Memory

No. 3 of Essays on the Intellectual Powers of Man

Thomas Reid

Copyright ©2010–2015 All rights reserved. Jonathan Bennett

[Brackets] enclose editorial explanations. Small 'dots' enclose material that has been added, but can be read as though it were part of the original text. Occasional *bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. Every four-point ellipsis indicates the omission of a brief passage that seems to present more difficulty than it is worth. Longer omissions are reported between brackets in normal-sized type.

First launched: April 2006 Last amended: May 2008

Contents

Chapter 1: Obvious and certain truths about memory	133
hapter 2: Memory is an original faculty	134
Chapter 3: Duration	136
Chapter 4: Identity	139
Chapter 5: Locke's account of the origin of our ideas, especially the idea of duration	142
Chapter 6: Locke's account of our personal identity	147
Chapter 7: Theories about memory	150

Chapter 1: Obvious and certain truths about memory

In a man's gradual progress from infancy to maturity, his faculties come into play in a certain order, and that order seems to be the best one to follow in discussing the faculties. The external senses appear first; memory next; so now I turn to memory. Memory is what gives us immediate knowledge of things past. The senses inform us about things only as they exist in the present moment, and if this information were not preserved by memory it would vanish instantly, leaving us as ignorant as if it had never been.

Memory must have an object. Everyone who remembers must remember *something*, and the item that he remembers is called 'the object' of his remembering. Memory is like perception in this respect, and unlike sensation, which has no object but the feeling itself. Everyone can distinguish other thing remembered from other remembering of it. We may remember anything that we have seen or heard or known or done or undergone, but the remembering of it is a particular act of the mind which exists *now* and of which we are conscious....

When we perceive an object by our senses, a certain sequence of operations—tied together by our constitution—takes place:

- •The object makes some impression on the senseorgan, either immediately or through some medium.
- •This leads to an impression's being made on the nerves and brain.
- •That results in our feeling some sensation.
- •And that sensation is accompanied by the conception of and belief in the external object that we call 'perception'.

These operations are so connected in our constitution that

it's hard to separate them in our thought, attending to each without confusing it with the others. But in memory we don't find any sequence of operations like that one, and this frees us from the difficulty-of-separating embarrassment: rememberings are easily distinguished from all other acts of the mind, and they are free from all ambiguity.

The object of memory—i.e. the thing remembered—must be something that is •past, just as the object of perception and of consciousness must be something that is •present. What happens *now* can't be an object of memory, and something that is past and gone can't be an object of perception or of consciousness.

Memory is always accompanied by a belief in what we remember, just as perception is accompanied by a belief in what we perceive, and consciousness by a belief in what we are conscious of. Perhaps in infancy or in a mental disorder someone can confuse remembered things with things that are merely imagined; but every mentally healthy adult feels that he must believe anything that he clearly •remembers, even though he can give no reason for his belief except that he remembers the thing clearly, whereas when he merely •imagines a thing—however clearly—this doesn't lead him to believe in its existence.

We regard this belief that we have from clear memory as *real knowledge*, and as being no less certain than if it had been based on demonstration; no sane man calls it in question or will hear any argument against it. The testimony of witnesses in trials where the accused's *life* is at stake depends on, it and all mankind's knowledge of past events is built on this foundation.

Sometimes a man's memory is less clear and definite, and then he is ready to allow that it can have failed him; but this doesn't in the least weaken its credibility when it is perfectly clear.

Memory implies a conception of past time and a belief that some time *has* passed; for it is impossible that a man should *now* clearly •remember x without •believing that some stretch of time, large or small, has passed between the time when x happened and *now*; and I think it is impossible to show how we could acquire a notion of duration if we had no memory.

Things remembered must be things formerly perceived or known....

The remembering of a past event is necessarily accompanied by the rememberer's belief that he existed at the

time when the event happened. I can't remember something that happened a year ago without a conviction, as strong as memory can give, that I—the very same identical person who now remembers that event—did exist a year ago.

I regard what I have said about memory up to here as principles that will appear obvious and certain to everyone who takes the trouble to reflect on the operations of his own mind. They are factual claims that you must judge on the basis of what you feel; they admit of no proof except an appeal to everyone's own reflection. So I shall take them for granted in what follows. I shall first (·chapters 2-4·) draw some conclusions from them, and then (·chapters 5-7·) examine the theories of philosophers concerning •memory, •duration, and •our personal identity—which ·comes in here because· we acquire the knowledge of it by memory.

Chapter 2: Memory is an original faculty

[In calling memory an 'original' faculty Reid means, at least in part, that it is *basic*, and not the upshot of combining two or more faculties that are more basic and more general. That is why we can't explain it. An explanation, Reid thinks, would have to be something along the lines of 'To remember x is to combine the upshots of mental actions of types A and B in relation to x'; and that would mean that A and B were more basic than memory, implying that memory is not 'original'.]

First, I think it appears that memory is an original faculty that God has given us, and that we can't give any explanation of it except 'That's the way we are made'.

The knowledge that my memory gives me of •past events seems to me as unexplainable as would be an immediate

knowledge of •future events; and I can't explain why I should have the •former and not the •latter except that that is God's will....

When I believe the truth of an axiom or other mathematical proposition, I see that it *must* be so. Everyone who has the same conception of it sees the same. There is a necessary and evident connection between the subject of the proposition and its predicate, and I have all the evidence to support my belief that I can possibly conceive.

When I believe that I washed my hands and face this morning, no necessity shows up in the truth of this proposition—it could be true but it might not be. A man

can clearly •conceive it without believing it at all. Then how do I come to believe it? By remembering it distinctly. That's all I can say. This remembering is an act of my mind. Isn't it possible that this act should occur without the event's having happened? I have ·to answer 'Yes, as far as I know', i.e.· to say that I don't see any necessary connection between the present act and the past event. If someone does show such a necessary connection, then I think we'll have an explanation for the belief that we have in what we remember; but if this can't be done, that belief can't explained except by saying that it's a result of how we are built.

'But the experience we have had of memory's trustworthiness is a good reason for relying on its testimony.' I don't deny that this can be a reason for those who have had this experience and who reflect on it. But I don't think that many people have ever thought of this reason, or thought they needed it. It would have to be some very special circumstance that led a man to have recourse to it; and even those who *have* used that argument must have trusted the testimony of memory before having any experience of its trustworthiness....

We sometimes 'come to know an abstract truth by comparing the terms of the proposition that expresses it and perceiving some necessary relation or agreement between them. That's how I know that two and three make five, that the diameters of a circle are all equal. Locke discovered this source of knowledge and then rushed on to concluded that all human knowledge can be derived from it; and he has been very generally followed in this, especially by Hume.

But I can see that our knowledge of the existence of contingent things can't ever be traced back to this source. I know that a certain thing x does or did exist. This knowledge can't be derived from the perception of a necessary agreement between *existence and *x*, because there is no

such necessary agreement.... The thing x doesn't exist necessarily, but by the will and power of God who made it; and no contradiction follows from supposing x not to exist.

This implies, I think, that our knowledge of the existence of our own thoughts, of the existence of all the material objects around us, and of all past contingencies, must be derived not from •a perception of necessary relations or agreements, but from •some other source.

God has provided other means for giving us the knowledge of these things—means that are perfect for their purpose, and produce the effect they were intended to produce. But *how* they do this is beyond our skill to explain, I'm afraid. We know our own thoughts and the operations of our minds by a power we call 'consciousness'. But this is only giving a name to this part of our make-up, not explaining its structure or showing how it produces in us an irresistible belief in its testimony....

It is well known what subtle disputes went on all through the middle ages, and are still carried on, about God's fore-knowledge. Aristotle had taught that there can be no certain foreknowledge of contingent things; and in this he has been very generally followed, apparently just on the grounds that we 'can't conceive how such things should be foreknown and therefore 'conclude foreknowledge to be impossible. This has given rise to an opposition and supposed inconsistency between God's foreknowledge and human liberty. Some have given up foreknowledge in order to preserve liberty, others have given up liberty in order to preserve God's foreknowledge.

It is remarkable that the parties to this dispute have never seen any difficulty in reconciling •liberty with the •knowledge of what is *past*. It is only *fore*knowledge and not *memory* that they have seen as hostile to liberty and hard to make consistent with it.

Yet I believe there is exactly as much difficulty about the past as about the future. I admit that we cannot account for •foreknowledge of the actions of a free agent,

but I maintain that we are no better able to account for •memory of the past actions of a free agent.

If you think you can prove that the actions of a free agent can't be foreknown, you will find that those same arguments have just as much force to prove that the past actions of a free agent can't be remembered. It is true that •what is past did certainly exist. It is no less true that •what is future will certainly exist. I don't know any reasoning—from the constitution of the agent or from his circumstances—that doesn't apply just as strongly to his past as to his future actions. The past was but now is not. The future will be but now is not. The present is equally connected or unconnected with both.

