AN ESSAY ON MEMORY

With Particular Reference to the Role of Imagery

by

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Chapter V

REMEMBERING HOW TO

1. The case against the existence of a 'mental directive'

It is commonly thought, by quite unsophisticated people as well as by 'traditional philosophers', that when we perform some skilled action which we have learnt to perform we are in fact doing two distinct things: making certain effective physical movements, and remembering past experiences in a way that enables us to make those movements effectively. It is commonly thought that exercising a skill is making our bodies follow the dictates of a mental directive composed very largely of memories of past events and performances. But strong arguments have been produced to challenge this belief both on empirical and on rational grounds, and we must now consider these arguments.

a) The dispensibility of recollections

i. Skill and lack of skill

When we say that someone performs a task well or skilfully, we generally mean that he can be relied upon to achieve what we take to be his desired end smoothly, efficiently, without hesitation or deliberation, as though it were an automatic process. In fact, the more closely our overt behaviour assimilates that of a well-regulated machine, the further it gets from the fumblings and ponderings we associate with learning, the greater is our skill held to be. As
A.J. Ayer puts it,¹ "Remembering how to swim or how to write, remembering how to set a compass or add up a column of figures, is in every case a matter of being able to do these things, more or less efficiently, when the need arises. It can indeed happen in cases of this sort, that people are assisted by actually recalling some previous occasion on which they did the thing in question, or saw it done, but it is by no means necessary that they should be. On the contrary, the better they remember, the less likely is it that they will have any such events in mind: it is only when one is in difficulties that one tries as it were to use one's recollections as a manual. To have learnt a thing properly is to be able to dispense with them'.

Certainly it would be very strange to say that the man who dives into the pool and swims faultlessly to the other side does not remember how to swim - simply because his mind throughout the performance is wholly occupied with what he intends to have for dinner. In due course we must consider whether it is equally strange to say that he is not remembering how to swim.

ii. Knowing what we are doing - and 'catching ourselves'

We might say that he is certainly aware - whatever else may be occupying his thoughts - that he is swimming; and that to be aware of what we are doing is, in a sense, to be remembering previous

¹ 'The Problem of Knowledge' p.150.
occasions since it is to classify this (the present performance) with that (some past performance or group of performances).

But, though we can be fairly certain that our swimmer knows that he is swimming, we cannot be so certain that he knows that he is swimming sidestroke. We frequently 'catch ourselves' performing tasks quite efficiently, and a swimmer may be surprised to discover that he is swimming sidestroke after he has been doing so for quite some time. But, assuming that he has just learnt the stroke, his performance seems to qualify just as well as an example of remembering how\(^1\) as it would have done if he had been giving it his undivided attention.

We may wish to deny that a fish remembers how to swim, but a human swimmer is not a fish; he had to learn the skill he is now exhibiting. It could be claimed, therefore, that whether or not he is concentrating upon what he is doing is quite irrelevant. His exercise of that skill is his remembering how to swim sidestroke.

### iii. Acting at will

Against this we may argue that such efficient actions are simply things we do, things which, because their successful completion is dependent upon our having had some past experience, are analogous to remembering. But they are not, we may claim, a species of remembering, any more than boxing is a species of ballet because it happens to involve considerable grace of movement. I do not want simply to

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\(^{1}\) Throughout this chapter 'remembering how' will mean 'remembering how to do something' not 'remembering how a thing looked, felt, etc.'.
dismiss this argument. Indeed, subject to some modifications, I intend ultimately to support it. But, at this stage we must not blind ourselves to the fact that swimming, when we have learnt to swim, is much more like remembering an event, when we have witnessed that event, than boxing is like ballet. In one case there is a superficial resemblance in the performance itself; in the other case there is a formal resemblance in the relationship of past and present events and the application of the retention of past events to our present requirements.

In 'The Mind and Its Place in Nature' C.D. Broad writes 'We may acquire by practice the power of performing at will certain characteristic sets of bodily movements, such as those that are used in swimming. If we find that we can still swim when we get into the water after an interval, we should commonly say that we "remember how to swim" or "remember the movements of swimming". There is nothing cognitive about "memory" in this sense. To say we remember how to swim is merely to state (a) that we can perform the proper movements after an interval, and (b) that we believe, or the speaker who observes us believes, that this is due to our having performed them in the past. It would be better to call memory in this sense, "retention of an acquired motor-capacity".

1 'The Mind and Its Place in Nature', p.269.
But even allowing that our arms and legs can, as it were, look after themselves, they do so as the result of prior training and in a way that is conducive to the end we seek. There is a sense in which we are both deliberately setting in motion and deliberately keeping in motion the performance in question when clearly it is open to us, as intelligent beings, to behave otherwise. If a fish is dropped into water it simply commences swimming; we do not think of it as deciding to swim, how to swim, or where to swim to. If a man is suddenly dropped into water (assuming that he can swim) he may to some extent react in the same way as the fish—simply commence swimming. Yet in adapting this mode of swimming to the condition of the water and directing his course to the nearest safe landing place his reactions (if 'reactions' is the right word here) are quite different from those of the fish. His first struggle to the surface may well be governed solely by motor-response, but thereafter his performance is always to some extent deliberate and purposeful and preconceived. To what extent will vary from man to man.

iv. The apparent absence of recollection

The question is—How are we to characterise this deliberateness and purposefulness in our skilled performance? In most cases they do not seem to be accompanied by any mental events of the kind we normally call remembering. When I swim across a pool I do not generally recollect any previous occasion of swimming nor yet any propositions or maxims about how to swim, nor am I generally aware of
any images of what my arms and legs should be doing. And on such occasions as I do have recollections — perhaps I am reminded of some previous occasion of swimming — those recollections are more distraction from than directive to my present performance. Normally, so far as I am conscious of anything to do with my present performance it is of what I am doing now — and, when I 'know what I am doing', what I am doing now just happens to be what I have done many times before.

Yet, as I pointed out in chapter II,¹ although we do not seem to be remembering anything on these occasions, our performances are of the kind we feel would have to be remembered, which suggests that in some way we have a constant memory-disposition always, so to speak, directing our activities so that no specific recollection, either of event or of proposition, is needed for the successful completion of the task. It is something of this sort, I believe, that philosophers have had in mind when they have spoken of memories as 'present in power' though not in fact. They have been driven to making such mystical-sounding assertions because although we are able to discover retrospectively that we were in fact performing in accord with certain learnt skills and performing to some specific end, after the initial learning period we rarely seem to be conscious in performing of any recollections of events or rules with

¹ See p.56.
which we compare, or any directives by which we guide, our performance. Although the performance seems to exemplify 'remembering how' - clearly it is intentional, skilled, and in some way dependent upon past mental as well as physical performances - those past performances, mental or physical, do not seem to be specifically recalled or in any way 'presented to us' as directives of our present efforts.

b) Some supporting arguments

We have considered the empirical grounds for holding that to be remembering how to do something is simply to be performing appropriately. Now we turn to certain arguments designed to show that it must be so, that remembering how could not be reduced to a variety or aspect of remembering that.

i. The time factor

If, in every instance, the performance of a skilled act were dependent upon the prior remembering of how to perform it, our lives would be a series of alternate thinkings and doings; before making each move we should have to pause to remember how to make it. In actual fact the occasions when we do proceed in this manner, as, for instance, when we work out very carefully the moves to be made in a game of chess, contrast very sharply with the ordinary conduct of our affairs where we are constantly putting into practice learnt skills of various sorts with never a pause. If we all paused to remember how to perform each operation whilst we were driving a car in heavy traffic (as indeed a novice driver often does have to) the result might well be catastrophic.
Suppose we suggest that remembering how does always take place (as a mental preliminary to action), but is very swift, hardly noticeable at all, always just a fraction ahead of the action itself. This could hardly be disproved on empirical grounds. During the learning stages of any skill we are in fact conscious of such 'mental preliminaries' and it is always open to us to say that if we introspected more carefully we would catch ourselves mentally rehearsing even when we are fully competent. Furthermore, as we shall consider later in this chapter, it is by no means easy to say when a skill is perfect, nor what constitutes a particular skill. But to show that something cannot be disproved is one thing; to prove it is quite another. And there are specific objections to this 'solution' which must be considered.

a. The object of attention. According to this view, since the overt performance is continuous, our minds would need to be attending always to what we were just about to do, to be concentrating upon how to make the next move — never upon the move we were then making. Thus by virtue of remembering how to perform we would be precluded from giving any attention to how we were in fact performing. However 'swift' the decision, there would always be a further decision to be made as soon as it was completed.

See p. 159ff.
b. The infinite regress argument. There have also been attempts to demonstrate logically that no prior mental directive can be entailed by the skilled performance of any action. The argument usually runs thus: Remembering and planning are activities which, like any other activities, can be done well or badly. If no skilled performance can be given until a prior remembering has occurred, then that remembering cannot occur until a prior remembering has occurred, and so on ad infinitum. Thus we could never even commence the overt performance itself.

I do not, however, attach great importance to this argument as it begs the point at issue. Unless we are already agreed that remembering is a skilled performance of the same kind as swimming or driving motor-cars the argument does not hold. And if we were agreed upon this the demonstration would be redundant. Further, as I shall argue in section 3 of this chapter, doing a thing well or badly has nothing to do with doing it intelligently in the sense of that word which is relevant to remembering.

ii. 'How to' is not recallable

In 'The Concept of Mind' Kyle produces two closely connected arguments designed to show that 'remembering how' and 'remembering that' are different in a way which would make it impossible to reduce the former to a mere sub-species of the latter.

a. The applicability of 'partial knowledge'. We never speak of a person having a partial knowledge of a fact or truth, save in

1 'The Concept of Mind', p.59.
the special sense of his having knowledge of a part of a body of facts or truths.... On the other hand, it is proper and normal to speak of a person knowing in part how to do something, i.e. of his having a particular capacity in a limited degree. And Ryle claims that this means only that the person knows how to do the thing fairly well, i.e. that he performs fairly well - not that he is conversant with only some of the maxims governing its successful performance. 'Remembering that' is necessarily a closed affair - either we remember or we do not. 'Remembering how' is always an open affair - we can perform the task in question with a greater or lesser degree of skill.

b. When does knowing how commence? Remembering that A was B is always traceable, in principle, to discovering that A was B at some exact time, whereas remembering how to perform some task can never be traced to an exact moment when we knew how for the first time. 'Learning how or improving an ability is not like learning that or acquiring information. Truths can be imparted, procedures can only be inculcated, and while inculcation is a gradual process, imparting is relatively sudden. It makes sense to ask at what moment someone became apprised of a truth, but not to ask at what moment someone acquired a skill'. It is noticeable that Ryle does not explain how we can improve an ability unless we have already acquired it, i.e. learnt how.

1 'The Concept of Mind', p.59.
The importance of Ryle's claims is that, if they are true, then it simply does not make sense to talk of remembering how to do something except as being able to do it more or less effectively. And the test of 'being able' is the performance on demand of the task in question. On the other hand, if it can be shown that it does make sense to talk of remembering how as distinct from the giving of public performances, then it follows that these claims, however convincing they may seem, simply cannot be true. We shall now consider some arguments which might lead us to deny that remembering how just is performing appropriately.

2. Causes for reservations
   a) Knowing and doing
      i. Performing and rehearsing

      If I am asked 'Do you remember how to drive a motor cycle?' I may well reply 'Yes' notwithstanding that there is no motor cycle for me to drive. On what authority do I make this reply? It could be that I recall some occasion on which I drove a motor cycle and I assume that I could do so again. Or it could be that what I recall is not any specific occasion, but simply the proposition, formed at some time in the past (when does not matter) 'I can drive a motor cycle'. In these cases the claim 'I am now remembering how to drive a motor cycle' would not be justified. What I am remembering is, in the one case a certain event, and in the other case, a certain proposition from which I am inferring that, given opportunity, I could drive a motor cycle.
But suppose I am remembering, not a single event, nor the single proposition 'I can drive a motor cycle', but a set of propositions which constitute the rules for driving a motor cycle. And suppose also that I have clear kinaesthetic images of balancing and directing a motor cycle. Could we then deny that I am remembering how to drive one? The point is that we frequently do feel justified in claiming to remember how to do something as distinct from claiming that we are able to do it – or even that we ever have done it. No doubt there are many old-world Japanese who remember how to commit Hari-Kiri.

Consider the question 'Do you remember how to play tennis?' addressed to a man now confined to a wheelchair. Must he reply 'No' simply because he is incapable of getting up and demonstrating? If a man is asked 'Do you remember how to swim the crawl?' when he is sitting at home he may rehearse in his mind the movements involved and consider images of performances he has seen and answer 'Yes, I do', whereas, if the same question is addressed to him when he is in the swimming pool he may simply execute a few strokes by way of reply. The two ways of answering the question are quite different; but it is the same question which is being answered. The effective difference between the answers is that the one given in the water tells us more than we asked. By his demonstration our man is showing us not only that he remembers how to swim the crawl but also that he can swim it, whereas the verbal reply would still be
justified if he remembered how only in the sense that the man in the wheelchair remembers how to play tennis, e.g. he could instruct other people. It is worth noting that many dramatic producers are very unsatisfactory actors — but we should hardly say that this is because they do not know how to act.

ii. The need for a criterion

Now, why do we say that the man showed us both that he can swim and that he remembers how? If a small boy picks up a stone and hurls it into a pond this is evidence enough that he can perform this 'task'. But it is surely not evidence that he is remembering how to do anything. The boy could be doing something quite clever, throwing a stone in a particular way that he has been practising. But, equally, he could be acting quite carelessly and thoughtlessly and have never thrown a stone before. Our swimmer's performance counts as an affirmative answer to our question only because (a) it follows the asking of the question and (b) we presume it is the application of a skill he has learnt. We accept it as an example of remembering how only on the assumption that he is aware that his demonstration provides the answer to our question, i.e. that his present performance has certain essential resemblances to an indefinite number of past performances which have been classified as swimming the crawl. We are in fact assuming, as the condition of our granting that he is remembering how, some association by him of his present performance with other performances he has given or witnessed. Part of what we
are attributing to him is the ability, should he make a wrong stroke, to realise that it is a wrong stroke and correct it. But how can he realise that this is a wrong stroke unless he has some present idea of what constitutes the right stroke? To argue here that it simply 'feels wrong' is simply to make this into a 'negative memory situation'. And, as I have argued,¹ such situations have always a basis of positive remembering. In his claim to be remembering how the man in the water is adopting at least some of the same criteria as the man on the land.

iii. Automatic and 'quasi-automatic' performances

It may be instructive to compare the extents to which conscious activity is involved in (a) breathing (b) walking (c) riding a bicycle and (d) playing Bridge.

(a) Breathing (though not deep-breathing) is something we just do — we do not need to be conscious at all.

(b) To walk we usually need to be conscious — but not conscious of our walking. Although it is something we have had to learn, and is to that extent a skill, it has become almost as automatic as breathing. The difference is principally that we can and do decide to start and to stop walking. But only if we have not walked for a very long time do we need to pay attention to the performance itself.

¹ See p.130ff.
(c) In contrast to this, riding a bicycle does require a lot of attention. We can think of other things while we are riding, but unless we are aware to some extent of what we are doing and how we are doing it we shall soon meet with disaster.

(d) In playing Bridge we are constantly 'telling ourselves' what to do next. Our minds do the 'real work', our hands and lips are just the labourers on the job. Here there is generally very little about our performances that we would call automatic - only such things as the actual holding and handling of the cards.

Let us allow, for the sake of argument, that walking (notwithstanding that we once learnt how) is for most of us a wholly automatic affair, and that playing Bridge is a wholly intelligent affair. Riding a bicycle, which is a fairly standard example of remembering how, might then be called a quasi-automatic affair since it patently includes a great deal of conscious (deliberate) and a great deal of unconscious (motor-responsive) behaviour. In the preceding section I described the 'conscious part' of 'remembering how' as the association of what we are now doing with - and its guidance by - what we have done or witnessed in the past. The question we must now consider is how we are to regard the unconscious part of the performance, and what if anything this has to do with remembering.

iv. The ability to forget

One maxim that may fairly go unchallenged is that whatever we can remember we can forget. What does forgetting how to do something amount to? Suppose we say it amounts to not being able to do
it any more. But (regarding walking as a wholly automatic performance) if I quite suddenly could not walk we would not normally say that I had forgotten how to walk. Even if no physical defect could be discovered to account for my inability we should be more inclined to assume some undiscovered physical defect than to attribute it to a breakdown of memory. I have forgotten if I do not know something I previously knew — and what in this case did I know previously that I do not know now? We cannot really say I knew how to walk; I simply walked — there was no knowing how to about it. And this would surely be true of the automatic part of any performance. One of the things we mean by calling a performance automatic is that it does not make sense to say we have forgotten how to do it, though we might for other reasons cease to perform it. And, if remembering how to ride a bicycle were simply being able to ride a bicycle, what could forgetting how to ride a bicycle be but not being able to ride one? But this would be no proof of having forgotten. It would be quite reasonable, if I could, nonetheless, state things about how a bicycle should be ridden, to say 'I remember well enough how to ride a bicycle, but nowadays my legs are not strong enough to do it'.

There is naturally a close association in our minds between remembering how and being able, so close that we often treat the concepts as interchangeable. But the vitally important point is that, whilst the exemplifications of the two concepts so frequently overlap in practice, there is no necessity for them to do so. A child
told to draw a picture entitled 'Earthquake' would almost certainly
draw a scene of devastation - but this does not mean that the
concepts 'earthquake' and 'devastation' are identical. It is our
ability to differentiate 'remembering how' from 'being able' if and
when the occasion arises that has led to the use of the expression
'remembering how' even if it is not always used in a way that makes
the distinction obvious.

b) **What constitutes a skilled performance?**

Since 'remembering how' is so evidently connected with the
exercise of acquired skills, it is strange that so little attention
has been paid by writers on memory to two crucial questions: (i)
what constitutes a particular skill? and (ii) By what criteria is
a performance judged to be skilful?

i. **The determination of a skill**

Suppose I mount my bicycle after many years of driving cars and
promptly fall off. Does this show that I have forgotten how to ride
a bicycle - or only that I have forgotten how to *balance* a bicycle?
I may still remember how to do a great many other things which come
under the general heading of riding a bicycle. Let us look again at
Ryle's argument in which it was claimed that knowing in part how to
do something is not a matter of being conversant with only some of the
maxims governing its successful performance. It certainly does seem

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1 See p.152.
possible to maintain that, just as balancing is part though not the whole of riding, so other activities, sub-skills let us call them, are parts of balancing; that every 'imperfect performance' may contain within it many 'perfect' ones. Now, I am not going to suggest that every such 'sub-skill' could necessarily be contained in a verbal maxim so that if each maxim is followed the balancing (the 'major skill') must be successful. On the contrary the point I am making is that there is no such thing as a 'basic unit' of skill; there are simply greater or lesser sets of effective activities, and it is perfectly legitimate to regard any of these as a skill which could be the object of a maxim. As I argued in chapter II, we remember a great many 'propositions' without words at all, and some of these could well be concerned with muscular feelings in our bodies. I grant that by the time we are competent cyclists balancing a bicycle has become a wholly automatic affair. But there seems nothing absurd about the suggestion that, at the learning stage when we are in fact remembering how to balance, balancing should not be regarded as one single skill but as a complex mass of skills, each with its own corresponding memory-directive.

Under this analysis, 'improving a skill', as Ryle calls it, becomes a matter of developing from lesser skills to greater skills. And the fact that 'a skill' is developed over a long period of time no more proves that its exercise is not dependent upon 'remembering that' (or a complex of 'remembering thats') than the fact that a
A complicated piece of information is gleaned over a long period of time proves that the remembering of it is not a case of 'remembering that'.

ii. What makes a performance skilled?

I have argued that we should talk of remembering only such things as it makes sense to talk of forgetting. The skill that we remember is, therefore, something that it is possible to forget. It is in some sense an intelligent performance. This, so far as I know, nobody has openly denied. But there is a tendency in recent philosophy to slide from statements attempting to reconcile this fact with the apparent absence of 'mental directive' in the exercise of skills, to statements which, though similar-sounding, pay lip-service to the 'intelligence' of skilled performances while in fact rendering impossible any intelligible analysis of them. Compare, for example, these two short passages from 'The Concept of Mind'. Ryle allows that there is a difference we are all aware of between an action done accidentally or automatically and one done deliberately and carefully, and he writes:

(a)¹ 'But such differences of description do not consist in the absence or presence of an implicit reference to some shadow-action covertly prefacing the overt action. They consist, on the contrary, in the absence or presence of certain sorts of testable explanatory-cum-predictive assertions'.

¹'The Concept of Mind', p.25.
(b)¹ 'But to admit, as we must, that there may be no visible or audible difference between a tactful or witty act and a tactless or humourless one is not to admit that the difference is constituted by the performance or non-performance of some extra secret acts'.

Assertion (a) says in effect that although something is going on in the mind in accompaniment to what is going on in the body, it is not in the form of a rehearsal prefacing the actual performance, but rather of attention to that performance, its nature and purpose. With this we may very well agree - and still go on to consider what constitutes the difference between attending to our performance simply as to any object of observation and attending to it as our means of achieving certain desired ends.

But assertion (b) goes much further. It not only denies the existence of any prior mental directive of the action, it denies in effect that there is a distinguishable mental element involved at all. I feel that Ryle has deliberately selected words which evoke a certain emotional reaction: 'extra' suggests 'extraneous' and 'secret' suggests 'kept secret', and we may well wish to deny the existence of any such entities. If we substitute the more neutral expression 'additional private factor' we shall be able approach the question much more dispassionately. Now, it may be protested that I have no right to substitute the neutral word 'factor' for

¹'The Concept of Mind', p.32.
'act'. A mere 'mental existent' is no more a 'mental act', it may be claimed, than a physical existent is a physical act. But, whereas, in considering the physical there is a clear distinction – we can all say which physical factors are acts and which are entities – there is no such obvious distinction when we consider the mental. Any terminology which suggests that 'mental acts' are distinguishable from 'mental entities' in the way that physical acts and entities are distinguishable is bound to be misleading.

Now, if there is no 'additional private factor' in the skilled performance, wherein can the difference between it and the automatic or accidental performance lie? It has been conceded that we are all aware of the distinction and that there is no visible or audible difference, so any factor present in one performance and not in the other must be private in the sense of being knowable only to the agent. It may be argued that the distinction is simply a matter of whether or not the performance can be repeated. But what does 'can be repeated' mean unless it is repeated? And surely we do not have to perform everything twice in order to know that the first occasion was an exercise of skill. Apart from which an overt act done once accidentally may well be repeated intentionally.

