

Conception

No. 4 of *Essays on the Intellectual Powers of Man*

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[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.

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Chapter 1: Conception (or simple apprehension) in general

Conceiving, imagining, apprehending, understanding, having a notion of a thing, are common words used to express the operation of the understanding that the logicians call *simple apprehension*. In ordinary language the same thing is meant by ‘having an idea’ of a thing—a usage that I think has become current since Locke’s time.

Logicians define ‘simple apprehension’ to be the bare •conception of a thing without any •judgment or •belief about it. If this were intended as a strictly logical definition, one might object that ‘conception’ and ‘apprehension’ are synonyms, and that we may as well define ‘conception’ by ‘apprehension’ as vice versa. But it ought to be remembered that the simplest operations of the mind can’t be logically defined. To have a clear notion of them, we must attend to them as we feel them in our own minds. If you want a clear notion of *scarlet*, you’ll never get it from a definition; what you must do is to look at an example of scarlet and compare it with the colours that come nearest to it, *observing* the difference that marks off scarlet from the others—a difference that you still can’t possibly *define*.

Everyone is aware that he can conceive a thousand things about which he believes nothing at all—things such as a horse with wings, a mountain of gold—but although conception can occur without any degree of belief, even the smallest belief has to involve conception. Someone who *believes* must have some conception of *what* he believes.

Without trying to define this operation of the mind, I’ll try to explain some of its properties; •in chapter 2• to consider the theories about it; and •in chapter 3• to discuss mistakes that philosophers have made concerning it. •The present chapter will expound nine properties of conception•.

(1) Conception enters as an ingredient in *every* operation of the mind. Our senses can’t give us a •belief in any object without giving some conception of it at the same time. No man can either •remember or •reason about things of which he has no conception. When we •will to engage in some physical activity, we must have some conception of what we will to do. There can’t be any •desire or •aversion, •love or •hatred, without some conception of the object. We can’t •feel pain without conceiving it, though we can conceive it without feeling it. All this is self-evident.

So there must be conception in every operation of the mind, everything we call ‘thought’. When we analyse the operations of the •understanding or of the •will we shall always find this at the bottom. . . .; but though there is no mental operation without conception, still conception can occur nakedly detached from all the rest, and then it is called ‘simple apprehension’ or the ‘bare conception’ of a thing.

[a) Reid is here using ‘thought’ as a catch-all term for operations of the mind, a very broad sense of the term that became common after Descartes’s correspondingly broad sense for *pensée* and *cogitatio*. (b) For Reid the terms ‘will’ and ‘understanding’ between them divide up the entire life of the mind. His *Essays on the Intellectual Powers of Man*, from which the present work comes, are devoted to the understanding. Reid’s earlier *Essays on the Active Powers of Man* were concerned with the will.]

As all the operations of our mind are expressed by language, everyone knows that it is one thing (a) to understand what is said, to conceive or apprehend its meaning, whether it is a word, a sentence, or a whole speech; and it is another thing (b) to judge concerning it, to assent or dissent, to be persuaded or moved. (a) is simple apprehension, and can occur without (b); but (b) cannot occur without (a).

(2) In bare conception there can't be either truth or falsehood, because conception neither affirms nor denies. Every judgment, and every proposition [= 'sentence'] by which judgment is expressed, must be true or false; and truth and falsehood—using those terms in their proper sense—can belong to nothing but judgments or propositions that express judgments. . . .

[We often say such things as 'He has a false conception of x', Reid acknowledges, but he explains this away, saying that 'we always find that when we speak of true or false conceptions, we mean true or false opinions'. He quotes a passage from Locke expressing the same view, on the assumption—Reid says—that Locke in this context is using 'idea' to mean 'conception'. Then he shifts into something that he admits is a 'digression' from the supposed topic of this section. Thus:]

Incidentally, in this passage as in many others Locke uses the word 'perception' as well as 'idea' to signify what I call 'conception' or 'simple apprehension'. And in his chapter on perception he uses it in the same sense. 'Just as perception is the mind's first way of engaging with ideas,' he says, 'the idea of· it is the first and simplest idea we have from reflection. Some call it *thinking*' (*Essay* II.ix.1). 'Perception seems to me to be what distinguishes the animal kingdom from the inferior parts of Nature' (11). 'Perception is the first step towards knowledge, and is the inlet through which all its materials come into the mind' (15).

Locke has followed the example of Descartes, Gassendi, and other Cartesians in giving the name 'perception' to the bare conception of things. And he has been followed in this by Berkeley, Hume, and many recent philosophers when they discuss ideas. They were probably led into this impropriety by the common theory of ideas, which teaches us that conception, sense-perception, and memory are only

·three· different ways of *perceiving* ideas in our own minds. If that theory is well founded, it will indeed be very hard to find any specific distinction—any radical difference of kind—between conception and perception. But there is reason to distrust any philosophical theory when it leads men to corrupt language and to run together under one name operations of the mind that common sense and ordinary language teach them to distinguish.

[Reid next concedes that it *can* happen that someone mistakes his mere conceptions with perceptions or memory—in some kinds of illness, in madness, or in cases where a memory is 'so very weak' that the person wonders whether 'dreamed or imagined it'. He also conjectures that a very young child may say things that are untrue not because he is a liar but because he has 'mistaken the roving of his own fancy for things that he remembers'. Then:]

Granting all this, I assert that people whose intellectual faculties are sound and sober and mature can distinguish with certainty •what they perceive or remember from •what they merely conceive, when those operations have any degree of strength and clarity. [He goes on to say that ordinary good sense and intellectual competence enables one to avoid running these mental operations together, and that it is inexcusable that philosophers should commit such a blunder when they are theorizing about ideas. Then:]

Coming back now from this digression into which the misuse of the word 'perception' by philosophers has led me: it appears evident that the bare conception of an object, not including any opinion or judgment, can't be either true or false. Truth and falsity, with those words taken in their proper senses, are altogether inapplicable to this operation of the mind.

(3) Of all the analogies between the operations of body and those of the mind, the strongest and most obvious to all

mankind is the analogy between •painting or other creative arts and •the power of conceiving objects in the mind. That is why in every language the words used to refer to this power of the mind and its various special cases are analogical, being borrowed from the creative arts. We consider this power of the mind as a creative power that enables us to make for ourselves images [= 'likenesses'] of the objects of thought.

It's useless to try to avoid •this analogical language, for we have no other language on the subject; yet •it is dangerous and apt to mislead. All analogical and figurative words have a double meaning; and if we aren't very careful we'll slide unknowingly from the borrowed and figurative meaning of a word into its original literal meaning. We are apt to carry the parallel between the things compared—in our present case, between paintings and conceptions—further than it will hold, and thus very naturally to fall into error.

To avoid this as far as possible in our present context, we should attend to the dissimilarity between •conceiving a thing in the mind and •painting it for the eye, as well as to their similarity. The similarity impresses us and gives us pleasure; and we are less inclined to notice the dissimilarity. But the philosopher ought to attend to it, and to bear it in mind continuously in his reasonings on this subject, as a monitor to warn him against the errors into which the analogical language is apt to draw him.

When a man paints, he produces a work that remains when his hand is taken off, and continues to exist even if he doesn't think of it again. Every stroke of his brush produces an effect, and this effect is different from his action in making it because it continues to exist when the action stops. The action of painting is one thing, a cause; the picture produced is another, the effect.

Now let us consider what is done when he only *conceives* this picture. He must have conceived it before he painted

it; for everyone agrees that every work of art must first be conceived in the mind of the artist. What is this conception? It is an act of the mind, a kind of thought. This can't be denied. But does it produce any effect besides the act itself? Surely common sense answers No to this question. For everyone knows that it is one thing to *conceive* something, another thing to actually *make* it. It is one thing to plan, another to carry out. A man may spend a long time thinking about what to do, and then do nothing. Conceiving, as well as planning and deciding, are what the schoolmen called 'immanent' acts of the mind, which produce nothing beyond themselves. But painting is a 'transitive' act which produces an effect distinct from the operation, namely the picture. ['Immanent' comes from Latin meaning 'remaining within'; 'transitive' comes from Latin meaning 'going across', which implies 'going outside'.] So don't lose sight of the fact that what is commonly called 'the •image of a thing in the mind is nothing more than the •act or operation of the mind in conceiving the thing.

This is the common sense of men who haven't been tutored by philosophy, as their language shows. If someone ignorant of the language were to ask what 'conceiving a thing' means, we would find it natural to answer that it is *having an image* of it in the mind; and that may be the best explanation we have. This shows that 'conception' and 'image' of a thing in the mind are synonymous expressions. So the image in the mind is not the •object of conception, nor is it any •effect produced by conception as a cause. It is •conception itself. . . .

[Reid acknowledges that many philosophers maintain that in conception *what* one conceives is a '*real image*' = *thing-like image* [from Latin *res* = 'thing'], and that this is distinct from the act of conceiving it. He will discuss this view, he says, in his next chapter.]

(4) Keeping the content of (3) in mind, to guard us against being misled by the analogical language used on this subject, I point out a very strong analogy not only between

•conceiving in general and •painting in general

but also between

different •kinds of conceptions and different •kinds of painting.

The painter either (a) makes imaginative pictures, or (b) he paints from real objects of art or Nature that he has seen, or (c) he copies from the paintings of others. I think our conceptions admit of a very similar division.

(a) There are conceptions that may be called imaginative pictures. [Reid gives examples, e.g. Swift's conception of Lilliput. These can't be either true or false, he says, 'because they aren't accompanied by any belief and don't imply any affirmation or negation'. Then he turns to two kinds of conceptions that 'have an original or archetype to which they refer and with which they are believed to agree', and thus a basis on which they could be called true or false:]

(b) We have conceptions of individual things that really exist, such as the city of London or the government of Venice; these are analogous to pictures taken from the life. . . .

Individual things that really exist were created by God (though some of them may have been shaped up by man), and only God knows their whole nature. We know them only in part, so our conceptions of them must always be incomplete and inadequate; yet they may be true and sound as far as they go.

(c) Analogous to paintings that are copies of earlier paintings, we have conceptions of what the ancients called *universals*—i.e. of things that do or could belong to many individuals. These are •kinds and •species of things, such as *man* or *elephant*, which are species of substances; *wisdom* and *courage*, which are species of qualities; *equality* or

similarity, which are species of relations.