Why have men seen cases that are in fact perfectly alike as being so different? I think it is for this reason: The faculty of memory in ourselves convinces us, from *fact*, that it is possible for a thinking being—even a finite being—to have certain knowledge of past actions of free agents, without tracing them from anything necessarily connected with them.

But having in ourselves no foreknowledge corresponding to our memory of what is past, we find great difficulty in admitting it to be possible even for God.

When we have a faculty in some degree, we easily admit that God can have it in a more perfect degree; but we hardly allow to be possible—even for God—a faculty that has nothing corresponding to it in our constitution. We are so constituted as to have an intuitive knowledge of many past things, but we have no intuitive knowledge of the future. Perhaps we could have been so constituted that we had intuitive knowledge of the future but not of the past; and that constitution wouldn't have been any harder to explain than our actual one is, though it might be much more inconvenient! If that had been how we were built, we would have found no difficulty in accepting that God can know all future things, but much difficulty in accepting his knowledge of things that are past.

None of our original faculties can be explained. Memory is one of them. Only ·God· who made our faculties fully comprehends •how they are made and •how they produce in us not only a conception of but a firm belief in things that we need to know.

Chapter 3: Duration

From the principles laid down in chapter 1, I think it appears that our notion of duration—of time passing, of periods of time—as well as our belief in it comes to us through the faculty of memory. It is essential to anything that is remembered that it be something that is past, and we

can't think of something as past without thinking of some duration, large or small, between it and the present. So as soon as we remember something we must have both a notion of and a belief in duration. It is necessarily suggested by every operation of our memory, which is the faculty to

which it ought to be ascribed. So this \cdot Essay on memory \cdot is a proper place to consider what is known about it.

•Duration, •extension, and •number are the measures of all things that can be measured. When we apply them to finite things that we measure by them—e.g. saying 'The lecture lasted for an hour', 'The boot-laces are 60 inches long', 'There are five people in the room·'—they seem to be more clearly conceived and more within our grasp than anything else whatsoever.

•Extension has three dimensions, which gives it an endless variety of modifications [= 'special cases', 'specific ways of being extended'] that can be precisely defined; and their various relations provide the human mind with its richest field of demonstrative reasoning, ·namely geometry·.

•Duration, having only one dimension, has fewer modifications; but these are clearly understood, and their relations admit of measure, proportion, and demonstrative reasoning.

•Number is called 'discrete' quantity, because it is made up of units that are all equal and similar, and it can *only* be divided into units. (This is true in some sense even of fractions < 1, which these days are also commonly called 'numbers'. For in every such fractional number, *one* is supposed to be subdivided into a certain number of equal parts which are the units for that fraction and for all fractions with the same denominator.) Duration and extension are not •discrete but •continuous quantity. Their parts are perfectly alike but divisible without end.

When thinking about the size and proportions of the various intervals of •duration, we find a need to give a name to some known portion of it, such as an hour, a day, a year. Treating these as units, we can form a clear conception of some longer period of time by thinking of *how many* of these units it contains. And we find that we need a similar procedure to have clear conceptions of the sizes and

proportions of extended things. Thus •number is necessary as a common measure of •extension and of •duration.

But it can be that we have this need only because of the weakness of our understanding. The mathematicians have been clever enough to discover that this device—this measuring of things in terms of numbers of units—won't always serve our purpose. For there are proportions of continuous quantity that *can't* be exactly expressed by numbers. For example (and there are many others), there is no numerically exact answer to the question 'What proportion of the length of a square's diagonal is the length of its side?'

Periods of time have the relations of *before* and *after* to •other periods, and the relations *past* and *future* to •the present. The notion of •past is immediately suggested by memory, as I have remarked; and when we have acquired the notions of •present and •past, and of •before and •after, we can out of these construct a notion of the •future—namely the period that is after the present. Nearness and distance are relations equally applicable to time and to place. Distance in time is •intrinsically so different from distance in place, and yet so like it in its •relational properties, that it's hard to decide whether the word 'distance' is applied to both in the same sense or only analogically.

space: The extension of bodies that we perceive by our senses leads us necessarily to the conception of and belief in...

time: The duration of events that we remember leads us necessarily to the conception of and belief in...

space: ... a *space that remains immovable when the body is moved.

time: ... a •duration that would have gone on uniformly even if the event had never happened.

space: Without space there can be nothing that is extended. **time:** Without time there can be nothing that has duration.

This I think undeniable, ·and it makes the *properties* extension and duration fairly clear and easy to understand. But that clarity and ease is matched by the darkness and difficulty of thinking about ·the *individuals*· space and time. Because there must be space wherever there is or can be something extended, and there must be time whenever there is or can be something that has duration, we can't even *imagine* limits to space and time. They defy all limitation. Space swells in our conception to •immensity, time swells to •eternity.

We can't grasp *a past eternity*; ·but we can't dodge the notion of a past eternity by supposing that time began, because· unless we take the phrase 'a beginning of time' in a figurative sense, it expresses a contradiction. By a common figure of speech we give the name 'time' to the motions and revolutions by which we measure time—e.g. days and years. We can conceive a beginning of those perceptible *measures of* time, and say that there was a time when they didn't exist, a time not variegated by any motion or change; but to say that there was *a time before all time* is a contradiction.

All limited duration is included within time, and all limited extension within space. Time and space contain all finite existences in their capacious womb, but aren't themselves contained by anything. Created things have their particular place in space and their particular place in time; but time exists throughout all of space, and space exists at all times. They embrace each the other, and have that mysterious union that the schoolmen conceived between soul and body: the whole of each is in every part of the other—at any split second the whole of space exists, and every cubic

millimetre of space exists throughout the whole of time. We don't know what category or class of things we ought to put them into. They are not *beings* but rather the *receptacles for every created being*, receptacles without which no created being could possibly have existed. Philosophers have tried to put all the objects of human thought into these three classes: *substances, *properties, and *relations. Which of these should hold time, space, and number, the most common objects of thought?

[Then a paragraph about views of Newton and Clarke, relating the immensity of space and eternity of time to the unlimited nature of God. Reid hints that these are 'the wanderings of imagination in a region beyond the limits of human understanding'.]

The schoolmen said that eternity is a *nunc stans*, that is a moment of time that stands still. This was to put a spoke into the wheel of time [= 'to jam the wheel so that it stops turning'], and might give satisfaction to those who are to be satisfied by words without meaning. But I can as easily believe a circle to be a square as time to stand still.

Such paradoxes and riddles, if I may call them that, are what men get pulled into when they reason about time and space and try to understand their nature. Space and time are probably things of which the human faculties give an imperfect and inadequate conception. Hence difficulties arise that we uselessly try to overcome, and doubts arise that we can't lay to rest. How are we to remove the darkness that hangs over space and time and makes us so apt to bewilder ourselves when we reason about them? It may need some faculty that we don't have.

Chapter 4: Identity

Everyone has a conviction of his own identity as far back as his memory reaches; this conviction doesn't need help from philosophy to strengthen it, and no philosophy can weaken it without first producing some degree of insanity.

The philosopher, however, may very properly regard this conviction as a fact about human nature that is worth attending to. If he can discover its cause, that will add something to his stock of knowledge. If not, i.e. if *no-one* can discover its cause, the conviction of one's own identity must be regarded as either •a part of our original constitution or •something produced by that constitution in a manner unknown to us.

First point: this conviction \cdot of one's own identity is utterly necessary for all exercise of reason. The operations of reason—whether practical reasoning about what to do or speculative reasoning in the building up of a theory—are made up of successive parts. In any reasoning that I perform, the early parts are the foundation of the later ones, and if I didn't have the conviction that the early parts are propositions that I have approved or written down, I would have no reason to proceed to the later parts in any theoretical or practical project whatever.

I can't remember a past event without being sure that I existed at the time remembered. There may be good arguments to convince me that I existed before the earliest thing I can remember; but to suppose that my memory reaches a moment further back than my belief in my own existence is a contradiction.

The moment a man loses this conviction,...past things are done away with, and in his own belief *that* is the moment when he begins to exist. Whatever was thought or said or

done or undergone before that period may belong to some other person; but he can never attribute it to himself, or act in any way that supposes it to be his doing.

That clearly shows us that we must have the conviction of our own continued existence and identity as soon as we are capable of *thinking or doing anything on account of what we have thought or done or undergone before*—i.e. as soon as we are reasonable creatures.

Let us consider •what is meant by 'identity' in general, •what is meant by 'our own personal identity', and •how we are led into the irresistible belief and conviction that everyone has of his own personal identity as far as his memory reaches. These are appropriate things to look into if we want to form as clear a notion as we can of this phenomenon of the human mind.