The problem is precisely to know what doing something intentionally is. Ryle speaks of acts done 'on purpose' but he seems to suggest that the agent may not know what he does on purpose and what he does 'not on purpose'. I would say that I am doing something on purpose
when I am aware as I do it of my aims and intentions, and because of this it is reasonable for me to take it that you are doing something on purpose when you express your intentions before or during the activity or when your activity has every appearance of being intelligently directed to what I believe to be a reasonable goal for you.

It is true that people are sometimes accused of doing things 'on purpose' — and perhaps rightly so — when they have not been 'aware of their intentions'. But such cases (which are in the province of experimental psychology rather than of epistemology) show only that a pre-determined action has been taken by the agent to be an accidental or automatic action. They do not set up a separate group of deliberate acts which are not pre-determined. When children slide along the floor and fall down on their bottoms we have to ask them whether they did it on purpose or not. We mean — was it an accident or did they decide to do it? The choice remains the same whether they are able to tell us or not. Because 'on purpose' is contrasted with 'accidental' there is an obvious sense in which a lizard catches flies on purpose, simply in that it does not do so accidentally. But plainly this sense of 'on purpose' is too limited to make the distinction Ryle does in fact allow to exist. Assuming that the lizard does not decide to catch the fly, his catching it is a purely automatic response.
c) Remembering how in terms of remembering that

i. Our viewpoint or point of interest

The claim, by Ryle and others, that 'remembering how' cannot be reduced to or explained in terms of 'remembering that' seems to contradict the assumptions that most of us make, apparently quite successfully, whenever we give instructions. When my little boy calls to me that he cannot remember how to do up his football boots, I call back to him that the laces must go through the eyelets in such and such order, that they then go through the loops at the sides and back, and so on. It is true that there are elements of most performances which we may find difficult, if not impossible, to describe in propositions of this kind. But this seems to reflect the limitations of our existing language rather than any mysterious inexplicability of those elements themselves. There is also (as we shall presently consider) in every performance some motor-responsive behaviour which, though it forms an essential part of the 'remembered performance', is not itself remembered in the ordinary sense of that word.

If we are employing someone to do a job for us then clearly our only concern is that the job be done. We are pleased to concede (that is, we have no wish to deny) that he 'remembers how' so long as the job is done properly. In such a case we can fully endorse Ryle's assertion¹ 'Our enquiry is not into causes (and a fortiori

¹ 'The Concept of Mind', p.45.
not into occult causes), but into capacities, skills, habits, liabilities and bents'. It is when, not as employers but as epistemological enquirers, we turn our attention to what his remembering how amounts to that we seem obliged to attribute to him all sorts of 'memories that'. It is one thing to observe skill and quite another to attribute skill. We observe the 'skill' of the lizard which never misses the fly it aims for, but our attributing skill to a marksman who repeatedly scores bull's eyes (though not to a child who lets off a rifle and just happens to hit the bull's eye) seems to rest upon our ability to explain his repeated success in terms of his knowing that the sights must be in such and such a position, that his breathing must be controlled in such and such a way, and so on. It is more natural to say 'I remember how to hit the bull's eye' than to say 'I remember that bullets hit bull's eyes when the sights of the rifle are so and so, and my finger squeezes so and so, and allowance is made for the wind' – and etc., mainly because it is so much more economical of words, and because, as I pointed out above, we do not always have the words to express everything we would need to say. Nevertheless 'he remembers how to' must 'stand for' all these unexpressed, and perhaps unexpressable, assertions. The lizard can catch flies all day but we do not want to say it remembers how to. The marksman need display his prowess once only and we grant immediately that he remembers how to hit bull's eyes.
ii. When do we ask 'do you remember how to?'

It may be helpful to consider under what circumstances I would ever ask myself whether I remember how to do something, or, for that matter, ask anyone else whether he remembers how to do something. Not, surely, while he is actually doing it. But, if 'remembering how' is in fact quite distinct from being able, why is it unreasonable to ask the man performing the task whether he remembers how?

The answer is that it is not unreasonable; it is simply an odd and confusing way of putting the question. We could, for instance, ask such a man whether he was exercising a learnt skill or attempting the task for the first time. But we would have to make it quite clear what 'task' we were referring to; as pointed out above, even if he is experimenting in the 'major task' he is almost certainly exercising his learnt ability to perform certain 'sub-tasks'.

In fact we do not generally ask the question in these circumstances, not because it would be absurd but simply because it would be uninteresting to us. What does interest us is whether he can carry on — whether he can master the next stage in the performance with the same apparent ease. 'Do you remember how —?' is always in some sense appropriate — but it is in fact asked only when the performance in question is not being given — though it may be pending. And if the reply is, as it may well be, 'I'm not sure — but I dare say I would remember if I had to' this need not mean that the man we have asked is identifying remembering how with being able. The
assumption behind the reply could be that under the stimulus of actually attempting the task the 'memories that' which now elude him would come back to him.

iii. Recollection as directive knowledge

It is sometimes held that we cannot know how to do certain things because we remember certain events and propositions, since remembering is never a source of knowledge. Now, there is a sense in which this may well be true – but is completely trivial. Assuming that I cannot remember anything until I have already known it, I must come to know it in the first place by some means other than memory.

But, quite apart from the possibility (discussed at length in chapters III and IV) of making factual discoveries from the reinterpretation of our memories, there is a very real sense in which memory is the source of practically all our knowledge. In the dispositional sense I know a great many things which I am not at present thinking about; but the existence of any disposition presupposes the periodical occurrences which actualise it, and I am now knowing only those things which I am now thinking about. Since I was not thinking about them half an hour ago I am now knowing them because I remember them, unless, of course, I am presently perceiving them.

It is interesting that Ryle, in discussing the question of the allocation of praise and blame, decides that a boy is
blameworthy if 'knowing how to tie the knot, he still did not tie it correctly'. There is no suggestion that the boy deliberately tied the knot wrongly. We must assume therefore that by 'knowing how to tie the knot' Ryle means knowing in the dispositional sense. Most of us would say here 'He could have remembered how to do it but he didn't bother'. And what he did not bother about could only be knowing (or remembering) in the occurrent sense. And if it be protested that knowing how in the occurrent sense just is tying it correctly, I once more point out that the lizard just does catch flies correctly. And the boy could tie the knot correctly entirely by accident.

3. **Intelligence and intelligent behaviour**

We may say that in doing something we remember how to do we are giving an intelligent performance, but we must be quite clear what we mean by this. For we feel a certain natural reluctance to say that the child who deliberately falls on his bottom is giving an intelligent performance. I believe that a great deal of the difficulty in the question, what constitutes remembering how, arises from the confusion of quite different senses of the word 'intelligent'. We want to say that remembering how to do something is always an exercise of intelligence (whether the remembering is 'public' or 'private'), but the word 'intelligent' is commonly used as a term of

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1 'The Concept of Mind', p.71.
approval, and at other times as the contrary of 'automatic' or 'motor-responsive', and the two uses are by no means the same - even though both frequently apply to the same instance. It is most important that we see clearly in which sense of the word remembering how to do something is always an intelligent performance.

a) Intelligence and effectiveness

i. Paying heed

Some recent philosophers, most notably Ryle, have made great use of the concept of paying heed. We are paying heed when we are fully aware of what we are doing, how we are doing it, and why we are doing it. But none of these guarantee that our activity will be effective. The boy who is busily misapplying a mathematical formula is paying heed to what he is doing, but he will not get the answer right. On the other hand the man who is thinking about anything and everything but what he is doing while he climbs a ladder will still get to the top if he carries on as he is going. Now, clearly we regard the performance of the boy as ineffective and that of the man as effective if we believe that their respective aims are answering the problem and surmounting the ladder. But, if we equate intelligence with attention, or 'paying heed', then the boy is giving an intelligent performance whilst the man is not, for the boy is heeding what he is doing. We shall be forced into the position of claiming,

1 Note H.H. Price's observation that the mark of intelligence is the ability to make mistakes - 'Thinking and Experience', p.87.
paradoxical though it may seem, that a dull man is exercising more intelligence when he is puzzling over the completion of an operation than a bright man who achieves the required end with a minimum of mental effort.

ii. Conscious and unconscious repetition

Here you may well object that the second man is obviously the more intelligent man simply because he does not need to puzzle over the task. But already you have shifted to another (and, I grant, more common, though perhaps derivative) use of 'intelligent'. What we are now speaking of is a capacity for effective behaviour. Indeed the building up of such a capacity is an excellent thing, but with it comes a lessening, not an increase, of intelligence in our conduct in the only sense of that term in which intelligence could be used as the mark of 'remembering how'.

For, as allowed at the outset of this chapter, the better we get at doing anything the less we need to think about it. Exercising any acquired skill is largely a matter of repetition. In the early stages it may be conscious repetition; in the later stages it will tend to become unconscious repetition. But, to an observer, this difference shows up simply as an improvement in effectiveness. We must never forget, however, that a well-regulated machine may be a greater improvement still — unless and until it breaks down.
Ryle cites the case of a chess-player developing this kind of competence. 1 'Very soon he comes to observe the rules without thinking of them. He makes the permitted moves and avoids the forbidden ones; he notices and protests when his opponent breaks the rules. But he no longer cites to himself or to the room the formulae in which the bans and prohibitions are declared. It has become second nature to him to do what is allowed and avoid what is forbidden. At this stage he might even have lost his former ability to cite the rules'. But 'second nature' is a very vague sort of term, suggestive somehow of being aware in a non-occurrence kind of way of the thing to do, a situation much easier to suggest than to analyse. Playing chess is not the most fortunate example since it involves both the formal rules which constitute the game itself and also what we might call the 'informal rules' which constitute good playing, and it is not altogether clear to which Ryle is referring. But either way, if the player really had lost the ability to cite the rules by which he was in fact playing, 2 would it not be fairer to say that he had reached a stage of physiological conditioning which enabled him to carry on by motor-responses alone - that he had in fact become a kind of human chess machine? This need not, of course, be to his

1 'The Concept of Mind', p. 41.
2 We are concerned here with the propositions - not just the forms of words.
A human chess machine, like a real chess machine, may play a very effective game of chess. The point I am making is that if ever this stage were reached it would not be a case of 'remembering how' so well that he need no longer bother about 'mental states'. On the contrary, it would be a case of reaching a stage of physiological conditioning where he need no longer bother to remember how.

b) Intelligence and stupidity

We have already encountered the use of 'intelligent' in which it is applied to persons and contrasted with 'stupid'. Although this is not the sense of the word in which remembering how is an intelligent performance (we can remember how to do stupid things as well as clever ones) some further consideration of it may nevertheless throw light upon the relationship between remembering how and remembering that. Intelligence in the laudatory sense is not measured by our ability to remember things but rather by our ability to make good use of the things we remember. Indeed we often contrast intelligence with the mere possession of a good memory. But, as H.H. Price has pointed out, we must be careful not to push the 'contrast' too far.¹

'Without memory' he says 'there would be no primary recognition; without primary recognition, no abstraction, and therefore no basic concepts; and without basic concepts there would be no derivative

¹ 'Thinking and Experience', p.59.
concepts, which are acquired by intellectual operations directed upon these basic ones'. Inventiveness is the mark of the intelligent man. As Ryle says¹ 'He has to meet new objections, interpret new evidence and make connections between elements in the situation which had not previously been co-ordinated. In short he has to innovate...'. But it is his memories which provide the basis for his inventiveness - and indeed it may well be that much of the 'inventiveness' is itself simply the reapplication of certain kinds of memories, the recognition of similarities which are not obvious to less lively minds.

ii. Remembering rules

Insofar as we do work out how to achieve some end, whether this 'working out' be a slow, deliberate performance or a spontaneous realisation which seems to occur along with the action itself, we must in some way classify the situation before us and predict the outcome of our actions accordingly. This, I presume, is what Ryle means by 'the presence of certain sorts of explanatory-cum-predictive assertions'.² And these classifications and predictions certainly involve operations of memory; the recognition of kinds and the memory of cause-effect sequences. Thus discovering how is in part a matter of remembering how - which in this case is very clearly a matter of

¹ 'The Concept of Mind', p.47.
² 'The Concept of Mind', p.25. See also p.161 (of this essay).
remembering that certain kinds of things behave in certain ways in certain kinds of situations. Our 'inventiveness' rests upon our ability to observe relational similarities in past and present situations and so make predictions about the achievement of our present needs, and the more extensive our memories the greater opportunity we have to make such observations. If we remembered, and appreciated the full predictive implications of, every cause/effect sequence we had ever witnessed we should indeed be well equipped to tackle any problems which confronted us.

I agree with Ryle's assertion. 'Often we deplore a person's ignorance of some fact only because we deplore the stupidity of which his ignorance is a consequence'. But, as we have seen, what we praise and what we deplore is a totally different question from what we do and do not consider to be instances of remembering how.

The reason for our disgust is that we are assuming that the person remembers certain facts which constitute premises and yet is incapable of moving from these to an obvious conclusion. As we saw in the previous paragraph, classification and prediction cannot operate without memory; thus we can hold the man to be stupid only on the assumption that his memory is sound. If he were proved to be suffering from amnesia (and therefore ignorant of the 'premises' in question) we should not then think him stupid. Even in normal

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1 'The Concept of Mind', p.28.
conditions 'I forgot' is often the best defence against a charge of stupidity.

c) Intelligence and ignorance

It would undoubtedly be wrong, a misunderstanding of the language, to equate lack of intelligence with lack of knowledge. A man is not unintelligent because he does not know something he has had no opportunity to learn - nor yet because he has forgotten something he once knew. On the other hand it would be equally wrong to overlook the very real connection, for the purpose of the question we are considering, between intelligent behaviour and knowledge of facts, for the current awareness of, and guidance by, certain facts - those proposed in our 'explanatory-cum-predictive assertions' - is the only factor we have been able to find to differentiate intelligent performances from both automatic and accidental ones.

i. Remembering how as recognition

In chapter III we discovered that 'remembering by doing' involved at least the recognition of our present situation as similar in some vital respect to some past situation. It is not enough that a situation 'looks familiar'; it must look familiar in a particular, informative way. We cannot expel 'remembering that' from the situation simply by concentrating our attention upon the present perception. Thus when my remembering how to go home is manifest simply in my going home, insofar as it is remembering how and not just 'sleep-walking', it is in part dependent upon my knowing,
i.e. remembering, a great many facts of the kind 'this is the street which has led me to such a place - the turning I took on those occasions is just past the gasworks', whether I recite these propositions to myself or not. Intelligence, as it is involved in remembering how, is not a matter of knowing a great many facts, but its exercise is wholly dependent upon knowing the relevant facts.

ii. 'Remember' is transitive

Whilst we do not hold a man to be ignorant because of the things he cannot do, we may be justified in suspecting that he cannot do them because he is ignorant. If a man cannot write down the English for a passage of Greek prose this is more likely to be because of his ignorance of Greek or English than because of an inability to manipulate a pen. And although it might well happen that a man could recite every instruction a good teacher had given him but still not be able to ride a bicycle, his failure could be the result of his ignorance of certain facts which his teacher had been unable to express in words. There are elements in most performances which defy description, at least within the framework of our existing language, but this does not mean that they are in principle indescribable in language. We do use public words for many of our private experiences. (For instance, how else could we separate, as we do, the concepts of misery and melancholy?)

It is a point we should always bear in mind that 'remember' is a transitive verb; when we remember we always remember something.
And when the something we remember is 'how to cycle' the quotation marks must always be implied even if they are not shown. Unless we use 'remember how' simply as a synonym for 'be able' — and this, if my arguments are sound, would render impossible the distinction between intelligent and non-intelligent performances — then it is hard to see what remembering how to do something could amount to unless it involved the occurrent remembering of at least some of the rules, maxims and propositions which may be held to constitute 'how to do it'. How else could we characterise the distinction we are all aware of between 'remembering how' and 'being able'?  

4. Conclusions

There should be no further danger of confusion between 'intelligent behaviour' and commendable behaviour (the behaviour of 'intelligent people') and so we can return to the real problem which is:

We are satisfied that many of our performances are intelligently directed towards some specific end in the light of our experience of similar performances in the past. We therefore view them as instances of remembering how. Yet, in performing, we do not generally seem to be relying for guidance upon any memories of past events. We can appreciate the difference between purely automatic responses and intelligent performances, and also between accidental and intentional performances, yet we cannot find by introspection that series of directive memories which is the only differentiating factor we can conceive between them.
The solution to the problem lies, I believe, in: (a) the realisation that every performance includes a great deal of automatic motor-response whether or not the performance counts as an instance of 'remembering how'; (b) a considerable broadening of our view as to what constitutes remembering events.

a) Dispositions to perform and dispositions to remember

i. General applicability of the disposition/occurrence distinction

The point I made in chapter II, that the distinction between disposition and occurrence, though applicable to memory, is not peculiar to memory, is here very important. We develop dispositions (how we do so is the concern of physiologists) both to remember certain experiences and to give certain bodily performances when stimulated in the appropriate ways. In the dispositional sense, therefore, it is possible that I both can perform the bodily activities which are essential to my driving a car and do remember those rules, maxims and propositions which may be classified as 'how to drive a car'.

ii. Joint actualisation of dispositions

While I am sitting at my desk, I may run through in my mind all these rules, maxims and propositions. To do this would be to actualise my disposition to remember how to drive a car. On the other hand I may, on a long, straight, lonely road, sit back at the wheel of a car allowing my mind to wander while my hands and feet respond automatically to the feel of the car beneath me and
the sight of the road ahead, and then I would be actualising my dispositional ability to make the efficient physical manoeuvres which constitute the overt performance.

But, when I am driving through the town, easing the clutch, touching the brake, marking to whom I must give way and who must give way to me, making signals, anticipating traffic jams and avoiding one-way streets (all of which operations come under the general heading of 'driving a car') then, unless I am an extremely practised driver, I am actualising both dispositions together. My performance still includes much that is purely automatic; but it also includes much that is planned and considered, the conscious application of those rules and maxims which constitute 'how to drive'. There is no harm, of course, in our speaking of a single disposition to drive carefully — provided that we bear in mind that driving carefully includes both remembering how and being able, just as working happily includes both working and being happy about it.

When we appreciate that the body can retain the capacity for effective activity just as the mind can retain acquired knowledge, and further, that with the continued repetition of any task what we might call the 'motor-response dispositions' become adequate to account for an ever increasing part of the efficient performance of that task, there is no longer any mystery about those performances which we feel to be both wholly effective and completely 'unconscious'.
There is no reason why they should not be both. What makes these performances seem mysterious is only our insistence upon calling them 'remembering'. And we do this simply because there was once a time when similar performances were remembering, and also, because as overt performances (even when the observer is also the performer), they are indistinguishable from consciously planned performances.

b) The 'event' being recalled

By showing that within an effective performance there are both 'automatic' and 'intelligent' elements, we simplify, but do not solve, the problem. The fact remains that the 'mental factor' of which we are conscious, in even what we now accept as the 'intelligent part' of our behaviour, does not seem to be a series of memories of past events running through our minds, but rather, to use Ryle's phrase, 'certain explanatory-cum-predictive assertions'. Yet how are we able to make these explanatory-cum-predictive assertions except by virtue of being apprised in some occurrent way of past situations and events?

It is true that we can become physiologically conditioned to utter (or sub-vocally speak) certain sounds in response to certain stimuli just as we can become physiologically conditioned to act in certain ways with our hands and feet. In fact we often 'catch ourselves' giving a muttered commentary on our activities and plans as we go about our business. But it is noticeable that on these occasions we are generally engaged in routine tasks which demand
little of our attention, tasks which we frequently do perform quite automatically, like washing up dishes or sorting a pack of cards into order, and the commentary is simply an extension of the automatic performance; it could be said to be 'directing' our activities only if we were to attend separately to it as we might to any independent instructing agent - a gramaphone for instance - and obey its dictates. But this re-introduces deliberate intelligent behaviour, the following of the instructions, and the problem breaks out afresh.

It does not seem possible to avoid the conclusion that, insofar as we are actually remembering how to perform some task - are predicting the outcome of our conduct and shaping it accordingly - we must be basing our predictions upon our occurrent remembering of similar tasks performed in the past or on maxims formed in the light of past experience. That is, we must be relying on our occurrent remembering of events in some sense of that expression. We must therefore consider what sense of remembering events this can be.

i. Degrees of determinateness

What constitutes one particular event must always be an arbitrary matter. It can be misleading to talk of remembering an event as though there were certain fixed limits to this achievement as there are to eating an apple. One event is whatever we choose to regard as one event and it may be remembered in more or less detail. My remembering sitting down on this chair a moment ago is no more
remembering an event in any essential way than my remembering coming to this room nearly every day last year. Each memory could be augmented by greater detail and each 'event' could be sub-divided. Further, the temporal location of events is not an essential part of the memory of them.\(^1\) It is possible, therefore, to allow that in remembering how to swim sidestroke I am not actually recalling some specific previous occasion of swimming sidestroke, without being committed to the view that I am not recalling any event which could be described as my swimming sidestroke in the past. I may well be recalling, though not necessarily in verbal propositions, my exercise of the skills and 'sub-skills' involved on an indeterminate number of past occasions, and being guided accordingly in my present performance.

Now, I contend that, unless and until our 'motor-response dispositions' develop to the point where we no longer need to remember how, the effective performance of tasks is dependent upon our occurrent remembering of this kind. And, further, that since there is an obvious thread of connection between all these past performances, the recollection of any of them, with or without specific location in time, can quite properly be described as the memory of an event (or of events - there is no real difference), even though the 'event' in question may spread over a considerable period and be of too in-

\(^1\) This point was made in chapter III, p.70.
determinate a character to ever be thought of as 'an event' in normal contexts.

ii. Remembering 'states of mind'

It is necessary, in view of current ruling opinion on the question, to say something in support of my claim that these events may be remembered 'though not necessarily in verbal propositions'. In chapter III, I distinguished between remembered propositions and the forms of words which are used to convey them and gave my reasons for believing that we must accept the existence of non-verbal thinking and remembering. The separation of memory-claim from memory in chapter IV and the conclusion that the memory, as distinct from the memory-claim, is of our private experience in perceiving the event, not of the public event itself, shows how a non-verbal memory can play its part in the production of a verbal claim. The memory-claim when it is made must (qua claim) be made in verbal propositions, but there is no reason why the memory on which it is based should contain anything verbal.

