in the unity of a thing with a name, these are the complex objective stuff out of which my actually perceived table is made. Infants must go through a long education of the eye and ear before they can perceive the realities which adults perceive. Every perception is an acquired perception.

William James, Psychology, XIX

39 A sensation is rather like a client who has given his case to a lawyer and then has passively to listen in the courtroom to whatever account of his affairs, pleasant or unpleasant, the lawyer finds it most expedient to give.

William James, Pragmatism, VII

40 The state of becoming conscious is a special psychic act, different from and independent of the process of becoming fixed or represented, and consciousness appears to us as a sensory organ which perceives a content proceeding from another source.

Freud, Interpretation of Dreams, IV

## 5.3 | Memory

The two most famous metaphors that have been used to say what memory is-one, that it is the storehouse of ideas; the other, that it is decaying sense—may give us some grasp of the subject, but upon closer examination they are more misleading than instructive. Something must be experienced or learned before it can be remembered, and that which is remembered must somehow be retained between the time of acquisition and the time of recall or recollection; but after we have acknowledged these two points, we are left with many difficult questions about the objects of memory, about the kind of knowledge that memory is, about the difference between immediate memory and memory after a long interval of time, about the related processes of reminiscence, recollection, and recognition, about the gradual fading away of memories, and forgetfulness and forgetting.

The quotations collected here touch on all these matters as well as others, and represent the fascination of memory not only for psychologists and philosophers, but also for the poets and the historians, who are concerned with our sense of time and our knowledge of the past. That fascination is, perhaps, most eloquently expressed in the passages taken from Augustine's Confessions. The modern scientific and the psychoanalytical interest in the subject are represented here in the quotations from William James and Sigmund Freud.

1 Cebes added: Your favourite doctrine, Socrates, that knowledge is simply recollection, if true, also necessarily implies a previous time in which we have learned that which we now recollect. But this would be impossible unless our soul had been in some place before existing in the form of man; here then is another proof of the soul's immortality.

But tell me, Cebes, said Simmias, interposing, what arguments are urged in favour of this doc-

trine of recollection. I am not very sure at the moment that I remember them.

One excellent proof, said Cebes, is afforded by questions. If you put a question to a person in a right way, he will give a true answer of himself, but how could he do this unless there were knowledge and right reason already in him? And this is most clearly shown when he is taken to a diagram or to anything of that sort. . . .

And if we acquired this knowledge before we

were born, and were born having the use of it, then we also knew before we were born and at the instant of birth not only the equal or the greater or the less, but all other ideas; for we are not speaking only of equality, but of beauty, goodness, justice, holiness, and of all which we stamp with the name of essence in the dialectical process, both when we ask and when we answer questions. Of all this we may certainly affirm that we acquired the knowledge before birth?

We may.

But if, after having acquired, we have not forgotten what in each case we acquired, then we must always have come into life having knowledge, and shall always continue to know as long as life lasts-for knowing is the acquiring and retaining knowledge and not forgetting. Is not forgetting, Simmias, just the losing of knowledge?

Quite true, Socrates.

But if the knowledge which we acquired before birth was lost by us at birth, and if afterwards by the use of the senses we recovered what we previously knew, will not the process which we call learning be a recovering of the knowledge which is natural to us, and may not this be rightly termed recollection?

Very true.

So much is clear—that when we perceive something, either by the help of sight, or hearing, or some other sense, from that perception we are able to obtain a notion of some other thing like or unlike which is associated with it but has been forgotten. Whence, as I was saying, one of two alternatives follows:-either we had this knowledge at birth, and continued to know through life; or, after birth, those who are said to learn only remember, and learning is simply recollec-

Plato, Phaedo, 72B

2 Socrates. Tell me, then, whether I am right in saying that you may learn a thing which at one time you did not know?

Theaetetus. Certainly you may. Soc. And another and another? Theaet. Yes.

Soc. I would have you imagine, then, that there exists in the mind of man a block of wax, which is of different sizes in different men; harder, moister, and having more or less of purity in one than another, and in some of an intermediate quality.

Theaet. I see.

Soc. Let us say that this tablet is a gift of Memory, the mother of the Muses; and that when we wish to remember anything which we have seen, or heard, or thought in our own minds, we hold the wax to the perceptions and thoughts, and in that material receive the impression of them as from the seal of a ring; and that we remember and know what is imprinted as long as the image lasts; but when the image is effaced, or cannot be taken, then we forget and do not know. Plato, Theaetetus, 191A

3 Acts of recollection, as they occur in experience, are due to the fact that one movement has by nature another that succeeds it in regular order.

If this order be necessary, whenever a subject experiences the former of two movements thus connected, it will [invariably], experience the latter; if, however, the order be not necessary, but customary, only in the majority of cases will the subject experience the latter of the two movements. But it is a fact that there are some movements, by a single experience of which persons take the impress of custom more deeply than they do by experiencing others many times; hence upon seeing some things but once we remember them better than others which we may have seen frequently.

Whenever, therefore, we are recollecting, we are experiencing certain of the antecedent movements until finally we experience the one after which customarily comes that which we seek. This explains why we hunt up the series, having started in thought either from a present intuition or some other, and from something either similar, or contrary, to what we seek, or else from that which is contiguous with it. Such is the empirical ground of the process of recollection.