Identity in general I take to be a relation between a thing known to exist at one time and a thing known to have existed at another time. If you ask whether they are one and the same or two different things—for example, 'Is the professor who persuaded you to take the course the one who gave you an F in it?'—everyone of common sense understands perfectly what your question means. So we can be certain that everyone of common sense has a clear and distinct notion of identity.

If you ask for a definition of identity, I confess that I can't give one; it is too simple a notion to admit of logical definition. [For Reid's linking of 'logical definition' to simplicity, see the first two pages of Essay 1, chapter 1.] I can say that it is a *relation*, but I can't find words in which to say what marks identity off from other relations, though I'm in no danger of confusing it with any other! I can say that *diversity* is a

contrary relation, and that similarity and dissimilarity are another pair of contrary relations, which everyone easily distinguishes, conceptually, from identity and diversity.

I see evidently that identity requires an uninterrupted continuance of existence. Something that stops existing can't be the same thing as something that begins to exist at a later time; for this would be to suppose that

•a thing existed after it had stopped existing, and

•existed before it was produced,

and these are both manifest contradictions. Continued uninterrupted existence is therefore necessarily implied in identity.

From this we can infer that identity can't properly be applied to our pains, our pleasures, our thoughts, or any operation of our minds. The pain I feel today is not *the same individual pain* that I felt yesterday, though they may be similar in kind and degree, and may have the same cause. This holds for every feeling and for every mental operation. They are all successive in their nature, like time itself, no two moments of which can be the same moment.

It's not like that with the parts of absolute space. They always are, were, and will be the same. Up to this point I think we are on safe ground in our moves towards fixing the notion of identity in general.

It is perhaps harder to ascertain precisely the meaning of *personhood*, but for the present topic we don't need to. For our present purpose, all that matters is that all mankind place their personhood in something that can't be divided or consist of parts. A *part of a person* is an obvious absurdity.

When a man loses his estate, his health, his strength, he is still the same person and has lost nothing of his personhood—i.e. he is just as much *a person* as he was before. If he has a leg or an arm cut off, he is the same person that he was before. The amputated limb is no part

of his person; if it were, it would have a right to a part of his estate, and be liable for a part of his debts! It would be entitled to a share of his merit and demerit—which is plainly absurd. A person is something indivisible; it is what Leibniz called a 'monad'.

My personal identity, therefore, implies the continued existence of that indivisible thing that I call *myself*. Whatever this *self* may be, it is something that thinks and wonders what to do and decides and acts and is acted on. I am not thought; I am not action; I am not feeling; I am something that thinks and acts and feels. My thoughts and actions and feelings change every moment; rather than lasting through time they occur in a series; but the *self* or I to which they belong is permanent, and relates in exactly the same way to all the successive thoughts, actions, and feelings that I call *mine*. These are the notions that I have of my personal identity. You may want to object:

All this may be imagined, not real. How do you know—what evidence do you have—that there *is* such a permanent self that has a claim to all the thoughts, actions, and feelings that you call yours?

I answer that the proper evidence I have of all this is remembering. I remember that twenty years ago I had a conversation with Dr Stewart; I remember several things that happened in that conversation; my memory testifies not only that this was done but that it was done by me who now remember it. If it was done by me, I must have existed at that time, and continued to exist from then until now. If the very same person that I call myself didn't have a part in that conversation, my memory is deceptive—it gives clear and positive testimony of something that isn't true. Everyone in his right mind believes what he clearly remembers, and everything he remembers convinces him that he existed at the time remembered.

Although •memory gives the most irresistible evidence of my being the same person who did such-and-such a thing at such-and-such a time, I may have •other good evidence of things that happened to me and that I don't remember. I know who gave birth to me and fed me at her breast, but I don't remember these events.

What makes it the case that I was the person who did such-and-such is not my remembering doing it. My remembering doing it makes me know for sure that I did it; but I could have done it without remembering it. The *relation to me* that is expressed by saying 'I did it' would be the same even if I hadn't the least memory of doing it. This thesis:

•My remembering that I did such-and-such—or, as some choose to express it, my being 'conscious that' I did it—makes it the case that •I did do it

seems to me as great an absurdity as this:

•My believing that the world was created *makes it the case that* •it was created!

The point I'm making in this paragraph would have been unnecessary if some great philosophers hadn't contradicted it.

When we pass judgment on the identity of people other than ourselves, we go by other evidence and decide on the basis of various factors that sometimes produce the firmest assurance and sometimes leave room for doubt. The identity of persons has often been the subject of serious litigation in courts of law. But no-one in his right mind ever had doubts about his own identity as far as he clearly remembered.

The identity of a person is a perfect identity: wherever it is real, it doesn't admit of degrees—it is impossible that a person should be partly the same and partly different, because a person is a *monad* [Reid's word] and isn't divisible into parts. Our *evidence for* the identity of other people does indeed admit of all degrees: we can be absolutely certain

·that this is Martin Guerre· or think there is just a faint chance ·that this is Martin Guerre·, or anything in between those extremes. But still it is true that the same person is perfectly the same, and can't be partly the same or fairly much the same. . . .

We probably at first derive our notion of identity from the natural conviction that everyone has had, from the dawn of reason, of his own identity and continued existence. The *operations of our minds are all successive, and have no continued existence. But the *thinking being has a continuous existence, and we have an irresistible belief that it remains the same through all the changes in its thoughts and operations.

Our judgments about the identity of objects of sense seem to be based on much the same kind of evidence as our judgments about the identity of other people.

Wherever we observe great *similarity we are apt to presume *identity, if no reason appears to the contrary. When two objects are perceived at the same time, they can't be *one* object, however alike they may be. But if they are presented to our senses at different times, we are apt to think them the same, merely because of their similarity.

Whether this is a natural prejudice, or whatever its cause is, it certainly appears in children from infancy; and when we grow up it is confirmed in most instances by experience. For we rarely find two individuals of the same species that are not distinguishable by obvious differences.

When a man challenges a thief whom he finds in possession of his watch, he goes purely by similarity—'This *looks like* my watch'. When the watchmaker swears that he sold that watch to this person, his testimony is based on similarity. The testimony of witnesses to the identity of a person is commonly grounded on no evidence except similarity.

Thus it appears that •the evidence we have of *our own* identity as far back as we remember is of a totally different kind from •the evidence we have for the identity of other persons or of perceptible objects. The •former is based on memory, and gives undoubted certainty. The •latter is based on similarity and on other facts that are often not so decisive as to leave no room for doubt.

The identity of perceptible objects is never perfect. All bodies have countless parts that can be separated from them by various causes; so they are subject to continual changes of their substance—increasing, diminishing, changing insensibly ·by gaining or losing very small parts ·. When something alters thus *gradually*, it keeps the same name (because language couldn't afford a different name for every different state of such a changing being) and is considered as the same thing. Thus we see an old regiment marching past and we say that *it* fought at Poitiers a century ago, although no-one now alive belonged to it then. We say a tree is the same in the seed-bed and in the forest. A warship that has successively changed its tackle, sails, masts, planks, and timbers, while keeping the same name, is the same.

Thus, the identity that we ascribe to bodies—whether natural or artificial—isn't perfect identity; it is rather something which for convenience of speech we call identity. It admits of a great change of the subject, as long as the change is gradual, and sometimes even a total change. For example, we might say 'This is the ship that turned the tide of battle off Cadiz in 1645', although every part of the ship had been replaced, a little at a time. How do the changes that ordinary language allows as consistent with •identity differ from those that are thought to destroy •it? They don't differ in kind, but only in number and degree. For example, it might fail to count as 'the same ship' because the total turn-over of planks, masts etc. happened too quickly—which is a matter of degree, not of kind. Identity has no fixed nature when applied to •bodies; and questions about the identity of a body are very often questions about words. But identity when applied to *persons has no ambiguity and doesn't admit of degrees, or of more and less. It is the basis for all rights and obligations, and for all accountability, and the notion of it is fixed and precise.

Chapter 5: Locke's account of the origin of our ideas, especially the idea of duration

It was a very laudable attempt of Locke's 'to enquire into the origins of those ideas, notions, or whatever you please to call them, that a man observes and is conscious of having in his mind, and into how the understanding comes to be furnished with them'. No man was better qualified for this investigation, and no man, I think, ever engaged in it with a

more sincere love of truth.

He had considerable success in this, but I think he'd have had even more if he hadn't too early formed a system or hypothesis on this subject, without all the caution and patient induction that is necessary in drawing general conclusions from facts.