'From what originals are these conceptions formed? And when are they said to be true or false?' It seems to me that the original from which such a conception is copied—i.e. the thing that is conceived—is the conception or meaning that other competent speakers of the language attach to the same words. That is what makes conceptions of universals analogous to paintings of paintings.

Things are divided up into kinds and sorts not by •Nature but by •men. We are connected to so many individual things that we couldn't possibly give each of them its own individual name. If we are to get the knowledge of them that is needed for thought and talk about them, we have to *sort* them according to their different attributes. Those that have certain attributes in common are lumped together in one compartment and given a general name that belongs equally to every individual in that compartment. This common name must, therefore, signify the attributes that have been observed to be common to every individual in that compartment and to nothing else.

All that is needed for such a general word to fulfil its purpose is that all those who use it should attach *the same* meaning or notion—i.e. the same conception—to it. The common meaning is the standard by which such conceptions are formed, and they are said to be true or false according to whether they agree or disagree with that common meaning. Thus my conception of *felony* is true and sound when it agrees with the meaning of 'felony' in the laws relating to it and in authors who understand the law.

The thing that is conceived is the meaning of the word; and that meaning is the conception attached to the word by those who best understand the language.

An individual is signified in language either by •a proper name or by •a general word joined to further details that

distinguish the given individual from all others. If we don't know enough details about it, the individual—if it is an object of sense, and is nearby—can be pointed out to the senses. And if it is not within reach of the senses, we may be able to fix it by a description which, though very incomplete, may be true and sufficient to distinguish this individual from every other. So when we are speaking of individuals, we are very little in danger of mistaking the object or taking one individual to be another.

But, I repeat, our conception of an individual is always inadequate and lame. Individual things are the creatures of •God, and there are many facts about them that •we don't know and can't deduce by reasoning from what we do know. They have a *real essence* or *natural constitution* from which all their qualities flow; but our faculties don't comprehend this essence. That is why individual things can't be defined; for a definition ought to include the whole nature or essence of the thing defined. . . .

Universals are always expressed by general words; and all the words of a language except for proper names are •general words; they are the signs of •general conceptions. . . . These general conceptions are formed for the purpose of language and reasoning; and the object •from which they are taken and •with which they are intended to agree is the conception that other men attach to the same words. So *these* conceptions—unlike our conceptions of individuals—can be adequate, and can completely agree with the thing conceived. All this means is that men who speak the same language may completely agree in their meanings for many general words.

Thus, mathematicians have conceived what they call a 'plane triangle'. They have defined it precisely, and when I conceive it to be *a plane surface bounded by three straight lines* I have a conception of it that is both true and adequate.

Every property of plane triangles is either included in this conception or deducible from it by valid reasoning. This definition expresses the *whole* essence of the thing defined, as every good definition ought to do; but this essence is only what Locke very properly calls a •'nominal essence'; it is a general conception formed by the mind and joined to a general •word as its sign. ['Nominal' come from Latin *nomen* = 'name'.]

If all the general words of a language had a precise meaning, and were perfectly understood as mathematical terms are, all verbal disputes would be at an end and men would seem to differ in opinion only when they really *did* differ. But this is far from being the case. [Reid elaborates that point a little, and then concludes (4) thus:]

Our conceptions, therefore, appear to be of three kinds. They are either **(b)** the conceptions of individual things, the creatures of God; or they are **(c)** conceptions of the meanings of general words; or they are **(a)** the creatures of our own imagination. And these different kinds of conceptions have different properties, which I have tried to describe.

(5) Our conception of things can be anywhere on a scale from •very strong and lively down to •very faint and languid. These are qualities that properly belong to our conceptions, though we have only analogical names for them. Everyone is conscious of his conceptions' differing in this way, and greatly enjoys his lively conceptions when the object isn't of a painful sort.

Those who have lively conceptions commonly express them in a lively manner, i.e. in such a way that they arouse lively conceptions and emotions in others. People like that are the most agreeable companions in conversation, and the most acceptable in their writings.

[Reid continues through several paragraphs describing some of the causes of the liveliness of conceptions, e.g. their

being associated with strong emotions. He ends (5) with:]

When 'imagination' is distinguished from 'conception', it seems to me to signify one *sort* of conception, namely conception of visible objects. Thus, in a geometrical proposition I imagine the diagram and I conceive the demonstration; I think it would be all right to say that I •conceive both; but it would be less correct to say that I •imagine the demonstration.

(6) Our conceptions of things may be •clear, distinct, and steady, or they may be •obscure, indistinct, and wavering. The liveliness of our conceptions gives pleasure; but their distinctness and steadiness are what enable us to judge rightly and to express our sentiments clearly.

Why do we find, among people speaking or writing on the same subject, so much •darkness in one and so much •clarity in another? I think that the chief cause is that one had a •distinct and steady conception of what he said or wrote, and the other •didn't. Men usually find ways to express distinctly what they have conceived distinctly. . . . But a man can't possibly express distinctly something that he hasn't conceived distinctly. . . .

I think that indistinct conceptions of things usually cause not only •obscurity in writing and speaking but also •error in judging. [Reid goes on to say—using examples from geometry—that the main source of difference of opinion is difference of conception. Then:]

If this is really so, as it seems to be, it leads me to think that men are very much on a level with regard to mere •judgment, when we consider that faculty separately from the apprehension or conception of the things about which we judge; so that sound judgment seems to be the inseparable companion of clear and steady apprehension. We oughtn't to consider judgment and conception as two talents, of which it could be the case that you have just one of them and your

neighbour has just the other. Rather, they are talents that always go together.

Still, I would point out that some of our conceptions may be more usable in reasoning than others that are equally clear and distinct. I remarked earlier that some of our conceptions are of individual things, others of general and abstract things. It can happen that a man who has very clear conceptions of individual things is not so good at conceiving things that are general and abstract. I take this to be the reason why we find men who have good judgment in matters of common life, and perhaps good talents for poetical or rhetorical composition, yet find it very difficult to enter into abstract reasoning.

I don't want to seem out on my own in putting men so much on a level in respect of mere judgment, so let me support this opinion by the authority of two very thoughtful men, Descartes and Cicero. Descartes writes:

Judgment is the best shared-out thing in the world. . . . So it seems reasonable to believe that the power of judging well and of telling the true from the false—which is what we properly call 'judgment' or 'right reason'—is naturally equal in all men; so when our opinions differ it's not because some of us are more reasonable than others but solely because we take our thoughts along different paths and don't attend to the same things. (*Discourse on the Method* 1)

[Reid adds a short quotation to the same effect from Cicero's third book of orations.]

From what I have said in (6), it follows that to the extent that it is in our power to form clear and distinct conceptions of the subject on which we speak or reason, to *that* extent it is in our power to write and speak clearly and to reason soundly. Nature has put a wide difference between one man and another in respect of ability to conceive clearly, but still

it can't be doubted that it is in a very considerable degree in our power to have clear and distinct apprehensions of things about which we think and reason.

(7) Many authors have noted that when we merely conceive any object, the ingredients of that conception must be either •things with which we were previously acquainted through some other original power of the mind or •parts or attributes of such things. Thus, a man can't conceive colours if he has never seen anything, or sounds if he has never heard anything. He can't conceive what is meant by moral obligation, or by right and wrong in conduct, if he doesn't have a conscience.

Imagination can combine things that never were combined in reality. It can enlarge or diminish, multiply or divide, compound and build up the objects that Nature presents; but it can't by the utmost effort of that creative power that we ascribe to it bring into its productions *any* simple ingredient that Nature hasn't produced and brought to our knowledge by some other faculty.

Locke has expressed this beautifully and correctly:

Man's power over this little world of his own understanding is much like his power over the great world of visible things, where he can only compound and divide the materials that he finds available to him, and can do nothing towards the making the least particle of new matter, or destroying one atom of what already exists. Everyone will find that he is unable to construct in his understanding any simple idea that he hasn't received by the powers that God has given him. (*Essay* II.ii.2)

I think all philosophers agree about this. Hume, indeed, after acknowledging the truth of the principle in general, mentions what he thinks is a single exception to it: a man who has seen all the shades of a particular colour except

one might form in his mind a conception of the shade that he never saw. I don't think this is an exception; because a particular shade of a colour differs from other shades of the same colour only in degree and not in kind.

It should be noted that our most simple conceptions are not the ones that Nature immediately presents to us. When we come to years of understanding, we have the power of •analysing the objects of Nature, of •distinguishing their various attributes and relations, of •conceiving those attributes and relations one by one, and of •giving to each a name whose meaning extends only to that single attribute or relation. And thus our simplest conceptions are not those of any object in Nature, but of some single attribute or relation of such objects.

Thus, Nature presents to our senses *bodies that are solid and extended in three dimensions*. By analysing the notion of *body* that we get from our senses, we form the conceptions of

extension,
solidity,
space,
a point,
a line,
a surface;

which are all simpler conceptions than that of *body*. But they are the elements (as it were) •out of which our conception of *body* is made up, and •into which it can be analysed. I shall discuss this power of analysing objects in another place [Essay 5, chapter 3.] My only reason for mentioning it here is to prevent the content of (7) from being (mis)understood in such a way as to be inconsistent with it.

(8) Though our conceptions must be restricted to the ingredients mentioned in (7), there are no restrictions on how we can arrange those ingredients. In this we can pick

and choose, forming an endless variety of combinations and compositions, which we call creatures of the imagination. We can conceive these clearly, even if they are of things that never existed. And indeed everything that is made must have been conceived before it was made. Every work of human art, and every plan of conduct (whether in public or in private life), must have been conceived before being put into practice. And we cannot help thinking that God, before exercising his power by creating the universe, had a distinct conception of the whole and of every part, and saw it to be good and to be what he wanted.

It is the business of man, as a rational creature, to employ his unlimited power of conception for planning his conduct and enlarging his knowledge. It seems that only beings endowed with reason can act on a preconceived plan. Brute animals seem either to lack this power or to have it in a very low degree. They are moved by instinct, habit, appetite, or natural affection, according as these sources of energy are stirred up by the animal's situation at the given moment. But I see no reason to think that animals can envisage a connected plan of life, or form general rules of conduct. Indeed, we see that many *humans* to whom God has given this power make little use of it. They act without a plan, going wherever they are led by the emotion or appetite that is strongest at the time.

