## READING 1

## Memory

## Part 1

A lot of you have said to me lately that you feel you'd get what you want quicker, if you could only remember better. Asked what you mean, you say things like this: 'At the end of a half-hour or after a Dervish Mukabeleh I have a feeling of Truth, of Reality; but I forget it directly I start thinking or doing things.' Or: 'I know now that permanent happiness exists inside me and that it can be independent of circumstances; but through forgetting this, I catch myself full of unhappy thoughts often for no reason at all.' Or: 'Sometimes when I'm feeling flat or bored or miserable, I can snap out of it, if only I can remember to think of good ideas I know or things that always work...'

Since Memory is the keynote of the Teachings both of Mr. Ouspensky and of the Shankaracharya, I'm very anxious myself to know more about the mechanisms underlying it, just in a plain practical, day-to-day way. One feels so like the bee on his window-pane that is disturbing Paul Jennings (Observer, September 5th), and one talks to oneself as he would like that bee to do:

I'd have said if I were a bee...
'I can see there is no use at all
In running my head against a brick, that is to say a glass (or whatever the hell it is) wall.'
I should go into a corner and think, or possibly pray,
I should say
'Here is a game which logic, not doggedness,
that is to say bee-eddness, will win.
All I must do is remember how I got in.'
Instead of which, again and again
You angrily, busily, scrabble up the pane
And busily buzz and fall, again and again.
There are many kinds of memory of course; but we want to begin by asking: What actually is known about the mechanism of ordinary day-to-day memory? Well, in a current medical journal animal experiments have pin-pointed particular nuclei in the thalamus ('Light') and corresponding areas of the cortex ('Screen') where these short-term memories are continually being formed in the ordinary way. If these are damaged, the mechanism is impaired; $100 \%$ damage means total loss of memory formation. We share this mechanism with higher primates like apes and monkeys, and it's all there built into the machine. It is a self-governing circuit continually renewing itself.

But here we need to be a little more scientific and precise in our language. The best contemporary description I can find is in a text-book by Russell Brain.

It begins like this:

Memory may be defined as the power to retain and recall past experiences. A little reflection, however, will show that memory thus defined includes functions of differing complexity. Perhaps the simplest form of memory is that involved in remembering a series of digits or a passage of meaningless jargon. In such an act of recollection or mechanical memory there is little emphasis upon the 'pastness' of what is recollected. The emphasis is rather upon the persistence into the present of a series of acts which have become habitual, perhaps through repetition. In such an act of remembering there is nothing more than the three fundamental elements of memory - registration, retention, and recall.

> (Russell Brain, Diseases of the Nervous System, p.949)

So now may I ask you, in bringing your examples and observations, not to use vague general terms like 'memory', 'remembering' and so on, but to say exactly what you are talking about Registration? Retention? or Recall?


Figure 1. Mechanism of day-to-day memory
Consider this mechanism on the analogy of a tape recorder, 'Memory' here being the magnetic tape.

To record you place the microphone in right relation to the source of sound, and depress a couple of knobs. In this case Retention is permanent until wiped off by a new record, and then it is lost for ever; but our brains readily superimpose records one on top of another so that records are not destroyed but buried. Only severe injury to that part of the brain destroys them.

For Recall you wind the tape back to the beginning and press another knob. Easy. But in our brains only recall of the most recent records is under the control of our will; older records only come back by chance through mechanical association.

One other thing. In current tape recorders volume regulation is available both for input and playback. This, in our brains, might correspond to desire; emotion steps up the sensitivity of attention in memory formation. 'Every schoolboy knows that unless he attends he will not remember' - hence the importance of evoking interest in the subject being taught.
(N.B. The tape recording example is the current equivalent of older analogies.

For instance, in Plato's Theaetetus the process of memory formation is well described in terms of 'a block of wax in our minds'.)
[Pause for Discussion: But please confine yourselves today simply to this ordinary mechanism of memory, taking yourself as nothing but a machine.]