The sum of his doctrine I take to be this:

All our ideas or notions fall into one of two classes. the simple and the complex. The simple ones are purely the work of Nature, the understanding being merely passive in receiving them. They are all suggested by two powers of the mind, namely sensation and reflection; and they are the materials of all our knowledge. Complex ideas are formed by the understanding itself; once it has been stocked with simple ideas of sensation and reflection, the understanding has the power to repeat, compare, and combine them....and so can at its pleasure make new complex ideas. But it isn't within the power of the most exalted intellect wit or enlarged understanding, by any quick-wittedness or variety of thought, to invent or create one new simple idea that didn't get into the mind by sensation or reflection. Just as

> •our only power over the material world is a power to compound, divide, and assemble in various forms the matter that God has made, and doesn't enable us to produce or annihilate a single atom,

so also

•we can compound, compare and abstract the original and simple ideas that Nature has given us, but can't make in our minds any simple idea not received by our senses from external objects or by reflection from the operations of our own mind.

(Adapted by Reid from Essay II.ii.1-2)

This account of the origin of all our ideas was adopted by Berkeley and Hume; but some very able philosophers who hold Locke's *Essay* in high esteem are dissatisfied with it.

Hutcheson in his Enquiry into the Origin of our Ideas of

Beauty and Virtue has tried to show that these—i.e. the ideas of beauty and of virtue—are original and simple ideas ·that don't come from sensation or reflection, and are instead· furnished by original powers ·of the mind·, which he calls the sense of beauty and the moral sense.

Price in his *Review of the Principal Questions in Morals* has rightly observed that if we take the words 'sensation' and 'reflection' as Locke defined them at the start of his excellent *Essay*, it will be impossible to derive some of our most important ideas from them; and that many simple and original notions are provided for us by the understanding, i.e. by our judging and reasoning power.

Locke says that by 'reflection' he means 'the notice that the mind takes of its own operations and the manner of them'. This, I think, is what we ordinarily call 'consciousness'; and we do indeed derive from it our notions of the operations of our own minds. Locke often speaks of the operations of our own minds as the *only* objects of reflection.

When 'reflection' is taken in this restricted sense, to say that •all our ideas are ideas either of sensation or reflection is to say that •everything we can conceive is either some object of sense or some operation of our own minds—and that is far from being true.

But 'reflection' is commonly used in a much broader sense; many operations of the mind are better candidates for the label 'reflection' than consciousness is. We reflect when we remember or call to mind some past event or state of affairs and survey it with attention. We reflect when we define, when we distinguish, when we judge, when we reason, whether about material things or intellectual ones.

When reflection is taken in this ·broader· sense, which is more common and therefore more proper than the sense Locke gives the word, it can rightly be said to be the only source of all our clear and precise notions of things. For

although our first notions of material things are acquired by the external senses, and our first notions of the operations of our own minds by consciousness, these first notions are neither simple nor clear. Our senses and our consciousness are continually shifting from one object to another; their operations are transient and momentary, and leave no clear notion of their objects until they are recalled by memory, examined with attention, and compared with other things.

This reflection—i.e. 'reflection' in the broad sense—is not *one* power of the mind; it involves many powers, such as recollecting, attending, distinguishing, comparing, judging. By these powers our minds are provided not only with many simple and original notions, but with all our notions that are precise and well-defined—these being the only proper materials of reasoning. Many of these are not notions of perceptible objects or of the operations of our own minds, so they are not ideas of sensation, or of reflection in Locke's sense of 'reflection'. But if you want to call them 'ideas of reflection', taking that word in the more common and proper sense, I have no objection.

Locke seems to me to have sometimes *used 'reflection' in the limited sense given to it in his definition and sometimes *slid unawares into the common sense of the word; and by this ambiguity his account of the origin of our ideas is made obscure and tangled.

After these remarks about Locke's general theory of the origin of our ideas or notions, I proceed to some observations on his account of the idea of duration.

He says: 'Reflection on the sequence of ideas that appear one after another in our minds is what provides us with the idea of succession; and the distance between any two parts of that succession is what we call "duration".' (*Essay* II.xiv.3)

If he means that the idea of succession is prior to the idea of duration—whether prior time or prior in the order

of Nature—I think this is impossible, for a reason given by Price: succession presupposes duration, so that it can't in any sense be 'prior' to it; so it would be more proper to derive the idea of succession from that of duration ·than vice versa·. ['x is prior in time to y' just means that x occurs before y does. 'x is prior in the order of Nature' means that any definition or analysis or explanation of y would have to involve x, and not vice versa.]

How does Locke say we get the idea of succession? We get it, he says, by reflecting on the sequence of ideas that appear one after another in our minds.

'Reflecting on the sequence of ideas'—that has to mean remembering the sequence and attending to what our memory testifies concerning it; for if we didn't remember it we couldn't have a thought about it. So it's evident that this reflection includes memory, without which there couldn't be any reflection on what is past or, therefore, any idea of succession.

Speaking strictly and philosophically, no kind of succession can be an object of the senses *or* of consciousness. You can only sense what is the case *now*; you can only be conscious of what is the case *now*; and *now*—a point in time—can't contain a succession. Therefore, the motion of a body—a successive change of place—couldn't be observed by the senses alone without the aid of memory.

This observation seems to contradict the common sense and common language of mankind, when they affirm that they 'see a body move', thus holding motion to be an object of the senses. [Reid then, at considerable length, explains this away: it comes, he says, from the fact that the vulgar use the present tense and the word 'present' to signify a *period* of time, and not always a very short one; whereas he has been using 'present' in the philosophers' sense in which it stands for 'that indivisible point of time which divides the future from the past'. The vulgar usage is all right for

everyday purposes, he says, but his point—expressed in the philosophical sense of 'present' or 'now'—still stands. Then:]

Having considered Locke's account of the idea of succession, let us next consider how he derives the idea of duration from the idea of succession. He writes: 'The distance between any parts of that succession, or between the appearance of any two ideas in our minds, is what we call *duration*.' (II.xiv.3)

To get a firmer hold on this, let us call the 'temporal distance between one idea and its immediate successor one element of duration; the distance between an idea and the next idea but one in the sequence two elements of duration, and so on. If •ten such elements have duration, then •one element must also have duration, for otherwise duration would be made up of parts with no duration, which is impossible.... Indeed, nothing is more certain than that every elementary part of duration must have duration, just as every elementary part of extension must have extension.

But now see where we have come to: there is •no succession of ideas within these elements of duration, or single intervals of successive ideas; but we must think of them as having •duration! From this we can infer with certainty that we have a concept of duration that doesn't involve any succession of ideas in the mind.

We can *measure duration by the succession of thoughts in the mind, as we measure length by inches or feet; but the *notion or idea of duration must be antecedent to the measuring of it, just as the notion of length is antecedent to the length's being measured.

Locke draws some conclusions from his account of the idea of duration; we may use these as a way of checking on whether the account is right. One conclusion is that if it were possible for a waking man to keep only one idea in his mind, without variation, he would have no perception

of duration at all; and the moment when he began to have this idea would seem to have no ·temporal· distance from the moment when he stopped having it.

·This can't be right. That one idea should seem to have no duration, and that a multiplication of this *no-duration* should seem to have duration, strikes me as being just as impossible as that the multiplication of nothing should produce something.

Another conclusion that Locke draws from this theory is that the same period of duration appears long to us if the succession of ideas in our mind is quick, and short if the succession is slow.

There can be no doubt that the same length of duration appears in some circumstances much longer than in others; the time appears long when a man is suffering pain or distress and when he is eager in the expectation of some happiness. On the other hand, when he is pleased and happy in pleasant conversation, or delighted with a variety of pleasant objects that strike his senses or his imagination, time flies away and appears short.

According to Locke's theory, in the time-seems-long case the succession of ideas is very quick, and in the time-seems-short case it is very slow. I'm inclined to think that the exact opposite is the truth! When a man is racked with pain or with expectation, he can hardly think of anything but his distress; and the more his mind is occupied by that single object, the longer the time seems. On the other hand, when he is entertained with cheerful music, with lively conversation and brisk sallies of wit, there seems to be the quickest succession of ideas but the time seems shortest....

If the idea of duration were acquired merely from the succession of ideas in our minds, that succession itself must seem to us equally quick at all times, because the only measure of duration is the number of succeeding ideas; but

if you are capable of reflection at all, I'm sure you are aware that at some times your thoughts come slowly and heavily and at other times have a much quicker and livelier motion.

I know of no ideas or notions that have a better claim to be accounted simple and original than those of space and time. [The recurring phrase 'simple and original' is a weapon of Reid's against Locke. An 'original' notion or idea is one that starts in the mind rather than being put into it from the outside by sensation. And a 'simple' idea or notion can't have been put together in the mind by the kind of compounding operation that Locke allows. So any idea that is both original and simple is a counter-example to Locke's theory about the origin of our ideas. What place do 'ideas of reflection' have in this line of thought? It's not clear. Some such ideas are *simple and all are original in the sense that they start in the mind rather than being put into it from outside. Reid doesn't directly attack that problem.] It is essential to both space and time to be made up of parts, but every part is similar to the whole and of the same nature. Because space has three dimensions, different parts of it can differ in shape as well as in size; but time has only one dimension, so its parts can differ from it only in size; and as it is one of the simplest objects of thought, our conception of it ·can't come from our forming it by composition in Locke's manner, so it · must be purely the effect of our constitution, and given to us by some original power of the mind.