(9) The last property of the power of conception that I shall mention is the one that essentially distinguishes it from every other power of the mind. namely: it is not employed solely about things that exist. I can conceive a winged horse as easily and as distinctly as I can conceive a man whom I have seen. And this distinct conception doesn't give me the faintest inclination to believe that a winged horse ever existed.

The other operations of our minds are different in this respect. They are employed on things that really exist, and

carry with them a belief in their objects. When I feel pain, I am forced to believe that the pain I feel really exists. When I perceive any external object, my belief in its real existence is irresistible. When I distinctly remember any event, even one that no longer exists, I cannot doubt that it *did* exist. The consciousness we have of the operations of our own minds implies a belief in the real existence of the objects of those operations.

Thus we see that the powers of sensation, perception, memory, and consciousness are all employed solely about objects that do exist or have existed. But conception is often employed about objects that neither do nor did nor will exist. This is the very nature or essence of this faculty that its object, though clearly conceived, may have no existence. We call such an object a 'creature of imagination', but this 'creature' was never created!

So as not to get in a muddle about all this, we must distinguish the act or operation of the mind that we call 'conceiving an object' from the object that we conceive. When we conceive something, there is a real act or operation of the mind; we are conscious of this, and can have no doubt of its—i.e. the act's—existence. But every such act must have an object—you can't *conceive* unless you *conceive something*—and it may be that this object never existed.

If you haven't been acquainted with the doctrine of philosophers on this subject, I'm afraid you will think I am making a fool of myself by insisting on something as obvious as the fact that *men can conceive things that never existed*. You'll hardly believe that any man in his wits ever doubted this. Indeed, I know no truth more evident to the common sense and to the experience of mankind. But if it is opposed by the authority of philosophy, ancient and modern, as I think it is, I don't want to treat that authority so contemptuously as not to attend patiently to what can be said in support of it.

Chapter 2: Theories about conception

The theory of ideas has been applied to the •conception of objects as well as to •perception and •memory. It may be as tiresome for you as it is for me to return to the theory of ideas when I have already said so much about it; but ·there is a sober reason for coming back to it·. Its application to the •conception of objects couldn't suitably have been introduced until now, and studying this one application will provide a more comprehensive view of the theory and of the prejudices that have led philosophers so unanimously to accept it.

The theory of ideas, in all the various forms it has taken during more than two thousand years, seems to me to have arisen from ·two· prejudices. These get no support from the natural dictates of our faculties, or from attentive reflection on their operations; but they are prejudices that those who theorize about this subject are very apt to be led into by analogy.

- (1) In all the operations of the understanding, there must be some *immediate* communication between the mind and its object, so that the one can act on the other.
- (2) In all the operations of understanding, there must be an object of thought that really exists while we are thinking of it—or (as some philosophers have put it) what doesn't exist can't be intelligible.

If philosophers had seen that these are merely prejudices, and based purely on analogical reasoning, we would never have heard of 'ideas' in the philosophical sense of that word.

(1) The first of these principles has led philosophers to think that, because the external objects of sense are too remote to act on the mind immediately, there must be some image or shadow of them that is present to the mind and is the immediate object of perception. That there is such an

immediate object of perception, distinct from the external object, has been unanimously held by philosophers, though they have disagreed considerably about the name, the nature, and the origin of those immediate objects.

I have discussed what has been said in the support of this principle in Essay 2, chapter 4, to which I refer you now, so as not to say it all again. I have just one thing to add to what I said there. There seems to be no shadow of reason why the mind must have an object immediately present to it in its •intellectual operations, any more than in its •affections and •emotions. Philosophers haven't said that ideas are the immediate objects of love or resentment, of esteem or disapproval. It is accepted, I think, that the immediate objects of those affections [here = 'non-cognitive states'] are *persons* and not *ideas*. Yet persons are as far from being *immediately present* to the mind as other external objects are; and sometimes the object of one's love, disapproval etc. is a person who doesn't now exist and therefore can't act on the mind or be acted on by it.

(2) The second principle flatly contradicts what I said in (9) in the preceding chapter, namely that we can have a distinct conception of things that never existed. This is undoubtedly the common belief of people who haven't been instructed in philosophy, and they will think it as ridiculous to defend it by reasoning as to oppose it.

The philosopher says:

Though there may be a remote object that doesn't exist, there must be an immediate object that really exists; for something that doesn't exist can't be an object of thought. The *idea* must be perceived by the mind; and if it doesn't exist in the mind, there

can be no perception of it, no operation of the mind concerning it.

There is all the more reason to examine this because principle (1) depends on it. It could be that (2) is true and (1) false, but it can't be the case that (1) is true and (2) false. If we can conceive objects that have no existence, it follows that there can be objects of thought that don't act on the mind and aren't acted on by it; because something that has no existence can't either act or be acted on.

These two principles have led philosophers to think that in every act of memory and of conception, as well as of perception, there are two objects:

- the immediate object—the idea, the species [Aristotelian technical term], the form; and
- the mediated or external object.

The vulgar know of only one object, which in perception is some external thing that *does* exist, in memory something that *did* exist; and in conception it may be something that never existed. But the immediate object of the philosophers, the 'idea', is said to exist and to be perceived in all these operations.

These principles have not only led philosophers to split objects into two where others can find only one, but likewise have led them to reduce the •three operations I have just mentioned to •one, taking memory and conception (as well as perception, properly so-called) to be the perception of ideas. But to •the vulgar it seems utterly obvious that what is only remembered or only conceived is *not* perceived; and to speak of the 'perceptions of memory' appears to them as absurd as to speak of the 'hearing of sight'.

In short, these two principles carry us into the whole philosophical theory of ideas and furnish every argument that ever was used for their existence. If the principles are true, the 'ideas' system must be admitted, with all its

consequences. If they are only prejudices based on analogical reasoning, the whole system must fall to the ground with them.

So it is important to trace those principles back as far as we can to their origin, to see whether they might have some firm foundation in reason rather than being rash conclusions drawn from a supposed analogy between matter and mind.

The uneducated, who are guided by the dictates of Nature and express what they are conscious of concerning the operations of their own mind, believe that the object they clearly perceive certainly exists, that the object that they clearly remember certainly did exist but now may not; but as to things that are barely conceived, they know they can conceive a thousand things that never existed and never will, and that the bare conception of a thing doesn't create even a presumption of its existence. They don't trouble themselves to know how these operations are performed, or to explain them in terms of general principles.

But philosophers, who want to discover the *causes* of things and to *explain* these mental operations, having observed that in physical operations there must be not only something that acts but something that is acted on, have been led by analogy to conclude that it must also be like that with the operations of the mind.

The relation between •the mind and •its conceptions bears a very strong and obvious analogy to the relation between •a man and •his work. Every scheme a man forms, every discovery he makes by his reasoning powers, is very properly called the 'work' of his mind. These works of the mind are sometimes great and important works that attract men's attention and admiration.

It is the philosopher's business to consider how such works of the mind are produced, and what materials they are composed of. He calls the materials 'ideas'. So there have to

be ideas that the mind can arrange and form into a regular structure. Everything that is produced must be produced out of something; nothing can be produced from nothing.

Some such reasoning as this seems to me to have first given rise to the philosophical notions of ideas. Those notions were formed into a system by the Pythagoreans two thousand years ago; and this system was adopted by Plato, who polished and decorated it with all the powers of his fine and lofty imagination. I shall go along with customary usage and call it the 'Platonic' system of ideas, though really it was the invention of the Pythagorean school.

The hardest question that exercised the minds of men in the infancy of Greek philosophy was: What was the origin of the world? From what sources and causes did it come? This was answered differently by the different schools of philosophy. Most of the answers strike us as quite ridiculous. But the Pythagoreans judged very rationally, from the order and beauty of the universe, that it must be the work of an eternal, thinking, and good being. So they concluded that the Deity is **one** first source or cause of the universe.

But they thought there must be more. The universe must be made *of* something. Every workman must have materials to work on. That the world should be *made out of nothing* seemed to them absurd, because every thing that is made must be made of something. Lucretius wrote: 'Divine power never produces something out of nothing.' Persius wrote: 'Nothing can come out of nothing, and nothing can return into nothing.' [Reid gives these in their original Latin.] This maxim was never called into question. . . . Because men must have materials to work on, they all inferred it must be so with the Deity also. This was reasoning from analogy.

From this it followed that an eternal uncreated matter was another first source of the universe. But this matter,

they believed, had no form, no qualities. It was the same as the 'prime matter' of Aristotle, who borrowed this part of his philosophy from his predecessors.

To us it seems more rational to think that •the Deity created matter along with its qualities than that •the matter of the universe is eternal and self-existent [= 'existing in its own right (so to speak), not needing anything else to bring it into existence or keep it in existence']. But the ancient philosophers were so strongly prejudiced against what we call 'creation' that they preferred to fall back on this eternal and unintelligible 'matter', so that the Deity would have materials to work on.

The same analogy that led them to think that •there must be an eternal *matter* of which the world was made led them also to conclude that •there must be an eternal *pattern* or model according to which it was made. Works of •human• design and art must be clearly conceived before they are made. The Deity, as a thinking being about to carry out a work of perfect beauty and regularity, must have had a clear conception of his work before it was made. This appears very reasonable.

But because this conception was the work of the divine intellect, something must have existed as its object. This could only be *ideas*, which are the proper and immediate object of intellect.

From this investigation of the sources or causes of the universe, those philosophers concluded that there were three of them: •eternal matter as the material cause, •eternal ideas as the model or exemplary cause, and an •eternal thinking mind as the efficient cause. [It's the last of these three that means 'cause' in your and my sense.]

As for the nature of those eternal ideas, the Pythagorean philosophers ascribed to them the most magnificent attributes. They were

- unchanging and uncreated,
- the object of God's intellect before the world was made, and
- the only object of intellect and of science to all thinking beings.

As far as intellect is superior to sense, so far are ideas superior to all the objects of sense. The objects of sense being in a constant flux, can't properly be said to exist. Ideas are the things that have a real and permanent existence. They are as various as the species of things, there being one idea for every species but none for individuals. The idea is the *essence* of the species, and existed before any of the species were made. This idea or essence exists in its entirety in every individual member of the species, without being either divided or multiplied.