Here is a current example from the Evening News of 21.9 .65 which illustrates a defect of Registration:

## The Terrible Memory of Eileen H.

Housewife Eileen H. has a terrible memory. She admits it. 'I'm very forgetful', says this 51 -year-old married woman... Today, at the police court, she told of her lapses of memory and what resulted.
On holiday: 'We went away and I forgot my suitcase. We arrived in C... and I had no clothing for myself.'
The hairdresser: 'When I go there the assistant laughs and says if she doesn't give me a card I would turn up at the right time on the wrong day or the wrong time on the right day.'
Recreation: 'I went to play bridge at R... and arrived on the wrong day.'
At home: 'I even put the dish into the oven the other Sunday and forgot to put the joint in and we had no lunch.'

Mrs. H. appeared at the police court accused of stealing 5 s. worth of dishcloths from a supermarket. Tearfully she told the magistrates, 'I am very forgetful.' She added: 'I put the cloths in the bottom of my shopping bag because I was going to get some strawberries and they might be squashy. And I forgot I had put them there. I didn't mean to steal them, I swear. I didn't even know they were there.'

Her bad memory? This is how her solicitor saw it: 'We laugh at ourselves for forgetting things. We look for our spectacles and find them on our forehead. It's just as bad as taking things from a supermarket.'

The verdict given by Chairman: 'We find there is a reasonable doubt in this case and we will dismiss it.'

Now what is going wrong with poor Mrs. H.? What does 'terrible memory' mean in this case? In fact, her memory mechanism is perfectly good; it's just fatigued by constant unnecessary overloading. The truth of that is that it gets her along well enough except when she gets particularly hectic; it is only one Sunday she forgets the joint; she has, after all, only been in Court once in all those 51 years, and she will probably never be there again!

What happens to your tape recorder if you leave it running? Eventually the batteries run out and have to be recharged. Our memory battery is recharged every night - four hours deep sleep is enough if you don't overtax it all day and every day.

But this extreme example can show something important: Do you realise that if the input is right, the other stages follow naturally within the machine beneath the level of your consciousness? What questions have you about this?

## Part 2

We won't get very far if we don't recall from our System something to add to Russell Brain's account. We were told that:

We must learn to regard each 'centre' as a separate and independent machine consisting of sensitive matter... All that happens to us, all that we see, all that we hear, all that we feel, all that we learn is registered on these records... leave certain 'impressions' on these records.

We have not one but several tape recorders in our brains sensitive each to a given range of frequency and under its own laws. It will be enough to take the dotted lines in Figure 1 as indicating the three storeyed house - top room intellectual, middle room emotional, basement instinctive-moving. Russell Brain's account hints at two of these - 'remembering meaningless figures or jargon' involves only the intellectual tape recorder; the 'series of acts becoming habitual through repetition' refers to the recorder in the 'basement'; many impressions are however recording simultaneously on the tape in the 'middle room' in terms of pleasant and unpleasant feeling - often without our knowing it.

One explanation of the troubles of Mrs. H. in the Evening News quotation is that in her there is poor liaison between the tapes in the three 'rooms', so that when she goes from one 'room' to another she forgets. Connected with this is the fact that different 'I's belong to different storeys and that in scatty people like Mrs. H., the 'I's are even more disconnected than in most of us!

We want to know more of the difference between the recording mechanisms in the three storeys. Then we shall realise that people differ according to which storey predominates in them, and they have to find what is their own best way of learning. For instance, how do you learn a complicated series of movements - verbal explanation, imitation, pattern, or emotional sequence? If you are a pianist, how do you learn a piece of music either to play from the score or from memory?; if a painter, how do you retain a fleeting image long enough to paint it?
(Discussion)

## Conclusion

We said earlier that, 'if the input is right, the other stages of memory follow naturally'; what chiefly is required? Wouldn't you agree that 'selection' is important? Attend to what you want to retain; don't bother with what you don't want. This needs a certain degree of consciousness of aim. In 'sleep' or identification anything can get in; and once in, it is difficult to get rid of. Try experiments during the next two weeks in order to see with how much unnecessary stuff we clutter up our memory. Try doing only what you are doing at the moment without playing over irrelevant records all the time. You will then find that there is plenty of room for a different kind of memory altogether, a memory independent of sensory impressions from the changing environment, which we shall go on to discuss.