Aristotle, Memory and Reminiscence, 451b10

4 Many animals have memory, and are capable of instruction; but no other creature except man can recall the past at will.

Aristotle, History of Animals, 488b25

5 Men of fine genius are readily reminded of things, but those who receive with most pains and difficulty, remember best; every new thing they learn, being, as it were, burnt and branded in on their minds.

Plutarch, Cato the Younger

6 A memory has to do with something brought into ken from without, something learned or something experienced; the Memory-Principle, therefore, cannot belong to such beings as are immune from experience and from time.

No memory, therefore, can be ascribed to any divine being, or to the Authentic-Existent or the Intellectual-Principle: these are intangibly immune; time does not approach them; they possess eternity centred around Being; they know nothing of past and sequent; all is an unbroken state of identity, not receptive of change.

Plotinus, Fourth Ennead, III, 25

7 Memory, in point of fact, is impeded by the body: even as things are, addition often brings forgetfulness; with thinning and clearing away, memory will often revive. The soul is a stability; the shifting and fleeting thing which body is can be a cause only of its forgetting not of its remembering—Lethe stream may be understood in this sense—and memory is a fact of the soul.

Plotinus, Fourth Ennead, III, 26

8 I shall mount beyond this power of my nature. still rising by degrees towards Him who made me. And so I come to the fields and vast palaces of memory, where are stored the innumerable images of material things brought to it by the senses. Further there is stored in the memory the thoughts we think, by adding to or taking from or otherwise modifying the things that sense has made contact with, and all other things that have been entrusted to and laid up in memory, save such as forgetfulness has swallowed in its grave. When I turn to memory, I ask it to bring forth what I want: and some things are produced immediately, some take longer as if they had to be brought out from some more secret place of storage; some pour out in a heap, and while we are actually wanting and looking for something quite different, they hurl themselves upon us in masses as though to say: "May it not be we that you want?" I brush them from the face of my memory with the hand of my heart, until at last the thing I want is brought to light as from some hidden place. Some things are produced just as they are required, easily and in right order; and things that come first give place to those that follow, and giving place are stored up again to be produced when I want them. This is what happens, when I say anything by heart.

In the memory all the various things are kept distinct and in their right categories, though each came into the memory by its own gate. For example, light and all the colors and shapes of bodies come in by the eyes, all the kinds of sound by the ears, all scents by the nostrils, all tastes by the mouth; and by a sense that belongs to the whole body comes in what is hard and what is soft, what is hot or cold, rough or smooth, heavy or light, whether outside the body or inside. All these things the vast recesses, the hidden and unsearchable caverns, of memory receive and store up, to be available and brought to light when need arises: yet all enter by their own various gates to be stored up in memory. Nor indeed do the things themselves enter: only the images of the things perceived by the senses are there for thought to remember them.

And even though we know by which senses they were brought in and laid up in the memory, who can tell how these images were formed? Even when I am in darkness and in silence, I can if I will produce colors in my memory, and distinguish black from white and any other colors if I choose; and sounds do not break in and disturb the image I am considering that came in through the eye, since the sounds themselves were already there and lie stored up apart. For I can summon

them too, if I like, and they are immediately present; and though my tongue is at rest and my throat silent I can sing as I will; nor do the images of the colors, although they are as truly present, interfere or interrupt when I call from the store-house some other thing which came in by the ear. Similarly all other things that were brought in by the other senses and stored up in the memory can be called up at my pleasure: I distinguish the scent of lilies from the scent of violets, though at that instant I smell nothing; and I like honey better than wine, some smooth thing better than rough, though I am not tasting or handling but only remembering.

All this I do inside me, in the huge court of my memory. In my memory are sky and earth and sea, ready at hand along with all the things that I have ever been able to perceive in them and have not forgotten. And in my memory too I meet myself-I recall myself, what I have done, when and where and in what state of mind I was when I did it. In my memory are all the things I remember to have experienced myself or to have been told by others. From the same store I can weave into the past endless new likenesses of things either experienced by me or believed on the strength of things experienced; and from these again I can picture actions and events and hopes for the future; and upon them all I can meditate as if they were present. "I shall do this or that," I say to myself in the vast recess of my mind with its immeasurable store of images of things so great: and this or that follows. "O, if only this or that could be!" or again, "May God prevent this or that!" Such things I say within myself, and when I speak of them the images of all the things I mention are to hand from the same storehouse of memory, and if the images were not there I could not so much as speak of the things.

Great is this power of memory, exceedingly great, O my God, a spreading limitless room within me.

Augustine, Confessions, X, 8

9 Now when I hear that there are three kinds of questions: whether a thing is, what it is, of what sort it is: I do indeed retain the images of the sounds of which those words are composed, and I know that they passed through the air with a certain noise and now no longer are. But the things themselves which the sounds signified I could not come at by any bodily sense nor see them at all save by my mind; and what I stored in my memory was not their images but the truths themselves. But how they got into me, it is for them to tell if they can. For I run my mind over all the doorways of my body, but I cannot find any door by which they could have come in. For my eyes say: "If they were coloured, we reported them to you"; the nostrils say: "If they had any smell, they went in through us"; the sense of taste says: "Unless there was any taste in them, there is no use in my ' being asked"; the sense of touch says: "If the thing is not a body, I did not handle it, and if I did not handle it, I did not report it to you." Very well then, whence and how did they get into my memory? I do not know. For when I first learned them I was not trusting some other man's mind, but recognized them in my own; and I saw them as true and committed them to my mind as if placing them where I could get at them again whenever I desired. Thus they must have been in my mind even before I learned them, though they were not in my memory. Then where were they, or how did it come that when I heard them spoken I recognized them and said: "It is so, it is true," unless they were in my memory already, but so far back, thrust away as it were in such remote recesses, that unless they had been drawn forth by some other man's teaching, I might perhaps never have managed to think of them at all?