Now, in the case of 'remembering how', instead of an uttered (or otherwise formulated) claim we have a deliberate activity. The memory is manifested not in a piece of knowledge but in a piece of purposeful behaviour. And the memory which gives rise to this piece of purposeful behaviour need not itself be a verbal memory. [It may, of course, take the form of a verbal proposition (an ordinary memory-claim), as it tends to in our hesitant 'learning' performances. But here no problem arises.]
Suppose that whilst I am swimming I am aware that a certain muscular movement of my body has produced on previous unspecified occasions a particular thrusting effect through the water. It is very doubtful that this could be expressed precisely enough in words to be of any directive value to me, yet it does not seem at all doubtful that I am remembering a certain relationship which I have observed in the past, and whilst I may not be able to describe this to myself in words I can exemplify it in action. It seems to be a matter of complete indifference whether we say that the actual 'subject of memory' here is an event or a series of events or a belief formulated non-verbally to myself at some past time as the result of my observation of a series of events. The important point is that my failure to make specific memory-claims to myself does not entail that I am not in fact remembering in the occurrent sense.

Thus, whilst Ryle is no doubt right when he says¹ 'A well-trained sailor boy can both tie complex knots and discern whether someone else is tying them correctly or incorrectly, deftly or clumsily. But he is probably incapable of the difficult task of describing in words how the knots should be tied', he is wrong in supposing this to show that the sailor boy is not in fact remembering how the knots should be tied in order to tie them. It shows only that his remembering is not in the form of verbal propositions.

¹ 'The Concept of Mind', p.56.
In the case of this sailor boy, assuming that he is not performing by motor-response alone (which he could be), much of the remembering may well be in the form of imagery. If he is able to perform the task without watching what he is doing, there would be a good case for denying any visual imagery. But not all imagery is visual. There are certain bodily feelings involved in the performance of tasks, and the memory of these feelings, as distinct from the memory of any propositions about them, would be one kind of imagery - kinaesthetic imagery. And he could remember how to tie the knot by rehearsal, as it were, without an actual rope in his hands, and without the recitation of any rules. His remembering could be in a series of visual or kinaesthetic images of the stages of the performance, and he may also twist his hands in a kind of mime, possibly, though not necessarily, accompanied by a stumbling verbal account based on his imagery.

The manner in which we learn a skill must to a great extent determine the way in which we remember it. When we learn by instruction we tend to remember by recitation; when we learn by attempt we tend to remember by imagery, together with half-formed dictums made to ourselves during the attempts. Since most often we learn by a combination of both, our way of remembering will depend largely upon the relative effectiveness for ourselves of the two ways of learning the skill in question. This is why some men can tie bow-ties (usually a very 'conscious performance') only upon themselves,
whilst others can tie them only upon other people or on themselves with the aid of a mirror.

The tasks which we think of ourselves as remembering how to perform are for the most part muscular tasks in the broadest sense, and it is reasonable to suppose that any imagery involved in remembering how to perform them is mainly of the kinaesthetic kind. This fact makes it particularly easy for us to overlook its presence. Thus, in an article entitled 'Remembering' B.S. Benjamin wrote ¹

'Anyone who assigns the memory-image a central role in the analysis of remembering must explain the connection or lack of connection between our rememberings when memory images naturally are likely to occur, as in our memories of places and faces, and those where they are not, as for instance when we remember how to tie a running-bowline...'. Since tactual or kinaesthetic imagery would be very likely to occur in our remembering of how to tie a bowline, once it is allowed that the tying and the remembering are not one and the same thing, it seems clear that Benjamin is regarding memory-images as visual images — which for a very obvious reason play only a minor part in remembering how to perform physical tasks. It should be noted however that not all recent writers have fallen into this trap. E.J. Furlong writes ² 'This stress on the visual has given a handle

¹ 'Mind', vol. LXX, 1956, p.317.
² 'Imagination', p.70.
to those who for one reason or another are ill-disposed to imagery. Perhaps impotent to visualise themselves they write of "mental images" in any form'. And N.H. Price\(^1\) attributed his own poor performance at golf to his weakness in kinaesthetic imagery-powers.

iii. The simultaneity of act and directive

We are now in a position to answer the argument that if we were occurrently remembering events in the sense described and acting in accordance with the dictates of our memories whenever we performed intelligently, we could not then achieve the smooth continuity which characterises our overt behaviour.\(^2\)

Let us suppose that I am building a wall, and that my performance is an instance of 'remembering how'. It would clearly be absurd to suggest that I must therefore remember every detail of how to build it before commencing operations. I do not have to 'remember how' and then build — nor yet do I have to remember how to lay a brick and then lay it. It is enough that my remembering keeps, as it were, always one jump ahead of my performance, that each 'task' (and what constitutes one task is what we choose to regard as one) be considered with a degree of determinateness suitable to its complexity and, insofar as it demands direction, planned accordingly in the light of my memory of how it can be accomplished. Many such 'tasks' are wholly contained

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1 'Thinking and Experience', p.237.
2 This argument was put forward in the first section of this chapter. See p.149.
within other 'tasks'; the merest flickings of the wrist, straightenings, smoothings, settings, may each be regarded as separate tasks. Thus the remembering how need not precede the building of the wall, or the laying of the brick - it may accompany it.

I say 'insofar as it demands direction' because much of the actual performance does not; it is simple motor-response to a physical stimulus. That it may be a learnt ability like walking, and not an inherent ability like breathing, is here quite irrelevant. It is the ability of our bodies to carry on, so to speak, with the job in hand which smooths out and renders continuous our overt performances. Our motor-responses, by filling the gaps between our planned activities, allow our overt performances to continue uninterrupted.¹

iv. The acid-test of remembering how

This completes my account of what it is to remember how to do something. I am not disputing that we can and sometimes do perform with complete efficiency tasks which we once learnt to perform and that, in A.J. Ayer's words,² 'such exercises need not be accompanied by anything that anyone would be even tempted to call a memory-experience'. But I claim that in such cases we are concerned, not with memory in the normal sense of that word, but only with acquired

¹ Compare Russell 'An Outline of Philosophy', p.198 'In talking, words suggest other words, and a man with sufficient verbal associations may be successfully carried along by them for a considerable time.'
physiological capacities. When those capacities were developed, and whether they might someday collapse, throwing us back upon the resources of our memories, is beside the point. I also claim that notwithstanding this, there is an activity which can properly be called 'remembering how', which is quite distinct from 'being able', and which can occur whether or not we are actually performing the task in question. It is, however, more likely to occur whilst we are performing the task, both because its occurrence may then be demanded and because the performance acts as a stimulus to the memory.

It is intelligible to talk of remembering only when there is something which we remember - and conceivably could forget. If none of the performances people commonly speak of as remembering how fulfilled this requirement my arguments in this chapter would be tantamount to a plea for dropping the expression from the language. But since many of these performances do - in my opinion by far the greatest proportion of them do - my plea is only for the more careful application of the expression, at least in an epistemological enquiry.
Chapter VI

IMAGES - THE SUBJECTS OF IMAGERY

1. Kinds of imagery

a) The meanings of 'image'

I propose to begin this chapter with a brief examination of the uses of the term 'image', an examination which I hope will make apparent the extent and the limitations of the connections between these different uses.

When we speak of the graven image of a god the assumption is that the statue copies or reproduces the physical characteristics of that god, so that by looking at the statue we see what the god is alleged to look like. But the term 'image' is often used to mean a strong resemblance or suggestive likeness rather than an exact likeness. When someone says 'Our Fred is the image of our Arthur' he does not usually mean that he cannot tell them apart. He does mean, however, (though he may, of course, be wrong) that nobody could fail to see the resemblance. 'Image of' is much stronger than simply 'like'. 'Image', in its most basic and general sense, sometimes means an exact copy and sometimes not, but always it means an unmistakable likeness.

A mirror-image or reflection is an exact visual copy, but for the reversal of right and left. (The colour photograph is perhaps the most exact visual copy). But it is not because of its exactness

1 I am ignoring the fact that both mirror-image and photograph are usually smaller than the subject imaged.
that I take 'mirror-image' to be a special sense of 'image'; a
mirror-image is something we can examine, it is itself an observable
entity in the ordinary sense. We speak of the statue as 'an image'
but it is also, and primarily, a statue, and we see the image of the
god, as it were, in it. The mirror-image is nothing but the mirror-
image. To speak of a statue as the image of a god is to speak of a
relationship between two entities, the god whose existence is assumed
and the statue, as when we speak of Fred's being the image of Arthur.
But to speak of a mirror-image is not to speak of a relationship, a
likeness between a man and something else, his replica; nor yet
between a man and the sheet of glass or polished steel, or pool of
water, or whatever else the image is 'in'. It is to speak only of
the visible image itself. It might be claimed that it is just one
way of seeing the object - but it is a mediate way of seeing it, and
the mediating entity is not the mirror but the actual image in it.

After-images are 'entities' in the same way as mirror-images -
they are things which are there to be seen simply as images. When
I close my eyes after looking fixedly at a sunlit window the 'picture'
of that window remains before me as though it had been photographed
onto my retina. Except by such mechanical means as pressing my
eyeballs I can neither remove it nor change it; it is just as much
outside my control as is the view of the window itself when my eyes
are open. And if the light has been particularly bright the after-
image will remain superimposed on my visual field even when my eyes are
open, partly obscuring the normal view from a section of that field.
The study of after-images, including the 'reversal' of their colours in some cases and not in others, lies within the province of physiology - but that does not necessarily mean that they are philosophically uninteresting. Being a common and easily identifiable experience, the after-image provides a useful contrast to the memory-image. There may also be a strong connection between after-imagery and eidetic imagery. For eidetic images seem to have both some characteristics normally associated with after-images and some normally associated with memory-images and imagination.

In discussing eidetic imagery I am at a considerable disadvantage, in that I cannot recall having ever experienced it myself, and, must rely, therefore, on the reports of those who have. An eidetic image may occur immediately, or some considerable time, after the perceptual situation which gave rise to it. It resembles an after-image in that it is seemingly 'there, before the eyes', in a way that permits us to study it as we might any external object. It is claimed that an eidetic image can be 'projected' on to a blank surface and can then be examined, much as we might examine a painting or a photograph. Normally it is a faithful reproduction of the scene perceived.

It would seem possible, then, to explain the eidetic image as simply a delayed positive after-image, a mere photograph on the retina, provided that the reproduction always was exact and that the 'picture' remained always wholly outside the control of the 'viewer'. But experimental psychologists suggest that neither of these conditions
is in fact fulfilled. Apparently eidetic images are often found on 'examination' to be imperfect reproductions of the scenes perceived, and the people 'viewing' them can sometimes be induced by suggestion to make them change, or even 'come to life'. If we accept their testimony we must allow that eidetic imagery is not simply a physiological process of 'photographing' like after-imaging. The alternative is to assert that those people who have reported inaccuracies and changes in eidetic images were unable to distinguish the point at which memory-imagery or imagination-imagery came in to augment or replace the eidetic imagery. I find this second alternative very difficult to reconcile with my own experience of memory-images, for these do not seem to be substantives in any sense at all, and would hardly seem likely, therefore, to be confused with the kind of phenomena I understand eidetic images to be. We can, perhaps, draw comfort from the fact that most of the reports of such changes come from young children, and it is notorious that children are sometimes carried away by their imagination. I do not wish to give any definite opinion on the question, firstly, because as I have admitted, I have no experience of eidetic imagery, and secondly, because the eidetic image does not seem to play any vital part in memory. People who do have eidetic images usually allow that they also have other images, distinguishable from these, which they call memory-images.

1 See I.M.L. Hunter - 'Memory - Facts and Fallacies', p.146ff.
At this juncture we need only say of memory-images that they are our means of being aware (or our actual awareness) of our past sense-perceptions as such. It is not essential that they be exact reproductions of these past sense-perceptions. Leaving aside for the moment the question whether it is proper to speak of seeing or hearing our memory-images, it is sufficient that our 'having' them recalls to us some past sensory experience of our own, as it were directly, not through the medium of verbal description. We need no command of language in order to have memory-images; on the contrary, psychologists claim to have considerable evidence that the occurrence of memory-imagery diminishes with the development of linguistic habits. Let us say, then, at this stage, that memory-imagery is the direct linkage of our past sense-perceptions with our present awareness of them as past sense-perceptions. The experience of imaging is similar, in a way that seems quite impossible to describe and yet which those of us who habitually remember in images must know, to the sensory experiences of seeing, hearing, and so on, though it does not involve the present use of any sense-organ; there is no reason why a man who has gone blind should not still have visual memory-images. Memory-images, unlike after-images and eidetic images, can often be induced and dismissed at will — though at other times they 'appear' as if from nowhere and seem to linger when we would be rid of them. In this their behaviour is no different from that of any other form of memory.
Sometimes we have images which are not, and which we know full well not to be, of any particular object we have ever experienced by sense-perception. Just as I can have an image of my friend sitting on the bicycle he habitually rides, so I can have an image of the same friend riding a donkey, a thing I have certainly never seen him do. And, as images, the two seem to be different only in their 'subject matter'. I in fact distinguish between them simply because I know one to be a memory-image and the other to be merely a figment of my own imagination; but how I know this is a problem which has exercised the minds of philosophers for a very long time. The extreme difficulty which has always been found in demonstrating how memory-images can be distinguished from imagination-images by their own intrinsic qualities or their 'modes of presentation' is one of the factors which have led so many philosophers to assert that we distinguish them only by their compatibility with other, non-image, memories - and to relegate the memory-image to the status of a mere aide-memoir accordingly. But I myself am quite unprepared to abandon the belief, arising from my own actual experience of in fact being able to distinguish them, that there must be inherent distinguishing marks. I want now to suggest that the failure of so many people to 'put their finger on' these differences is largely the result of a misunderstanding about the kind of difference they are trying to discover.
b) **Images of memory and of imagination**

i. **Is the difference of kind or of degree?**

However wild or grotesque our imagination-images may be there is at least some sense in which they arise out of actual past experience. I can visualize my friend on a donkey because, though I have never seen this sight, I have seen my friend and I have seen a donkey. I am not in the position of the Prince in one of Anthony Armstrong's fanciful stories, who, when given a magic wish, wished for a blue rumped gnurgle because he wanted to see what one would look like. Imagination imagery can be likened to those cards with heads and middles and rumps of animals on them that we used to play with as children; the creatures we 'made up' were quite fantastic, but the individual parts did all belong somewhere. In the same way our imagination-images are memory-images — but not of any single past perceptual occasion. To accept them as re-presentations of our own past perceptions would be wrong — but not altogether wrong.

And, conversely, in taking memory-images to be re-presentations of our own past perceptions we are right — but not altogether right. For an image does not have to be 'perfect' to rate as a memory-image; if my memory-image of the friend I lunched with today included a white shirt whereas in fact he wore a blue shirt, this alone would not be grounds for holding that I am not having a memory-image at all but an imagination-image. It would be a memory-image with some of the detail inaccurate, that is, including some detail recalled from a different perceptual occasion from the one I consider myself to be remembering,
Where, then, should we draw the line between memory-images and imagination-images? The answer is, I believe, that we do not need to 'draw a line' at all.

Once we cease to think of memory-images and imagination-images as two distinct kinds of phenomena we can point to at least three different criteria for 'allotting marks' on the side of memory or on the side of imagination — in the act, as it were, of actually having the images. I do not mean that we consciously judge the image to be 'memory-like' or 'imaginationlike', only that there are different factors which prompt us to accept it as memory or as imagination.

ii. Distinguishing features

a. 'Firmness'. There is about my image of my friend on a bicycle a unity and 'firmness' that is lacking from my image of the same friend on a donkey. In the one case there is a single whole, man on bicycle, a single focal point of attention. In the other case there are two separate focal points; it is almost as if I were imaging a man and then imaging a donkey and trying to 'clip them together'. The bicycle image, though it may be sketchy, is still constant and steady. The donkey image, though more detailed (as detailed in fact as I want it to be), tends to be constantly blurring and changing; details come and go and only in the face of my friend does the detail seem to be set and firm.

It could well be that Hume was thinking of this difference when he spoke of the 'vividness' of memory-images as compared with
imagination-images. But 'vivid', as that word is normally used, is
certainly not the best description. 'Self-sufficient', 'unitary' and
'constant' are perhaps better terms. I realise that a particular
imagination-image may be unitary, self-sufficient or constant, but
since we are considering only one means of 'allotting marks', not a
rigid distinction of kinds, so long as these qualities are generally
characteristic of memory-images and not of imagination-images, the
exceptions are not disastrous. And when exceptions do occur their non-
conformity can often be explained as something peculiar to a particular
case. They might, for instance, be images of images.1

b. Controllability. Our imagination-images come and go and change
quite freely. The donkey beneath my friend can be turned into an
elephant, his hair can be turned bright green and made to stand on
end; the image is at the disposal of my every whim. As Hume said2
'A man may indulge his fancy in feigning any past scene of adventure'.
The odd thing is that Hume then went on to insist that without some
'memory indicator' he would take what he had feigned to be his memory
of his own past. Surely the reason we speak of feigning is that we
are aware of our own control over what is being postulated. Feigning
and shamming are intelligible only on the assumption that the
performer knows this is not 'the real thing'.

1 See p. 202ff.
2 'A Treatise of Human Nature', Bk.1, pt.iii, p.85 of 'Hume's
Treatise' – L.A. Selby-Bigge.
Of course I can make the bicycle beneath my friend 'turn into' an elephant - but in doing this I am immediately aware of having 'taken charge of' my image. The bicycle will tend to re-assert itself as soon as I discontinue my deliberate fantasy, and there may even be a sense, which we shall consider later, in which it is 'there' all the time.

c. The 'natural development' of context. Closely connected with 'controllability' is the third criterion, what we might call the natural development or expansion of images. The memory-image I have of a friend on a bicycle leads on naturally to an expanded image which includes the trees and buildings behind him, and to further images of his getting off his bicycle to greet me and of the sound of his voice as he did so. And all this additional imagery has the same 'firmness' and the same 'involuntariness' as the original image.

There are, of course, occasions when I remember so much and can remember no more, when the context simply refuses to 'expand' further - a stage which is bound to be reached eventually. But the feeling of 'expandability' still persists - I seem compelled either to enlarge my image, to expand its context - or else to shift my train of thought to something altogether different. So long as my attention remains, the 'next move' is both demanded and to some extent predetermined. At the conclusion of his book 'Remembering' Bartlett says, 'Always it is  

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1 See p.214.
the material from some specially organised mass which has to be central, and about this the constructions and reconstructions of memory cluster'. ¹ This certainly seems to be true of imagery.

The imagination-image does not so much expand as simply change. We have no feeling of predetermination or compulsion; the development, if any, is haphazard and voluntary (unless it follows some pre-arranged pattern of associated ideas).² To quote Bartlett again: 'With constructive imagination this is not so. The central "scheme" is not, so to speak, predetermined by the initial orientation. There is a freer range from setting to setting and from interest to interest'.³ Memory-imagery, on the other hand, is always felt to be an integral part of a greater whole. It 'belongs in context', and this may well be the basis of the 'feeling of familiarity' of which Russell speaks. Certainly this explanation of 'familiarity' would provide an answer to Holland's objection that an imagination-image entertained many times is more familiar than a memory-image of an experience had but once.⁴ The imagination-image, however often it occurs, will not normally develop a contextual setting into which it naturally, almost compulsively, expands.

¹ 'Remembering', p.313.
² Cf 'metaphorical imagery', p.242.
³ 'Remembering', p.313.
⁴ This objection was raised in chapter II, p. 48.
iii. Memory and imagination 'elements' in imagery

Since I have argued that the difference between memory and imagination imagery is one of degree rather than one of kind, it may be better to speak not of memory-images and imagination-images, but rather of the memory-elements and imagination-elements in imagery. We can then say that, on any given occasion, the memory-elements are those 'parts' of an image which derive from a single past perceptual occasion, whilst the imagination-elements are those 'parts' which derive from past perceptual occasions other than the one we take ourselves to be remembering. Or, at the level of 'uninterpreted images', when everything in an image derives from the same past perceptual occasion it is a memory-image, i.e., composed wholly of memory-elements, and when the content of the image is derived from more than one past perceptual occasion it is potentially either an 'imagination image' or an incorrect memory-image - the part which is incorrect being dependent upon what we subsequently take it to be the image of.

iv. Images of images

Now, there is really no reason why 'remembered experience' should be limited to 'remembered perceptual experience'. Just as I can remember perceiving things so I can remember imagining things. And if my imagining took the form of imagery, my memory of that imagining may well take the form of imagery too. In his article 'The Empiricist Theory of Memory' Holland considers the possibility of someone amusing
himself repeatedly by contemplating an image of Magdalen Tower standing on Magdalen Bridge.\footnote{MIND, Vol. LXIII, 1954, p.468.} Such an image, when first entertained, would be 'taken as' imagination. The memory-elements and imagination-elements would be equally balanced (whether we thought of the image as of the bridge or of the tower) and would be discordant with each other, with a consequent lack of 'firmness'. The image would be completely controllable and detached from any single context. But subsequent occurrences of the same image could be memory-images — memory-images of the imagination image — and the image would tend to become more 'firm' and less controllable. What would still be seen to be the image of a fantasy in the light of other extraneous knowledge, could well, in time, come to have many of the inherent characteristics of an ordinary memory-image. It could not, however, acquire all the characteristics of memory-imagery. For the only 'context' it could acquire would be one which would show it up immediately as the contrived fantasy it is. We could, if we wished, speak of a habit of forming a particular image rather than of the occurrence of memories of a previous image, but the effect would still be the same.

This, incidentally, provides us with at least one possible explanation of the 'fixed idea', the wrong belief to which we return even after we have been shown that it is wrong. I myself got it into
my mind at an early age that a certain schoolmaster was cross-eyed (why I cannot say) and so often entertained an image of him with cross-eyes that on meeting him much later I was astonished to find that his eyes were in fact quite straight. Notwithstanding this I still image him with cross-eyes, and only by a considerable effort can I make myself image him otherwise.

v. 'Memory-images' and 'imagination-images' as complementary

I may have a memory-image of my father riding a horse down a country lane and then, just to amuse myself, 'turn the horse into an elephant', and so create an 'imagination-image'. But suppose I then become interested in the elephant. The image may re-orient itself, as it were, about the elephant, so that instead of a country lane there is a Zoological Garden with an elephant being ridden through it - just as I saw it on my last visit. The rider fades and becomes nondescript, and once more I have a memory-image. In this case the imagination has re-kindled a different memory, but sometimes imagination may serve to augment, rather than to distort, the original memory. This is how I am inclined to interpret a private 'experiment' reported by Furlong.¹

He tells how once he groped, with his eyes closed, from his chair to the door in a familiar room. A little later, recalling the experience, he was surprised to find that his memory of it was in

¹ 'A Study in Memory', p.76.
visual imagery. Now, no doubt he had made the same journey many times with his eyes open. What then is more natural than that he should imagine the visual perceptions which would have been involved had he had his eyes open, and take this to be his remembering of the event? For the imagining in question is simply the transposition of true memory-images to another, and essentially similar, occasion.