The sense of seeing, by itself, gives us the conception of and belief in only *two dimensions of extension, but the sense of touch reveals *three; and from thinking about finite extended things we are necessarily led by reason to the belief in an immensity—a space infinite in all directions—that contains them.

Similarly, memory gives us the conception of and belief in finite intervals of duration. From thinking about these we are necessarily led by reason to the belief in an eternity which includes all things that have a beginning and end. Our conceptions both of space and time are probably partial and inadequate, and therefore we are apt to get lost and tangled in our reasonings about them.

When we consider •the smallest parts of time and space, our understanding is just as puzzled as it is when we consider •the whole. We are forced to acknowledge that space and time are in their nature divisible without end or limit; but there are limits beyond which our faculties can't divide either of them.

[Reid then spends a page discussing empirical questions about how finely humans can discriminate small lengths of space or time. He ends with an experiment which he says shows 'that the sixtieth part of a second of time is discernible by the human mind'.]

Chapter 6: Locke's account of our personal identity

In a chapter on identity and diversity, Locke makes has made many ingenious and sound observations, and some that I think can't be defended. I shall confine my discussion to his account of our own personal identity. His doctrine on this subject has been criticized by Butler in a short essay appended to his *The Analogy of Religion*, an essay with which I complete agree.

As I remarked in chapter 4, identity presupposes the continued existence of the being whose identity is affirmed, and therefore it can be applied only to things that have a continuous existence. For as long as any being continues to exist, it is the same being; but two beings that have different beginnings or different endings of their existence can't possibly be the same. I think Locke agrees with this.

He is absolutely right in his thesis that to know what is meant by 'same person' we must consider what 'person' stands for. He defines 'person' as *a thinking being endowed with reason and with consciousness*—and he thinks that consciousness is inseparable from thought.

From this definition it follows that while the thinking being continues to exist, and continues thinking, it must be the same person. To say that

•the thinking being is the person,

and yet that

•the person ceases to exist while the thinking being continues,

or that

•the person continues while the thinking being ceases to exist.

strikes me as a manifest contradiction.

One would think that the definition of 'person' would completely settle the question of what the nature of personal identity *is*, or what personal identity *consists in*, though there might still remain a question about how we come to *know* and *be assured of* our personal identity. But Locke tells us:

Personal identity, i.e. the sameness of a rational being, consists in consciousness alone; and as far as this consciousness can be extended backwards to any past action or thought, so far reaches the identity of that person. So that whatever has the consciousness of present and past actions is the same person to whom they belong. [Adapted by Reid from II.xxvii.9; the main difference is that Locke wrote 'is the same self' etc.]

This doctrine has some strange consequences that the author was aware of. For example: if the same consciousness could be transferred from one thinking being to another (which Locke thinks we can't show to be impossible), then **two or twenty thinking beings could be the same person**. And if a thinking being were to lose the consciousness of the actions he had done (which surely is possible), then he is not the person who performed those actions; so that **one thinking being could be two or twenty different persons** if he lost the consciousness of his former actions two or twenty times.

Another consequence of this doctrine (which follows just as necessarily, though Locke probably didn't see it) is this: A man may *be* and at the same time *not be* the person that performed a particular action. Suppose that a brave officer

•was beaten when a boy at school, for robbing an orchard,

•captures an enemy standard in his first battle, and •is made a general in advanced life.

Suppose also (and you have to agree that this is possible) that when he took the standard he was conscious of his having been beaten at school, and that when he became a general he was conscious of his taking the standard but had absolutely lost the consciousness of his beating.

Given these suppositions, it follows from Locke's doctrine that he who was beaten at school is the same person who captured the standard, and that he who captured the standard is the same person who was made a general. From which it follows—if there is any truth in logic!—that

•the general is the same person as him who was beaten at school.

But the general's consciousness does not reach so far back as his beating, and therefore according to Locke's doctrine

•the general is not the person who was beaten.

So the general *is* and at the same time *is not* the person who was beaten at school.

Leaving the consequences of this doctrine to those who have leisure to trace them, I shall offer four observations on the doctrine itself.

[Before Reid does that, the preparer of these texts ventures to intrude as a commentator. Reid offers the foregoing argument so confidently, and to so much applause from others in later centuries, that its lack of charity towards Locke should be pointed out. The tone and tenor of Locke's Identity chapter are compatible with this possibility:

- (1) Locke was thinking in terms of *sufficient* conditions for personal identity.
- (2) He silently assumed that elementary logic was to be built into his account, so that *one* sufficient condition for the truth of 'x is z' would be 'x is y & y is z'.
- (3) His 'same consciousness' account was meant to present not *everything* that could make a statement of personal identity true but everything that (a) could make such a statement true *and* (b) *didn't itself presuppose the truth of any such statement.*

This interpretation would be ruled out only if he explicitly and persistently said that his 'same consciousness' stuff was meant, on its own, to give sufficient *and necessary* conditions for the truth of 'x is z'. But he did no such thing. Why didn't he *say* that elementary logic—i.e. the transitivity of identity—was being assumed? He shouldn't have needed to; in a fair-minded world it would go without saying.]

(1) Locke attributes to *consciousness* the conviction we have of our past actions, as if a man could now be *conscious* of what he did twenty years ago. It is impossible to make sense of this unless 'consciousness' means *memory*, the only faculty by which we have an immediate knowledge of our past actions.

Sometimes in informal conversation a man says he is 'conscious' that he did such-and-such, meaning that he distinctly remembers that he did it. In ordinary everyday talk we don't need to fix precisely the borderline between consciousness and memory.... But this ·imprecision· ought to be avoided in philosophy—otherwise we run together different powers of the mind, ascribing to one what really belongs to another. If a man can be ·strictly and literally conscious of what he did twenty years or twenty minutes ago, then there is nothing for memory to do, and we oughtn't to allow that there is any such faculty. The faculties of •consciousness and •memory are chiefly distinguished by this: •consciousness is an immediate knowledge of the present, •memory is an immediate knowledge of the past.

So Locke's notion of personal identity, stated properly, is that personal identity consists in clear remembering....

(2) In this doctrine, not only is •consciousness run together with •memory, but (even more strange) •personal identity is run together with •the evidence we have of our personal identity.

It is very true that my remembering that I did such-andsuch is the evidence I have that I am the identical person who did it. And I'm inclined to think that this what this is what Locke meant. But to say that my remembering that I did such-and-such, or my consciousness that I did it, *makes me* the person who did—that strikes me as an absurdity too crude to be entertained by anyone who attends to the meaning of it. For it credits memory or consciousness with having a strange magical power to produce its object, though that object must have existed before the memory or consciousness that ·supposedly· produced it.

Consciousness is the testimony of one faculty; memory is the testimony of another faculty. To say that •the testimony is the cause of •the thing testified is surely absurd if *anything* is absurd, and Locke couldn't have said it if he hadn't confused the testimony with the thing testified....

(3) Isn't it strange that the sameness or identity of a person should consist in something that is continually changing, and is never the same for two minutes?

Our consciousness, our memory, and every operation of the mind are still flowing like the water of a river, or like time itself. The consciousness I have this moment can't be the same consciousness that I had a moment ago, any more than this moment can be that earlier moment. Identity can only be affirmed of things that have a continuous existence. Consciousness and every kind of thought is passing and momentary, and has no continuous existence; so if personal identity consisted in consciousness it would certainly follow that no •man is the same •person any two moments of his life; and as the right and justice of reward and punishment is based on personal identity, no man would be responsible for his actions! But though I take this to be the unavoidable consequence of Locke's theory of personal identity, and though some people may have liked the doctrine the better on this account, I am far from imputing anything of this kind to Locke himself. He was too good a man not to have

rejected in horror a doctrine that he thought would bring this consequence with it.

(4) In his discussion of personal identity, Locke uses many expressions that I find unintelligible unless he wasn't distinguishing •the sameness or identity that we ascribe to an individual from •the identity which in everyday talk we ascribe to many individuals of the same species.

When we say that pain and pleasure, consciousness and memory, are *the same* in all men, this 'same'ness can only mean *similarity*, i.e. sameness *of kind*. If it meant individual identity, i.e. identity properly and strictly so-called, it would be implying that the pain of one man could be the same individual pain that another man also felt, and this is no more possible than that one man should be another man; the pain I felt yesterday can no more be the pain I feel to-day than yesterday can be today; and the same thing holds for *every operation of the mind and *every episode of the mind's undergoing something. The same kind or species of operation may occur in different men or in the same man at different times, but it is impossible for the *the same individual operation* to occur in different men or in the same man at different times.