Augustine, Confessions, X, 10

10 The memory also contains the innumerable principles and laws of numbers and dimensions; and none of these have been impressed upon it by any bodily sense, seeing that they have neither colour nor sound nor scent nor taste nor feel. I have heard the sounds of the words by which they are expressed when we discuss them, but the sounds are not the same as the truths themselves. For the sounds are of one kind in Greek, quite different in Latin, but the things themselves are neither Greek nor Latin nor of any other language. I have seen the lines drawn by architects, some of them as fine as a spider's web; but the truths are different, they are not the images of such things as the eye of my body has shown me. To know them is to recognize them interiorly without any concept of any kind of body whatsoever. With all my bodily senses I have perceived the numbers we use in counting; but the basic numbers by which we count are not the same as these, nor images of these; but really are. Let whoever does not see these truths laugh at me for talking thus: while he laughs at me I shall be sorry for him.

Augustine, Confessions, X, 12

11 Assuredly, Lord, I toil with this, toil within myself: I have become to myself a soil laborious and of heavy sweat. For I am not now considering the parts of the heavens, or measuring the distances of the stars, or seeking how the earth is held in space; it is I who remember, I, my mind. It is not remarkable if things that I am not are far from my knowledge: but what could be closer to me than myself? Yet the power of memory in me I do not understand, though without memory I could not even name myself.

Augustine, Confessions, X, 16

12 For memory sets before us, not what we choose,

but what it pleases. Indeed there is nothing that imprints a thing so vividly on our memory as the desire to forget it: a good way to give our mind something to guard, and to impress it on her, is to solicit her to lose it.

> Montaigne, Essays, II, 12, Apology for Raymond Sebond

13 If souls came from anything but a natural succession, and had been something else outside of the body, they would have a memory of their first existence, considering the natural faculties that are proper to them, of reflecting, reasoning, and remembering. . . .

For to value the condition of our souls as highly as we want to, we must presuppose them to be wholly knowing when they are in their natural simplicity and purity. Thus they would have been such, being free from the corporeal prison, as much before entering it as we hope they will be after they have gone out of it. And this knowledge they would have to remember still while in the body, as Plato said that what we learned was only a recollection of what we had known; a thing which each man by experience can maintain to be false. In the first place, because we recollect only precisely what we are taught, and if memory were doing its job purely, it would at least suggest to us some point beyond what we have learned. Second, what it knew when it was in its purity was a real knowledge, by its divine intelligence understanding things as they are, whereas here it is made to receive falsehood and vice, if it is instructed about them. In this it cannot use its power of reminiscence, this idea and conception never having lodged in it.

> Montaigne, Essays, II, 12, Apology for Raymond Sebond

- 14 When to the sessions of sweet silent thought I summon up remembrance of things past, I sigh the lack of many a thing I sought, And with old woes new wail my dear time's waste. Then can I drown an eye, unused to flow, For precious friends hid in death's dateless night, And weep afresh love's long since cancell'd woe, And moan the expense of many a vanish'd sight. Shakespeare, Sonnet XXX
- 15 I make no more estimation of repeating a great number of names or words upon once hearing, or the pouring forth of a number of verses or rhymes ex tempore, or the making of a satirical simile of everything, or the turning of everything to a jest, or the falsifying or contradicting of everything by cavil, or the like (whereof in the faculties of the mind there is great copie, and such as by device and practice may be exalted to an extreme degree of wonder), than I do of the tricks of tumblers, funambuloes, baladines; the one being the same in the mind that the other is in the body, matters

of strangeness without worthiness.

Bacon, Advancement of Learning, Bk. II, XV, 2

16 Let the required nature be memory, or that which excites and assists memory. The constitutive instances are order or distribution, which manifestly assists memory; topics or common-places in artificial memory, which may be either places in their literal sense, as a gate, a corner, a window, and the like, or familiar persons and marks, or anything else (provided it be arranged in a determinate order), as animals, plants, and words, letters, characters, historical persons, and the like, of which, however, some are more convenient than others. All these common-places materially assist memory, and raise it far above its natural strength. Verse, too, is recollected and learnt more easily than prose. From this group of three instances-order, the common-places of artificial memory, and verses—is constituted one species of aid for the memory, which may be well termed a separation from infinity. For when a man strives to recollect or recall anything to memory, without a preconceived notion or perception of the object of his search, he inquires about, and labors, and turns from point to point, as if involved in infinity. But if he have any preconceived notion, this infinity is separated off, and the range of his memory is brought within closer limits. In the three instances given above, the preconceived notion is clear and determined. In the first, it must be something that agrees with order; in the second, an image which has some relation or agreement with the fixed common-places; in the third, words which fall into a verse: and thus infinity is divided off. Other instances will offer another species, namely, that whatever brings the intellect into contact with something that strikes the sense (the principal point of artificial memory), assists the memory. Others again offer another species, namely, whatever excites an impression by any powerful passion, as fear, wonder, shame, delight, assists the memory. Other instances will afford another species: thus those impressions remain most fixed in the memory which are taken from the mind when clear and least occupied by preceding or succeeding notions, such as the things we learn in childhood, or imagine before sleep, and the first time of any circumstance happening.