He himself explains it by saying that what he was remembering was his whole state of mind at the time. But this seems to entail that as he groped he imagined the visual experience he would be having and subsequently remembered these imaginary visual experiences. And whilst this is certainly possible, it does not seem here to be necessary. 'Imagination-imagery' quite often 'fills out' our memories where memory-imagery is weak or altogether lacking; so long as it is correct in essentials we are not likely to be misled by it, though clearly, we could be. Had Furlong claimed from memory that he passed the cat on the way to the door, we should have felt obliged to enquire whether he touched it or only 'saw' it.

c) Classifying memory-images by their organic origins

It is notorious that people who write about imagery often become so preoccupied with visual imagery that they write as if no other forms of imagery existed. I am myself so dominated by visual experience that such examples as spring to my mind are nearly always of the visual kind, and it is as well to remind ourselves as often as possible that memory-images can be of many kinds — as many in fact
as there are kinds of sense experience. I want, therefore, to make it quite clear that whatever I may claim for visual imagery I am claiming equally, where it is not patently inappropriate, for every other kind of imagery as well.

i. **Correspondence with sense-organs**

It is not necessary here to settle the question of how many different kinds of sense-organs we have. We need only state that whatever can be regarded as one class of organic sensations can give rise to what may be regarded as a corresponding class of images. We have sight and visual imagery, touch and tactual imagery, smell and olfactory imagery, hearing and auditory imagery, taste and gustatory imagery. If we claim that there is a separate kinaesthetic sense, sense of motion and/or sense of heat, we should also claim that there is separate kinaesthetic, motion and/or heat imagery. It is sometimes felt that there is a special problem about images when the corresponding sensations are, as people say, localised. We know the difference between seeing something and having a visual image of it, but could there be the same difference (or the same sort of difference) between feeling something, say, a pinprick, and having a tactual image of it? I can see no reason at all why there should not be. The people who raise this problem are overlooking the fact that what is seen is also 'localised', though not in our own bodies, and if it is possible to have a visual image of an 'external object' without thereby having an hallucination, it is equally possible to have a
tactual image of a pinprick without thereby having an hallucination.
The tactual image of the pinprick would not be painful for the same reason as the visual image of a car's headlights is not dazzling. In principle every sensory experience is recallable, and according to the view which I shall develop in this and the following chapters, to recall a sensory experience is to have an image. Recalling a sensory experience is not to be confused with recalling that we had the experience, which may take the form simply of a verbal proposition.

Now, here I want to give a caution about a frequently encountered, and potentially misleading expression - 'verbal imagery'. Words, like images, often function in trains of associated ideas, and, when what we are considering is the association of ideas, words and images are genuine alternatives at the same functional level. Bartlett, for instance, says: 'A person who uses visual cues more readily and frequently than other cues can also, as a rule, use other cues — verbal, kinaesthetic, auditory, and so on — if he is forced or encouraged to do so'. This is quite unexceptionable as it stands within a discussion of memory-cues. But the listing of 'verbal' with 'auditory', 'kinaesthetic' and 'visual' may lead us, if we are not careful, to think of it as 'another of the same kind' in our consideration of imagery — and this would be very wrong.

1 'Remembering', p.109.
Again, we find G.F. Stout saying 'There are some people, especially people who are much occupied with abstract thinking, who are inclined to deny that they have mental imagery at all. They are almost or quite unable to visualise objects, and their general power of mentally reviving auditory or tactile experiences may also be rudimentary. The images which with them mark the successive steps in a train of ideas are mainly or wholly verbal'. This too is perfectly all right - so long as we bear in mind that these 'verbal images' are images of words and are in fact either visual or auditory or kinaesthetic images. 'Verbal imagery' belongs at the classificatory level of 'tree imagery' or 'people imagery' - it is not a mode of imagery; it is a class of subjects of imagery.

ii. Joint imagery

Just as perceptual experience can involve a number of different sense-organs, so the recall of that experience can involve a number of different kinds of imagery. By seeing an apple does not prevent my simultaneously tasting it, smelling it, feeling its surface or hearing it when I tap it to test its hardness. And my subsequent visual imagery of it need not in any way conflict with my tactual, olfactory, auditory or gustatory imagery of it. As I.M.L. Hunter writes

1 'A Manual of Psychology', p.149.
2 'Memory - Facts and Fallacies', p.135.
the light-flecked waves breaking on the rocky shore, but we may also
hear again the cries of the sea-birds and the sound of the ship's
hooter. We may smell again the odour of the wrack on the shore and
the perfume of the rose in our lapel. We may taste the chocolate
we ate on that day, and feel again the warmth of the sun in our faces,
our movements in walking along the heaving deck, and the sinking
experience of oncoming seasickness. And, of course, it is not
necessary that we have these experiences one at a time.

The somewhat lyrical style of Hunter's example draws attention to
the richness of image-memory as compared with the somewhat sterile
memory of proposition. Only in imagery can we 're-live' a past
perceptual experience, and it is not surprising that those of us who
are much given to imaging regard people who cannot or do not image, if
indeed there really are such people, as greatly to be pitied.

2. Imageability

a) What is imageable?

What sort of things are images of? I can have an image of a tree
or of the smell of a railway train, or of a sentence if it was written
or heard or spoken, but it just would not make sense to talk of an image
of a proposition or of a fact. I have said that to have an image is to
recall a sensory experience. We must consider, therefore, what class
or classes of 'objects' we can be said to experience by or with our
senses.
i. **Sensible qualities**

Sensible qualities are obvious candidates, but we must be very careful not to confuse image and concept. To say that I have a sensation or an image of blue is to say that I have a sensation or an image as of a blue surface or expanse. It may be that in recalling the colour of the sky on a particular day I have a memory image which includes nothing but a blue expanse of no particular size and shape, but it still is the image of that particular blue of that particular sky. I may be able to have a general idea or concept of blueness but I cannot have a general image of blueness \(^1\) (for what shade of blue would this be?), though I may have a series of images of different shades of blue. It is possible to image any particular sensible quality, but to do so is always to image the sensible quality of something, the appearance (or part of the appearance) presented by something.

ii. **Appearances**

By 'an appearance' I mean a certain combination of sensible qualities in a certain relationship to each other as presented to an observer. So defined it follows logically that whenever we perceive a thing we sense an appearance. R.M. Chisholm has pointed out with great clarity that from 'He sees a boat' we may infer 'A boat appears in some way to him' or 'A boat presents him with an appearance', but not 'He

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\(^1\) Cf. chapter VII, p. 265.
sees an appearance'. However, to make the distinction, which I believe to be a very necessary one, between seeing, a perceptual experience which involves the use of our eyes and the classification or identification of what is presented to them, and mere visual sensing, the physiological reaction to a diversity of light and colour, to use Berkeley's phrase, at a pre-cognitive level, we cannot do better than to state that when the boat presents an appearance to me I see the boat by virtue of sensing that appearance. My mental reaction is, of course, to a boat, not to the appearance of the boat, in normal perceptual cases. And later, when I image what I previously sensed, my mental reaction is, on most occasions, to a remembered boat, not to a remembered appearance of a boat.

This may seem to obliterate the distinction I have made between the thing and its appearance, but it does not. There are three important differences:

(1) The boat goes on in time; it is a thing in the world - the appearance is simply the momentary experience of a single observer or group of observers.

(2) The boat has many other sensible qualities which we know about but which do not enter into the appearance. Therefore if these enter into the memory they must do so by means other than imagery of the event or occasion in question.

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(3) The boat is what it is; the appearance is whatever we take it to be. So that if the appearance were such as to suggest to us a whale rather than a boat, then our interpreting the memory-image as of a whale would reflect well, not badly, upon our imagery.

Since I have defined 'an appearance' as 'a certain combination of sensible qualities in a fixed relationship' it is necessary to say something of the imageability of relations. Whilst what we image must 'carry relationships within it', it is important to be clear that, just as an imaged quality must be a particular instance of that quality, so an imaged relation must be a particular instance of that relation. To have an idea of the relationship itself is always to have an abstract idea or concept, and belongs to an intellectual stage involving interpretation and classification.

iii. The 'total momentary experience'

My reference to the appearance as a momentary experience may call to mind a phrase used by Russell, 'the total momentary experience'. He defines the total momentary experience as any compresent set of mental constituents forming for the man who experiences them a single unit. But it is not clear to me whether he means a compresent set of sensory experiences or of any experiences at all. If he means the former, then a 'total momentary experience' would be what I have called an appearance (though the appearance, as recalled, may be of

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1 'Human Knowledge, Its Scope and Limits', p.315.
_any part of the total momentary experience). But if he means the
latter, then the total momentary experience may include elements -
memories, judgments, thoughts, emotions - which are neither sensible
nor imageable in the ordinary way. Only that which is presented to
us via our sense-organs is recallable by us _in_ imagery, as distinct
from being recallable _with the aid of_ imagery.

iv. Are images of any one sense mutually exclusive?

It would be generally allowed that, as sensations of the
different sense-organs do not exclude each other, neither do their
images. But it seems to have been widely assumed, on the other hand,
that sensations of any one organic type come necessarily one at a
time, and therefore so must images. I can see no justification for
such an assumption. It may well be that this is a case where pre-
occupation with the peculiarities of sight has led to error.

We can smell several smells, taste several flavours, hear
several sounds, at the same time; and I see no good reason why anyone
should claim that on such occasions our experience is _always_ of one
composite smell, sound or taste. Now, but for the accidental fact
that our eyes look the same way - if for instance they were so
spaced that their fields did not overlap - we would be able to see
two views at the same time, not one superimposed on the other but two
quite distinct views. And visual imaging is not an operation we
perform with our eyes or any other sense-organ. There seems,
therefore, to be no _logical_ reason why we should not experience
several totally different visual images simultaneously. There may, of course, be empirical reasons why we do not generally do so. Even where there are 'external stimuli' it is difficult to give our attention to two distinct sounds at one time, and in imagery there are no 'external stimuli'. Nevertheless, we cannot deny the empirical possibility of the simultaneous occurrence of two or more images. I could not attach any sense to an assertion that we may be having images but not (to any extent) attending to them. Having images implies some degree of attention, but divided attention is by no means an unknown experience. What, for instance, prompts us to 'correct' an image? A.D. Woozley gives an account of his visual memory-image of a cricket umpire, and says: 'Even while having the image, I am sure that the bow-tie, the shirt, and the coat are right, I am sure that the trousers are wrong, and about the shoes I have no very clear idea at all'. It could be that he had an independent propositional memory that the trousers were, say, striped, whereas those in the image were checked. But Woozley does not give this explanation — he seems in fact specifically to discount it — and certainly such situations do seem to arise in the absence of any relevant propositional memories. If we grant the possibility of different simultaneous visual images we have immediately one possible explanation. In chapter IV, I claimed that in all negative memory situations there is a positive

1 'Theory of Knowledge', p. 61.
element. In the case of imagery not supported by any propositional memories that positive element may well take the form of other, fainter, co-existent memory-images, which, though not 'replacing' the image under consideration, show wherein it is wrong.

The problem, how an image can persist and nevertheless be known to be inaccurate, has puzzled philosophers for a long time. I have suggested one explanation — that an 'imagination-image' known as such can become habitual\textsuperscript{1} — but clearly this would not meet all cases. In 'The Problems of Philosophy' Russell wrote 'We are certainly able, to some extent, to compare an image with the object remembered, so that we often know, within somewhat wide limits, how far our image is accurate; but this would be impossible unless the object, as opposed to the image, were in some way before the mind'.\textsuperscript{2} There is obviously something very queer about this suggestion. How could anyone have an object 'before the mind' except by having imagery? He could have a description of the object in the mind, but this is a different thing. It seems that Russell realised this, for, some fifteen years later he wrote:\textsuperscript{3} 'Suppose you call up an image of Waterloo Bridge, and you are convinced that it is like what you see when you look at Waterloo Bridge. It would seem natural to say that

\textsuperscript{1} See p. 203.
\textsuperscript{2} 'The Problems of Philosophy', p.180.
\textsuperscript{3} 'An Outline of Philosophy', p.189.
you know the likeness because you remember Waterloo Bridge. But remembering is often held to involve, as an essential element, the occurrence of an image which is regarded as referring to a prototype. Unless you can remember without images, it is difficult to see how you can be sure that images resemble prototypes. I think that in fact you cannot be sure, unless you can find some indirect means of comparison. You might, for example, have photographs of Waterloo Bridge... But the fact is that very often we are sure, and rightly so. And it could be that our certainty is based upon a comparison—the comparison of many simultaneous images of slightly different appearances presented by the bridge, all of which support and confirm each other.

I cannot assert, as a statement about my own experience, that I do have many different visual images simultaneously, because, quite frankly, I have simply found myself incapable of putting the hypothesis to an empirical test—my powers of introspection have failed me. But I do not, therefore, discount the possibility that I may have.

b) **Images and sensations**

i. **Their similarities**

I have spoken of the causal relationship between organic sensing and 'mental imaging' in a way which assumes the two to be so utterly distinct that no confusion could possibly arise as to which was which. But am I justified in making this assumption? An hallucination is precisely the taking of the one to be the other. And, even under
normal conditions, it is sometimes impossible for us to say whether we really heard or just imagined the faint noise in the next room, whether we really saw or just imagined the flash of light on the horizon. Few philosophers have ever faced up to the fact that what we call images are very like what we call sensations. Hume spoke of the greater 'liveliness' of sensations; but when we attempt to define this 'liveliness' we are ultimately reduced to saying that it is the distinguishing feature between sensations and images. There can be little doubt that Hume realised this, but it did not perturb him greatly because - 'Every one of himself will readily perceive the difference betwixt feeling and thinking'. Yet every one of himself will readily perceive the difference between a square and a triangle - but in doing so he does not perceive any distinction between the individual straight lines which make up the square and those which make up the triangle. It is hard to find any way to describe images other than as a 're-seeing' or 're-hearing' of some event, and when we are asked wherein this differs from an actual re-seeing or re-hearing what can we say except that the event is not really before us? When the next question is asked, 'How do you know it is not really before you?', we see the trap and are at a loss for a reply. For this reason I find quite unsatisfactory Russell's

conclusion that the distinguishing feature by which we tell
sensations from images is that the former arise wholly from external
stimuli whilst the latter arise from internal stimuli also.\footnote{The Analysis of Mind', p.145ff.} He is
doing what Hume also did (though Hume would most likely have denied
this) – providing formal, i.e. verbal, definitions on the assumption
that the phenomena to be defined are already known to us, that we
already have some means of distinguishing between internal and
external stimuli. But such means could exist only by virtue of an
inherent detectable difference between the experiences we call
sensing and imaging in an overwhelming majority of cases.

\section*{ii. Their differences}

I find it strange that recent philosophers have paid so little
attention to the one really outstanding difference between images
and sensations, although it was suggested by Ward\footnote{Psychological Principles', p.171ff.} and stressed by
G.F. Stout.\footnote{A Manual of Psychology', p.148.} It is that images never compete with sensations. My
image of a red sky neither obliterates nor becomes superimposed upon
my view of the blue sky. The two may 'exist' at the same time
quite independently of each other. And whilst I can, if I wish,
change my image from red to green, the blue of the actual sky remains
steadily before me quite outside my control. I can look away, but
so long as I keep my eyes directed upon it the sensation of blue persists. Now surely this persistence is the feature which distinguishes sensing from imaging. When we say that the sky is 'actually there' we are saying (at least) that there is a continuity of stimulus which cannot be rejected; it forces itself upon our attention whether we wish it or not. This is why the sudden sound or flash of light does not have the same distinctive character: we feel obliged to ask our companions whether they too heard or saw it. This is also why, if one particular image so monopolised a man's attention as to exclude from it even present external stimuli, he would be liable to hallucination.

If hallucination were a common experience we might well reach a stage where we were able to distinguish our sensations (and thereby the 'external world') from our imaginings only by constantly checking our experience against the testimony of other people. If groups of people suffered the same hallucination together then it seems doubtful whether they could ever finally decide whether the thing they 'witnessed' really happened. On the one hand there would be the inductive improbability, and on the other hand the confirming testimony. But in fact (and this is a very important fact), hallucinations are in any case very rare, and then almost invariably confined to a single person. It is possible for us, therefore, to write them off as odd exceptions for which psychological explanations must
be sought and coin the special name 'hallucination' to cover them. 1

My claim is that there is simply no need to seek any distinguishing feature between sensing and imaging other than the compulsive continuity of the one which is lacking from the other. This alone enables us to divide the real and present from the imagined and remembered, to develop a concept of what is 'normal', and to frame definitions by which we can decide, after the event, that certain cases are not normal.

iii. Are images fallible?

Thus we do in fact distinguish our imaging from our sensing, not by their respective 'subjects', nor yet by any difference inherent in a single experience itself, but rather by a difference found in a sequence of experiences. In the final chapter of this essay I shall accept the conclusion that what we call a sensation simply is an image, but one stimulated by external causes and thereby rendered 'persistent'. Now, is it reasonable to make this reduction and at the same time to go on talking, as I have done very freely, about wrong or inaccurate imagery? For it does not seem to make sense to talk of a sensation being wrong; it is simply what it is. Certainly

1 There have been cases of strange 'appearances' to masses of people - some of the 'miracles' for example - which could not be explained away as mass hypnotism. And in these cases we simply do not know what to say; it must remain an open question whether the event 'really happened' or was hallucinatory.
we can misinterpret our sensations, and in the same way we can mis-
interpret our images. But the fault then lies not in them but in
ourselves. And if it is meaningless to speak of a sensation’s being
wrong, it is equally meaningless to speak of its being right.

H.H. Price makes this point very clearly in reference to 'primary
recognition', recognition at what we might call the sensory level.
'Shall we say then that primary recognition is infallible, or as near to
infallibility as we can get? This might be misleading, because it might
suggest that mistaken primary recognitions are theoretically possible,
though by a fortunate dispensation of Providence they never in fact
occur. It will be better, perhaps, to say that primary recognition is
non-fallible, because the notion of fallibility does not apply to it'.

Against this view Russell has argued that there is such a thing
as error at a pre-intellectual level. When we are stimulated to action,
albeit in a purely motor-responsive manner, by some sensory occurrence,
then if that action is inappropriate there is error. 'There is error
when a bird flies against a pane of glass which it does not see'. But
surely this is very much a re-constructed error. We can say that the
bird did the wrong thing; but can we say that it did a foolish thing?
Error presupposes some sort of option. We might say that the bird
behaved as if it thought there was no obstruction, but surely it would

1 'Thinking and Experience', p.86.
2 'Human Knowledge, Its Scope and Limits', p.201.
be truer to say that the bird did not behave as though it thought there were an obstruction. To attribute error to the bird we should have to claim that it did see the obstruction but believed that it did not — which is simply absurd unless we are using 'see' in two quite different ways — once as 'visually sense' and the other time as 'perceive'.

But, allowing that 'sensations' are non-fallible, does it follow that all imagery is non-fallible in the same way? It may perhaps be felt that, since an image is already a re-presentation, it comes into being, so to speak, with a criterion of accuracy that cannot apply to a direct sensory presentation. But the 'imagination-image' is wholly composed of misplaced or ill-assorted memory-images, and that misplacement or ill-assortment is itself a form of initial error — only provided that the image is taken to be unitary, i.e. provided we regard it as the image of some specific past occasion, not as the assortment of images from different occasions which it in fact is.

To this extent, at least, there must be interpretation for the question of error to arise; and wherever there is interpretation there is the possibility of re-interpretation.

The only circumstances, then, under which we could hold the imagery itself to be wrong or false, would be if something were presented to us in imagery without any basis in past perceptual
experience. Thus, granted the single assumption that all mental imagery is basically the re-presentation of past sense experiences, however jumbled these experiences may be in their sequences and complexities, then all imagery is non-fallible in the same sense as sensation is non-fallible.
Chapter VII

IMAGES (Cont'd) - THE FUNCTION OF IMAGERY

1. Are images inspectables?

In chapter VI we were principally concerned with what imagery is of; we must now consider what imagery is. It is taken very much for granted in some quarters that the substantive term 'image' is only a courtesy title. I.M.L. Hunter, for example, writes: 'Strictly speaking we ought not to talk of the image of a scene but rather of imaging the scene or experiencing the scene in the absence of any appropriate external stimulus such as exists in perceiving. In the interests of easy expression, we may talk of images as things instead of as processes provided we always bear in mind that such language is more metaphorical than precise'.¹

Whilst I certainly agree with the view he expresses, I cannot agree with his manner of expressing it, as though it were an obvious truth which needed no supporting argument. A great many empiricist epistemologists still talk of images in 'entity' terms without any apology, and one authority of considerable weight, H.H. Price, has specifically defended their right to do so.

¹ 'Memory - Facts and Fallacies', p.137.
a) Price's defence of 'images'

In 'Thinking and Experience' Price specifically rejects the view that there is imaging but there are not images, that the relationship is two termed, between the public thing imaged and the private act of imaging without any intermediate 'entity' being involved. Although he admits that there could be a danger of being misled by the substantive term into thinking of an image as 'a persistent intra-mental thing or continuent', he holds this danger to be so slight as to be of no account, and he counter-charges that the upholders of the 'two term' view 'do not scruple to talk about words as if they were entities. If they insist that there are no images, but only imaging, ought they not equally to insist that there are no words, but only speaking and writing? Indeed a token word is far less "like an entity" than an occurrent image is'.

But the two cases are parallel only on the assumption which Price himself makes that images are symbols. When we talk about words we are talking about symbols - furthermore, about publicly observable symbols, e.g. sounds and marks on paper. My seeing or hearing the word 'Napoleon' may prompt me to think of Napoleon. But my having an image of Napoleon already is my thinking of Napoleon (even though I may not name or otherwise identify him). I am not, of course, claiming that I

1 'Thinking and Experience', p.247 ff.
2 'Thinking and Experience', p.248 (his italics).
cannot think about Napoleon without having an image of him — clearly this would be possible. I am claiming only that having an image is itself one way of thinking about him, which merely reading or hearing his name certainly is not.