So when Locke speaks of 'the same consciousness being continued through a succession of different substances', of 'repeating the idea of a past action with the same consciousness we had of it at the first' and 'the same consciousness extending to past and future actions', these expressions are unintelligible to me unless he means not the same individual consciousness but a consciousness that is of the same kind.

If our personal identity consists in consciousness, given that consciousness can't be •the same individually for any two moments but only •of the same kind, it would follow that we are not for any two moments the same *individual* persons but the same *kind* of persons.

As our consciousness sometimes ceases to exist—as in sound sleep—our personal identity must cease with it, according to Locke's theory. He allows that a single thing

can't have two beginnings of existence; so our identity would be irrecoverably lost every time we stopped thinking, even if only for a moment.

Chapter 7: Theories about memory

The common theory of ideas—i.e. of images in the brain or in the mind of all the objects of thought—has been very generally used to account for the faculties of •memory and •imagination as well as •perception by the senses....

The Aristotelian view about memory is expressed by Alexander Aphrodisiensis, one of the earliest Greek commentators on Aristotle, thus:

....The operations of our senses in relation to perceptible objects makes an impression...or picture in our original sensorium, this being a trace of the motion caused in us by the external object. When the external object is no longer present, the trace remains, and is preserved as a kind of image of the object, and because of this preservation it becomes the cause of our having memory.... [The sensorium is part of the *brain*.]

A passage from Alcinous, expounding Plato, shows the ancient Platonists and Aristotelians agreeing that:

When the form or type of things is imprinted on the mind by the sense-organs, and imprinted in such a way that it isn't deleted by time but preserved firm and lasting, its preservation is called *memory*.

On this basis, Aristotle explains the shortness of memory in children by their brain's being too moist and soft to keep impressions that are made on it. And the defect of memory in old men he explains by the hardness and rigidity of their brain, which stops it from receiving any durable impression.

This ancient theory of the cause of memory is defective in two respects. One could express them by saying that the theory fails *both* parts of Newton's 'first rule of philosophising.' [see Essay 1, near the end of chapter 3]. (1) If the assigned cause really *did* exist, it would be far from explaining the phenomenon of memory. (2) There is no evidence—not even a probability—that *that* cause exists.

(1) All the nerves terminate in the brain; and disorders and damage to the brain are found to affect our powers of perception even when the external sense-organ and the relevant nerve are sound. These two facts make it *probable* that in perception some impression is made on the brain, as well as on the sense-organ and the nerves. But we are totally ignorant of the nature of this impression on the brain. It can't resemble the perceived object, and it doesn't provide the faintest explanation for the sensation and perception that follow it. I have argued all this in Essay 2, and I'll now take it for granted.

Well, then, if the impression on the brain is insufficient to explain the *perception of objects that are *present, it can't have a better chance of explaining the *memory of things that are *past!

So that even if it were certain that the impressions made on the brain in perception remain as long as there is any memory of the object, all we could infer from this is that by the laws of Nature that impression is connected with the remembering of that object. We would still know nothing about *how* the impression contributes to this remembering, because it is impossible to discover how thought of any kind should be produced by an impression on the brain or on any part of the body.

It would be absurd to say that this impression, rather than being the *cause of* memory, *is* memory.

If a philosopher undertakes to explain the force of gunpowder in the discharge of a musket, and then solemnly tells us that the cause of this phenomenon is the pulling of the trigger, this wouldn't make us much wiser! Well, we aren't told any more about the cause of memory by being told that it is caused by a certain impression on the brain....

(2) Another defect in this theory is that there's no evidence making it even *probable* that the assigned cause does exist, i.e. that the impression made on the brain in perception *does* remain after the object is removed.

That impression, whatever its nature may be, is caused by the impression that the object makes on the sense-organ and on the nerve. Philosophers suppose, without any evidence, that when the object is removed and the impression on the sense-organ and nerve stops, the impression on the brain continues and is permanent—i.e. that **when the cause is removed, the effect continues**. The brain, surely, doesn't look better fitted to retain an impression than the organ and the nerve are.

Another point: suppose that the impression on the brain *does* continues after its cause is removed—then its effects ought to continue while it continues, i.e. the sensation and perception should be as permanent as the impression on

the brain that is supposed to be their cause. But here the philosopher makes a second supposition, with as little evidence as he has for the first assumption, and of a contrary nature to that one. That is, he assumes **that while the cause remains, the effect ceases**.

And if this second supposition is granted, there is need for a third, namely that the same cause that at first produced sensation and perception afterwards produces memory though memory is an operation essentially different both from sensation and perception.

A fourth supposition must also be made, namely that although this cause is permanent, doesn't produce its effect at all times—it must be like an inscription that is sometimes covered with rubbish and on other occasions made legible. For the memory of things is often interrupted for a long time, and circumstances bring to our recollection things we had long forgotten. And to top off my series of criticisms: many things are remembered that aren't objects of the senses, couldn't ever have been perceived by the senses, and so couldn't make any impression on the brain by means of the senses.

Thus when philosophers have piled one supposition on another, as the giants piled up the mountains in order to climb to the heavens, nothing comes of it: memory remains inexplicable, and we don't know how we remember things past any more than we know how we are conscious of the present.

But I should remark here that although impressions on the brain are no help in *explaining* memory, it's very likely that in the human frame memory does depend on some proper state or condition of the brain. Although the contents of our memory aren't—and couldn't possibly be—in the least *like* any brain-state, still Nature may have subjected us to this law that a certain constitution or state of the brain is necessary for memory. Many well known facts lead us to conclude that this is really the case.

Careful empirical work might lead to the discovery of the right way to keep the brain in the state that is favourable to memory, and of remedying the brain disorders that hinder memory. This would be an outstanding medical advance; but even if it were made, it would give no help in understanding how one brain-state assists memory and another hurts it.

I know for sure that the impression made on my hand by the jab of a pin occasions acute pain. But can any philosopher show how this cause produces the effect? The nature of the impression is perfectly known, but that knowledge gives no help in understand how the impression affects the mind. And if we knew •the brain-state that causes memory as clearly as we know othe impression on my hand that causes pain, we still wouldn't know anything about how that brain-state contributes to memory. For all we know to the contrary, we could have been so constituted that the jab of a pin in the hand, instead of causing pain, should cause a memory! And that constitution would be no more inexplicable than our actual constitution is.

The body and mind operate on each other according to fixed laws of Nature; and it is the business of a philosopher to discover those laws by observation and experiment. But when he has discovered them, he must settle for knowing them as facts whose cause is inscrutable to the human understanding.

When Locke and those who have followed him speak of impressions on the brain as the cause of memory, they are more cautious than the ancients in saying this, and say it only in passing. Their preferred view is that memory is caused rather by our retaining in our minds the ideas acquired by either sensation or reflection.

Locke says this can be done in two ways:

First, by keeping the idea for some time actually in view—this is called *contemplation*. Secondly, by the power to revive again in our minds the ideas which, after being imprinted, have disappeared or have been (as it were) laid out of sight; and this is memory, which is (as it were) the storehouse of our ideas. (Adapted by Reid from Essay II.x.1-2)

To explain this more clearly, Locke immediately adds the following remark:

> But our ideas are nothing but actual perceptions in the mind, and cease to be anything when they are not perceived; so that this 'storing of ideas in the repository of the memory' really means only that the mind has a power in many cases to revive perceptions that it has once had, with attached to them the additional perception that it has had them before. It is in this sense that our ideas are said to be 'in our memories', when they are actually nowhere. It's just that there is an ability in the mind to revive them again when it wants to, and (as it were) paint them on itself anew, though some with more and some with less difficulty, some more lively and others more obscurely. (II.x.2)

In this account of memory, the repeated use of the phrase 'as it were' leads one to think that the account is partly figurative; so we must try to distinguish the •figurative part from the part that is philosophical and therefore absolutely •literal·. The figurative part is addressed to the ·reader's· imagination: it presents a picture of memory that needs to be seen from a proper distance and from a particular point of view. The literal part is addressed to the ·reader's· understanding, and we should be able to view it from close up and subject it to a critical examination.

The analogy between memory and a repository, and between remembering and keeping, is obvious and is to be found in all languages, because it is very natural to express the operations of the mind by images taken from material things. But in philosophy we ought to draw aside the veil of imagery and view the mind's operations naked.

So when we are told that memory is a 'repository' or 'store-house' of ideas, in which they are 'stored' when not perceived and brought out again brought when they are needed, I take this to be popular and rhetorical ·and figurative. For Locke tells us that when they are not perceived they 'are nothing' and are 'nowhere'; so they can't ·literally· be stored in a repository or retrieved from it.

But he also tells us that 'this "storing of ideas in the repository of the memory" really means only that the mind has a power in many cases to revive perceptions that it has once had, with attached to them the additional perception that it has had them before'. I think we have to understand this literally and philosophically.