Bacon, Novum Organum, II, 26

17 The things perceived by sense remain in some animals; in others they do not remain. Those in whom they do not remain, however, have either no knowledge at all, or at least none beyond the simple perception of the things which do not remain; others, again, when they perceive, retain a certain something in their soul. Now, as there are many animals of this description, there is already a distinction between one animal and another; and to this extent, that in some there is reason

from the memory of things; and in others there is none. Memory, therefore, as is said, follows from sense; but from repeated recollection of the same thing springs experience (for repeated acts of memory constitute a single experience). . . .

Wherefore . . . there is no perfect knowledge which can be entitled ours, that is innate; none but what has been obtained from experience, or derived in some way from our senses; all knowledge, at all events, is examined by these, approved by them, and finally presents itself to us firmly grounded upon some preëxisting knowledge which we possessed: because without memory there is no experience, which is nothing else than reiterated memory; in like manner memory cannot exist without endurance of the things perceived, and the thing perceived cannot remain where it has never been.

William Harvey, Animal Generation, Intro.

18 Sometimes a man seeks what he hath lost; and from that place, and time, wherein he misses it, his mind runs back, from place to place, and time to time, to find where and when he had it; that is to say, to find some certain and limited time and place in which to begin a method of seeking. Again, from thence, his thoughts run over the same places and times to find what action or other occasion might make him lose it. This we call remembrance, or calling to mind.

Hobbes, Leviathan, I, 3

19 Time and Education begets experience; Experience begets Memory; Memory begets Judgment and Fancy: Judgment begets the strength and structure, and Fancy begets the ornaments of a Poem. The Ancients therefore fabled not absurdly, in making memory the mother of the Muses. For memory is the World (though not really, yet so as in a looking glass) in which the Judgment (the severer sister) busieth herself in a grave and rigid examination of all the parts of Nature, and in registring by Letters, their order, causes, uses, differences, and resemblances; Whereby the Fancy, when any work of Art is to be performed, findeth her materials at hand and prepared for use, and needs no more than a swift motion over them, that what she wants, and is there to be had, may not lye too long unespied. So that when she seemeth to fly from one Indies to the other, and from Heaven to Earth, and to penetrate into the hardest matter, and obscurest places, into the future and into her self, and all this in a point of time; the voyage is not very great, her self being all she seeks; and her wonderful celerity, consisteth not so much in motion, as in copious Imagery discreetly ordered, and perfectly registred in the memory.

Hobbes, Answer to Sir Will. D'Avenant's Preface Before Gondibert

20 But the iniquity of oblivion blindly scattereth her

poppy, and deals with the memory of men without distinction to merit of perpetuity. . . . Who knows whether the best of men be known, or whether there be not more remarkable persons forgot than any that stand remembered in the known account of time?

Sir Thomas Browne, Um-Burial, V

21 Memory . . . is nothing else than a certain concatenation of ideas, involving the nature of things which are outside the human body, a concatenation which corresponds in the mind to the order and concatenation of the affections of the human body. I say, firstly, that it is a concatenation of those ideas only which involve the nature of things which are outside the human body, and not of those ideas which explain the nature of those things, for there are in truth ideas of the affections of the human body, which involve its nature as well as the nature of external bodies. I say, in the second place, that this concatenation takes place according to the order and concatenation of the affections of the human body, that I may distinguish it from the concatenation of ideas which takes place according to the order of the intellect, and enables the mind to perceive things through their first causes, and is the same in all men. Hence we can clearly understand how it is that the mind from the thought of one thing at once turns to the thought of another thing which is not in any way like the first. . . . In this manner each person will turn from one thought to another according to the manner in which the habit of each has arranged the images of things in the body. The soldier, for instance, if he sees the footsteps of a horse in the sand, will immediately turn from the thought of a horse to the thought of a horseman, and so to the thought of war. The countryman, on the other hand, from the thought of a horse will turn to the thought of his plough, his field, etc.; and thus each person will turn from one thought to this or that thought, according to the manner in which he has been accustomed to connect and bind together the images of things in his mind.

Spinoza, Ethics, II, Prop. 18, Schol.

22 Retention is the power to revive again in our minds those ideas which, after imprinting, have disappeared, or have been as it were laid aside out of sight. And thus we do, when we conceive heat or light, yellow or sweet,-the object being removed. This is memory, which is as it were the store-house of our ideas. For, the narrow mind of man not being capable of having many ideas under view and consideration at once, it was necessary to have a repository, to lay up those ideas which, at another time, it might have use of. But, our ideas being nothing but actual perceptions in the mind, which cease to be anything when there is no perception of them; this laying up of our ideas in the repository of the memory signifies no more but this,-that the mind has a power in many cases to revive perceptions which it has once had, with this additional perception annexed to them, that it has had them before. And in this sense it is that our ideas are said to be in our memories, when indeed they are actually nowhere;-but only there is an ability in the mind when it will to revive them again, and as it were paint them anew on itself, though some with more, some with less difficulty; some more lively, and others more obscurely. And thus it is, by the assistance of this faculty, that we are said to have all those ideas in our understandings which, though we do not actually contemplate, yet we can bring in sight, and make appear again, and be the objects of our thoughts, without the help of those sensible qualities which first imprinted them there.