We are all agreed that imaging is not a public procedure. But since it must, in any case, involve some private mental performance (which is quite clearly understandable) why need it also involve some kind of private mental entity (which is very difficult indeed to understand). To think and to have thoughts is exactly the same thing. The thoughts are not 'there' to be thought about. And when I remember an event in propositions I do not remember those propositions in propositions. Why, then, when I remember an event in imagery, should what I am imaging be an image of the past event rather than the past event itself? The usual reply: 'Because that event is no longer existent', is entirely pointless. If it were existent we should perceive it, not image it. What is now existent is the 'act of imaging'. And it is the kind of 'act' which can be directed only to past, not to present, objects.

Imagery is, in fact, simply one way of remembering things; the way of remembering which is applicable to perceived appearances. It is not something that helps us to remember things the way that notes in our diaries do. I agree that it is more natural to think of an image which eludes us when we want it and obtrudes itself when we do not, than to think of an inability to control our imaging, but
this simply reflects the natural tendency we have to 'substantify' our activities, especially those activities which seem to be involuntary. It is just as natural for us, in the same way, to think of a nervous tic in the leg rather than of an inability to control our legs. And our thinking this way does not make a nervous tic in my leg the same kind of thing (only invisible in some way) as a sheep-tick in my leg.

'Modern philosophers', Price says, 'are never tired of telling us that mental images are not at all like pictures. But they are'. He is quite right, they are - but only in the way that perceived views are like pictures; likeness is a reciprocal relationship and pictures are like mental images. Having a mental image is in many ways very like looking at a picture, but it is a good deal more like looking at the 'real thing'. And it certainly is not like looking through a picture at the scene it represents.

It is comforting to turn from the work of those philosophers who treat imagery as little more than an amusing pastime for the simple-minded to an unequivocal assertion like that by Furlong: 'We do also visualize, and when we visualize there is something presented to us,

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1 It is noticeable that we are more inclined to talk of 'imagining a flying elephant' than of 'having an image of a flying elephant' and we say 'I just can't imagine it, rather than 'the image of it eludes me'.

2 'Thinking and Experience', p.249.
something having the properties we have stated, and this is an image'.

But why 'presented'? Why not simply 'There is something present to our minds (though not to our senses); and when this occurs we are imaging'? It is clearly not within my competence to deny any man's account of his own experience. And so I must accept that R.M. Price 'cannot help noticing that in imaging we seem to be confronted with something, to have something over against us or presented to us - and something other than the material object or physical event, real or fictitious, which we are trying to envisage', though I might well ask how he distinguishes ordinary memory-imagery from eidetic imagery. I can only assert that this is not my own experience, nor that of other people I have questioned on the subject, and attempt to show that, though some of our memory-performances do demand that there is imagery, none of them demand the existence of any such 'extra entities' as images are sometimes held to be.

b) Inspecting and 'reading off'

The 'three term' view of imagery arises from the assumption that we observe or inspect our images, as we might a newspaper, in order to gain factual information from them about the sensible appearances of things seen in the past. Russell seems to be making this assumption when he writes: 3 'Suppose, for instance, you want to remember whether,

1 'Imagination', p.81.
2 'Thinking and Experience', p.248.
3 'An Outline of Philosophy', p.207.
in a certain room, the window is to the right or the left of the door as viewed from the fireplace. You can observe your image of the room, consisting (inter-alia) of an image of the door and an image of the window standing (if your recollection is correct) in the same relation as when you were actually seeing the room. Now, I do not want to deny that imagery can remind us of, or even, in some cases, enable us to discover, the spatial relationships which existed between the things we have observed. What I do deny, and what Russell seems to be suggesting, is the existence of two distinct 'stages' in the memory of the room's appearance: the 'balling up' of a 'picture' of the room, and the inspection of that 'picture' in order to ascertain how the room looked.

An image is not something we carry about with us like a map (though the capacity to have a certain image may well be part of our present physiological make-up); we actually have the image only insofar as we are remembering the appearance in question. I do not mean that we must first remember and then have the image. I mean that, since what we are remembering is an appearance, our remembering of it is in imagery; by imaging the room we are remembering its former appearance, which includes the relative visual positions of the window and the door. So that what we are observing is the appearance of the room with the window and the door, not an image or replica of it. Only 'observe' is not the right word here, because the things we observe are present to our senses, they are 'really there'.
The word we want is 'remember'; and in this case the remembering is in imagery.

I do not deny that if we genuinely could not remember the relative positions of the door and the window, imagery may help us to do so. We might, for instance, 'call up' images of various alternative window/door relationships, and one of these 'called-up images' might then develop the characteristics of a memory-image, become more 'firm' and harder to control, and tend to expand in context. But all we are doing here is imagining in imagery in order to stimulate ourselves into remembering in imagery. Having the memory-image, if and when we did have it, would again be remembering.

I am convinced that we cannot, as it were, get anything from an image that we have not already put into it. And our ways of 'putting something into it' are by imagining and remembering. We can, of course, interpret our images; we can draw inferences about factual relationships from appearances presented in imagery which we did not draw when those appearances were presented to perception, or which we did draw but have subsequently forgotten. And to this extent we do, in a metaphorical sense, 'read off' information from our images. But this 'reading off' can only be some further interpretation of what we already are remembering - not an addition to it.

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1 The 'memory characteristics' of imagery, as described in chapter VI, p. 198ff.
Furlong considers the case of a gate of which we had noticed the colour but not the number of bars. In the subsequent image of it, the colour and general shape are clear and distinct, yet, though the gate as imaged is barred, it does not have any definite number of bars, only a barred 'look'. And he says: 1 'If we are in any way acquainted with the past when we remember, then it is hard to see why...we cannot read off the number of bars in the gate, as we could have done on the original occasion'. But, in the first place, to be acquainted with the past is not to be in the past. And, in the second place, the past with which we are acquainted is our own past experience, and this happens to have been limited to observing the general 'look' of the gate. People would be far less puzzled by the 'vagueness and sketchiness' of memory-imagery if they realised how very 'vague and sketchy' most of our sense-perceptions are. When I look at a corrugated iron roof I am aware that I am seeing 'stripes', but I am certainly not aware of the number of these. To ascertain their number I must move my eyes along the roof, inspecting the 'stripes' one by one. And this is precisely what I can never do with my memory-image of the corrugated roof. Our imagery can contain, at most, only that degree of detail that the appearance re-presented in it contained. Thus we can 'read off' an image only such information as it would have been possible to have 'seen at a glance' at the time of the perception.

1 'A Study in Memory', p.38.
This may be more than was in fact 'seen at a glance'. The 'look' of a three-barred gate is quite distinctive, and so the fact that a gate was three-barred could be learned from the memory of that 'look' (the memory-image) even though we had not remarked this fact when we saw the gate, or, having remarked it, had subsequently forgotten it. But, for most people, this would not be so with a twelve-barred gate. So there is a sense in which we 'notice' the three-barred character of the gate although we do not actually count the bars, whereas it is not possible to 'notice' a twelve-barred character in this way. Noticing the twelve-barred character, as distinct from the multi-barred 'look', necessarily involves counting the bars.

2. Imagery and recognition

We sometimes speak of recognising images, and also of recognising by means of imagery. Both these are suggestive of an 'entity' view of imagery, and, in the light of my argument that images are our memories of the appearances previously presented by events and things, but not extra inspectable 'entities', we must now consider whether, and in what sense: (1) we recognise images, and (2) we recognise by imagery.

a) Recognising images

i. Recognition in absence

I have a visual image which I recognise to be of the man who lives in the flat below mine. What does this amount to? I have a certain image, i.e. remember a certain appearance. The image is 'involuntary', 'firm' and 'unitary'; it is a memory-image. It is of
the upper half of a man, and this is not something I work out or infer; in having the image I am conscious that I am imaging a man whose appearance is familiar to me. I may then wonder 'Who is this man?', which generally amounts to 'Where and when did I see this man?' And, as the result either of a 'broadening' of the image or of the stimulation of certain propositional memories, the answer comes to me: 'Yesterday, coming out of the flat downstairs'. The 'recognition' may come immediately, or it may take time, or it may not come at all. It may be incomplete; I may, for instance, remember where I saw him but not when.

This all seems exactly similar to what would have happened had I passed him in the street instead of having an image of him—except, it might be objected—that what is being recognised is an image and not a man. But why should this objection be made? In both cases the person I am identifying is the man who lives in the flat below mine. The only difference is that one time he is within my sight, the other time he is not. If we are to call one of these cases recognising an image (which amounts, on the view I have expressed, to recognising an imaging), then, what are we to say of the cases where what is recognised is an image or imaging? I might, for instance, amuse myself by imaging an elephant with wings, and be aware as I do so that I have produced a similar image on a previous occasion. Here I am recognising an image.
ii. 'Recognising that'

Suppose we draw a distinction between recognising and 'recognising that'; in recognising the man in the street I also recognise that he is the man who came out of the flat below mine yesterday. We might then say that in having the image I recognise that it is of this particular man.

I do not think that such a distinction would help us because it simply robs 'recognise' of any special force, and in any case it is wholly arbitrary. For what is my original recognition of the man but the recognition that I have encountered him before? And wherein is this different from the initial familiarity of my memory-image? If we maintain that recognising a man is something prior to any 'recognition that' about him, then, to be consistent, we would have to allow that knowing an image to be a memory-image is a basic recognition of this kind. And since it is not the recognition of an image, it could only be the recognition of the subject imaged.

It seems, then, that we can recognise images if we have had them or others very like them before - but only in the sense that we may recognise any of our performances when we have performed previously in the same way. We may also, if we wish, speak of recognising things and events in their absence by means of imagery. But to do so is to destroy such distinction as there may be between 'cognise' and 'recognise', and it is much less confusing to talk simply of remembering things and also remembering further propositions about them.
We must now consider the part played by imagery (if any) in recognising things in their presence.

b) Imagery in recognition

1. The need for comparison

In chapter III, I claimed that recognition implies some form of comparison between present and past. When I say 'This is the dog that bit me' or 'This is the same kind of car as my father's' I must be simultaneously aware, in some way, of both present and past instances. Now, as we have seen, present sensations and memory-images do not compete, so that a simple and obvious explanation of recognition is that an appearance presented to us is found to be like an appearance we remember, that is, an image we are having of a certain past perceptual situation.

The catch in this simple explanation is that it does not seem to accord with our common experience. In most of the cases which we would tend to regard as recognition we simply name things or act in some other manner appropriate to them. This does not mean, however, that the 'explanation' must immediately be abandoned. We discovered in chapter V that a great deal of our activity can be accounted for in terms of developed motor-capacities to respond appropriately to given stimuli; and this applies to the great bulk of our recognitions and recognitional behaviour in our daily lives, including, incidentally, our 'recognitions in absence'.

1 See chapter VI, p. 208.
And what of those cases where recognition is not immediate? Quite often we pause and ponder before deciding that this wool is the same colour as the socks our wives are knitting for us, or that the cat outside the window is not our neighbour's after all. And here, although we could in some cases be reciting to ourselves descriptive catalogues which we check against the present object, there seems little doubt that, sometimes at least, we are comparing the perceived object with a past object remembered in imagery in exactly the way suggested.

Now, if we do in fact behave in this way when recognition is considered or deliberate, there is at least a good case for suggesting that this is the basic mode of recognition which renders possible the development of language habits and other 'motor-capacities'. I find it surprising, therefore, that Price refers to this theory as an 'extreme imagist view' and doubts whether anyone has in fact ever held it.

ii. The infinite regress argument

Price supports his condemnation of the theory with a claim that it is logically impossible for recognition ever to 'depend upon' the presence of imagery. He argues that when we recognise, say, aircraft by means of a silhouette chart, the identification is valid only because we have independent grounds for believing the chart to provide

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1 This possibility is considered later in this chapter, p.249ff.
2 See 'Thinking and Experience', p.277.
accurate models. But if our exemplars are simply images in our own minds no such independent grounds for accepting them are possible. Their acceptability as 'models' must depend, then, upon their being themselves recognised as 'true copies' of the objects we are remembering. And if recognition demands the existence of a prior image for comparison, their recognition could be achieved only by comparison with some pre-image, and so on ad infinitum.

Now, on the view of imagery which I have put forward the 'regress' cannot ever get started. For there can be no question of 'checking the copy'; the imagery is the memory of the past perceptual situation itself. In chapter VI we discussed the manner in which, and the extent to which, we can know it to be a past perceptual situation and not just a 'piece of imagination'.\(^1\) It is true that we can be mistaken about what it is we are imaging. And, equally, we can be mistaken in our recognitions. Price seems to overlook this, to talk as though our 'right to recognise' were somehow a 'logical right', and clearly it is not; we have all had the embarrassing experience of 'recognising' somebody and finding that he is a total stranger. But so long as recognition (or what we take to be recognition) is a two-termed relationship between a present object and a remembered past object, although there is always the possibility of error, there can be no question of an infinite regress. As I have pointed out, objects

\(^1\) See p. 198ff.
may be 'recognised' when we image, but only under special circum-
stances do we ever recognise images, i.e., when we recognise them as
previous images, not as previous perceptions.

iii. Image dispositions

I am not here claiming that we must accept an 'imagist theory of
recognition'. Our behaviour could be accounted for without it - I have
admitted that most of our everyday recognition is simple motor-response
and there is no logical reason why the motor-response dispositions, the
capacities we have for recognising things in this immediate sense,
should not have developed like any other purely physiological capaci-
ties. But I do claim that it is not a silly theory. It appears to be
so only when it is taken in conjunction with the 'entity' view of
imagery. I also claim that most people are capable of what I have
called 'considered recognitions' and that in such cases we seem bound
to admit that they are in fact comparing a remembered appearance with
a presented appearance. The final decision that something is, or is
not, the same shade of colour as something else was, could be made
only in the light of a knowledge of the past appearance as well as the
present one. Price allows that 'Recognition is only possible to a
being with the capacity of retentiveness, whatever the right analysis
of that capacity may be',¹ and in this case the only analysis which
can meet the demands of the situation is a dispositional knowledge of

¹ 'Thinking and Experience', p.58 (his italics).
the appearance. And if I have a dispositional knowledge of an appearance it is always at least empirically possible that I shall have a memory-image of that appearance. From the definition I have given of imagery as the direct memory of appearances it follows logically that a capacity to recognise from a direct appearance is also a capacity to have the appropriate memory-image. For the dispositional knowledge of an appearance can only be the dispositional memory of that appearance. Thus a dispositional ability to recognise A in its presence in the non-motor-responsive sense entails a dispositional ability to image A in its absence.

In stressing the fundamental importance of recognition, Price says:

'Having made my generalisation, having learned to expect milk (in my actions at least) whenever tea is observed, I cannot apply what I have learned or use it as a guide to my future behaviour, unless I can also recognise further instances of tea when I meet them; even though I may be as incapable of conceiving tea in abstracto, as the cat is in Locke's opinion'.

Now, if we do perceive something in abstracto then we may be able to recognise an instance of it, as it were, by description - much as the aeronautics students may 'recognise' a helicopter the first time they see one. But, apart from cases

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1 'Thinking and Experience', p.43 (his italics). Price is considering the case of a cat which has come to expect milk when it sees people preparing tea.

2 Price uses this example in 'Thinking and Experience', p.53.
of immediate motor-response, it is hard to see what the recognition of an instance could amount to in the absence of any such abstract concept, except the noting of similarities between a present appearance and a remembered past appearance.

Once we grant that we can distinguish between immediate, motor-responsive recognition and what I have called deliberate and considered recognition, and grant also that the occurrence of the latter entails at least the capacity to have the appropriate image, then the only really strong objection to the 'imagination theory of recognition' is that we are not generally aware, even in our most deliberate recognition, that we are having images. But imaging, like any other remembering, requires a stimulus to 'set it in motion'. And in the case of recognition, the stimulus is a present perceptual experience. It is hardly surprising, therefore, that we think of the object of our attention as, not an image, but its prototype, the actual object which is persisting before our eyes.

Nobody thinks it terribly strange that in the 'helicopter case' we are at once seeing the machine and remembering a past description of it. Why then should it seem strange that in another case we may be at once seeing an object and remembering a past appearance of it? On the other hand it would be very strange indeed if, under what must be the strongest possible stimulus, the actual appearance before us of the thing itself, an image for which we have the 'capacity' failed to
occur; and in fact it is surprising when we fail to recognise someone we 'ought to' recognise.

Further, the fact that we often at once recognise a man and notice that he is in some way different - has shaved his moustache for instance (though we had never 'noted to ourselves' that he had a moustache) - suggests that such images must be occurring even when the recognition seems to be entirely spontaneous.

3. Images, signs and symbols

a) Are images 'signs'?

It has become common practice among philosophers to refer to images as symbols. Thus A.J. Ayer writes: 'As in the case of any other symbol, it is the use we make of its qualities that matters, the construction we put upon them, not these qualities themselves', ¹ and in his description of what he regards as 'the Imagist Theory of Thinking' Price writes: 'Mental images are the primary symbols, and all other symbols are secondary and derivative'.² There is, of course, a distinction which can be drawn between symbols, phenomena specifically (and arbitrarily) made to stand for other phenomena, and signs, phenomena which simply lead us to think of or expect other phenomena. But I am not here concerned with this distinction. My argument is that both symbolising and signifying are three-termed relationships -

¹ 'The Problem of Knowledge', p.158.
² 'Thinking and Experience', p.239.
A signifies or symbolises B to C — and once we reject the 'entity' view of imagery we simply cannot maintain that an image is a symbol or a sign of a past event. What we contemplate when we image is the appearance presented by the past event itself (though it may not be the past event we take it to be). This is not to deny that an image can be made to act as a sign (and thereby made into a symbol) — anything can be made to act as a sign. But when this occurs it is the sign of one thing, the image of another.

ii. Metaphorical images

Price speaks of such cases as 'metaphorical imagery', his assumption being that it is the imagery which 'stands for' something other than what is being imaged. 'An example of a metaphorical image would be an image of a lion which is used, not for thinking about lions, but for thinking about courage. It is possible that some of our verbal metaphors, even some which are now cliches like 'the ship of state' may have originated in this way'.¹ The only thing I wish to object to here is the suggestion that it is the image which is a sign or symbol of courage, whereas in fact it is the lion which is imaged which is the symbol of courage. In thinking of courage we think of a lion, and our thinking of it may take the form of imagery.

¹ 'Thinking and Experience', p.295 (his italics).
b) The 'imagist theory'.

i. Price's criticism

According to Price the 'Imagist Theory' holds that images are the only true symbols of our past experience, and that, although words do have meaning, 'they have it only indirectly, as substitutes for images. These substitutes are needed because words can be manipulated more quickly and easily than images can'. But they have, so the theory is said to maintain, only a temporary licence - they are meaningful only so long as they could be cashed for the images of what they stand for.

Now, the most damaging criticism of such a theory would be that many words stand for concepts which are simply not imageable because they are wholly relational, and therefore derived through rather than in sense-perception. This difficulty being well known and widely accepted, Price does not elaborate it. Instead he develops at length an argument designed to show that even for the consideration of 'qualities' and 'entities' the traditional imagist theory is not tenable. But he is arguing only against this 'traditional theory' which treats imagery as a combination of 'entity symbols' (like words) by which we identify and classify the objects about us.

Now, I do not want to claim that he is arguing against a 'straw man' of his own creation. There may well be some philosophers against

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1 'Thinking and Experience', p.239.
whom his arguments are most damaging. But I do claim that his argument in no way affects the 'imagist theory' (if it should be so called) which I am here putting forward. When Price maintains that the imagist is wrong to assume that 'thinking can only be in touch with reality if it is a kind of inspection', he is taking this to mean an inspection of images, not an inspection of the reality itself in imagery. And his argument quite fails to take account of the distinction between the appearance presented to us by reality and our perceptual interpretations, definitions, and descriptions of those appearances, (although this is, in effect, the distinction he himself has made between 'primary' and 'secondary' recognition).

The claim central to his argument is that an image cannot be essential for thinking of what is absent since we can exemplify a concept in many ways other than by imagery — by making a model or a drawing for instance. And 'if it be objected that one has to have a mental image first, in order to produce the model or drawing, we must reply that this is both false and vicious in principle. It is false in fact. If I am asked to draw a hexagon, I may have an image first, especially if I am somewhat uncertain what a hexagon looks like. But it is not true that I must have one. ...And if such comparison with an image blueprint were indeed indispensable, how about the production

1 'Thinking and Experience', p.262.
2 See chapter II of 'Thinking and Experience', p.44ff.
of the image blueprint itself? Should we not be driven to say that it too could only be produced if we have a super-blueprint to copy it from, and to guide us in detecting and correcting any defects it may have? ¹

ii. Image and concept

Let us look at the 'false in fact' claim first. If Price means that, being unable to remember what a hexagon looks like, he may, (though he need not), consult his image of a hexagon to find out what it looks like, then clearly he is simply wrong. If he did not remember what it looked like he could not have an image of it.² It would be like saying 'I couldn't remember his name so I consulted my memory of it'. If he means only that one way, though not the only way, of trying to remember it would be trying to image it, then, in the case of the hexagon, I agree with him. In fact, if I did remember what a hexagon looked like, i.e. had a memory of its 'look' in imagery, this may (though it may not - compare the barred gate case) assist me to remember that it is a six-sided figure. But there is a confusion here between remembering a 'look' and remembering a proposition. I agree that I can remember the fact that a hexagon is a six-sided figure without any image at all - and, remembering it, can draw a hexagon - but this is

¹ 'Thinking and Experience', p.256 (his italics).
² I am assuming here that 'looks like' is being used in its popular sense, not in the special sense (as distinct from 'how it looks') in which I use it in Section 4.a) following. See p.247.
only because what I am remembering is not the appearance of an individual but a formal relationship quite simply definable in words. If I were to set out, instead, to draw from memory a picture of my friend John, with a certain peculiar facial expression he sometimes has, the story would be very different. For then I would be concerned with a particular appearance which would defy any attempt at 'complete description', not simply with an instance of a particular quantitative relationship. Price fails to make this important distinction. He seems to assume that since the occurrence of imagery is not essential for all thinking and remembering it cannot be essential for any thinking or remembering.

iii. The 'infinite regress argument' again

When we turn to his argument that it is vicious in principle the charges made simply do not apply to my view that imagery is indispensable for a certain kind of remembering, the remembering of appearances, however damaging they may be to the 'traditional imagist theory'. My reply is the same, in effect, as I made to similar charges against the 'Imagist Theory of Recognition'.¹ There can be no question of an infinite regress of the images; our imaging simply is our remembering the appearance that was presented to us by the thing or event. To the extent that the imagery is 'imperfect' our memory is imperfect as to the past presented appearance. And, insofar as we are concerned with

¹ See p. 237.
appearances, it must remain imperfect – unless and until the imagery itself is 'perfected'.