In our present state, we have only an imperfect conception of the eternal ideas; but it is the greatest happiness and perfection of men to be able to contemplate them. While we are in this prison of the body, sense acts as a dead weight pulling us down from the contemplation of the intellectual objects; and it is only by the right kind of purification of the soul and abstraction from the senses that the eye of the intellect is opened and we become able to rise on the wings of intellect to the heavenly world of ideas.

Such was the most ancient theory of ideas of which we have any account. And however different from the modern theory it may be, it seems to be based on the two prejudices I have mentioned—that in every operation there must be something to work on, and that even in conception there must be an object that really exists.

For if those ancient philosophers had thought that the Deity could make the world without •materials, and could conceive the plan of the world without a •model, they couldn't

have thought they had any reason to make •matter and •ideas eternal and necessarily existent sources along with the Deity himself.

I don't know whether the Pythagoreans believed that the status of *eternal and existing without a cause* was possessed not only by •the ideas individually but also by •the beautiful and perfect order—the *structure* of ideas—that they ascribed to this intelligible world of ideas. But this latter seems to be a necessary consequence of the Pythagorean system. For if the Deity couldn't conceive the plan of the world that he made without a really existing model, that model couldn't be his work or devised by his wisdom; for if he made it, he must have conceived it before it was made; so it must have existed in all its beauty and order independently of the Deity; and I think the Pythagoreans were acknowledging this when they made the •model and the •matter of this world *first* sources—*utterly basic* sources—along with •the Deity.

If the Platonic system is understood in this way (and I don't see how else it can hang together), it leads to two consequences that are unfavourable to it.

First, all that the maker of this world needs to have is the skill to work under the guidance of a model. The model had all the perfection and beauty that appears in the copy, and God had only to copy a pattern that existed independently of him. •And not to copy very accurately.: if we are to believe those philosophers, the copy falls very far short of the original •model or plan, but they seem to have blamed this on the stubbornness of the matter of which the world was made.

Secondly, if •the world of ideas could have so much beauty and perfection without being the work of a perfectly wise and good thinking being, how can we infer from the beauty and order of •*this* world—which is merely an imperfect copy of the original model—that *it* must have been made by a perfectly wise and good being? The force of the inference from •the

universe's beauty and order to •its being the work of a wise being—a force that seems irresistible to every candid mind, and seemed so to those ancient philosophers—is entirely destroyed by the supposition that there exists an even more beautiful and orderly world of ideas that was never *made*. And if on the other hand the inference is sound, it will apply also to the world of ideas, which must have been *made* by a wise and good thinking being and must have been conceived before it was made.

I would point out also that everything that is mysterious and unintelligible in Platonic 'ideas' arises from attributing existence to them. Take away this one attribute, and all the rest, however grandly expressed, are easy to understand and accept. •I shall now show this•. What is a Platonic idea?

- (1) It is the essence of a species.
- (2) It is the exemplar, the model according to which all individual members of that species are made.
- (3) It is entire in every individual of the species, without being multiplied or divided.
- (4) It was an object of God's intellect from eternity, and is an object of contemplation and of science to every thinking being.
- (5) It is eternal, unchanging, and uncreated.

And, to crown all,

- (6) it has a more real and permanent existence than anything that ever God made.

Take this description as a whole and it would require an Oedipus to unriddle it. But take away the last item—the 'crowning' one—and nothing is easier. It is easy to find five hundred things of which every *other* article in the description is true.

Take for an instance the nature of a circle as it is defined by Euclid, an object that any thinking being could conceive clearly even if no circle had ever existed.

(1) •This is the essence of the species *circle*•.

(2) It is the exemplar, the model according to which all the individual circles that ever existed were made, for they are all made according to the nature of a circle.

(3) It is entire in every individual circle, without being multiplied or divided, for every circle is an entire circle; and all circles, insofar as they are circles, have one and the same nature.

(4) It was an object of God's intellect from all eternity, and can be an object of contemplation and of science to every thinking being.

It is the essence of a species, and like all other essences

(5) it is eternal, unchanging, and uncreated.

This means merely that a circle always was a circle and can never be anything but a circle. It is the necessity of the thing, and not any act of creating power, that makes a circle be a circle.

The nature of every *species*—whether of substance, of quality, or of relation—and in general everything that the ancient philosophers called a 'universal', fits the description of a Platonic idea once you have removed from that description the attribute of existence.

If we believe that God could not conceive any species of things without having a really existing model, we'll have to go back to the Platonic system, however mysterious it may be. But if it's true that God *could* have a distinct conception of things that have never existed, and that other •and lesser• thinking beings can conceive objects that don't exist, the Platonic system has no better foundation than this prejudice that the mind's operations of mind must be like the body's.

Aristotle rejected the ideas of his master Plato as visionary; but he still had the prejudices that caused them, so he devised substitutes for Plato's 'ideas', giving them a different name and telling a different story about how they arise.

He called the objects of the intellect ‘intelligible species’, those of memory and imagination ‘phantasms’, and those of the senses ‘sensible species’. This was indeed a very small change of name, because the Greek word of Aristotle’s that we translate as ‘species’ or ‘form’ is very near to the Greek word *ιδεα*, both in sound and meaning, so that from their etymology it wouldn’t be easy to give them different meanings. Both are derived from a Greek word meaning ‘to see’, and both can signify a vision or appearance to the eye. Cicero, who understood Greek well, often translates the Greek *ιδεα* by the Latin word *visio* [= ‘vision’]. But since both words were being used as technical terms—one in the Platonic system, the other in the Aristotelian one—the Latin writers generally borrowed the Greek *ιδεα* to express the Platonic notion, and translated Aristotle’s word by the words ‘*species*’ or ‘*forma*’; and in this they have been followed in the modern languages.

Those forms or species were called ‘intelligible’ to distinguish them from ‘sensible’ species, which Aristotle held to be the immediate objects of sense.

He thought that the ‘sensible species’ come from the external object, and he defined a *sense* to be *something that can receive the form of sensible things without the matter*, as wax receives the form of a seal without any of its matter. Similarly, he thought that •the intellect receives the forms of intelligible things, and he calls •it the ‘place of forms’.

I take it to have been Aristotle’s opinion that the •intelligible forms in the human intellect are derived from the •sensible ones by abstraction and other operations of the mind itself. As for the intelligible forms in God’s intellect: they must have had some other origin, but I don’t remember that Aristotle says anything about them. He certainly maintained that there is no abstract thought without intelligible species, no memory or imagination without phantasms, no perception without sensible species. Treating of memory, he

presents (and tries to solve) a difficulty about how a phantasm that is a present object in the mind could represent a thing that is past.

Thus I think it appears that the Aristotelian system of species and phantasms, as well as the Platonic system of ideas, is based on this principle that in every kind of thought there must be some object that really exists; in every operation of the mind there must be something to work on. In our present context it doesn’t matter whether this immediate object is called an ‘idea’ with Plato or a ‘phantasm’ or ‘species’ with Aristotle, or whether it is eternal and uncreated or produced by the impressions of external objects. Either way, and in both systems, it was thought impossible for God to make the world without matter to work on. And in both it was thought impossible for a thinking being to conceive anything that didn’t exist except by means of a model that really existed.

The later Platonists thought the eternal ideas of things to be in God’s intellect, thereby avoiding the absurdity of making them something distinct from and independent of God; but still they held that these ideas really exist in the Divine mind, as the objects of conception and as the patterns and archetypes [= ‘things to be copied’] of things that are made.

Modern philosophers, still convinced that every thought must have an immediate object that really exists, haven’t thought it necessary to distinguish by different names the immediate objects of intellect, of imagination, and of the senses, but have given them all the common name ‘idea’.

On certain points different modern philosophers seem to have different opinions, and sometimes the same author seems to waver between one view and another, or to hesitate to take either side. I mean such issues as these:

- Are these ideas in the sensorium or in the mind, or partly in the one and partly in the other?

- Do they exist when they aren't perceived or only when they are perceived?
- Are they the workmanship of God or of the mind itself or of external natural causes?

But as to the *existence* of ideas there seems to be great unanimity.

This opinion is so firmly fixed in the minds of philosophers that I'm sure that most will think it a very strange paradox—or rather a *contradiction*—to say that men think without ideas. I agree that it appears to be a contradiction; but this appearance arises from the ambiguity of 'idea'. If the 'idea' of a thing means only the *thought* of it, or the *operation of the mind* in thinking about it (which is the most common meaning of the word), to •think without ideas is to •think without thought—and that certainly is a contradiction.

But according to the definition of 'idea' given by philosophers, an idea is not •thought but •an *object of* thought that really exists and is perceived. Now, is it a contradiction to say that a man can think of an object that doesn't exist? I agree that a man can't •perceive an object that doesn't exist, or •remember an object that didn't exist; but I can't see any contradiction in his •conceiving an object that doesn't and never did exist. [He gives the example of conceiving a centaur. Then:]

The philosopher says 'I can't conceive a centaur without having an idea of it in my mind.' I am at a loss to understand what he means. He surely doesn't mean 'I can't conceive a centaur without conceiving it'—that would make me no wiser! What, then, is this 'idea'? Is it an animal, half horse and half man? No. Then I am certain it isn't the thing I conceive. The philosopher may say that the idea is an *image of the animal*, and is the *immediate* object of my conception; and that the animal is the mediate or *remote* object.

I have three answers to this. (1) I am certain there are not two objects of this conception of mine, but only one, and *it* is as immediate an object of my conception as any can be.

(2) This one object that I conceive is not the image of an animal, it is an animal. I know what it is to conceive an image of an animal, and what it is to conceive an animal; and I can tell these apart with no danger of getting it wrong. The thing I conceive is a body of a certain shape and colour, having life and spontaneous motion. The philosopher says that the idea is an image [= 'likeness'] of the animal, but that it has neither body nor colour nor life nor spontaneous motion. I can't make sense of this.

(3) How does this idea come to be an object of my thought, when I can't even conceive what 'idea' means; and even if I *did* conceive it, this wouldn't be evidence of its existence any more than my conception of a centaur is evidence of *its* existence. Philosophers sometimes say that we 'perceive' ideas, sometimes that we 'are conscious of' them. I can have no doubt of the existence of anything that I either perceive or am conscious of, but I can't find that I either perceive ideas or am conscious of them.