> Locke, Concerning Human Understanding, Bk. II, X, 2

23 The memory of some men, it is true, is very tenacious, even to a miracle. But yet there seems to be a constant decay of all our ideas, even of those which are struck deepest, and in minds the most retentive; so that if they be not sometimes renewed, by repeated exercise of the senses, or reflection on those kinds of objects which at first occasioned them, the print wears out, and at last there remains nothing to be seen. Thus the ideas, as well as children, of our youth, often die before us: and our minds represent to us those tombs to which we are approaching; where, though the brass and marble remain, yet the inscriptions are effaced by time, and the imagery moulders away. The pictures drawn in our minds are laid in fading colours; and if not sometimes refreshed, vanish and disappear. How much the constitution of our bodies and the make of our animal spirits are concerned in this; and whether the temper of the brain makes this difference, that in some it retains the characters drawn on it like marble, in others like freestone, and in others little better than sand, I shall not here inquire; though it may seem probable that the constitution of the body does sometimes influence the memory, since we oftentimes find a disease quite strip the mind of all its ideas, and the flames of a fever in a few days calcine all those images to dust and confusion, which seemed to be as lasting as if graved in marble.

> Locke, Concerning Human Understanding, Bk. II, X, 5

24 Music, when soft voices die, Vibrates in the memory; Odors, when sweet violets sicken, Live within the sense they quicken.

Rose leaves, when the rose is dead, Are heaped for the beloved's bed;

And so thy thoughts, when thou art gone, Love itself shall slumber on.

Shelley, To-

25 Blessed are the forgetful: for they get over their stupidities, too.

Nietzsche, Beyond Good and Evil, VII, 217

26 Try . . . to symbolize what goes on in a man who is racking his brains to remember a thought which occurred to him last week. The associates of the thought are there, many of them at least, but they refuse to awaken the thought itself. We cannot suppose that they do not irradiate at all into its brain-tract, because his mind quivers on the very edge of its recovery. Its actual rhythm sounds in his ears; the words seem on the imminent point of following, but fail. What it is that blocks the discharge and keeps the brain-excitement here from passing beyond the nascent into the vivid state cannot be guessed. But we see in the philosophy of desire and pleasure, that such nascent excitements, spontaneously tending to a crescendo, but inhibited or checked by other causes, may become potent mental stimuli and determinants of desire. All questioning, wonder, emotion of curiosity, must be referred to cerebral causes of some such form as this. The great difference between the effort to recall things forgotten and the search after the means to a given end, is that the latter have not, whilst the former have, already formed a part of our experience. . . .

The forgotten thing is felt by us as a gap in the midst of certain other things. If it is a thought, we possess a dim idea of where we were and what we were about when it occurred to us. We recollect the general subject to which it relates. But all these details refuse to shoot together into a solid whole, for the lack of the vivid traits of this missing thought, the relation whereof to each detail forms now the main interest of the latter. We keep running over the details in our mind, dissatisfied, craving something more. From each detail there radiate lines of association forming so many tentative guesses. Many of these are immediately seen to be irrelevant, are therefore void of interest, and lapse immediately from consciousness. Others are associated with the other details present, and with the missing thought as well. When these surge up, we have a peculiar feeling that we are "warm," as the children say when they play hide and seek; and such associates as these we clutch at and keep before the attention. Thus we recollect successively that when we had the thought in question we were at the dinner-table; then that our friend J. D. was there; then that the subject talked about was so and so; finally, that the thought came  $\hat{a}$ propos of a certain anecdote, and then that it had something to do with a French quotation. Now all these added associations arise independently of the will, by the spontaneous process we know so well.

All that the will does is to emphasize and linger over those which seem pertinent, and ignore the rest. Through this hovering of the attention in the neighborhood of the desired object, the accumulation of associates becomes so great that the combined tensions of their neural processes break through the bar, and the nervous wave pours into the tract which has so long been awaiting its advent. And as the expectant, sub-conscious itching there, bursts into the fulness of vivid feeling, the mind finds an inexpressible relief.

William James, Psychology, XIV

27 The stream of thought flows on; but most of its segments fall into the bottomless abyss of oblivion. Of some, no memory survives the instant of their passage. Of others, it is confined to a few moments, hours, or days. Others, again, leave vestiges which are indestructible, and by means of which they may be recalled as long as life endures.

William James, Psychology, XVI

28 Memory proper, or secondary memory as it might be styled, is the knowledge of a former state of mind after it has already once dropped from consciousness; or rather it is the knowledge of an event, or fact, of which meantime we have not been thinking, with the additional consciousness that we have thought or experienced it before.

The first element which such a knowledge involves would seem to be the revival in the mind of an image or copy of the original event. And it is an assumption made by many writers that the revival of an image is all that is needed to constitute the memory of the original occurrence. But such a revival is obviously not a memory, whatever else it may be; it is simply a duplicate, a second event, having absolutely no connection with the first event except that it happens to resemble it. The clock strikes to-day; it struck yesterday; and may strike a million times ere it wears out. The rain pours through the gutter this week; it did so last week; and will do so in soecula soeculorum. But does the present clock-stroke become aware of the past ones, or the present stream recollect the past stream, because they repeat and resemble them? Assuredly not. . . . No memory is involved in the mere fact of recurrence. The successive editions of a feeling are so many independent events, each snug in its own skin. Yesterday's feeling is dead and buried; and the presence of to-day's is no reason why it should resuscitate. A farther condition is required before the present image can be held to stand for a past original.