4. The need for imagery

a) 'How' and 'what like'

i. The private experience of knowing how

We now come to the distinction which is central to my view of imagery, and thereby to my view of memory, a distinction which has been foreshadowed, I trust, in everything that I have said to date. This distinction is that between how a thing looks, smells, sounds and so on, and what it looks like, smells like, sounds like and so on. To quote William James: 'The best taught blind pupil of such an establishment yet lacks a knowledge which the least instructed seeing baby has. They can never show him what light is in its "first intention"; and the loss of that sensible knowledge no book learning can replace'.

It is this 'first intention' which is how a thing looks. And the extraordinary difficulty in talking about it is that, whilst we know how it looks, we can describe it only in terms of what it looks like. But, whilst the car standing opposite looks like thousands of other cars in many respects, and unlike them in others, how it looks is something quite peculiar to itself. Or rather, it is a peculiar relationship between itself and myself, the viewer. How something


2 Cf. Wittgenstein – 'Philosophical Investigations', Pt.1, para.78, p.36e – We can know, but cannot say, how a clarinet sounds.
looks refers only to the appearance it presents; what it looks like refers to its resemblances to countless other things.

ii. Knowing and knowing about.

Price is quite right when he says 'One man can describe his visual images to another. He may describe them in great detail, and he may be understood'. But when he continues 'You cannot be acquainted with my visual images; but you may know them by description if you have images yourself' he is obscuring a very important distinction. He should say 'You may know about them'. For it is not simply a matter of your not being able to be acquainted with my images because they happen to be mine and not yours. In this sense you cannot be acquainted with my visual perceptions, but if you and I stand successively in the same place facing the same motionless scene, then we may well be satisfied that we have enjoyed effectively similar visual perceptions. It is reasonable to assume that since we both have equivalent sense-organs which were stimulated by the same external causes in viewing the scene, we each learned independently how it looked. And, under these circumstances we would subsequently 'know each other's imagery' if we agreed that we were both imaging that scene as we had seen it. But we would know it by description. The 'absolute privacy' of most imagery arises from two facts; remembering how a thing looked, like perceiving how it looks, is a unique experience quite distinct from

1 'Thinking and Experience', p.154.
any catalogue of descriptive terms; and remembering, unlike per-
ceiving, is not dependent upon any present public object.

Philosophers have not altogether ignored the distinction between
how a thing looks and what it looks like - the ways in which its
appearance can be classified. Chisholm, for instance, writes:¹ 'The
man in charge of the stage lighting will be concerned not with the
actual colours of the settings but with the ways in which they appear
under certain conditions. And philosophers and psychologists,
studying perception, may be concerned with the nature of the appearances
rather than with the objects which appear'. And von Leyden asserts
that 'self-centeredness...is implicit in every recollection, at any
rate in those cases where we remember how something took place, though
not perhaps always in those where we remember that something took
place'.²

Yet no-one seems to have observed, or if observing to have felt
it worth remarking, that this 'how it looks' is, at the memory level,
the peculiar province of imagery.

b) The alternatives to imagery

i. Describing appearances

No descriptive catalogue can ever give direct knowledge of how
something looks. But it does not follow from this that such a catalogue

¹ 'Perceiving', p.161.
² 'Remembering', p.78 (his italics).
can never serve to identify that thing. It would be wrong to suppose that the ability to describe some past event is prima-facie evidence for the existence of an image of it. Benjamin seems at least to be attributing this view to others when he says: 'It is a genuine puzzle sometimes to know what is to count as an image. For instance, what the writer presumes is his memory-image of the High from Magdalen Bridge is so fleeting, blurred and thin that, if, as it were, it could be captured for the requisite time, it would undoubtedly prove impossible to draw it; yet he can describe the view to himself and others. Would this count as an image, a reliving? One tends to put an end to such a question, I think, by wearily agreeing that it must be an image'.

I agree that if he has an image he has an image, albeit a fleeting, blurred and thin one. But his ability to describe the view in no way entails his having an image of that view, and few, if any, imagists have ever maintained that it does. It entails only that he has either a good memory for descriptive propositions (which might have been learned from any source, not necessarily his own experience) or a memory-image of the view.

Thus Russell, who states that he is a poor visualiser, says:

'When now I meet a man and wish to remember his appearance, I find the only way is to describe him in words while I am seeing him, and then remember the words'.

1 'Remembering' MIND Vol. LXV, 1956, p.320 (his italics)
"Two men having these characteristics are present at once." 'In this respect', he says, 'a visualiser would have the advantage of me'. But he claims: 'Nevertheless, if I had made my verbal inventory sufficiently extensive and precise, it would have been pretty sure to answer its purpose'.

ii. The limitations of the verbal alternative

Of course, if the description were sufficiently extensive it would answer the purpose. But how extensive must that be? As the police know well enough, a couple of good photographs of a wanted man may be worth more than a description a mile long of his visual appearance. A great many men might still answer the description, but the chances are that one man, and one only, would match the photographs. And why does Russell say 'unless two men having these characteristics are present at once'? We do not use our memories of people only for identifying them when we meet them. And, if we take seriously what he has said of himself, even when one of the two men answering the same description appeared by himself, Russell would still not know who it was, even though he might have known the man well for a considerable time.

Since it seems improbable that Russell is in fact incapable of distinguishing between his acquaintances, either when he meets them or when he just thinks about them, we must suppose either that he makes very careful descriptions indeed to himself and is very fortunate in that these never coincide, or that verbal descriptions augment his imagery rather than that they replace it - despite his claim, 'I do
not think there is anything in memory that absolutely demands images as opposed to words. Of these two possibilities the latter seems to me to be the more probable.

I must grant, however, that wherever distinguishing relational features exist it is possible, in principle at least, to isolate and describe them, however difficult this may sometimes be in practice. But what of the case where the distinguishing feature is a quality rather than a relation? (What Locke would have termed a secondary quality). To take the obvious example: How is it that I can now remember that the car which stood outside my window a while ago was a different shade of green from the one that stood there yesterday? I did not note this fact at the time, and I do not know any names for either of the shades. Even without names for the shades I could have noted, say, that one was like the colour of peas and the other was like the colour of yew trees, and I could now be reasoning that they were not, therefore, the same shade. But this only moves the problem a stage further back; for how was I able to note these likenesses when there were neither peas nor yew trees present to my senses? And how do I now know the different shades of peas and yew trees in the absence of these objects in a way that enables me to compare them?

Surely we cannot seriously suggest that, unless I have noted to myself the names for two different shades of colour at the times of

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1 'An Outline of Philosophy', p.196.
perceiving them, I cannot ever compare them in memory except by means of a complex network of propositions of the kind 'A is the same colour as B', 'C is a different colour from D', 'D is rather like B', which I have framed on various occasions when two or more coloured objects were present together for my inspection. Yet this seems to be the only way in which shades of colour could be remembered by describable relational features. The only alternative is that I know that the two remembered shades were different, or that they were the same, simply because I now remember how each of them looked, i.e. I now have memory-images of them both.

If we accept this last alternative, then it seems to follow that images of the same (organic) kind are entertained simultaneously.\(^1\)

Perhaps I could be forming some propositional description of the relationship of one imaged colour to some presently perceived colour, and then checking the other imaged colour against this description; but in fact I am satisfied that I am not doing this. If, then, as I have maintained, how the colour looked is knowable only in imagery, the two images must be simultaneous. For if I had the images in chronological succession, then, as soon as I had one, and thereby knew how it looked, I should have ceased to have the other and thereby ceased to know how it looked. This would render impossible any comparison of the 'look' of the one with the 'look' of the other.

\(^{1}\) This question was discussed in chapter VI. See p. 213ff.

\(^{2}\) In the 'occurrent sense', which is what we are here concerned with.
The two 'looks' could, of course, combine in a kind of composite image. But I would still have to be conscious of having two distinct memories, not a single 'imagination-image'.

iii. Non-imagers

I have claimed that there is a large and important area of our memory (and our imagination) which is solely the province of imagery. This is the memory of presented appearances as such, and, at the introspective level, it is the final court of appeal for all our memory-claims. What are we to say, then, about those people, including many of Galton's correspondents, who seem to be quite normal in every way, and yet simply deny that they ever have images at all? There seem to be three possible alternatives:

(1) They lead what would seem to be strangely empty mental lives (in the way that we might feel that congenitally blind and deaf people must lead empty mental lives). And, further, they can achieve only a very poor degree of certainty about matters of past fact in the absence of supporting testimony or 'cause/effect' evidence, since their memories, being all propositional, would not permit of any individual reinterpretations. If their remembered propositions were wrong - that is, if they were formed as the result of misjudgments about perceptual situations - they would have no means of setting them right so they would have to remain wrong for ever. ¹ Or

¹ The re-interpretation and 'correction' of memories is dealt with in chapter III, Section 1, p. 66 and chapter IV, Section 5, p. 136. I say 'individual reinterpretations' to allow for the 'football team example' given in chapter IV, p. 121.
(2) They are lying in order to pose as 'superior intellects' or simply to be perverse. Or

(3) They have misunderstood the nature of imagery, and their denial that they have images is the result of their misunderstanding, much as the denial by a respectable housewife that she has erotic impulses would be the result of her misunderstanding.

I discount possibility (2), and I am naturally loath to accept possibility (1). I shall therefore begin with the third possibility.

Now, I myself have no experience of eidetic imagery, though I am happy to believe that others have. And if I conceived of imagery as necessarily the same kind of thing as eidetic imagery — in Price's words, 'something over against us or presented to us — and something other than the material object or physical event, real or fictitious, which we are trying to envisage¹ — then I should have to place myself in the ranks of the non-imagers. This is exactly the misunderstanding which A.J. Ayer seems to be guilty of when he says 'I remember that a moment ago I ran my hand over the surface of my writing table: I remember how it felt in the sense that I can give a description of the feeling, but I do not have any tactual image of it'.² Now, unless he accompanied the gesture, Russell fashion, with a catalogue of descriptive phrases — which seems at least highly improbable — his

¹ 'Thinking and Experience', p.248. Note that Price is referring to ordinary memory-imagery, not to eidetic imagery.
² 'The Problem of Knowledge', p.156 (my italics).
assertion must be false according to my definition. For to remember how it felt in a way that makes possible a subsequent description is to have imagery, and in this case the imagery would be tactual.

It may be protested here that I am simply applying my own definition in order to convict Ayer of error. But the only point I am interested in making here is that we do have a unique experience, the direct memory of appearances, the memory of how things looked, felt and so on, and that this does play a central role in our remembering of events, and also in our being certain that we are remembering events. I call this kind of remembering 'imagery' because this seems the natural thing to call it: if someone else wants to reserve the term 'imagery' for something like eidetic imagery, well and good. Subject to this reservation Ayer can make his denial without contradiction; but he must find some other term to cover what I am calling imagery. He must not ignore its existence. And he can call it simply 'describing' only if he is prepared to claim that he never has perceived, or remembered, how anything looks, sounds, and so on, without actually describing it to himself or to somebody else.

For obvious reasons it is hard to see how we could 'demonstrate' or 'ostensify' this unique experience to someone who denied having it. Suppose a man, blind from birth, knew and used the word 'smile' but claimed that he himself never smiled. To convince him that he was wrong you would have to say to him each time you caught him smiling: 'That's it, you're doing it now', and in time he would
probably get the idea of what a smile is; not the impressive affair he had imagined it to be, merely a very mild experience he had hardly even noticed.

But with the man who claims that he never images the position is more difficult. Not only can he not see our imaging; we cannot see his either. The best we can do is to say to him something like: 'Think of your wife - think of her smiling with that particular quizzical expression she sometimes has', or even: 'Remember the colour of your new curtains - not the manufacturer's fancy name for the colour, or a catalogue of other things the same colour, or whether you like it or not - the actual colour itself'. And if he says 'Yes, I am doing that' we can tell him that he is imaging. His reaction may then be like that of the blind man - 'Oh, if that's all it is, then of course I image'.

However, if he stoutly maintains that he is having no experience which he can distinguish from the construction of descriptive propositions, or if he finds himself simply unable to perform the tasks asked of him, then we must, however sadly, revert to the first alternative.

But we should be well advised, henceforward, before accepting his memory-claims about past events, to check very carefully his reasons for making those claims - especially if they contain any wealth of detail.

5. The actual characteristics of memory-images

In chapter VI we considered what kind of objects images are of, and we have now discussed what having images amounts to. But before
concluding this chapter we should look at imagery itself and consider certain questions about what kind of experience imaging is.

a) The qualities of images

Since we have decided that what we call an image is just a particular kind of memory, the memory of how things looked, sounded, and so on, it makes no more sense to ask 'Where are images?' than to ask 'Where are memories?' Our insistence upon the existence and importance of imagery does not involve us in any mysterious speculations about other dimensions of space, nor are we obliged to make any such empty assertions as 'an image is where it is'. Imagery 'occurs in' our minds, and something correlated with it no doubt occurs in our brains, and the event imaged occurred, if at all, in physical space at a past physical time.

But, even though imagery is a performance rather than a set of entities, there are still some questions about the characteristics of it which it is reasonable to ask. What are the relationships of size and position between the scene as imaged and the scene as originally perceived? Do we necessarily image the whole scene as it was perceived? Must the original colour, or any colour at all, be reproduced in the imagery?

i. Position

Ideally, when we remember a scene in imagery the parts of that scene as imaged are in the same spatial relationship to each other as they were in the scene as perceived. There is, however, as we
considered in chapter VI, an imagination element in nearly all imagery, and this may well manifest itself as a disproportion between the parts as imaged, especially if some particular feature is the focal point of our attention.

It has been held by some philosophers that there must be a spatial relationship of some kind between an image and a presently perceived scene, since it is possible to 'project' an image into an actual view (although this neither becomes nor obscures any part of that view). For instance, it is claimed that I could image a cat as sitting on the mat which is now before me. Now, there is no doubt that we often talk as if such 'projection' were a possible and quite normal procedure. But what could it be that we are implying? 'Projecting images' is certainly nothing like projecting a picture of a cat on to the mat with a cinematograph. Indeed there is really nothing to be projected. When we attempt an analysis of what is happening there seem to be two possibilities only, neither of which involves anything we would wish to call a spatial relationship between an image and a present perception. It is possible that:

(1) I have an image of a cat and I conceive the possibility of this cat being on the mat which I am in fact looking at; or

(2) In addition to my perceiving the actual mat on which there is no cat, I am also imaging an exactly similar mat (together with its visible surroundings) on which there sits a cat.

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1 See p.197.
ii. Size

Now, in the second case, would the mat, as imaged, be the same 'size' as the mat as actually perceived? It is clear that we can be talking only of visible size, and since in this case it is my perceiving the mat which has stimulated me to image it, the chances are that it will be the 'same size'.

A memory-image is as visibly large or small as its object was originally perceived, even though it does not 'occupy', as does an after-image, any part of the total potential field of vision. There is nothing deep or mysterious in this. It simply means that if I saw my friend twenty paces away from me, I image him as if he were twenty paces away from me. To test this, try to remember a favourite snapshot in imagery; you will find that it is always imaged as if it were about eighteen inches away, the distance at which we normally look at snapshots. By an effort it may be possible to 'enlarge it', but once we do this we are immediately conscious of the entry of 'imagination elements' into the imagery.

It is possible, in principle, to have a visual memory-image of a complete visual field, a thing we rarely if ever in fact have, and a memory-image 'covers' only that portion of the possible visual field which was covered by the object imaged in the original perception of it. It follows that there is, as it were, a 'blank surround' to the image - much as there is to a particular object looked at through a telescope. Now, when a particular area or object is detached from its
setting, we are aware of the 'blank surround' and of its potential occupants which provide the spatial element (there is also the temporal element) of that 'context' which is distinctive of the memory-image, known as such, and determines the 'expansion' of the image.

iii. Colour

In 'The Mind and Its Place in Nature' Broad asserts: 1 'A visual sensum must in fact have some perfectly determinate shade of colour; and so must a visual image'. It would be very difficult to deny this claim, but nevertheless it raises certain questions: Need a memory-image include the same colours as the perceived scene? Need the image include any chromatic colour? Can we make a distinction between colour and mere visible variety?

Of course imagery can include exact shades of colour, as in my examples in the previous section. But, if what is being remembered, or our particular interest in what is being remembered, is the shapes and relative sizes involved in the appearance, colour seems to be no more necessary than in a newspaper photograph. We do not feel that the picture in the paper is not a true representation of the Prime Minister because it shows his face as grey and not pink, though we might well do so if the rest of the picture were in colour. Whether or not our visual imagery always does involve chromatic colour is an empirical

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1 'The Mind and Its Place in Nature', p.258.
question we should each have to answer for ourselves; there seems to be no reason why it must do so.

Nevertheless, it may still be held that an image must have some perfectly determinate shade or shades of colour. The 'black and white' picture is intelligible only so long as it is a kind of 'translation' of the multi-coloured appearance, and blacks, whites, and greys must themselves be 'perfectly determinate'. It is true that our concern is with the relationship between the shades rather than with the shades themselves, but whatever is related must be one shade or another. Notwithstanding this, it seems to me that I can image in considerable detail a framed photograph of my father in military uniform, yet I would find it very hard to say whether I am imaging it as 'black and white' or as 'sepia'. Possibly I am imaging it as both simultaneously.

In another odd case, I remember my supervisor's voice, i.e. remember how it sounds in auditory imagery, yet without remembering it as making any specific utterance. There is at least an initial puzzle about both these cases; the second may simply be an extreme case of 'remembering the "look" of the gate',¹ but the first seems to demand for its explanation an investigation of what is usually called 'generic imagery'.

b) Specific and 'generic' imagery

Thinking and remembering in imagery, as this performance is traditionally understood, seems to demand that the image be at once

¹ See p. 231.
sufficiently like the original perception to be identifiable, and sufficiently unlike it to be productive or reminiscent of the concept or idea of a continuous thing in the world. This problem is often magnified by the assumption that an image is a kind of symbol for a class-concept, an assumption which I have denied. Having an image of a dog may lead us to think of dogs in general, but there is no reason why it should do so. And certainly I do not 'use the image' to think about the concept dog, although I might well regard my having an image of Rover as my thinking about Rover as a creature in the world, especially if the image I have of him is not identifiable as an image of any one occasion in his life. In practice I find that my own 'standard images' do tend to be of 'fixed instances'. Thus the images I have of people are frequently in fact images of their photographs. For obvious reasons these photographs can more easily be 'imprinted on the memory' than can any single fleeting appearance of the people themselves. Similarly, the images I have of places are most frequently of the oft-repeated views of those places from certain vantage points: houses from their front gates, valleys from the nearby hills we climb to look at them, and so on. Nevertheless, we do have memory-images of sights seen only once and only for a moment (else our memories of events would necessarily be wholly propositional). We also do seem to have images of particulars which have been built up over a series of different, and differing, viewings, and it is these that are felt to be at once both like and unlike any one single 'viewing'.
i. *Vague images*

We have discussed the way that 'vagueness' permits us to remember the 'look' of the gate without knowing the number of its bars. Now we must consider how 'vagueness' may also permit us to remember the 'look' of the gate open, half-open or shut, all seemingly at once. For we do seem able, in some way, to do this. Russell contends that the vagueness of imagery not only fully explains this strange ability, but also 'supplies an answer to Hume's query: Could you imagine a shade of colour that you had never seen, if it was intermediate between two very similar shades that you had seen? The answer is that you could not form so precise an image, even of a colour that you had seen, but that you could form a vague image, equally appropriate to the shade that you had not seen and to the two similar shades that you had seen'.

I believe that, insofar as this is a statement of fact, it is wrong. Unless we beg the question by making precision an empirically unattainable ideal, then why does Russell assert that you cannot form a precise image of the required shade of colour? It would be most surprising if many painters and other people whose job it is to match colours do not do so regularly, and I am satisfied that I not infrequently do so myself. If we avoid this difficulty by rephrasing the question as 'Could you form as precise an image of a colour you

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1 See p. 231ff.
had never seen as you could of a colour you had seen?", my own
answer would be an unequivocal 'No'. What we can have is a concept
of such a shade; the use of the word 'intermediate' shows this to be
possible; but we cannot have an image of it for the very reasons which
led Hume to regard the 'possibility' as a puzzle. The problem only
arises because people have overlooked the fact that colours, like
sounds, form a natural scale. The missing shade is not, therefore, a
completely unknown quantity like the blue rumped gnurgle.¹

I said 'insofar as it is a statement of fact', because 'vague' is
itself a vague word.² Before we can decide in what way vagueness permits
us to image 'all the positions of the gate at once' we must determine
what this particular kind of vagueness amounts to.

ii. Generic Images

There are several possibilities and they are generally classified
together under the heading 'Generic Imagery'.

a. 'Composite pictures'. Firstly, there is the notion of a composite
image, rather like a composite photograph, that is, a number of photo-
graphs taken on the same film and superimposed on each other. Clearly
we cannot take this too literally, for unless the separate objects were
extremely similar in outline the resultant picture would be simply an
undecipherable mess. And if they were sufficiently close — say, several

¹ See p.197.
² This point is made by J.L. Austin. See 'Sense and Sensibilia', p.125.
shots of the same face with just slightly varied expressions - the need for the composite would be lost; any one of the pictures would serve equally well. Except as regards the expression - and this would be the one point wherein the composite would be blurred and useless. With colour the position would be just as bad. A yellow surface superimposed on a blue surface would give a green surface, not a surface that was somehow both yellow and blue at once.

Suppose we suggest that instead of superimposing each entire image upon the others, we 'select' and combine parts of each to make up a composite which is, as it were, a single image drawn from many sources. This is certainly possible. But the image itself would still be 'specific' and, being 'drawn from many sources', it would lack the authority of a memory-image; whereas what we want is an image which is not specific and yet has that authority. Nor would this composite be representative of the continuous object except in the way that a piece of china made up from bits of different articles in a teaset would be representative of the teaset. And finally, there is also the drawback that the appearances involved must still be at least sufficiently alike to be compatible, e.g., if the composite image is of a man's face they must be all frontface or all sideface; a combination would not be possible.

b. Series of images. There is however one other possibility which Price, amongst others, has advanced. 'When I think about some object or class of objects in an image manner, I am not restricted
to using just one single image. I might use a series of different images. Again, the images which I use need not be static'. Thus by a series of different images of the same object, drawn possibly, but not necessarily, from a perceived sequence of events, we can image, as it were, all round the object in both space and time.