•Perception and •consciousness are very different operations, and it is strange that philosophers have never settled which of them we use to discern ideas. It's as though someone were to insist that he had perceived a certain object but didn't know whether he had seen it or felt it or heard it.

But if a man conceives a centaur, isn't it all right for him to say that he has a clear image of it in his mind? I think it is. And if he means by this what the vulgar would mean by it—the vulgar, who have never heard of the philosophical theory of ideas—I find no fault with it. By a 'clear image' in the mind the vulgar mean a clear *conception*; and it is natural to call it an 'image' because of the analogy between an image of a thing and the conception of it. On account of

this analogy, which is obvious to all mankind, this operation is called 'imagination' and an 'image in the mind' is only a round-about way of saying 'imagination'. But to infer from this that there is really an image in the mind, distinct from the operation of conceiving the object, is to be misled by an analogical expression; as though we were to infer from talk about deliberating [from the Latin *librare* = 'weigh'] and 'balancing' things in the mind that the mind really does contain a balance for weighing motives and arguments.

The analogical words and phrases that all languages use to express *conception* no doubt encourage their being taken in a literal sense. But if we attend carefully to what we are conscious of in conception—attend to that and nothing else—we'll find no more reason to think that images really exist in our minds than that balances and other mechanical contraptions do.

Everything we know about what is in the mind we know by consciousness, and all we are conscious of are various ways of thinking—such as understanding, willing, affection, passion, doing, undergoing. If philosophers choose to give the name 'idea' to any way of thinking of which we are conscious, I have no objection to the name except that it introduces into our language a foreign word that we have no need for, a word that is very ambiguous and apt to mislead. But if they use 'idea' to refer to images in the mind that are not *instances of thinking* but rather *objects of thought*, then I do object to the name 'idea' because I can see no reason to think that there are such things in Nature. Don't say 'Perhaps there are such objects in your mind, but they lurk there in a form that makes it hard for you to detect them'. If there are such objects in our minds, their existence and their nature should be more evident than anything else, because according to the friends of the theory of ideas they are our only route to anything that we know! I would add that if they

exist in the mind, we can't know anything *else*. For there is no sound reasoning that will take us from the existence of images to the existence of anything else, except perhaps the existence of a thinking author of them. In this Berkeley reasoned correctly.

In every work of design, the work must be conceived before it is carried out, i.e. before it exists. [That is now restated in terms of the specific example of a house, to make it a little easier to grasp. Reid gave no such example.] When someone is designing a house, the house must be conceived before the building work is done—i.e. before the house exists. If conceiving the house involves having in one's mind a model consisting of ideas, that model is a work of design just as much as the house of which it is the model. And therefore as a work of design it must have been conceived before it existed—and so we are launched on an infinite regress. Earlier [page 172] I applied this argument to the Platonic system of eternal and unchanging ideas, and it can be applied with equal force to all the systems of ideas.

Now for some questions and my answers.

What is the idea of a circle? It is the conception of a circle.

What is the immediate object of this conception? The immediate and *only* object of it is a circle.

Where is this circle? It is nowhere. If it were an individual and had a real existence, it would have to have a place; but being a universal it has no existence and therefore no place.

Isn't it in the mind of him who conceives it? The conception of the circle is in the mind because it is an *act* of the mind; and in common language 'x is in the mind' is a figurative way of saying that x is conceived or remembered.

Is this conception an image or likeness of a circle? Answer: I have already dealt with its being *in a figurative sense* called 'the image of a circle' in the mind. If the question is meant in the literal sense in which 'image' means 'likeness',

I have to begin my reply by pointing out that 'conception' has two meanings. Strictly (a) it stands for the operation of the mind that I have been trying to explain; but sometimes (b) it is used to signify the object of conceiving, i.e. the thing that is conceived. Thus, one question becomes two:

Is (b) the conception—meaning the object of the conceiving—an image or likeness of a circle? The object of this conceiving is not an image or likeness of a circle, because it is a circle, and nothing can be an image of itself.

Is (a) the operation of conceiving a circle an image or likeness of a circle? No: no two things can be more perfectly *unlike* than a kind of thinking and a kind of shape. **Isn't it strange that conceiving should be utterly unlike the object that is conceived?** No more strange than that desire should have no resemblance to the object desired, or resentment to the object of resentment.

I can conceive an individual object that really exists, such as St Paul's church in London. I have an idea of it, i.e. I conceive it. The immediate object of this conception is four hundred miles away [Reid lived in Edinburgh], and I have no reason to think that it acts on me or that I act on it; but I can think of it, nonetheless. I can think of the first year or the last year of the Julian period.

'Despite all that you have said, images in the mind serve to *explain* our ability to conceive •things that are far away in time and place and even •things that don't exist and that would otherwise be altogether inconceivable.' I answer that 'explanations' of things based on *conjectures* have been the curse of true philosophy all through the centuries. Our experience of them—specifically, our experience of their failure rate—should convince us that it is a hundred times more probable that such an 'explanation' is false than that it is true.

This explanation of the faculty of conception in terms of images in the mind or in the brain will deserve the respect of those who have sound judgment in philosophy when four things have been proved by solid arguments: •That the mind or the brain contains images of the things we conceive. •That the mind has a faculty or capacity for perceiving such images. •That the *perception* of such images produces the *conception* of things that are most distant and even of things that don't exist. •That the perception of individual images, in the mind or in the brain, gives us the conception of *universals* that are the attributes of many individuals. Until these are proved, the theory of images existing in the mind or in the brain ought to be put in the same box as Aristotle's 'sensible species' and 'prime matter' and Descartes's 'vortices'.

Chapter 3: ·Four· mistakes about conception

(1) Writers on logic, following Aristotle's example, divide the operations of the understanding into three—simple apprehension (which is another word for conception), judgment, and reasoning. They teach us that

- reasoning is expressed by a syllogism,
- judgment is expressed by a proposition [here = 'sentence'], and
- simple apprehension is expressed by a term—i.e. by one or more words that don't make a full proposition but only the subject or predicate of one.

If by this they mean, as I think they do, that a proposition or even a syllogism can't be simply apprehended, I think they are mistaken.

Conception is *included* in all judgment and all reasoning. We can't judge of a proposition or reason about it unless we conceive or apprehend it. We can distinctly conceive a proposition without judging of it at all. We may have no evidence for its truth or for its falsity, or we may have no interest in whether it is true or false. In these cases we commonly form no judgment about it, though we perfectly understand its meaning.

A man can discourse or plead or write for purposes other than to find the truth. His learning and wit and invention can be employed while his judgment is used not at all or very little. When what he is after is not truth but something else, judgment would be a nuisance except for •discovering the means to attaining his end; so he sets it aside or uses it solely for •that purpose.

An orator's business, they say, is to find out what is likely to persuade. A man can do this very ingeniously without ever taking the trouble to examine whether it *ought*

to persuade. So it shouldn't be thought that a man makes a judgment about the truth of every proposition he utters or hears uttered. In our commerce with the world, judgment is not the talent that commands the greatest price; so those who are not sincere lovers of truth put this talent on a high shelf where it can sit and grow mouldy, while they carry to market other talents for which there is greater demand.

(2) Logicians usually divide simple apprehension into •sensation, •imagination, and •pure intellection—a classification that seems to me very improper in three respects.

First: under the word 'sensation' they include not only •sensation properly so called but also •the perception of external objects by the senses. These are very different operations of the mind; and although Nature commonly links them together, they ought to be carefully distinguished by philosophers.

Second: neither •sensation nor the •perception of external objects is ·a kind of· simple apprehension. Both include judgment and belief, which are excluded from simple apprehension.

Third: they distinguish •imagination from •pure intellection thus: in imagination the image is in the brain, in pure intellection it is in the intellect. This is to base a distinction on an ·ungrounded· hypothesis. We have no evidence that there are images either in the brain or in the intellect.

I take 'imagination' in its most proper sense to stand for a lively conception of *visible* objects. This is a talent of importance to poets and orators, and deserves a name of its own because of its connection with those arts. According to this strict meaning of the word, •imagination is distinguished from •conception as a •part from the •whole. We *conceive*

the objects of senses other than sight, but it is less correct to say that we *imagine* them. We conceive judgment, reasoning, propositions, and arguments; but it is rather improper to say that we imagine these things.

This distinction between •imagination and •conception can be illustrated by an example that Descartes uses to illustrate the distinction between •imagination and •pure intellection. We can imagine a triangle or a square so clearly as to distinguish them from every other shape. But we can't so clearly imagine a figure of a thousand equal sides and angles. No-one, however good his eye, could just by looking at it distinguish this from every figure with more or fewer sides. And the *conception of its appearance to the eye* that we properly call 'imagination' can't be more distinct than the appearance itself; yet we can *conceive* a figure of a thousand sides, and can even demonstrate the properties that distinguish it from all figures of more or fewer sides. We form the notion of a great number such as a thousand not by the eye but by a higher faculty. And a distinct notion of this number of sides, since it can't be acquired by the eye, is not *imagined*; but it is distinctly conceived and easily distinguished from every other number.

(3) Simple apprehension is commonly represented as the first ·or most basic· operation of the understanding; and judgment is taken to be a composition or combination of simple apprehensions.

This mistake has probably arisen from taking •sensation and the •sense-perception of objects to be nothing but simple apprehension. *They* very probably *are* the first ·or most basic· operations of the mind, but they aren't simple apprehensions.

It is generally allowed that we can't conceive sounds if we have never heard anything, or colours if we have never seen anything; and the same thing holds for the objects of the

other senses. Similarly, we must have judged or reasoned before we can have the conception or simple apprehension of judgment and of reasoning.

So simple apprehension is not the •first operation of the understanding, though it is the •simplest; and instead of saying that the more complex operations of the mind are formed by compounding simple apprehensions, we ought rather to say that simple apprehensions are acquired by analysing more complex operations.

A similar mistake that runs all through Locke's *Essay* may be mentioned here. It is that our simplest ideas or conceptions are acquired immediately through the senses or through consciousness, and complex ideas are then formed by compounding the simple ones. I think this is far from the truth.

Nature presents no object to the senses or to consciousness that isn't complex. Thus, by our senses we perceive bodies of various kinds; but every body is a complex object with length, breadth, and thickness, with shape and colour and various other sensible qualities that are blended together in a single thing. And I think that brute animals who have the same senses that we have can't separate the different qualities belonging to a single thing, and have only a complex and confused notion of the whole. Our own notions of the objects of sense would be like that if we didn't have higher powers of understanding that enable us to analyse the complex object, abstract each particular attribute from the rest and form a distinct conception of it.