That condition is that the fact imaged be expressly referred to the past, thought as in the past. But how can we think a thing as in the past, except by thinking of the past together with the thing, and of the relation of the two? And how can we think of the past? In the chapter on Time-perception we

have seen that our intuitive or immediate consciousness of pastness hardly carries us more than a few seconds backward of the present instant of time. Remoter dates are conceived, not perceived: known symbolically by names, such as "last week," "1850"; or thought of by events which happened in them, as the year in which we attended such a school, or met with such a loss.-So that if we wish to think of a particular past epoch. we must think of a name or other symbol, or else of certain concrete events, associated therewithal, Both must be thought of, to think the past epoch adequately. And to "refer" any special fact to the past epoch is to think that fact with the names and events which characterize its date, to think it, in short, with a lot of contiguous associates.

But even this would not be memory. Memory requires more than mere dating of a fact in the past. It must be dated in my past. In other words, I must think that I directly experienced its occurrence. It must have that "warmth and intimacy" which . . . characteriz[es] all experiences "appropriated" by the thinker as his own.

William James, Psychology, XVI

29 In the practical use of our intellect, forgetting is as important a function as recollecting. . .

This peculiar mixture of forgetting with our remembering is but one instance of our mind's selective activity. Selection is the very keel on which our mental ship is built. And in this case of memory its utility is obvious. If we remembered everything, we should on most occasions be as ill off as if we remembered nothing. It would take as long for us to recall a space of time as it took the original time to elapse, and we should never get ahead with our thinking. All recollected times undergo, accordingly, what M. Ribot calls foreshortening; and this foreshortening is due to the omission of an enormous number of the facts which filled them.

William James, Psychology, XVI

30 In human experience, the most compelling example of non-sensuous perception is our knowledge of our own immediate past. I am not referring to our memories of a day past, or of an hour past, or of a minute past. Such memories are blurred and confused by the intervening occasions of our personal existence. But our immediate past is constituted by that occasion, or by that group of fused occasions, which enters into experience devoid of any perceptible medium intervening between it and the present immediate fact. Roughly speaking, it is that portion of our past lying between a tenth of a second and half a second ago. It is gone, and yet it is here. It is our indubitable self, the foundation of our present existence. Yet the present occasion while claiming self-identity, while sharing the very nature of the byegone occasion in all its living activities, nevertheless is engaged in

modifying it, in adjusting it to other influences, in completing it with other values, in deflecting it to other purposes. The present moment is constituted by the influx of the other into that self-identity which is the continued life of the immediate past within the immediacy of the present.

Whitehead, Adventures of Ideas, XI, 12

31 Memory is the purest example of mirror knowledge. When I remember a piece of music or a friend's face, my state of mind resembles, though with a difference, what it was when I heard the music or saw the face. If I have sufficient skill, I can play the music or paint the face from memory, and then compare my playing or painting with the original, or rather with something which I have reason to believe closely similar to the original. But we trust our memory, up to a point, even if it does not pass this test. If our friend appears with a black eye, we say, "How did you get that injury?" not "I had forgotten that you had a black eye." The tests of memory, as we have already had occasion to notice, are only confirmations; a considerable degree of credibility attaches to a memory on its own account, particularly if it is vivid and recent.

A memory is accurate, not in proportion to the help it gives in handling present and future facts, but in proportion to its resemblance to a past fact. When Herbert Spencer, after fifty years, saw again the lady he had loved as a young man, whom he had imagined still young, it was the very accuracy of his memory which incapacitated him from handling the present fact. In regard to memory, the definition of "truth," and therefore of "knowledge," lies in the resemblance of present imagining to past sensible experience. Capacity for handling present and future facts may be confirmatory in certain circumstances, but can never define what we mean when we say that a certain memory is "knowledge."

Russell, Human Knowledge, VI, 1

32 When I had reached in my procedure with [my patients] a point at which they declared that they knew nothing more, I would assure them that they did know, that they must just tell it out, and I would venture the assertion that the memory which would emerge at the moment that I laid my hand on the patient's forehead would be the right one. In this way I succeeded, without hypnosis, in learning from the patient all that was necessary for a construction of the connection between the forgotten pathogenic scenes and the symptoms which they had left behind. This was a troublesome and in its length an exhausting proceeding, and did not lend itself to a finished technique. But I did not give it up without drawing definite conclusions from the data which I had gained. I had substantiated the fact that the forgotten memories were not lost. They were in the possession of the patient, ready to emerge and form associations with his other mental content, but hindered from becoming conscious, and forced to remain in the unconscious by some sort of a force. The existence of this force could be assumed with certainty, for in attempting to drag up the unconscious memories into the consciousness of the patient, in opposition to this force, one got the sensation of his own personal effort striving to overcome it. One could get an idea of this force, which maintained the pathological situation, from the resistance of the patient.