But it seems to me that when something has stopped being *anything*, it is as hard to 'revive' it as to 'store' it in—or bring it out of—a 'repository'. Once a thing has been annihilated, *it*—the very same thing—can't be produced again, though another thing like it may be produced. Locke in another place accepts that a single thing can't have two beginnings of existence.... From this it follows that an ability to 'revive' our ideas or perceptions after they have ceased to exist can't mean more than an ability to create new ideas or perceptions similar to those we had before.

They are said to be revived 'with attached to them the additional perception *that the mind has had them before*'. This surely would be a deceptive perception, because an idea can't have two beginnings of existence, and we can't believe that it could. All we can believe is that we formerly had ideas

or perceptions very like these ones though not identically the same. And in any case, one would think that for me to have a perception that *this is the one I had before* or *this is like the one I had before*—it doesn't matter which—requires me to have a memory of the one I had before.

In explaining this 'reviving' of our perceptions, Locke also says that 'the mind (as it were) paints them on itself anew'. There may be something figurative in this; but even allowing for that, the remark must imply that the mind in painting things that have ceased to exist must have a memory of what they were, since every painter must have a copy either in front of him or in his imagination and memory.

These remarks on Locke's account of memory are intended to show that his system of ideas throws no light on this faculty, but rather tends to darken it....

Everyone knows what memory is; everyone has a clear notion of it. But when Locke speaks of *a power to revive in the mind* ideas that were imprinted and then disappeared, or that have been (as it were) laid out of sight, one would hardly know it was memory he was describing if he hadn't told us! There are other things that it seems to fit at least as well as it does memory:

I see the picture of a friend. I shut my eyes, or turn them another way, and the picture disappears or is (as it were) laid out of sight. I have a power to turn my eyes again towards the picture, and immediately the perception is revived.

Is this *memory*? Surely not! But it fits Locke's account as well as memory itself can do.

I would point out that Locke uses the word 'perception' in too indefinite a way, as he does the word 'idea'.

In his chapter on perception (*Essay* II.ix), he says that perception is the 'first faculty of the mind exercised about our ideas' [= 'the mind's most basic way of engaging with ideas']. But

here ·in Locke's chapter on memory (*Essay* II.x)· we are told that ideas are 'nothing but perceptions'. It strikes me as odd to say that

•perception is the first faculty of the mind exercised about our ideas,

and even more odd to say that

•ideas are the first faculty of the mind exercised about our ideas.

·Of course Locke doesn't say about ideas anything as weird as that, but why not? Why shouldn't ideas be a faculty, as well as perception, if both are the same?

Memory is said to be a power to revive our perceptions. Doesn't it follow from this that everything that can be remembered is a perception? If that is so, it will be difficult to find anything in Nature but perceptions!

Our ideas, Locke tells us, are 'nothing but actual perceptions'; but in many places in the *Essay* he says that ideas are the *objects of* perception, and that the mind in all its thoughts and reasonings doesn't—and can't—have any immediate *object* other than its own ideas. Doesn't this make it seem that Locke either

•regarded the operations of the mind as the same thing as the objects of those operations

or

•used 'idea' sometimes in one sense and sometimes in another, without warning us of the ambiguity and probably without being aware of it?

One of the doctrines in Hume's philosophy is that there is no distinction between the operations of the mind and their objects. But I see no reason to attribute this opinion to Locke. Instead, I think that despite his great judgment and candour, his understanding was entangled by the ambiguity of 'idea' and that most of the defects of his *Essay* come from that.

Hume saw further into the consequences of the common system concerning ideas than any author had done before him. [The 'common system' is the 'common theory' discussed in Essay 2, chapter 8.] He saw the absurdity of making every object of thought double, splitting it into •a remote object that has a separate and permanent existence and an •immediate object called an 'idea' or 'impression' that is an image of the other and doesn't exist except when we are conscious of it. According to this system, our only communication with the external world is through the internal world of ideas, which represents the external world to the mind.

He saw that we had to reject one of these worlds as a fiction, and the question was *Which?* On the one hand,

All mankind—learned and uneducated—had invented the existence of the external world, without any good reason.

On the other:

Philosophers had invented the internal world of ideas, so as to account for the mind's communication with the external world.

Hume adopted the former of these two opinions, and exercised his reason and eloquence in support of it.

Berkeley had gone far enough along this road to reject the material world as fictitious, ·a mere invention·, but it was left to Hume to complete the system, thus:.

According to his system, the only things a man can know or conceive are impressions and ideas in his own mind. And these ideas are not *representatives*, as they were in the old system. There is nothing else in Nature, or anyway nothing within the reach of our faculties, for them to represent. What the vulgar call 'the perception of an external object' is nothing but a *strong impression on the mind. What we call 'remembering a past event' is nothing but a present impression or idea that is *weaker than that of

perception. And what we call 'imagination' is a present idea that is •weaker than that of memory.

So as not to be unfair to him, I quote his words in his Treatise of Human Nature:

> We find by experience that when an impression has been present to the mind, it re-appears there later as an idea; and it can do this in either of two ways: •when in its new appearance it retains a good deal of its first liveliness and is intermediate between an impression and an idea; or •when it entirely loses that liveliness and is a perfect idea. The faculty by which we repeat our impressions in the first manner is called the 'memory', and the other the 'imagination'. (Treatise I.i.3)

I have ·three· comments to offer concerning this account of memory and imagination.

(1) What are we to understand here by 'experience'? Hume says that we find all this 'by experience'; and I don't see how this 'experience' can be meant as anything but memory. I mean 'memory' in the common meaning of the word, not the 'memory' that Hume defines! In the vulgar way of looking at things, memory is an immediate knowledge of something past. Hume doesn't admit that there is any such knowledge in the human mind. He maintains that memory is nothing but a present idea or impression. But in defining 'memory' as he understands it, he takes for granted the kind of memory that he rejects. For if we are to find 'by experience' that an impression, after appearing once to the mind, then appears a second and a third time with different degrees of strength and liveliness, we'll need to have a memory—in the vulgar sense of the word!--of its first appearance that is clear enough for us to recognize it on its second and third appearances despite its having considerably changed.

All experience presupposes memory—there can't be any such thing as experience unless we trust memory, either our own or someone else's. So it seems from Hume's account of this matter that he found himself to have •the kind of memory that he acknowledges and defines, by exercising •the kind of memory that he rejects.

(2) What do we find by experience or memory? Hume answers that we find 'that when an impression has been present to the mind, it re-appears there later as an idea; and it can do this in either of two ways'. If experience informs us of this, it certainly deceives us, for the thing is impossible and Hume himself shows it to be so. Impressions and ideas are fleeting perishable things that don't exist except when we are conscious of them. If an impression could make a second and a third appearance to the mind, it would have to have existed continuously throughout the intervals between these appearances, and Hume accepts that that is a gross absurdity. So it seems that we 'find by experience' something that is impossible. Our experience is deceiving us, making us believe contradictions.

You may want to reply on Hume's behalf:

The 'different appearances of the impression' should be understood not literally but figuratively. The impression is treated like a person, and made to appear at different times and in different clothing, when all that is meant is that there are appearances

- •first of an impression,
- •then of something intermediate between an impression and an idea (we call it memory),
- •then finally of a perfect idea (we call it imagination).

This figurative meaning fits best with the last sentence of the quoted passage, where we are told that memory and imagination are faculties whereby we 'repeat our

impressions' in a more or less lively manner. To 'repeat an impression' is a figurative turn of speech which signifies making a *new* impression that is *like* the previous one.

If we clear Hume of the absurdity implied in the literal meaning, by understanding him in this figurative way, then his definitions of 'memory' and 'imagination'—stripped of their figurative dress—come down to this: Memory is the faculty of making a weak impression, and imagination is the faculty of making a still weaker impression, after a corresponding strong one. These definitions of 'memory' and 'imagination' have two defects: (a) They convey no notion of the thing defined; and (b) They can be applied to things of a very different nature from those that are defined....

(3) When Hume tells us that we have an ability to repeat our impressions in a more or less lively manner, this implies that •we are the causes of our ideas of memory and imagination; but this contradicts what he says shortly before that, when he maintains that •impressions are the cause of their corresponding ideas, supporting this by what he calls a 'convincing argument'. The argument for this needs to be very convincing! If take the idea to be •a second appearance of the impression, then the impression is the cause of itself. And if the idea is •the first appearance of • a new impression similar to the previous one, then the impression goes out of existence and *then* produces the idea. Such are the mysteries of Hume's philosophy.

Notice that the common system's doctrine that ideas are the only immediate objects of thought leads to scepticism about •memory as well as about •the objects of sense. And this holds true whether the ideas are placed in the mind or in the brain.