I would also add that it is by no means certain that this would have to be a series in the chronological sense. We could find no logical reason to deny (and some empirical reason to assert) the possibility of having several simultaneous images; why then should we not have several simultaneous images of different 'aspects' of the same object?

iii. Image and concept as complementary

Our analysis of 'generic imagery' shows clearly that 'a generic image' is a misleading expression. What we have is a number of complementary images or imagings which act jointly to exemplify or bring about in us a general idea or concept of a continuous individual entity or a set of characteristics. The images are, as Berkeley and Hume held them to be, the particular re-presentations to us in memory of particular past sense-experiences. Out of them concepts can arise, and by means of them concepts can be checked and defined. It is because of this that people have been led to refer to what are in fact concepts as 'generic images'.

A memory which consisted wholly of imagery would not be so utterly meaningless as a 'perception' which consisted wholly of sense-
experience, since it would be possible to form concepts, with the aid of present perception, from series of occurrent images. It would nevertheless be a very limited and strange memory - the kind of memory we are disposed to attribute to 'lower animals'. On the other hand, a memory with no imagery would be, as we have seen, both sterile and inconclusive. Language permits the development of complex forms of thinking; imagery provides the constant link between that development and our own past perceptual experience, our actual apprehension of the world about us.
Chapter VIII
CONCLUSIONS

1. Recapitulation

a) The problem raised

i. How is it that we are sure?

It may be remembered that in chapter I of this essay I made the point that the question to be answered is, not 'Should we trust our memories?' but 'How is it that our memories are in fact trustworthy when they seem, at every stage, to be open to error?'. At all times we are aware of a great deal of the experience we have had in the past, and aware of it in a way that gives us confidence in every way as great as the confidence we feel about our present surroundings. Yet in no case, it seems, can we prove to ourselves, or to other people, that things did occur as we remember them to have occurred, as we feel that we can prove the existence of our present surroundings - by pointing to them, knocking against them, measuring them, or tasting and smelling them.

Of course, one of the ways by which we prove the existence of our present surroundings - the prediction of effects which will arise out of them - is open to us, on some occasions at least, for establishing the truth of our memory-claims. But here we are not really proving anything about memory, only about matters of fact: the rose which is evidence for the accuracy of my memory-claim that I planted
a rose could have been put there by somebody else, or could have grown wild; the crater which reassures me that there was an explosion could have been made by an excavator. In any case confirmations of this sort do not generally create memory-beliefs, they merely reinforce our confidence if we are doubtful whether we really are remembering, and assist us to convince other people who may be inclined to doubt our memory reports.

The 'memory-experience', the certainty we feel about matters of past fact whether or not there is any 'objective evidence', suggests very strongly that in some way we actually 'look at' or re-live our past experiences as part of our present experience. But the difficulty is to give a sense to this which is not purely metaphorical. When we look at something we are directly acquainted with it, and in this direct acquaintance lies our authority to make confident assertions about it. Our task, therefore, is to show that in memory, or in some kinds of memory, we have the same authority. In short, we must explain how, and when, we are directly acquainted with the past when we remember.

ii. Special cases

Firstly - the past with which I am directly acquainted must be my own past. It would be blatantly absurd to suggest that when I remember that the Battle of Waterloo was fought in 1815 I am somehow directly acquainted with that battle itself. It is not so absurd, however, (though it may well be false) to claim that I am directly acquainted with the occasion of my learning this piece of history.
To show that the authority of all memory rests upon our direct acquaintance with the past, it is first necessary to show that what is generally called the memory of events—the memory of one's own actual experiences—is the basic form of memory from which all other forms derive. Although it is perfectly natural and intelligible to talk of remembering individuals or remembering propositions or remembering how to do things, as distinct kinds of remembering, we must show that all these can be reduced to, or explained in terms of, remembering past events in our lives, events which we ourselves witnessed. Accordingly a considerable part of this essay has been devoted to demonstrating this reduction.

I have argued that to remember an individual is either to remember a particular appearance or a series of appearances which we regard as being of the same individual, or else to remember an event or series of events in which that individual figures. Thus to say that what I am remembering is an individual, not an event, is only to say something about my point of interest in my memory. The same memory which I now regard as 'of my uncle' I could equally well regard as 'of the time my uncle fell down the steps' or 'of the time my uncle wore a bowler hat'.

When we turn to 'propositional memories' it is vital to bear in mind the distinction I made between remembering propositions and

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1 See chapter III, p.63.
remembering in propositions.¹ All our remembering, insofar as it is expressed in memory-claims, is in propositions. To remember propositions is to remember the beliefs we have held in the past about matters of fact - whether we announced them publicly or not - as distinct from remembering the events, our perception of which led us to hold those beliefs. (And as distinct also from remembering the sentences in which the propositions were expressed).

Clearly, a proposition is not an event in the world. Thinking - producing propositions - is, of course, a mental event, and mental events as well as physical ones may be remembered. But in remembering them we are not acquainted with a past public event; we are only presented with evidence that we have been so acquainted. And the past public event need not be the event which the proposition is about. It frequently happens that we remember a proposition though we have forgotten, or are not presently recalling, or never even witnessed, the event to which it refers, though it is always possible, of course, if we did witness the event, that we may remember it, or some part of it, along with the proposition. For instance, I remember that as an infant I lived in West Hartlepool; I can remember several occasions of producing my Birth Certificate which showed West Hartlepool as my birthplace and several conversations about my having been born there. And but for these memories my claim - I remember that I

¹ See chapter III, p. 77ff.
once lived in West Hartlepool – would be quite unconvincing, even to myself. For I cannot remember living in West Hartlepool.

To the question of remembering how to do things I devoted a whole chapter, because this, above all others, has traditionally been regarded as a special case of remembering, not to be fitted into the 'perceptual mould'. My conclusion was that, although it is normal practice in everyday speech to identify 'remembering how' with 'being able', there is nevertheless a distinction between them which we are all conscious of, and which we are sometimes obliged to make in order to be intelligible. And though 'being able' may well be, in many instances, a case of retentiveness, it is physiological retentiveness only, and as such outside the scope of an epistemological enquiry. The 'remembering how' which is a function of intelligence, as I defined that term in relation to memory, is intelligible only in terms of 'remembering that' – remembering events and propositions. And, as we have seen, remembering propositions is itself dependent for its authority upon the memory of events.

iii. Re-interpretation – memories and claims

In chapter IV, I distinguished between our memory-claims – the propositions we produce about our past experiences – and our actual memories – the remembered propositions and occurrent imagery which constitute the 'remembering state of mind' on which those claims are based. I pointed out that, whilst it is by the former that our memories are judged to be true or false, it is from the latter, and only from
the latter, that what I called the initial authority of memory can arise. The memory-claim may refer directly to a past state of affairs in the world; the memory is always of a past state of myself - my own perceptions and judgments when confronted with that state of affairs. Thus it is always possible in principle at least, to amend a memory-claim in the light of a re-assessment of the memory itself without recourse to any 'external evidence'. When a man is relating what happened on some past occasion which he witnessed it is always sensible to ask him 'But what are you actually remembering?'.

b) The problem remaining

i. Narrowing the gap

We have already come some way towards the solution of our problem. If it be allowed: (a) that all memory-claims must be or rest upon memory-claims concerning past events, and (b) that these memory-claims are based upon occurrent memories of our own past states when we were confronted with these events; then, the authority we attach to all our memory-claims must derive from our ability to remember our own past states. And since these claims are always open to revision in the light of a closer scrutiny of our occurrent memories, it may well be that many of our so-called 'false memories' are not memories at all; they are merely false inferences from our memories of our own past states.

It may be recalled that I distinguished two kinds of error which could be avoided, or at least guarded against, by introspection. We can avoid claiming more that is warranted by the occurrent memory.
can also re-check the remembered propositions to ensure that, at the
time of the perception, we were not misinterpreting the event we
witnessed—provided only that we have memory-imagery of the event
against which to check.

Thus our memories are open to 'checking' and reinterpretation at
two points. But unless that which is being reinterpreted, the memory-
imagery itself, is a re-presentation to us of the actual past event,
and not itself an interpretation of that event, then all our reinter-
pretations are pointless and vain. Before we could decide whether,
and in what way, our imagery does constitute such a re-presentation —
a direct acquaintance with the past event — it was necessary to
consider the nature and function of imagery. This we have done, and
we are now in a position to see how imagery does constitute an actual
re-presentation to us of the past events themselves.

ii. The 'physical element'

I claimed that the function of imagery is to provide a direct
contact with how things looked, sounded and so forth. I defined
imagery, accordingly, as the direct memory of appearances, an appear-
ance being what is presented to the senses by a physical event or
object irrespective of any perceptual judgment or classification. I
also claimed that we may have a disposition or capacity to image a
particular appearance (whatever the physiological explanation of
this may be) just as we may have the capacity to make any overt
muscular movement, in response to an appropriate stimulus. The
appearances 'given to us' in imagery are the same appearances as were previously 'given to us' in sensation. The objects which presented those appearances are no longer here; but the appearances never were 'here' in the sense that the objects were, so the absence of the objects does not entail that the appearance is not the same appearance.¹

Sensing an appearance is not a cognitive operation, though it may be a prerequisite of certain kinds of cognitive operation, e.g. perceptual judgments. To perceive is always to perceive that something is the case, to note a factual relationship. Hence philosophers have attempted to distinguish between 'knowledge of' and 'acquaintance with' the objective world. The danger of making this distinction is that, having made it, there is a tendency to then apply it as though it were between two 'kinds of knowledge', when in fact it must be between knowledge and something else. For, to maintain the distinction at all, we must allow that we are 'acquainted with' the world only in the same way as the table is 'acquainted with' the floor it stands on. We cannot have the benefits of special use and ordinary use at once. Ordinarily we say that we are acquainted with certain facts when we have not yet decided 'what to make of them'. But we are already allowing that we know these facts as such, that we have noticed them.

¹ By 'same' I mean qualitatively same. On p.281 following I argue that numerical sameness and difference cannot be applied to appearances.
And to notice something is always to notice something about it, even if only to notice that it is distinguishable from something else — and this is to make a perceptual judgment. We cannot isolate 'objects of acquaintance' or 'pure sensations' within our actual experience; they are simply inferences from that experience. Our experience is of objects in certain relationships. It is true that, since we perceive relationships, there must be elements which are related. But it is a further, and unjustified, step to say that we must perceive the related elements, as a prerequisite of perceiving the relationship. To quote G.F. Stout: 'it thus appears that we can never have absolutely pure sensation, sensation absolutely devoid of meaning either original or acquired. We may even go further than this and lay it down as a general principle that sensations always have derivative meaning; for retentiveness and association operate from the very beginning of mental life. It may be urged that this cannot be the case in the earliest moments of experience. But even if we set aside what may perhaps be due to the results of ancestral experience transmitted by heredity, we have to recognise that the first instant of conscious life is only an ideal limit, which we cannot definitely mark off so as to consider it separately. Thus, even from this point of view, the concept of absolutely pure sensation is an artificial abstraction'.

The point is that sensation, the separate activity of sensing, is something the existence of which we seem driven to accept; but it is clearly not a mental operation in any ordinary sense. It must, then, be a physiological operation. Just as we can move our feet and judge that they are moving forwards or backwards, so we can visually sense and judge that we are seeing trees and houses (that is, we can see trees and houses; 'see' is a cognitive term as we normally use it). In neither case are we conscious that the 'physical activity' precedes the 'mental activity'. At most we assume that it 'must do so'.

Sensation, then, is simply the physiological process by virtue of which appearances are presented to us. If these appearances can be retained, again in a purely physical or physiological way, and reproduced in imagery, then we have a permanent physical access to external reality, by virtue of which we can make some factual judgments about physical events after those events have occurred, with the same right of assurance as we could have made them when the events were occurring.

Now, my contention throughout has been that the ability to image is simply the ability to retain and re-actualize sensed appearances; that is what I mean by calling imagery the memory of how things appeared. Thus we have found in imagery, if not a 'physical element' of the past physical event itself, at least a physiological element of the past perception of that event. And we have found in memory
the element we were looking for which is prior to any interpretation of the event remembered. The objection that the imagery may not be of actual past events is anticipated by my argument that 'imagination images' are memory-images: correctly identified, all images are seen to be memory-images.

But 'correctly identified' is a quite considerable qualification. I have argued that the proper question about imagery is not 'Whether it was' but 'When it was', and I have considered various ways in which we can identify the 'memory character of imagery'. But still it may be felt that this is not enough, that we have a better right, and a different kind of right, to be sure about what is going on around us in the present than to be sure about what has gone on around us in the past. To see what justification there may be for this feeling we shall now consider 'the past' and its relationship to 'the present'.

2. The past

There are two distinct, though obviously related, problems about the past: how we know the past when it is no longer here to be known, and how we come to have the concept of pastness at all - what is the origin of our concept of temporal sequence. Perhaps we might assume that it originates with our own memories, as the 'home', so to speak, of the events we remember. But this is to presuppose that we are competent to distinguish actual happenings from imaginary happenings.

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1 See chapter VI, p. 197ff.
without recourse to any notion of a 'real past' as a criterion. It is imperative, therefore, for those who wish to deny that there is any unique memory-experience, and who wish to base their account of memory upon our knowledge of the past and our ability to report it correctly, to show that the concept of pastness could arise from present experience independently of memory. But before examining any suggestions as to how this could be, let us look at the first question: how can we know the past?

a) Knowing the past

i. 'Actual presentation'.

There are various ways of knowing what happened in the past: we can read about it, or be told about it, or work out what must have happened for things to be as they are now. Or we can remember our own past experiences. The first group are all quite simple and intelligible - once we understand clearly what we mean by 'the past' - and they are not directly connected with memory. We simply 'place' certain events in a former time.

But with our memories of our own experiences there is no question of placing events in a former time; in being remembered they are already so placed. We are aware of certain events, and at the same time aware that they belong to the past. Now, it would be possible to accept this and yet still to feel that saying that in memory we are directly acquainted with the past is a strangely 'metaphysical' claim. It may be felt that, taken literally, it is simply absurd -
for the past is past - and, taken metaphorically, it reduces to the trivial assertion that the events we remember are always past events. I do not believe, however, that this feeling would be justified. The 'reduction' cannot be sustained because there is a difference, however we may characterise it, between actually remembering an event and simply remembering propositions about it. What we may call 'being actually presented with a past event' must at least be a particular kind of remembering. The charge that the claim is absurd arises from the confusion of 'being presented' with 'being present with', and a misunderstanding about what is presented in both memory and perception. We can be present when an event occurs, and we are then presented with an appearance of that event (or by that event). We are not presented with the event; we merely witness it. When we remember the event in imagery we are again presented with the same appearance, but this time by our own 'retentive mechanisms', whatever they be, not by a current happening in the world. If it be protested that the appearance presented is the same qualitatively but not numerically, then I ask what numerical difference of an appearance could mean. We are not using the term 'appearance' to stand for an activity; any object which does not change presents the same appearance on any number of occasions to any number of observers who happen to be suitably placed. These presentations are numerically different, as are the 'perceptual acts' of the observers. But we are concerned with the appearance (how it appears), not the appearing (that it
appears), and the only criterion of identity which can be applied, therefore, is qualitative sameness. If I may use an analogy: The same joke may be told many times by many different people but it remains the same joke. Numerical difference can apply only to the occasions of telling it.

Actual presentation with the past demands only that we be in effectively the same position as we were in the past for noting and identifying events which then occurred. It is surely misleading, then, to characterise direct presentation of the past in such ways as this: 'Just as it is asked whether the sense-datum is a mental representation of an external object or a constituent of that object, so it has been asked whether the memory image is a present symbol of what occurred in the past or the past event itself'. 1 To suggest that an image is itself a past event is an obvious absurdity. But there is nothing absurd in asking whether the appearance presented to me in imagery on this present occasion is the same appearance as was presented to me in perceiving on some past occasion. It is no more absurd than asking whether, in hearing a gramaphone record, we are presented with a past performance of an orchestra, and the case for a positive reply seems somewhat stronger. For in that case it could be argued that what we are really presented with is the effect of vibrations set up by the record, whereas, once we have got rid of the 'entity image'

notion, there is nothing we could be presented with in the memory case except the appearance of the event itself. If anyone should wish to push the analogy to what may be its logical conclusion, and say that we are really presented with the mnemonic effects of certain of our own physiological retentive organisms reacting to a stimulus, then I have no objection— for these 'effects' simply are the presentation to us of a certain appearance which has been presented to us before.

There will undoubtedly be those who balk at saying that in memory we may be actually presented with the past. Very well: let us say only that in memory we have an access to the past which is effectively equivalent to the access we have in perception to the present. A case could be made out for either description, and this would be an argument about English usage. The important thing is not how we choose to describe the facts, but that we are clear as to what these facts are.

ii. Knowing and knowing about

I have maintained that in imagery we are re-presented with the appearances originally presented to us by past events. When we remember propositions, our own past judgments, these are already, as remembered, interpretations of the appearances presented by past events. In his article 'The Empiricist Theory of Memory'\footnote{MIND, Vol. LXIII, 1954, p.482. Holland is criticising a distinction drawn by Woolzley in his 'Theory of Knowledge'.} Holland casts doubt upon the possibility of making any sharp division within propositional
memories between those arising from the perception of events and those arising from reports and inferences. He does, however, allow that 'There is, of course, one way in which I can recall the Rugby Match [which he had witnessed] that is not open to me in the case of the Boat Race [which he had not], and that is by picturing to myself parts of it as I saw them; and it seems likely that it is recollections in which visual imagery occurs that Woollley has mainly in mind when he segregates one sort of remembering from all others as being cognitive. Yet if this is the case, one wonders why he does not say so plainly'.

I agree that the only intelligible distinction of kind we can make within memory occurrences is that between propositional memory and imagery. But, arising out of this is a distinction in memory-claims. It is based upon situations in which memory-imagery of the event claimed as remembered could occur and those in which it could not. The distinction is not based upon memories in which imagery does occur and memories in which it does not.

In fact, our memories of events we have actually witnessed generally include both propositions and imagery, and the essential difference between the memory of the Rugby Match and the memory of the Boat Race is that the one can be supported by the memory 'presentation' of the event itself, whilst the only 'presentations' which can support the others are of other events - reports of the race in newspapers or from friends. The question: 'What is it you are actually remembering?' is here very pertinent.
Having once acquired a piece of knowledge, by whatever means, I may remember it. But if that knowledge was acquired as the direct result of my perceptual experience I have thereby a far better warrant for certainty than if it had simply been imparted to me secondhand. In the latter case I may always suspect that my informant was mistaken or untruthful; in the former case, the more I ponder on the memory, the more likely it is that 'supporting evidence', both imagery and remembered propositions, will be forthcoming. Compare, for instance, my two memories: that Magna Carta was signed in 1215, and that I spent some time in Rio de Janeiro in my youth. In the first case I could be convinced that I had misremembered the date by exactly the same kind of means as I could be reassured that I had remembered it correctly — by historical records and the authority of experts. I may be surprised, but I would not be astonished; this is the kind of 'memory' we are used to getting wrong.

If, on the other hand, everybody I knew denied that I had ever visited Rio, I could only suppose that they were having some sort of joke with me. I would find it quite impossible to account for the vivid imagery I have of that city, and the supporting memories I have of the voyages to and from it, in terms of any books I may have read or films I may have seen. If people, to show that they were not joking, produced documentary proof that I could not have ever been in Rio, then I would have to allow that I was suffering from what I called in chapter I a 'mnemic hallucination', and visit a
psychiatrist. But, as I have observed before, it is just a fortunate fact that hallucinations of any kind are very rare indeed.

Furlong says:¹ 'The sensuous imagery supplies context to what we remember; it places our recollections; it focuses our attention'. This is certainly true, but imagery has a more fundamental role in memory than this. Additional propositional memories supply a kind of context to what we remember — as when I remember that once I drank a whole bottle of brandy, and also remember that I was subsequently very ill. The thing which only imagery can supply is not context but content to our memories — the past events as we perceived them. I could have been ill through drinking whiskey, or because of a stomach infection. But if I have visual and gustatory images of the bottle in my hand and the brandy in my mouth this possibility hardly matters. With imagery the relationship is of evidence to conclusions, not — as with additional propositions — of premises to conclusions.

This is why I reject Hyle's claim:² 'The question "How can I faithfully describe what I once witnessed?" is no more of a puzzle than the question, "How can I faithfully visualise what I once witnessed?". Ability to describe things learned by personal experience is one of the knacks we expect of linguistically competent people; ability to visualise parts of it is another thing we expect in some

¹ 'A Study in Memory', p.87.
² 'The Concept of Mind', p.276.
degree of most people...'. In the first place, the ability to describe things has nothing to do with whether they were learned by personal experience or not. And in the second place, the ability to digest food is also something we expect of most people, and this is not a puzzle at all - or, if it is, it is a different kind of puzzle. To remember how to describe something so that we know that we are describing it correctly demands the mental retention of a great many propositions, sufficient to support each other, to form an adequate context for the memory. But imagery demands no mental retention, only physiological retention. In being re-presented with how the object looked I am in a position to decide what it was. That I know about the past by means of memory may mean that I am remembering propositions made in the past, or that I am interpreting my present imagery, or both together; but there is a perfectly familiar distinction between knowing and knowing of or about. I know the man next door whereas I know of or about the Prime Minister but I do not know him. I can know the past, as distinct from knowing about it, only when I am having imagery of it.

b) Conceiving 'the past'

When we ask how we come to have a concept of space we may be told that we simply perceive it directly or that it arises from our perceiving objects in certain relationships which we characterise as

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For the significance of the term 'adequate' see chapter IV, p. 108.
'spatial'. But to claim that we conceive time only as the result of perceiving (or being aware of) events in a certain relation which we characterise as 'temporal', presupposes that our memories of events are identifiable as such, and form a temporal sequence, leading up, so to speak, to the here and now. Once I have the idea of my past and also the idea of existents outside and independent of myself, then it is a straightforward step to the idea of the past. But, without the aid of some memory-indicator to differentiate, within the thoughts I entertain, what actually has happened from what logically could happen, how could I come to conceive my past? It has been suggested that our idea of the past grows up, so to speak, with our use of the past tense in speech. I do not doubt that the use of past tense helps to clarify the concept of the past, but I fail to see how a past tense could ever come into use unless and until people had at least some concept of their own past lives to which to apply it. Those who deny that remembering is a unique experience, and as such identifiable, are thereby obliged to claim that we perceive temporal sequence directly, that memory is a concept derived from our acquaintance with the past, and not vice-versa, and they are led to what is, in my opinion, a very contrived and unconvincing argument.

i. The specious present

This argument is that the present, though we treat it as simply an ideal limit, has in fact a very short duration - just long enough for us to perceive the temporal sequence of events. So that what I
am now perceiving has within it one event succeeded by another. Thus
I can grasp the notion of temporal sequence from present perceptual
experience alone, and from this evolve the notions of past and future.
Furlong, for example, speaks of 'a succession of sounds which we can
apprehend in one act',¹ the rat-tat-tat of someone knocking at the door.
And he says: 'Thus from this familiar mode of experience, the specious
present, we can learn what it means to say that an event has occurred,
and that one event is before another. And indeed this is likely to
have been the way in which we first acquired this knowledge, for it is
hard to see how else we could have obtained it'.²

Now, I do not want to deny that we apprehend rat-tat-tats 'in one
act', nor to deny that this could be our first introduction to the idea
of temporal sequence. What I do want to deny is that it is either
correct or necessary to maintain that this apprehension is 'in one
present', whether we call it specious or not.