It is on this idea of resistance that I based my theory of the psychic processes of hystericals. It had been found that in order to cure the patient it was necessary that this force should be overcome. Now with the mechanism of the cure as a starting point, quite a definite theory could be constructed. These same forces, which in the present situation as resistances opposed the emergence of the forgotten ideas into consciousness, must themselves have caused the forgetting, and repressed from consciousness the pathogenic experiences. I called this hypothetical process repression and considered that it was proved by the undeniable existence of resistance.

Freud, Origin and Development of Psycho-Analysis, II

33 It is quite true that the unconscious wishes are

always active. They represent paths which are always practicable, whenever a quantum of excitation makes use of them. It is indeed an outstanding peculiarity of the unconscious processes that they are indestructible. Nothing can be brought to an end in the unconscious; nothing is past or forgotten. . . . Indeed, the fading of memories and the weak affect of impressions which are no longer recent, which we are apt to take as self-evident, and to explain as a primary effect of time on our psychic memory-residues, are in reality secondary changes brought about by laborious work.

Freud, Interpretation of Dreams, VII, D

34 The process of repression is not to be regarded as something which takes place once for all, the results of which are permanent, as when some living thing has been killed and from that time onward is dead; on the contrary, repression demands a constant expenditure of energy, and if this were discontinued the success of the repression would be jeopardized, so that a fresh act of repression would be necessary. We may imagine that what is repressed exercises a continuous straining in the direction of consciousness, so that the balance has to be kept by means of a steady counter-pressure. A constant expenditure of energy, therefore, is entailed in maintaining a repression, and economically its abrogation denotes a saving.

Freud, Repression

## 5.4 | Imagination

Imagination is the faculty of poetry and fiction—of imaginative literature in all its forms. The poets express their appreciation of its resources and of its gifts. Fancy and fantasy not only create realms that cannot be explored by sense; imagination also exercises a magic touch on sensible reality, reshaping and enlivening it in a variety of ways.

Imagination like memory is thought of by the philosophers and psychologists as a residue or by-product of sense and sense perception. Yet the products of imagination often go beyond the world of things perceived and remembered. The fictions or constructions of the imagination—such as mermaids, centaurs, unicorns, and golden mountains—may involve elements derived from sense perception, but they also represent compositions that have never been experienced. What mode of being, if any, is possessed by such objects of imagination? Or, for that matter, by the imaginary persons who are the characters in plays and novels?

The word "ideas" is used by some writers—Hume, for example—for the images

that are derived from sense impressions. Other writers make a sharp distinction between images or phantasms—the products of imagination—and ideas or concepts which are the elements of thought and are attributed to the mind or intellect rather than to the imagination. When images and ideas or concepts are distinguished, problems arise concerning their inter-dependence. Can we conceive things that we cannot imagine? Is there a difference between the unimaginable and the inconceivable?

For the discussion of related matters, the reader is referred to Section 6.2 on Experi-ENCE, and to Section 16.3 on POETRY AND POETS: and also to Section 5.1 on Intelli-GENCE AND UNDERSTANDING.

1 Imagination is different from either perceiving or discursive thinking, though it is not found without sensation, or judgement without it. That this activity is not the same kind of thinking as judgement is obvious. For imagining lies within our own power whenever we wish (e.g. we can call up a picture, as in the practice of mnemonics by the use of mental images), but in forming opinions we are not free: we cannot escape the alternative of falsehood or truth. Further, when we think something to be fearful or threatening, emotion is immediately produced, and so too with what is encouraging, but when we merely imagine we remain as unaffected as persons who are looking at a painting of some dreadful or encouraging scene. Again within the field of judgement itself we find varieties-knowledge, opinion, prudence, and their opposites; of the differences between these I must speak elsewhere.

Thinking is different from perceiving and is held to be in part imagination, in part judgement: we must therefore first mark off the sphere of imagination and then speak of judgement. If then imagination is that in virtue of which an image arises for us, excluding metaphorical uses of the term, is it a single faculty or disposition relative to images, in virtue of which we discriminate and are either in error or not? The faculties in virtue of which we do this are sense, opinion, science, intelligence.

That imagination is not sense is clear from the following considerations: Sense is either a faculty or an activity, e.g. sight or seeing: imagination takes place in the absence of both, as e.g. in dreams. (2) Again, sense is always present, imagination not. If actual imagination and actual sensation were the same, imagination would be found in all the brutes: this is held not to be the case; e.g. it is not found in ants or bees or grubs. (3) Again, sensations are always true, imaginations are for the most part false. (4) Once more, even in ordinary speech, we do not, when sense functions precisely with regard to its object, say that we imagine it to be a man, but rather when there is some failure of accuracy in its exercise. And (5), as we were saying before, visions appear to us even when our eyes are shut. Neither is imagination any of the things that are never in error: e.g. knowledge or intelligence; for imagination may

It remains therefore to see if it is opinion, for opinion may be either true or false.