Ideas are said to be internal and present, having no existence except when they are in the mind. The objects of

sense are external things that exist continuously. When it is maintained that ideas or phantasms are the only things we immediately perceive, how can we from *their* existence infer the existence of an external world corresponding to them?

This hard question seems not to have occurred to the Aristotelians. Descartes saw the difficulty, and tried to find arguments by which we might infer the existence of external objects from the existence of our phantasms or ideas. The same course was followed by Malebranche, Arnauld, and Locke; but Berkeley and Hume easily refuted all their arguments and demonstrated that there is no strength in them.

The system of ideas naturally generates the same difficulty with regard to memory. (The only reason why philosophers didn't notice it is that they attend less to memory than to the senses.) Ideas are ·supposed to be · present things: how from my having a certain idea in my mind now can I infer that a certain event corresponding to it really happened ten or twenty years ago?....

It seems not to have occurred to Locke or to Berkeley that their system has the same tendency to overturn the testimony of memory as to overturn the testimony of the senses. Hume saw further than both, and found this consequence of the system of ideas to fit perfectly with his aim of establishing universal scepticism. So his system is more consistent than theirs, and his conclusions agree better with the premises.

Even if we grant to Hume that our ideas of memory afford no solid reason for believing in the past existence of things that we remember, he still has to face this question: How does it come about that *perception and *memory are accompanied by belief, while bare *imagination is not? On his system this belief can't be *justified*; but still it ought to be *accounted for* as a phenomenon of human nature.

He has done this giving us a new theory of belief in general—a theory that fits very well with the theory of ideas, seems to be a natural consequence of it, and at the same time reconciles perfect scepticism with all the belief that we find in human nature. [Reid is here being very sarcastic. He means that perfect scepticism is compatible with everything that people in general believe if we understand those beliefs as being the sort of thing that Hume says belief is.]

[This paragraph amplifies Reid's text in ways that the small-dots apparatus can't easily cope with. The use, here and hereafter, of 'F' as a dummy predicate attached to 'idea' replaces Reid's talk of a 'modification' of ideas.] Well, then, what *is* this belief? The idea-theorist will have to say either that

- •Having a belief is just having an idea, or that
- •Having a belief is having an F idea,

for some suitable value of F. Now, we conceive many things that we don't believe, so the account of belief must be of the second of these kinds, i.e. a belief must be an idea of a certain *kind*, an F idea for some F. When we believe in an object, our idea of it is the same as when we merely conceive it; the belief doesn't add any new idea to the thought we are having. So what marks off belief from mere conception—i.e. the required value of F—must have to do not with *what* idea the person has in his mind but rather with *how* he has it in his mind. Listen to Hume:

All the perceptions of the mind are of two kinds, impressions and ideas, which differ from each other only in their different degrees of force and liveliness. Our ideas are copied from our impressions and represent them in every detail. When you want somehow to vary your idea of a particular object, all you can do is to make it more or less strong and lively. If you change it in any other way it will come to represent a different object or impression. (Similarly with colours. A

particular shade of a colour can acquire a new degree of liveliness or brightness without any other variation; but if you produce any other change it is no longer the same shade or colour.) Therefore, as belief merely affects *how* we conceive any object, all it can do—the only kind of variation that won't change the subject, so to speak—is to make our ideas stronger and livelier. So an opinion or belief can most accurately defined as: a lively idea related to or associated with a present impression. (Treatise I.iii.7)

This theory of belief is rich with consequences, which Hume traces with his usual acuteness and brings into the service of his system. Much of his system is indeed built on it, and is of itself sufficient to make a case for what he calls his hypothesis that •belief is strictly an act of the *feeling* part of our natures rather than of the *thinking* part' (*Treatise* I.iv.1)

It is very difficult to examine this account of belief with as straight a face as Hume had when he proposed it.... There is surely no ·other· science in which able and versatile men have fallen into such gross absurdities as ·some of them do in treating of the powers of the mind. I can't help thinking that Hume's account of the nature of belief, and of what distinguishes perception from memory and both of them from imagination, is as absurd as anything ever seriously maintained by any philosopher.

Believing that P—that's a mental operation of which everyone is conscious, and everyone understands perfectly what belief is, though on account of its simplicity we can't give a logical definition of it. If we compare it with the strength or liveliness of our ideas, or with any feature of ideas, they are so far from appearing to be one and the same that they haven't the least similarity.

'A strong belief differs from a weak belief only in *degree*'—I can easily grasp *that*; but as for '•Belief differs from •no-belief

only in degree'—no-one who understands his own language could believe that. For it amounts to saying that *something and *nothing differ only in degree, or that nothing is a ·certain low· degree of something!

For every proposition that can be believed, there is a contrary proposition that can be believed, this belief being a contrary of the other. The ideas of both beliefs, according to Hume, are the same except for their different degrees of liveliness. That is: *contraries differ only in degree!* Thus, pleasure may be a degree of pain, and hatred a degree of love. But there's no profit in tracing the absurdities that follow from Hume's doctrine of belief, for none of them can be more absurd than the doctrine itself.

Everyone knows perfectly what it is to *see an object with his eyes, what it is to *remember a past event, and what it is to *conceive something that doesn't exist. These ·three are quite different operations of the mind, and everyone is as certain of this as he is that sound differs from colour and both differ from taste. 'Sound and colour and taste differ only in degree'—I don't find that any *more* incredible than 'Seeing and remembering and imagining differ only in degree'.

Hume in the third Book of his *Treatise of Human Nature* is aware that his theory of belief is open to strong objections, and seems to retract it somewhat; but *how far* he retracts it is hard to say. He seems still to think that a belief is only an F idea but that 'vivacious' [replaced elsewhere in this version by 'lively'] is not the right word to express what F stands for. Instead of 'vivacious' he uses some analogical phrases to explain F, such as 'apprehending the idea more strongly or taking firmer hold of it'. [This refers to an item in an Appendix to *Treatise* I, first printed at the end of the volume that is mainly devoted to *Treatise* III.]

There is nothing more meritorious in a philosopher than to retract an error when he becomes convinced that it is an error; but in this instance I humbly think that Hume claims that merit without doing much to deserve it. For I can't see that 'apprehending an idea more strongly or taking firmer hold of it' expresses any value of F other than what was earlier expressed by 'strong' and 'vivacious', or even that it expresses the same value more properly. Hume holds that

perception involves an F idea, memory involves an F idea, and imagination involves an F idea,

the differences consisting purely in different degrees of Fness. And this view is guilty of all the absurdities I have listed, no matter *what* he takes Fness to be—whether it is liveliness or something else that doesn't even have a name.

Before leaving the subject of memory, I should remark on Aristotle's distinction between •memory and •reminiscence, because it has a real basis in Nature although there is not, I think, any ordinary-language way of marking it.

Memory is a kind of *habit*; it isn't always at work with regard to things we remember, but it is ready to suggest them when there is a need to do so. There are three degrees of this habit:

- •The most perfect degree: the ·remembered· thing presents itself to our remembrance spontaneously and without labour as often as there is occasion.
- •Second best: the ·remembered· thing is forgotten for a period of time even when there is a need to remember it, but eventually some incident brings it to mind without any search.
- •Third best: we cast about and search for what we want to remember, and at last find it.

The third of these is, I think, what Aristotle calls 'reminiscence' as distinguished from 'memory'.

So reminiscence includes *willing* to recollect some past thing and *searching* for it. [Reid like most of his contemporaries thought that all voluntary action starts with an act of *willing*. It is something like *actively wanting* or *setting oneself* to do such-and-such.] It may be objected:

If we *will to remember something, we must have a conception of the thing we will to remember; we can't *will something without conceiving of it. That being so, it seems that willing to remember something implies already remembering it, in which case there's no need to search for it.

But this difficulty is easily removed. When we will to remember a thing, we must remember *something relating to it* that gives us a relative conception of it; but we may at the same time have no conception of what the thing *is*, only a conception of how it relates to something else. For example, I remember that a friend asked me to do something at the University library, and I forgotten what I was to do. By applying my thought to what I *do* remember concerning it—who made the request, and when and where and in what

conversational context—I am led in a sequence of thought to the very thing I had forgotten, and thus I come to recollect clearly what it was that he asked me to do.

Aristotle says that brute animals don't have reminiscence, and I think he is probably right. But he says that they do have memory. No doubt they have something very *like* memory, sometimes in a very high degree. A dog knows his master after long absence. A horse will, as accurately as a man, trace back a road he has once travelled; and what makes this especially strange is that the thought-sequence that the horse had when going one way must be reversed on his return.... Brutes certainly can learn much from experience, which seems to imply memory.

Yet I see no reason to think that brutes measure time as men do, by days, months, or years, or that they have any clear knowledge of •the interval between things that they remember, or of •their distance from the present moment. If we couldn't record transactions according to their dates, human memory would be very different from what it is, and perhaps would be more like the memory of brutes.