

One of the most interesting comments on education was made by Gurdjieff's disciple, Ouspensky. Gurdjieff, of course, taught that ordinary human consciousness is a form of 'sleep', and that our problem is to galvanise ourselves into some form of 'wakefulness'. Ouspensky observed that when he taught Gurdjieff's ideas to his own pupils, it had the effect of making him more deeply conscious of what they meant. In other words, in educating them, he was educating himself. Ouspensky had stumbled on the basic insight that all real education is self-education.

I was struck by the same observation when I was in America lecturing in the 1960s. I would arrive in some strange town, and would be met by a car which would drive me to my hotel, then to the university. I would always try to observe the route taken by the driver in case I had to walk it on some subsequent occasion. But I soon noticed that the best method of learning the way from my hotel to the university was simply to walk it once. I learned more that way than being driven along the same route a dozen times. It also gave me a completely different 'feel' for the place. Until I'd actually walked around, it was somehow anonymous, like a dozen other towns. The moment I'd seen it on foot, it took on its own identity, like a person ...

It was interesting to observe that, no matter how hard I tried, I couldn't really get to 'know' the place while I was looking at it through the window of a car. Somehow, the detachment produced by being driven prevented me from giving it the kind of absorbed attention that came naturally when I was walking around.

Socrates made the same point in the Meno. He got hold of an intelligent slave who knew nothing about geometry, and by asking him the right questions, got him to reason out a number of Euclidean propositions. This, according to Plato, proves that human beings possess all 'knowledge' inside them, and the main problem is to get it out. In other words, the teacher is simply a kind of midwife.

This seems to me to be an important step in the right direction. What it fails to recognise is that the best of all midwives is the student himself. Knowledge that comes from other sources is usually mere information. In order to change that information into real knowledge, it needs to be backed up by that subconscious element of 'absorption', concern.

Tom Sawyer, you may recall, made the same discovery when his aunt Polly ordered him to paint a fence. By whistling vigorously and looking as if he was thoroughly enjoying it, he conned half a dozen of his friends into offering him various bribes to allow them to use the paintbrush. Mark Twain remarked: 'Work is that which we are obliged to do. Play is that which we are not obliged to do.' We might paraphrase that and say: 'Bad education is a form of work. Good education is a form of play.'

Rabelais touched on the same idea in the first book of Gargantua. Gargantua displays his brilliant intelligence at the age of five in a discourse on the different methods of wiping his bum (he concludes, 'There is no arse wiper like a well-downed goose if you hold her neck between your legs.'). whereupon his father makes the mistake of having the boy educated by a typical pedant, Master Jobelin. The result, according to Rabelais, is that the boy becomes stupid, dreamy and doltish. So his father sacks Master Jobelin, and hires Ponocrates, whose idea of education is to get his pupils to do things that really interest them, which has the effect of making it stick.

So as long ago as 1540, Rabelais had already put his finger on the basic principle of education - to arouse the student's unconscious desire to educate himself. This principle is so universal that it applies not just to human beings but even to creatures without brains. In the 1960s, a couple of American zoologists called Rubinstein and Best performed an interesting experiment using planarian worms, a creature so simple that it has no brain or stomach or nervous system. The odd thing about planaria is that in spite of this, they appear to be able to learn. One of the odder things about planaria is that if you teach one flat worm (which is what they are) to avoid an electrified wire, then you chop it up and feed it to other flat worms, the other flat worms will now also avoid the electric wire - demonstrating that in this case, the learning somehow spreads throughout the whole body. This, it seems to me, is a good metaphor for the educational process.

But Rubinstein and Best learned something even more interesting and significant about flat worms. They performed an experiment which involved putting the flat worms in a plastic tube full of water. A tap at the bottom of the tube allowed them to drain off all the water. When this happened, the flat worms rushed off down the tube in great alarm - because they need water to live. Soon they would encounter a fork, one arm of which was lighted and the other of which wasn't. The water was down the lighted alley-way. In no time at all, the planaria had learned to move off down the tube when the water was drained away and make their way down the lighted alley-way, whether it was to the right or to the left.

Then a puzzling thing happened. The planaria began choosing the wrong alley-way. Then they did

something even odder. When the water was drained away, they just lay there, as if saying: 'Oh God, not again!' And they would prefer to die rather than go off looking for water.

Rubinstein and Best were baffled by this behaviour, and one of them came up with the extraordinary suggestion that maybe the worms were bored because they had learned too easily. The other said: 'Don't be stupid - how can they be bored when they've got no brains?' However, they decided to devise an experiment to test this hypothesis. What they did was to take a new lot of planaria, and to use two tubes. One of the tubes was made of rough plastic inside, and the other was smooth - so the worms could tell the differences with their stomachs. In the rough plastic tube, the water was down the lighted alley-way, and in the smooth plastic tube, the water was down the dark alley-way. They then transferred the planaria from one tube to the other between experiments. This 'double ambiguity' principle was far more hard to master, and only about one third of the planaria succeeded - as compared to about 90% of the previous lot. But that third never regressed. The experiment could be repeated a thousand times, and still they made straight for the water as soon as the tap drained the tube. In other words, they had got bored because they had learned too easily. The result is that the learning had not got through to the 'subconscious' mind of the worm, where it sticks.

The basic principle seems to be obvious. Real education is something into which you put your total attention and enthusiasm.

I suspect this is what W.H. Auden meant when he told a friend of mine, Hugh Heckstall Smith, that the aim of education was 'to induce as much neurosis as the pupil can stand without cracking'.