So we get the simplest and most distinct notions, even of the objects of sense, not immediately through the senses but rather through our ability to analyse and abstract. This will be more fully explained in another place [Essay 5].

(4) One further mistake about conception deserves to be noticed. It is that our conception of things is a test of their

possibility, so that if we can distinctly conceive something we may infer that it is possible—i.e. we can have no conception of what is impossible.

This opinion has been held by philosophers for more than a hundred years, without any contradiction or dissent that I know of. If it is an error, it may be useful to look into its origin and into why it has been so generally accepted as a maxim whose truth couldn't be questioned.

One of the pointless questions debated among scholastic philosophers in the dark ages was 'What is the criterion of truth?', as if men could have any way to distinguish truth from error other than through the proper use of their God-given power of judging!

Descartes tried to put an end to this controversy by making it a fundamental principle in his system that

•Whatever we clearly and distinctly perceive is true.

To understand this principle, you have to know that Descartes gave the name 'perception' to *every* power of the human understanding; and in explaining •this very maxim he tells us that sense, imagination, and pure intellection are only different kinds of perceiving, which is how the maxim was understood by all his followers.

[Reid then devotes a paragraph to Cudworth's somewhat obscure statement of the 'maxim', including this: 'If something is false, not even God's power can make it clearly and distinctly understood'.]

This Cartesian maxim seems to me to have led the way to the one I am now considering, which seems to have been adopted as a corrected version of the former. When Descartes's authority declined, men began to see that we *can* clearly and distinctly conceive something that isn't true, but they thought that our conception, though not always a test of •truth, might be a test of •possibility.

It seems indeed to be an inevitable consequence of the received doctrine of ideas, because it is obvious that there can't be a distinct image—in the mind or anywhere else—of something that is impossible. The ambiguity of the word 'conceive' which I noted in Essay 1, chapter 1, and the common way of saying 'I can't *conceive* x' when we want to get across that we think x is impossible, might also have contributed to the acceptance of this doctrine.

Anyway, whatever the origin was of this opinion, it seems now to hold sway, accepted as a maxim, everywhere. [Reid then presents short quotations in which this 'maxim' is affirmed, by Clarke, Bolingbroke, Abernethy, Price, Wolff, and Hume. The only one he will refer back to (quite soon), is Wolff's. It is in Latin meaning: 'Something of which we can't form any notion is impossible; something to which some notion corresponds is possible.']

It would be easy to round up many other respectable authorities for this maxim, and I have never found one who questioned it.

If the maxim is true in the strong form given it by Wolff in the passage quoted above, we'll have a short road to the settling of every question about the possibility or impossibility of things. All we'll need is to look into our own breast, which. . . will give an infallible answer. If we *can* conceive the thing, it is possible; if we *can't*, it is impossible. And surely everyone can know whether he can conceive a given proposition or not.

Other philosophers have settled for half of Wolff's maxim: they say that whatever we can conceive is possible; but they don't say that whatever we can't conceive is impossible. I can't help thinking that even this is a mistake—one that philosophers carelessly let themselves be led into by the causes I have mentioned. Here are my ·four· reasons for this judgment.

[We are going to meet the word ‘proposition’ quite often. Reid’s basic meaning for it is ‘sentence’: he speaks of what is ‘expressed by a proposition’ and of ‘the meaning of a proposition’. But sometimes a ‘proposition’ seems to be not •a sentence (a bit of language) but rather •what is meant by a sentence. Especially when Reid speaks of a proposition as possible, He doesn’t mean (for example) that the **sentence** ‘the speed of light is infinite’ is possible; *obviously* it is possible; it is *actual*; there it sits on the page! What he means is rather (to take the same example) that it is possible that the speed of light is infinite, where possibility is asserted not of the sentence but of **what the sentence expresses**. In this version, from here to the end of the chapter, ‘proposition’ will be left undisturbed.]

1. Whatever is said to be possible or impossible is expressed by a proposition. Now, what is it to conceive a proposition? I think it is merely to understand distinctly its meaning. I don’t know of anything else that can be meant by ‘simple apprehension’ or ‘conception’ when applied to a proposition. So the axiom amounts to this:

•Every proposition whose meaning you distinctly understand is possible.

Well, I’m convinced that I understand the meaning of this proposition:

(a) Any two sides of a triangle are together equal to the third

just as distinctly as I understand this:

(b) Any two sides of a triangle are together greater than the third;

yet (a) is impossible. You may want to object: ‘Although you understand the meaning of the impossible proposition (a), you can’t suppose or conceive it to be *true*.’ So now we have to examine the meaning of the phrases ‘supposing (or conceiving) a proposition to be true’. ·Taking them in their most natural sense·, they don’t help the ‘axiom’: I can certainly suppose (a) to be true, drawing from it consequences that I find to be impossible as well as (a) itself.

If by ‘conceiving it to be true’ you mean ‘giving *some* degree of assent to it, however small’, I concede that I can’t do *that*. But will you say that every proposition to which I can give any degree of assent is possible? This contradicts experience; so the maxim can’t be true in this sense.

Sometimes when we say ‘I can’t conceive x to be true’ we mean that we judge x to be impossible. Indeed, in *this* sense I can’t ‘conceive (a) to be true’, because I do judge it to be impossible. But taking the maxim in this sense, it means

•Everything that we judge to be possible *is* possible.

But doesn’t it often happen that what one man judges to be possible another man judges to be impossible? So the maxim is not true when understood in this way.

I can’t find any other meaning for ‘conceiving a proposition’ or ‘conceiving a proposition to be true’. I don’t know anything that can be meant by ‘having the idea of a proposition’ other than *understanding its meaning or judging its truth*. I can understand a proposition that is false or impossible as well as one that is true or possible; and I find that men have contradictory judgments about what is possible or impossible as well as about other things. In what sense, then, can it be said that having an idea of a proposition gives certain evidence that it is possible? . . .

2. Every proposition that is necessarily true stands opposed to a contradictory proposition that is impossible; and someone who conceives either of them conceives both. If you believe that two and three necessarily make five, you must believe it to be impossible that two and three should not make five. You conceive both propositions when you believe one. Every proposition carries its contradictory in its bosom, and both are conceived at the same time. ‘Whenever we dissent from what someone says’, says Hume, ‘we conceive both sides of the question, but we can *believe* only one side’ (*Treatise* I.iii.7). From this it certainly follows that when

we dissent from any person about a necessary proposition, we conceive one that is impossible; yet I know of no other philosopher who has made as much use as Hume has of •the maxim that *whatever we conceive is possible*. Many of the specifically Humean doctrines are built on it; and if *it* is true *they* must be true. But he didn't notice that in the passage I have just quoted—a passage that is obviously true—he contradicts •the maxim himself!

3. Mathematicians have proved many things to be possible and others to be impossible; these results wouldn't have been believed if they hadn't been demonstrated. But I have never come across a mathematician trying prove something to be possible because it can be conceived or impossible because it can't be conceived. Why isn't this maxim invoked to settle whether it is possible to square the circle?—a matter on which eminent mathematicians have disagreed. It is easy to *conceive* that in the infinite series of numbers and intermediate fractions some one member of the series may have the same ratio to another as the side of a square has to its diagonal; yet this, though conceivable, can be demonstrated to be impossible.

4. Mathematicians often require us to conceive impossible things in order to prove them to be impossible. That is what happens in all their demonstrations *ad absurdum*. Euclid tells me: Conceive a straight line drawn from one point on the circumference of a circle to another point on that circumference, the line falling outside the circle; I conceive this; I reason from it, until I come to a consequence that is manifestly absurd; and from this I infer that the thing I conceived is impossible.

Having said so much to show that our power of conceiving a proposition is no criterion of its possibility or impossibility, I shall add a few observations on the *extent* of our knowledge of this kind.

1. There are many propositions which we, using the faculties God has given us, judge to be not only true but necessary. All mathematical propositions are of this kind, and so are many others. The contradictories of such propositions must be impossible. So our knowledge of what is impossible must be at least as extensive as our knowledge of necessary truth.

2. By our senses, by memory, by testimony, and by other means, we know to be true many things that don't appear to be necessary. But whatever is true is possible. So our knowledge of what is possible must extend at least as far as our knowledge of truth.

3. If someone claims to determine the possibility or impossibility of things beyond these limits, let him bring proof. I don't say that no such proof can be brought. It *has* been brought in many cases, especially in mathematics. But I say that his being able to conceive a thing is no proof that it is possible. Mathematics affords many instances of impossibilities in the nature of things which no man would have believed if they—i.e. the impossibility results—hadn't been strictly demonstrated. If we could reason demonstratively in other subjects as extensively as we can in mathematics, we might find many things to be impossible which (·as things are·) we are sure are possible.

'It is *possible* that God should have made a universe of sensible and rational creatures into which neither natural nor moral evil should ever enter.' You may be right, for all I know. But how do you know that it is possible? That you can conceive it, I grant; but that isn't proof. I can't admit as an argument, or even as a pressing difficulty, anything based on the *supposition* that such a thing is possible when •there is no good evidence that it is possible. and •for all we know it may in the nature of things be impossible.

Chapter 4: The train of thought in the mind

[Throughout most of this version of the work, ‘fancy’ has been replaced by ‘imagination’, which means the same thing and is less distracting to us. In this chapter, however, ‘fancy’ will be allowed to stand unaltered, for a reason that will soon appear.]

Everyone is conscious of a succession of thoughts that pass through his mind while he is awake, even when they are not aroused by external objects.

The mind can be compared in this to fermenting beer. When it is not in this state, once the beer is still it remains still until some external impulse moves it. But in the state of fermentation it has some cause of motion *in itself*—a cause which, even when there is no impulse from the outside, won’t let it be still for a moment and produces a constant motion and bubbling. . . .not only of merely intellectual thoughts but also of sentiments, emotions, and affections that come with the thoughts.

Modern philosophers have called this continued succession of thought ‘the imagination’. I think it was formerly called ‘the fancy’ or ‘the phantasy’. If the old name was to be laid aside, I wish it had been replaced by a name less ambiguous than ‘imagination’, which had two or three *other* meanings as well.

