discovery to them. They were learned men and would be bound to recognize the significance of the experiment. He fetched the little box with the frozen chicken and stood behind the well, concealing himself until one of the gentlemen came by, a dumpy fellow, not too awe-inspiring. He stepped forward, holding out the box. At first his voice stuck in his throat, but he did at last manage to bring out his request in disjointed sentences.

‘His lordship found it dead six days ago, your excellency. We stuffed it with snow. His lordship believed it might keep fresh. See for yourself; it has kept fresh.’

The dumpy fellow gazed into the box with perplexity.

‘And what of it?’ he asked.

‘It hasn’t gone bad,’ said the boy.

‘Oh,’ said the dumpy fellow.

‘See for yourself,’ urged the lad.

‘I see,’ said the dumpy fellow and shook his head. Still shaking his head, he walked on.



The boy stared after him flabbergasted. He could not understand the dumpy fellow. Had not the old man brought on his death by getting out in the cold and making the experiment? He had gathered up snow from the ground with his own hands. That was a fact.

The boy went slowly back to the cellar door, but stopped short outside it, then turned about smartly and ran to the kitchen.

He found the cook very busy, as funeral guests from the neighbourhood were expected for dinner.

'What are you doing with that bird?' growled the cook testily. 'It's completely frozen.'

'That doesn't matter,' said the lad. 'His lordship said it doesn't matter.'

The cook gazed at him in an absentminded way for a moment, then went importantly to the door with a big pan in his hand, presumably to throw something out.

The boy followed him eagerly with the box.

'Couldn't you try it?' he entreated.

The cook lost patience. He grabbed at the chicken with his enormous hands and sent it spinning into the yard.

'Haven't you anything better to think about?' he yelled, beside himself. 'And his lordship lying dead!'

Angrily the boy picked up the chicken from the ground and slunk off with it.

The next two days were filled with the funeral ceremonies. He had a lot to do, harnessing and unharnessing horses, and was almost asleep with his eyes open when, at night, he still went to put fresh snow into the box. Everything seemed to him hopeless and the new era at an end.

But on the third day, the day of the burial, well washed and in his best clothes, he felt a change of mood. It was fine bright winter weather and the bells pealed out from the village.

Filled with new hope, he went into the cellar and gazed long and attentively at the dead fowl. He could discern no speck of

decay on it. He carefully packed the creature in its box, filled it with clean white snow, put it under his arm and set off for the village.

Whistling merrily he stepped into his grandmother's lowly kitchen. His parents had died young, so she had brought him up and enjoyed his confidence. Without at first showing her what was in the box, he gave the old woman, who was just dressing for the funeral, an account of his lordship's experiment.

She heard him out patiently.

'But everybody knows that,' she said at the end. 'They go stiff in the cold and keep for a bit. What's so remarkable about it?'

'I believe you could still eat it,' answered the lad, trying to appear as casual as possible.

'Eat a chicken that's been dead for a week? Why it's poisonous!'

'If it hasn't changed at all since it died, why should it be? And it was killed by his lordship's carriage, so it was quite healthy.

'But inside, inside, it's gone bad,' said the old woman, growing slightly impatient.

'I don't believe it,' said the lad stoutly, his bright eyes on the chicken. 'It's had snow inside the whole time. I think I'll cook it.'

The old woman got cross.

'You're coming along to the funeral,' she said with finality. 'I should have thought you'd had enough kindness from his lordship for you to walk decently behind his coffin.'

The boy did not reply. While she tied her black woollen kerchief round her head he took the chicken out of the snow, blew off the last flakes and laid it on two logs in front of the stove. It had to thaw out.

The old woman took no further notice of him. As soon as she was ready, she took him by the hand and went resolutely out of the door with him.

He went along obediently for quite a stretch. There were other people, men and women, also on their way to the funeral.

Suddenly he gave a cry of pain. One of his feet was stuck in a snowdrift. He pulled it out with a grimace, hobbled to a milestone and sat down, rubbing his foot.

'I've sprained it,' he said.

The old woman looked at him suspiciously.

'You can walk all right,' she said.

'I can't,' he said sullenly. 'But if you don't believe me, you can sit down with me till it's better.'

The old woman sat down next to him without a word.

A quarter of an hour went by. Villagers still kept passing, though fewer all the time. The two of them squatted stubbornly by the roadside.

Then the old woman said gravely: 'Didn't he teach you not to lie?'

The boy made no answer. The old woman got to her feet, groaning. It was getting too cold for her.

'If you don't follow in ten minutes,' she said, 'I'll tell your brother and he'll tan your backside.'

And she waddled on, in great haste not to miss the funeral oration.

The boy waited until she had gone far enough and got up slowly. He turned back, but looked round several times and also went on limping for a while. Only when a hedge hid him from the old woman's view did he walk normally again.

In the cottage he sat down by the chicken at which he looked expectantly. He would boil it in a pot of water and eat a wing. Then he would know whether it was poisonous or not.

He was still sitting there when three canon shots were audible from a distance. They were fired in honour of Francis Bacon, Baron Verulam, Viscount St Alban, former Lord High Chancellor of England, who filled not a few of his contemporaries with loathing, but also many of them with enthusiasm for the practical sciences.