I can express my argument better in relation to a plea by C.I.
Lewis for a temporally extended present, though his reason for making
it is slightly different.³ 'The present' is "long enough" for the
genuine apprehension of the data of experience; because otherwise
there would be no such thing as direct experience, of which anyone

¹ 'A Study in Memory', p.95.
² 'A Study in Memory', p.96.
³ 'An Analysis of Knowledge and Valuation', p.331 (his italics)
could be aware or even mention as what we do not have'. He argues that unless there were a present in which we could learn what we subsequently remember about the world as presented to us, memory could never even originate. 'Either the pristine given character is there to be inspected, or there is nothing there the inspection of which would inform us of what has just escaped'.

Now, I grant that perceptual judgments 'take time'. But I deny that the perceptual judgments which I remember must have been made within a single 'present'. If we regard the present as simply the ideal limit of the recent, then, though our sense-organs may be functioning continuously, our perceptual judgments are being made, as it were, up to the present rather than in the present. So long as we have the faculty of retaining what is presented to the eyes, ears and so on, we can still make perceptual judgments; we need only allow that they are being made about the immediate past as given in memory, not about the present as given in 'sensation'.

By taking this stand we avoid the problems which must arise from such claims as this by Russell: 'The specious present includes elements at all stages on the journey from sensation to image. It is this fact which enables us to apprehend such things as movements...'.

1 'An Analysis of Knowledge and Valuation', p.331
transition) literally, we must expect that seeing a car move down the
street would involve seeing one firm shape with a series of ever
fainter ghost shapes behind it, as we do in fact see shooting stars
which move too fast for our eyes, or objects in photographs when the
camera has been left open too long. And if we do not take it literally,
can it mean anything but that we see the car where it is and also
remember it where it has just been, that a single perceptual judgment
embraces both the 'present sensation' and an indefinite series of
memory-images of past sensations (or the appearances given in past
sensations)? This seems to be the only intelligible interpretation,
and, since the perception of changes must in any case involve memory-
imagery, why can we not dispense with the 'present sensation' as a
distinct kind of experience altogether?

The case for doing so is greatly strengthened by the difficulties
we are bound to meet in explaining how and when a sensation 'becomes'
an image. According to Russell 'We have seen no reason to think that
the difference between sensations and images is only one of degree',¹
yet, within the specious present, 'a² sensation fades gradually,
passing by continuous gradations to the status of an image'. It is
by no means easy to see how anything can pass by continuous gradations
from being one thing to being another unless the difference is simply

¹ 'The Analysis of Mind', p.147.
one of degree. This surely is how we would normally define a
difference of degree as opposed to a difference of kind.

ii. Perceiving, remembering and imagining as a single scale

Hume, like Russell, was reluctant to deny that sensations are
different in kind from images. He was faced, therefore, with the
problem that there seemed to be no way of distinguishing between the
'liveliness' by which he differentiated sensations from images, and the
'vividness' by which he differentiated memory from imagination imagery.
This fact he tacitly acknowledged by interchanging the two terms
quite frequently throughout his work. Why did he not simply accept
that between present perception, memory-imagery and imagination-imagery
there is a single difference of degree only? Why not allow that they
all lie on a scale of vividness/liveliness, with present perception
at one end and wild imagination at the other?

I have already argued that the difference between memory and
imagination imagery can be one of degree only.¹ I have also argued
that in all our perceptual judgments we must employ memory imagery;
to deny this is to embrace the apparent absurdity of a 'present' of
unspecified duration. Surely the next step is to allow that when we
speak of present appearances we are simply referring to that memory-
imagery which, due to the proximity in time of its 'external causes',
approaches the ideal limit of memory-authority.

¹ See chapter VI, p. 197.
It may be objected here that this would leave out entirely the unique quality of 'substantial existence' which belongs to the subjects of present perception, that we would be like people who have lost the use of their sense-organs and can 'see' and 'hear' things only in imagery, having no direct contact with the world they are actually living in. But this is not so. For we have not lost the use of our sense-organs; on the contrary they are operating busily all the time, constantly introducing to us novel situations. I have stressed the fact that 'sensing' is very like imaging - so like it in fact that the only effective distinguishing feature is that we 'cannot get away from' our sensations.\footnote{See chapter VI, p. 219.} Whatever other imagery we may have, our 'present sensations' remain firmly, involuntarily and persistently with us. But, if we regard 'present appearances' as being given in memory-imagery like any 'past appearances' except in that they arise out of the most recent sense-activity, is any of this going to be different? All memory-imagery occurs as the result of some stimulus, and if that stimulus, which in this case is the effect of physical events upon our sense-organs, is being constantly reinforced (by the continuity of those physical events), then the memory-image must keep occurring. And it must have the maximum 'firmness', the minimum of 'controllability' and a complete, coherent context.
We no longer have any problem about 'continuous gradations'. There is a single transition from imagery which reproduces the appearances presented by 'external events' in exact and perfect detail, to imagery which so distorts and rearranges those appearances that the perceptual origins of the various elements of them could hardly be traced.¹ The visual experience of a moment ago is only fractionally less 'firm' than that of this present moment, and we need not postulate a temporally extended present to explain our seeing things as they are, either still or in motion. Nor is it any objection to say that we must then have both 'sensations' and images at the same time. I have shown that there is no logical reason why the presence of one image should exclude the presence of any other, and that there are excellent reasons, quite apart from this present argument, for believing that it does not.²

iii. Perceiving as remembering

In a recent article, 'Philosophical Problems of Memory', C. Landeaman admits that there is a natural, almost inevitable, tendency to analyse memory in terms appropriate to perception. But he points out, as the one seemingly insurmountable difficulty, 'In perceiving one usually learns something that one has not previously known; perception is an acquisition of new knowledge. However, it is

¹ For example, the monstrosities which appear in nightmares may seem to be wholly unlike anything we have ever seen.
² See chapter VI, p.213ff.
essential to memory that what one remembers one does not know for the
very first time'.

But I have established, I think, that memory-images can be reinterpreted when they occur. If we regard such reinter-
pretations as part of our remembering, then to that extent we do
gain new knowledge in memory. There is a problem only if, on the
one hand we exclude from remembering all interpretation, and on the
other hand we think of remembering as a kind of perceiving. Once we
allow that remembering is the major class and perceiving is simply the
limiting case of that class, i.e., that perceiving is a sub-species of
remembering, the problem dissolves. For then all knowledge, new or
otherwise, is seen to be gained in memory.

We are able to distinguish 'present perceptions' as a unique class
because they are the means of acquiring new knowledge of the external
world. But 'present sensation' is only an ideal case, one which we
can assume but not examine. For this reason arguments about such
questions as whether we can properly be said to see movements raise quite
unreal problems.

We really see things as moving just as we really see things as stationary.

I want to make it quite clear at this point that I am not pro-
posing any startling or revolutionary new theory of knowledge. On the
contrary I am simply trying to eliminate the inconsistencies in the

2 Consider e.g. H.A. Prichard, 'Seeing Movements' - 'Knowledge and
Perception', p.41ff.
traditional theory of knowledge, advanced by Hume, and adhered to with minor variations by every 'British Empiricist' since. And to do so by accepting the conclusions to which I am logically committed by that theory.

Certainly, nothing I have said need in any way weaken the force of the normal, and very necessary, distinction we make between present perception and memory. The words we use in our perception-claims — 'see', 'hear', 'touch', and so on, are perception words. When I say that I see a bird on the windowsill I am asserting that there is a bird there now, not that there has been one there. The distinction between our perception-claims and our memory-claims is perfectly clear: both refer to objective reality, one to how it was, the other to how it is now.

But this sharp distinction lies in what is being claimed, not in our right to make the claims. Memory-claims are based upon memories we are having of our own past states at the time we make the claims. But perception-claims are not based upon some equivalent cognitive states called 'perceptions', for to perceive something is already to make some claim about a 'present state of affairs', to assert the existence of a particular factual relationship. As I argued in chapter VII, even recognising is always recognising that. Perception-claims are based, like memory-claims, on the memories we are having.

1 See p. 234.
when we make them, but in the case of perception claims these memories consist very largely, though not entirely, of 'immediate memories'.

It is important to note that the basis of perception-claims does not consist entirely of 'immediate memories'. It is generally acknowledged that any perceptual judgment (any perception in the way that I use that term) must 'go beyond' the present 'given', depending at least as much upon memory and the expectancies created by memory as upon 'present sensation'. The 'pristine given character', as Lewis calls it, is always to some extent tainted by the dubious authority of memory as soon as we advance to any pronouncement about matters of fact. This is the point Stout was making in the passage I quoted earlier in this chapter. My certainty that the door is now closed may rest much more heavily upon my memory of closing it a minute ago and not opening it since than upon the cursory glance I have just cast towards it. And when I have just switched off the light in my room, my certainty that my coat is hanging on the door is likely to arise from my having seen it clearly a moment ago rather than from my present perception of the vague shape which I now take to be my coat hanging on the door.

'Common sense trusts memory, not blindly, but because it has found memory to be trustworthy', Furlong says. But with memory-imagery as such the question of trusting does not arise; we simply have it and we

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1 'A Study in Memory', p.18.
accept it because we cannot do otherwise. It may be truer to say that, because we have usually found that our interpretations of the appearances which are presented to us are coherent with each other and with the reports made by other people, we accept them as knowledge about the world. When they are about what is happening now we call them perceptions and when they are about what has happened we call them memories - without being too precise about our qualification of events as 'occurring now'.

iv. 'Present', 'past' and 'absent'

To return now to the question of how we come to conceive the past, I suggest that 'past' is simply a classificatory term we apply to all those events which present themselves to us (present appearances to us) without that persistence by which we identify present events. It is no accident that 'present' is the contrary of both 'past' and 'absent'. The constant reinforcement of our imagery 'gives the present to us' as persistent, coherent experience which we cannot ignore. Events which we are aware of as real events, but which are not presented with this persistent continuity - which are in fact discordant with the events so presented - are thereby negatively classified as 'not present'. That I am now thinking of my friend's appearance, i.e. how he looks, though I am not now seeing him, entails that I have seen him at another time and also that, if he still exists, he is in another place.
That we conceive the past simply as the 'not present' within 'the real' is suggested in a passage by Furlong (though I do not claim that Furlong had any such idea in mind or that he would necessarily accept the view I propose, especially in the light of his claims, which I quoted above, for the specious present). 'The imaginary is what we invent, what is largely dependent upon our will. The real is what comes to us without our asking; its main characteristic is involuntariness, spontaneity.... Now in memory there is also this involuntary, spontaneous character; it is understandable therefore, that we should ascribe reality to what we remember. But we can clearly observe that what we remember is not now happening, and so we place it in the past, thus assigning to it a reality of a sort'.  

My only comments on this passage are that the distinctions between perceiving, remembering and imagining are not the sharp distinctions of kind which it suggests, and that we do not 'place' remembered events in the past; rather we exclude them from the present.

3. The verification of memories

a) Coherence

Thus we identify our current memories as the basis of both our perception-claims and our memory-claims, allowing differences of degree, but not of kind, in their value as 'evidence' for the claims made. And, in doing so, we deny that the perception claim is in any specially

1 'A Study in Memory', p.98.
privileged position. As a matter of empirical fact it is less likely to be wrong. But this is only because the sense-evidence on which it is based is up-to-the-minute evidence, not because it is better evidence in some other way.

When Holland speaks of 'the distinction which we certainly draw in ordinary life between those recollections which can only be supported by further recollections and those which are supported by something better', \(^1\) he is speaking of a distinction which simply does not apply to the authority of memory as such, but only to the comparative authority of one's own memories and the claims made by other people. He says: 'If I claim to remember putting some money into a box and certain other people saw me do it and later the box is destroyed by fire, then, supposing my recollections to be called in question, there may be no better means open to me of supporting my claim than to bring forward these other people to bear me out by saying that they also remember my putting money in the box. But suppose the box is not destroyed. Then I can if necessary fetch it and display its contents. How can it be said in this latter case that my recollection is only supported by other recollections in the way it was in the former case?'.

The important question is: What is it that causes us to make this distinction in ordinary life? The answer may be: To convince

\(^1\) 'The Empiricist Theory of Memory', MIND LXIII, 1954, p.476.
people that we did put the money in the box, or even: To convince people that there is money in the box. Surely it is not: To convince ourselves that we remember putting money in the box. I certainly do not deny that people are more readily convinced by what they see with their own eyes than by other people's memory-claims. But this fact does not, as Holland suggests, free us 'from dependence on memory in general'. My arguments above show that we can say that the recollection is still supported only by other recollections, even though these include the 'immediate recollections' of the people who witness the opening of the box. Their greater conviction arises, not from the fact that a memory is replaced by a 'present perception', but from the fact that someone else's claim is replaced by their own experience. Whether this is perceptual experience or memory experience is of minor importance. It is also true that people are more readily convinced by their own memories than by the claims of other people.

The important point is that all cause/effect confirmation must involve sense-perception, and once we allow that 'perceiving' is simply our name for that remembering which 'runs up to' the ideal limit we call the present, then it follows that the coherence by which we judge our memories to be true operates wholly within memory. And, as we have seen,¹ the most recent memory is not necessarily the strongest and most reliable.

¹ See p. 297.
We judge our memory-claims to be true by their coherence with other memory-claims, our own and other peoples. And we feel our memory-claims to be true because of their seeming coherence with other memory-claims. We should never lose sight of the fact that, in the overwhelming majority of cases, when we feel them to be true they are true. Von Leyden is perhaps right when he says that we may rule out the suggestion that the only characteristic of memory is 'the experience of being under the influence of some sort of an impression, and of a confidently held belief, concerning one's own past'. But I do not accept his claim that: 'It is impossible that the nature of this experience by itself should constitute the "essence" of memory, since an unjustified or even disproved memory-claim does not cease to be associated with, and even upheld by, precisely that same sort of experience'. The feeling of belief arises out of an initial contextual coherence, and it is true that, on occasions, belief attaches to a memory-claim before the context of the memory has been expanded sufficiently to justify this belief. But, if the claim has been disproved (and I take it that Von Leyden means disproved to the claimant, else his claim is utterly trivial), then this can only have been by the introduction into the memory-context of some fact which is not coherent. When this happens the claimant must see the need to amend or modify his memory-claim, and the feeling of belief cannot persist.

1 'Remembering', p.105 (my italics).
b) 'Looking again'.

i. Temporal location of memories

It is always possible to 'believe too soon'. And because of this we can never achieve 'absolute certainty' about matters of past fact. But this need not distress us, for we can never achieve 'absolute certainty' about matters of present fact either. If we suspect that we may have made a perceptual error, or even if we are just particularly anxious not to, we look again - or in some cases keep looking - until we are satisfied that our perceptual judgment is right. But sometimes it is by no means easy to be satisfied. We may look at a distant object for some time, seeing it sometimes as a man and sometimes as a bush blowing in the wind. Looking again is not a sure-fire way of becoming certain; at most it is a means of knowing whether we are certain or not - or of just how much we can be certain. And exactly the same applies when we 'look again' in imagery at the events we have witnessed in the past. But in this case it is generally necessary to 'look again' harder, more often, and more carefully, for we have to decide not only what it is, but when it was as well. This is to say, we not only have to be sure that we have identified the remembered objects or events correctly. We have also to be sure that these objects or events do belong to a single past perceptual occasion.

The 'immediate memories' we employ in perception are felt to be immediate, and the question of their temporal location does not arise. The appearances presented to me in imagery all belong in my past, but
in what part of my past may not be at once apparent. Some philosophers have claimed that when we have memory-images we 'see', as it were, the temporal location of the event imaged, i.e. the comparative 'distance' of the event from the present moment, almost as we see objects as more or less distant from us in space. Furlong, for instance, writes: 'We seem also to have some ability to judge what we might call "temporal distance" by means of vividness, detail and spontaneity of our imagery. To image this morning's breakfast is one thing; to image that of yesterday is another. The vividness and other such qualities of our imagery are "secondary signs" of temporal distance'.

Now, I believe that this is substantially true, especially in the case of our more recent memories. But, when we consider our more remote memories, it is clear that the notion of 'judging temporal distance' requires some further analysis. It is not enough to speak of 'vividness'; my memory-imagery of some very exciting happening in my early youth is likely to be much more vivid than my memory-imagery of the hum-drum events of this morning.

First and foremost, our memories are temporally located by the other memories coherent with them. I know, for instance, that my present imagery of my children in a boat is a memory of my last holiday because it 'runs off into' other memories: of the scenery, the house we stayed in, the journey home, and so on. But this is

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1 'A study in Memory', p.99.
not enough; there must also be some fixed reference point. All these events were (roughly) at the same time; but what time was that? To fix the temporal location of a remembered event seems possible only if we connect it to the present moment by an unbroken chain of coherent memories. And this is, I believe, what in fact happens.

This does not necessarily mean that to remember when anything happened to us we must also remember everything that has happened to us since. My claim seems much less odd when we realise how very indeterminate the memory of 'an event' can be. A set of coherent memories may be narrow and highly detailed, or it may be much wider and very sketchy; or it may be both at once - a nucleus, as it were, of detailed memories, fanning out into an extended context of less detailed memories, until it extends, however sketchily, over the whole of our past experience.

This extension of the context is made possible by the use of 'fixed markers'. If I wanted to colour in the eighteenth fiftieth part of a line drawn across this page I should not divide the line into fifty equal parts and then count along it. I should halve it and then halve one of the parts and so on, and the marks I made would remain on the page as a ready-made guide for any future endeavour of the same kind.

Our 'temporal markers' work in much the same way, and we all establish them for ourselves in the course of our lives. My own are
mainly such things as the size and general appearance of my family, the places where I have lived and the kind of work I was engaged in. As soon as any expanding memory-context embraces any such 'marker' the memory can take a short-cut, as it were, to the present time. The noticeable inability of small children to distinguish between the recent and the comparatively distant past may well be due, in part at least, to their lack of adequate 'markers'.

In this way most of our memories do 'come labelled' with the temporal location of the events remembered – with a greater or lesser degree of determinateness. On occasions I remember some event but have only the haziest notion of when it happened, but every memory of a past event in my own life has some degree of temporal determinateness and that temporal determinateness tends to increase with any expansion of the memory-context.

ii. **Non-fallibility and evidence**

At the end of chapter VI, I stressed that imagery, as such, is non-fallible; error can arise only in its interpretation; the imagery itself is only evidence for our memory-claims, it does not enter into those claims. There must, therefore, be a certain arbitrariness in any distinction we may make within memory-claims between what we really saw and what we took ourselves to be seeing.

We can make a distinction between seeing what is in fact a book, and seeing what we take to be a book (whether it is or not). But, in the case of memory, the very point at issue is whether or not what we
took to be a book was in fact a book. We can distinguish between remembering seeing a book and remembering the visual appearance of a book, but this is only the distinction between remembering a particular event and remembering a particular individual. The distinction we cannot make is between remembering seeing a book and remembering seeing an appearance, for, as I argued earlier, we do not see appearances. Appearances are presented to us by the things we see. To see is always to see something as something, even if only as a patch of colour. The only distinction of kind we can make is between how we saw (our evidence) and what we took ourselves to be seeing (our claim). The problem is that some initial degree of interpretation must be put upon our imagery to allow it to function as evidence. To assert that the man was bleeding on the strength of our memory of how he looked we must at least identify what we saw as a red patch spreading over a white patch.

At this point I must say, quite boldly, that the ultimate justification for our memory-beliefs is not logical but psychological. In chapter III, I made the distinction between what we (psychologically) could not see as anything but a certain object or event, and what we see as a certain object or event as a result of expectancies we happen to have at the time, or judgments about what it 'must be'. Having made this distinction in any given case, we have reached the terminal point of checking of our memory-claim.

1 See chapter VI, p.210ff.
iii. Verification is always confirmation

But this situation is not peculiar to memory. We cannot reach logical certainty about matters of fact, whether they be of past fact or of present fact. To 'verify' a claim, whether it be a memory-claim or a perception-claim, is simply to confirm it - not to put it beyond the reach of doubt. The question 'Are you sure?' is really only an invitation to reconsider, and the reply 'Yes I am' is only a rejection of that invitation.

I have claimed that the context of most of our memories spreads, so to speak, throughout our entire past histories, very sketchily except in the 'immediate vicinity' of the event which is the subject of the memory-claim, but clearly enough to enable us to 'locate' the remembered event, and to indicate to us with that degree of determinateness we are entitled to 'locate' it. In the case of our 'present perceptions' practical certainty is usually immediate. They are in a favoured position in that they rest, in part, upon the imagery of appearances which are still being presented, and this is sufficient to account for the greater likelihood of error in memory, a likelihood which increases as the events remembered 'fall away from' the present.

But the recentness of events is not the only factor which makes for 'firmness' in the memory of them. The extent to which we noticed them, i.e., the extent of the observed context, is ultimately of greater importance. That is why I can be more certain of my memory of travelling from Perth to Canberra two years ago than of my memory...
of stubbing out a cigarette a moment ago, or even of my perception, in which I have no interest at all, of the people and cars now passing my window.

We trust our memories in the same way, and for the same reasons as we trust our eyes and ears — and with the same kind of justification. The advantage on the side of 'present perception' is that the memory-context expands automatically with the passage of time. The compensating advantage on the side of our more distant memories is that they are concerned only with those events which did interest us, did command our attention, whether we realised this at the time or not. Because of this the supporting memory-context is not only always available to us, it is in fact already 'present' as the setting to the memory. It is only the presence of this context that leads us to claim to remember.
LIST OF PUBLICATIONS CITED IN THE ESSAY

(The dates shown are of the impressions actually used).