It is often called the ‘train of ideas’. This might lead one to think that it is a train of *bare conceptions*, but that would surely be a mistake. It is made up of many other operations of mind as well as of conceptions or ‘ideas’.

Memory, judgment, reasoning, emotions, affections, and purposes—in short, *every* operation of the mind except those of the senses—sometimes occurs as an ingredient in this train of thought. To make the train of our thoughts be only a train of *ideas*, we would have to take ‘idea’ in a *very*

extended sense. So much for the •name; let us now consider the •thing.

Trains of thought in the mind are of two kinds: some flow spontaneously, like water from a fountain, with no exercise of any governing force to keep them in order; others are regulated and directed by an active and purposive effort of the mind.

These two kinds, however distinct in their nature, are usually mixed together in adults who are awake. •On the one hand, we are rarely so empty of all projects and designs that we let our thoughts go their way without the least check or direction. . . . •On the other hand, when a man is attending with the greatest intensity to some theoretical issue or some practical plan, trying to exclude every thought that isn’t relevant to his present purpose, such thoughts will often rudely •force their way in on him, in spite of his attempts to keep them out, and •occupy by a kind of violence some of the time he had allotted to another purpose. One man may have more control over his thoughts than another man, perhaps more than he himself has at another time. But even in the best trained mind, I believe, the thoughts will sometimes be disobedient, sometimes capricious and self-willed, just when we most want to have them under command.

It has been observed very justly—e.g. by Malebranche—that we mustn’t credit the mind with having the power to call up any thought at pleasure. Why? Because voluntarily setting oneself to *call up x* is an operation that must *include* the thought of x; so voluntarily calling up a thought would involve already having that thought in one’s mind. Still, it is certainly true that a man has a considerable power in regulating and disposing his own thoughts. Everyone is

conscious of this; I can no more doubt it than I can doubt that I think at all.

We seem to treat the thoughts that crowd into the fancy in the way a great man treats those who crowd into a reception that he is giving. They are all eager for his attention; and he goes round the circle bestowing a bow on one, a smile on another; asks a short question of a third, while a fourth is honoured with a private conversation. Most of them receive no particular mark of attention, and go as they came. . . .

Similarly, a number of thoughts present themselves to the fancy spontaneously; but if we pay no attention to them and don't enter into conversation with them, they pass along out with the rest of the crowd and are immediately forgotten as though they had never appeared. But those we think we should pay attention to can be stopped, examined, and arranged for any particular purpose we have in view.

A train of thought that was at first put together deliberately and with care will present itself spontaneously after it has been often repeated and becomes familiar. Take for example the case of someone who has composed a tune so as to please his own ear; after he has played or sung it often, the notes will arrange themselves in the right order, and he'll require no effort to regulate their succession.

. . . Now let us return to the trains of thought that are spontaneous, which must be first in the order of Nature.

[Reid now devotes over three pages to describing the different kinds of daydreams, fantasies etc. that different kinds of people will have—the young politician, the lovesick man, and so on. There is not much of *philosophical* interest here until we come to this:]

In mature adults even these spontaneous bouts of fancy involve some arrangement of thought; and I think you'll agree that in those who have the greatest stock of knowledge and the best natural talents even the spontaneous movements

of fancy will be the most regular and connected. They have an order, connection, and unity that distinguishes them from the dreams of a sleeper or the ravings of someone in a delirium, just as much as from the finished productions of art.

How is this regular arrangement brought about? It has all the marks of judgment and reason, yet it seems to spring up spontaneously *before* any judgment is made.

Shall we follow Leibniz in believing that the mind was originally formed like a wound-up watch, and that all its thoughts, purposes, passions, and actions are brought about by the gradual unwinding of the machine's original spring, and succeed each other in order, as necessarily as the motions and pulsations of a watch?

If a three-year-old child were asked to explain the phenomena of a watch, he would think that the watch contains a little man or some other little animal that beats continually and produces the motion. Of these two,

- the hypothesis of this young philosopher in turning a watch-spring into a man,
- the hypothesis of the German philosopher in turning a man into a watch-spring,

which is the more rational? It is hard to say!

To explain the regularity of our first thoughts in terms of motions of animal spirits, vibrations of nerves, attractions of ideas, or from any other unthinking cause—whether mechanical or contingent—seems equally irrational.

[The phrase 'mechanical or contingent' seems to mean 'resulting from some fairly permanent structure in the person's make-up or resulting from a number of co-operating causes that just happened to come together in the person at that time'.]

If we can't distinguish •the strongest marks of thought and design from •the effects of mechanism or contingency, our situation will be very miserable. For it would follow that

we have no evidence of thought in any of our fellow-men—indeed, that we have no evidence of thought or design in the structure and government of the universe. If •one good phrase or sentence was ever produced without any input from a previous judgment, why not •an *Iliad* or *Aeneid*? It's only a difference of degree. . . . No coincidence of unthinking causes could produce a rational train of thought.

So when •a train of thought presents itself spontaneously to a man's fancy without his having thought about it, it is highly probable—to say the least—that whatever is regular and rational in •it is a copy of something that had previously been *composed* by the man's own rational powers or those of someone else.

That is certainly how we judge in similar cases. For example, I find in a book a train of thinking that has the marks of knowledge and judgment. How was it produced?

'It is printed in a book.'

This answer doesn't satisfy me, because the book has no knowledge or reason.

'A printer printed it, and a compositor set the type.'

This doesn't satisfy me either, because those causes may have known very little about the subject. There must be an earlier cause of the composition.

'It was printed from a manuscript.'

True. But the manuscript is as ignorant as the printed book.

'The manuscript was written or dictated by a man of knowledge and judgment.'

This and *only* this will satisfy a man of ordinary intelligence; and it will appear to any such man extremely ridiculous to believe that such a train of thinking could originally be produced by a cause that doesn't reason or think.

Whether such a train of thinking is •printed in a book or •printed (so to speak) in his mind and issued spontaneously from his fancy, it must have been composed with judgment

by himself or by some other rational being.

We can confirm this, I think, by tracing the progress of the human fancy as far as we can back •into childhood•. [As Reid is going to say a lot about young children, it may be appropriate to report that he had nine children, and outlived eight of them.]

We don't have the means for knowing how the fancy is employed in infants. Their time is divided between the use of their senses and sound sleep; so that there is little time left for imagination, and the materials it has to work on are probably very scanty. A few days—sometimes a few hours—after they are born we see them smile in their sleep. But it's not easy to guess what they are smiling at, for it's not until some months later that they smile at anything while awake. It is also common to see them move their lips, as if they were sucking, while they are asleep.

These things seem to reveal some working of the imagination, but there's no reason to think that there is any regular train of thought in the minds of infants.

By a 'regular' train of thought I mean one that has a beginning, a middle, and an end—an arrangement of its parts, according to some rule ['regular' comes from Latin *regula* = 'rule'], or with some intention. For example:

- the conception of a plan and of the means for carrying it out,
- the conception of a whole and of the number and order of the parts.

These are instances of the simplest trains of thought that can be called 'regular'.

Man undoubtedly has •a power. . . .by which he distinguishes a composition from a heap of •raw• materials—a house from a heap of stones, for instance, a sentence from a heap of words, a picture from a heap of colours. It seems to me that children don't have any regular trains of thought until •this power begins to operate. Those who are mentally

retarded to such an extent that they never show any signs of •this power also show no signs of regularity of thought. So it seems that •this power is connected with all regular trains of thought, and may be the cause of them.

Such trains of thought show up in children when they about two years old. At that age they can attend to the doings of older children in making their little houses, ships, and so on, in imitation of the works of men. They are then capable of some small understanding of language, which shows both a regular train of thinking and some degree of abstraction. I think we can see that the faculties of children who are two or three years old differ from those of the cleverest brute animals. Children at that age can perceive design and regularity in the works of others, especially those of older children; their little minds are fired with the discovery; they are eager to imitate it, and never at rest till they can exhibit something of the same kind.

When a child first learns by imitation to do something that requires design, how he rejoices! Pythagoras wasn't happier in the discovery of his famous theorem! The child seems to reflect on himself and to swell with self-esteem. His eyes sparkle. He is impatient to show everyone his performance, and thinks himself entitled to their applause. He is applauded by all, and feels the same emotion from this applause as a Roman Consul did from a triumph. He has now a consciousness of some worth in himself. . . .

As children grow up they are delighted with stories, with childish games, with schemes and plans. Everything of this kind stores the fancy with a new regular train of thought, which becomes familiar by repetition so that one part of it draws the rest after it in the imagination.

The imagination of a child, like the hand of a painter, is long employed in copying the works of others before it attempts any invention of its own. The power of invention

hasn't yet emerged, but it is developing, and like the bud of a tree is ready to split open its outer cover when some casual event helps it to burst out.

No other power of the understanding gives so much pleasure to its owner as invention does—whether it is employed in mechanics, in science, in the conduct of life, in poetry, in wit, or in the fine arts. Someone who is conscious of having the power of invention gets from this a worth and importance in his own eyes that he hadn't had before. He feels like someone who has been living on hand-outs from others and now has some property of his own. When this power begins to be felt in the young mind, it has the grace of novelty added to its other charms, and it is caressed more than all the rest—like the youngest child of the family!. . . .

The power of invention is less evenly distributed among men than almost any other. When it succeeds in producing something that all mankind care about, we call it 'genius', a talent that very few are blessed with. [In Reid's day, 'genius' meant something like 'high-level intellect'; it wasn't as strong in its meaning as it is today.] But there is perhaps a lower kind—or lower degree—of invention that is more common. Anyway, be that as it may, there is no doubt that the power of invention in those who have it will produce many new regular trains of thought; and when these are expressed in works of art, in writing, or in speech, they will be copied by others.

As soon as children have enough judgment to distinguish what is regular, orderly, and connected from a mere jumble of thoughts, their minds are provided with regular trains of thinking by the following •two• means.

(1) By copying things that they see other people do and say. Man is the most imitative of all animals: not only does he deliberately imitate what he thinks has any grace or beauty, but also *without* intention he is led, by a kind of instinct that is hard to resist, into the ways of speaking,

thinking, and acting that he has often encountered in his early years. The more children see of what is regular and beautiful in what is presented to them, the more they are led to observe and to imitate it.

This is the chief part of their stock of regular trains of thought; it comes down to them by a kind of tradition from those who came before them; and we shall find that the fancy of most men is stocked with materials from the fancies of people they have conversed with, as well as from their religion, language, and manners.

(2) By adding regular trains of thought that really are *theirs*. What these amount to will vary from person to person, depending on how much each person has studied and on how inventive he is; but in the bulk of mankind original trains of thought don't amount to much.

Each profession and each rank in life has a way of thinking and a turn of fancy that is special to it (in theatrical comedies and works of humour, profession and rank are identified by those). The bulk of men of the same nation, of the same rank, and of the same occupation, are cast in the same mould (so to speak). This mould itself changes slowly and gradually through new inventions, influence from outsiders, or other chance happenings.

[Reid goes on at length about how wonderfully practice and habit can enrich one's stock of regular trains of thought—for example 'the versatility of imagination that a well bred man acquires by being much exercised in the various scenes of life', so that he can speak and behave appropriately in a wide variety of social situations. Here is one episode in this discussion:]

When such habits are acquired and perfected, they are exercised without any laborious effort, like the habit of playing on a musical instrument. Countless movements of the fingers on the keys must be directed in one particular train

or succession. Only one arrangement of those movements is right, and ten thousand are wrong and would spoil the music. The musician doesn't give the least thought to those movements; he has a clear idea of the tune and he sets himself to play it. The movements of the fingers arrange themselves so as to achieve what he intends. [He compares that with the performance of a practised speaker on a topic that he knows well. After some more along these lines, Reid (a) sums up this part of his discussion with a clear swipe at the theory of 'association of ideas' espoused by Locke and Hume, and (b) starts to introduce a slightly new topic, in the development of which (a) will recur.]

(a) Up to here, I have considered operations of fancy that either are spontaneous or at least require no laborious effort to guide and direct them, and I have tried to explain the degree of regularity and arrangement that is found even in them. It seems to me that this phenomenon is well enough explained by

- the natural powers of judgment and invention,
- the pleasure that the exercise of those powers always brings,
- the means we have of improving them by imitating others, and
- the effect of practice and habits

—without supposing any unaccountable attractions of ideas by which they arrange themselves!

(b) But we are able to direct our thoughts in a certain course so as to perform a chosen task.

Every work of art has its model formed *in the imagination*. That is where Homer's *Iliad*, Plato's *Republic*, and Newton's *Principia* were made. Are we to believe that those works *spontaneously* took the form in which they now appear? That the sentiments, the manners, and the passions *arranged themselves*, all at once, in the mind of Homer so as to form

the *Iliad*? Was there no more effort in the composition than there is in telling a well-known tale or singing a favourite song? This cannot be believed.

Some casual thought may, through sheer good luck, have first suggested the plan of ‘singing the wrath of Achilles’, but surely it was a matter of **judgment** and choice where the narrative should begin and where it should end.

No doubt the fertility of the poet’s imagination suggested a variety of rich materials, but wasn’t **judgment** necessary to select what was proper, to reject what wasn’t, to arrange the materials into a sound composition, and to adapt them to each other and to the design of the whole?

No-one can believe that Homer’s ideas arranged themselves according to the most perfect rules of epic poetry, doing this merely by certain sympathies and antipathies—certain attractions and repulsions—inherent in their natures.

I would find it easier to believe that after he invoked his muse the poet did nothing at all but listen to the song of the goddess! It is true that poets and other artists must make their works appear natural; but •Nature is the perfection of •art, and there can be no sound imitation of Nature without art. When the building is finished, the rubbish, the scaffolding, the tools and engines are carried out of sight; but we know it couldn’t have been built without them.

So the train of thinking can be guided and directed in much the same manner as the horse we ride. The horse has his strength, his agility, and his mettle in himself; he has been taught certain movements and many useful habits that make him more subservient to our purposes and obedient to our will; but to complete a journey he must be directed by the rider.

Similarly, fancy has its original powers, which are very different in different persons; it has more regular movements

•to which it has been trained by a long course of discipline and exercise, and •by which it may suddenly and spontaneously and without much effort produce things that have a considerable degree of beauty, regularity, and design.

But the most perfect works of design are never sudden and spontaneous. We look back over our first thoughts, getting at a proper distance from them, examining every part, and taking a complex view of the whole. Our critical faculties enable us to see that this part is redundant, that one deficient; here is a lack of courage, there a lack of delicacy; this is obscure, that is too diffuse. Things are re-organized according to a second and more deliberate judgment—what was lacking is added, what was dislocated is put in joint; redundant passages are lopped off, and the whole thing polished. . . . Nothing that is regular was ever at first conceived without design, attention, and care.

I shall now offer a few reflections on a theory that has been used to explain this successive train of thought in the mind. It was hinted at by Hobbes, but has attracted more attention since it was clearly presented by Hume.

That author thinks that the train of thought in the mind results from a kind of *attraction* that ideas have for other ideas that relate to them in certain ways. He thinks that the complex ideas that are the common subjects of our thoughts and reasoning result from the same cause. This attraction of ideas, Hume thinks, is produced by these three relations and no others: •causation, •contiguity [= ‘nextness’] in time or place, and •similarity. He asserts that these are the only general sources for the uniting of ideas. And in another place, where he has to take notice of *contrariety* as a source of connection among ideas, he tries to reconcile this with his system by telling us, solemnly, that contrariety may perhaps be regarded as a mixture of causation and resemblance. As for the *status* of the supposed truth that

ideas that are related in any of these ways mutually attract each other, so that when one is presented to the fancy the other is drawn along with it

—Hume seems to think that this is an original ·or *basic*· property of the mind, or rather of the ideas, and therefore can't be explained ·because explanations have to appeal to something *more basic* than the thing being explained. I have two observations to make about this theory·.

(1) Although it is true that the thought of any object is apt to lead us to the thought of its cause or effect, of things contiguous to it in time or place, or of things resembling it, this list of the relations that are apt to lead us from one object to another is very inaccurate.

The list is too long, on Hume's own principles. According to his philosophy, causation implies merely a constant conjunction observed between the cause and the effect; so •contiguity must include •causation, bringing his three sources of attraction down to two.

But actually the list is much too short. *Every* relation between things has *some* tendency to lead the thought in a thinking mind from one to the other; and not only every *relation* but every kind of contrariety and opposition. (Hume's statement that contrariety can perhaps be considered as a mixture 'of causation and resemblance' makes as little sense to me as if he had said that shape can perhaps be considered as a mixture of colour and sound. [Reid is referring to the last footnote of Section 3 of Hume's *Enquiry concerning Human Understanding*.]) Our thoughts pass easily

- from the end to the means;
- from any truth to
 - the evidence on which it is based,
 - the consequences that follow from it, or
 - the use that can be made of it;

- from a part to the whole,
- from a subject to its qualities, or
- from related things to the relation.

Such transitions in thinking must have been made thousands of times by everyone who thinks and reasons, thus becoming beaten tracks (as it were) for the imagination. Our train of thinking is influenced by the relations of objects not only

to each other

but also

- to the present state of the mind,
- to the habits we have acquired, whether moral or intellectual,
- to the company we have kept, and
- to the occupation in which we have been chiefly employed.

One event will prompt very different thoughts in different persons, and in the same person at different times, depending on whether he is in a good or a bad mood, is lively or dull, angry or pleased, gloomy or cheerful. . . .

(2) Let us consider how far this attraction of ideas can be explained in terms of original qualities of human nature.

I believe the original ·basic· principles of the mind, which we can't explain except by saying 'That is how we are built', are more numerous than is commonly thought. But we ought not to multiply them without necessity. [Reid is echoing Occam's Razor: *Entia non sunt multiplicanda praeter necessitatem*—Entities shouldn't be multiplied beyond necessity.] ·And I think that Hume does multiply them beyond necessity, or at least postulates some that there is no need to postulate·. *Trains of thinking that have become familiar through frequent repetition spontaneously present themselves in our fancy*—this fact seems to need only one original quality of the mind, namely the power of habit.

In all rational thinking, and in all rational speech—whether serious or merely amusing—each thought must have some relation to what went before. So everyone from the dawn of reason must have been accustomed to sequences of *related* objects of thought. These please the understanding, and by custom they become like beaten tracks that invite the traveller.

As far as we have the power to direct our thoughts—and we certainly have a great deal of that power—our thoughts will get their direction from the active sources of mental energy that are common to men—our appetites, our passions, our affections, our reason, and our conscience. Everyone will find in his own experience that the trains of thinking in his mind are chiefly governed by whichever of these is prevalent at the given time. And even when someone's mind is free from every emotion and desire, there will still be some objects that are more acceptable to him than others. The witty man is pleased with surprising similarities or contrasts, the philosopher with relationships that can be reasoned about, the merchant with what tends to profit, and the politician with what may mend the state. . . .

It can't be denied that the state of the body has an influence on our imagination, depending on whether a man is sober or drunk, fatigued or refreshed. Uncooked food and indigestion are said to cause unpleasant dreams, and probably have a similar effect on the waking thoughts. Opium gives to some people pleasing dreams, and pleasing imaginations when awake, while to others what it gives is horrible and distressing. These influences of the body on the mind can only be known by experience, and I don't think we

can give any explanation for them.

. . . .I believe we are originally disposed to pass, in imagination, from any one object of thought to others that are contiguous to it in time or place. I think this can be seen in brutes and in mentally defective people, as well as in children before they have acquired any habits that might account for it. The sight of an object is apt to suggest to the imagination things that have seen or felt in conjunction with it, even when the memory of that conjunction is gone.

Such conjunctions of things influence not only the imagination, but also beliefs and emotions, especially in children and in brutes; and perhaps what we call 'memory' in brutes is merely something of this kind.

They expect events to occur in the same order in which they happened before; and this expectation regulates their actions and emotions as well as their thoughts. A horse takes fright at the place where some object frightened it before. We are apt to infer from this that he remembers the former accident; but perhaps it is only an association in his mind between the place and the emotion of fear, without any clear memory. . . .

[The chapter—and thus the Essay—ends with a couple of pages in which Reid: •praises Locke's chapter on the association of ideas, and says that its examples provide evidence that ideas can be linked not only to ideas but also to emotions; •criticises an aspect of Hume's treatment of this topic; and writes at some length about the value to you of stocking your imagination with thoughts about good human conduct and, especially, about God.]