But opinion involves belief (for without belief in what we opine we cannot have an opinion), and in the brutes though we often find imagination we never find belief. Further, every opinion is accompanied by belief, belief by conviction, and conviction by discourse of reason: while there are some of the brutes in which we find imagination, without discourse of reason. It is clear then that imagination cannot, again, be (1) opinion plus sensation, or (2) opinion mediated by sensation, or (3) a blend of opinion and sensation; this is impossible both for these reasons and because the content of the supposed opinion cannot be different from that of the sensation (I mean that imagination must be the blending of the perception of white with the opinion that it is white: it could scarcely be a blend of the opinion that it is good with the perception that it is white): to imagine is therefore (on this view) identical with the thinking of exactly the same as what one in the strictest sense perceives. But what we imagine is sometimes false though our contemporaneous judgement about it is true; e.g. we imagine the sun to be a foot in diameter though we are convinced that it is larger than the inhabited part of the earth, and the following dilemma presents itself. Either (a) while the fact has not changed and the observer has neither forgotten nor lost belief in the true opinion which he had, that opinion has disappeared, or (b) if he retains it then his opinion is at once true and false. A true opinion, however, becomes false only when the fact alters without being noticed.

Imagination is therefore neither any one of the states enumerated, nor compounded out of them.

But since when one thing has been set in motion another thing may be moved by it, and imagination is held to be a movement and to be impossible without sensation, i.e. to occur in beings that are percipient and to have for its content what can be perceived, and since movement may be produced by actual sensation and that movement is necessarily similar in character to the sensation itself, this movement must be (1) necessarily (a) incapable of existing apart from sensation, (b) incapable of existing except when we perceive, (2) such that in virtue of its possession that in which it is found may present various phenomena both active and passive, and (3) such that it may be either true or false.

The reason of the last characteristic is as follows. Perception (1) of the special objects of sense is never in error or admits the least possible amount of falsehood. (2) That of the concomitance of the objects concomitant with the sensible qualities comes next: in this case certainly we may be deceived; for while the perception that there is white before us cannot be false, the perception that what is white is this or that may be false. (3) Third comes the perception of the universal attributes which accompany the concomitant objects to which the special sensibles attach (I mean e.g. of movement and magnitude); it is in respect of these that the greatest amount of sense-illusion is possible.

The motion which is due to the activity of sense in these three modes of its exercise will differ from the activity of sense; (1) the first kind of derived motion is free from error while the sensation is present; (2) and (3) the others may be erroneous whether it is present or absent, especially when the object of perception is far off. If then imagination presents no other features than those enumerated and is what we have described, then imagination must be a movement resulting from an actual exercise of a power of sense.

As sight is the most highly developed sense... imagination has been formed from light because it is not possible to see without light.

And because imaginations remain in the organs of sense and resemble sensations, animals in their actions are largely guided by them, some (i.e. the brutes) because of the non-existence in them of mind, others (i.e. men) because of the temporary eclipse in them of mind by feeling or disease or sleep.

About imagination, what it is and why it exists, let so much suffice.

Aristotle, On the Soul, 427b14

2 And now that I have taught what the nature of the mind is and out of what things it is formed into one quickened being with the body, and how it is dissevered and returns into its first-beginnings, I will attempt to lay before you a truth which most nearly concerns these questions, the existence of things which we call idols of things: these, like films peeled off from the surface of things, fly to and fro through the air, and do likewise frighten our minds when they present them-

selves to us awake as well as in sleep, what time we behold strange shapes and idols of the light-bereaved, which have often startled us in appalling wise as we lay relaxed in sleep: this I will essay, that we may not haply believe that souls break loose from Acheron or that shades fly about among the living or that something of us is left behind after death, when the body and the nature of the mind destroyed together have taken their departure into their several first-beginnings.

Lucretius, Nature of Things, IV

3 In the present state of life in which the soul is united to a passible body, it is impossible for our intellect to understand anything actually except by turning to the phantasms. And of this there are two indications. First of all because the intellect, being a power that does not make use of a corporeal organ, would in no way be hindered in its act through the lesion of a corporeal organ if for its act there were not required the act of some power that does make use of a corporeal organ. Now sense, imagination and the other powers belonging to the sensitive part, make use of a corporeal organ. Therefore it is clear that for the intellect to understand actually, not only when it acquires fresh knowledge, but also when it uses knowledge already acquired, there is need for the act of the imagination and of the other powers. For when the act of the imagination is hindered by a lesion of the corporeal organ, for instance, in a case of frenzy, or when the act of the memory is hindered, as in the case of lethargy, we see that a man is hindered from actually understanding things of which he had a previous knowledge. Secondly, anyone can experience this of himself, that when he tries to understand something, he forms certain phantasms to serve him by way of examples, in which as it were he examines what he is striving to understand. It is for this reason that when we wish to make someone understand something, we lay examples before him, from which he can form phantasms for the purpose of understanding.

Now the reason of this is that the power of knowledge is proportioned to the thing known. Thus . . . the proper object of the human intellect, which is united to a body, is a quiddity or nature existing in corporeal matter, and through such natures of visible things it rises even to some knowledge of things invisible. Now it belongs to such a nature to exist in an individual, and this cannot be apart from corporeal matter. . . . And so the nature of a stone or any material thing cannot be known completely and truly, except according as it is known as existing in the individual. Now we apprehend the individual through the senses and the imagination. And, therefore, for the intellect to understand actually its proper object, it must of necessity turn to the phantasms in order to examine the universal nature existing in the individual.

down.

Aquinas, Summa Theologica, I, 84, 7

4 O fantasy, that at times dost so snatch us out of ourselves that we are conscious of naught, even though a thousand trumpets sound about us, who moves thee, if the senses set naught before thee? A light moves thee which takes its form in heaven, of itself, or by a will that sendeth it

Dante, Purgatorio, XVII, 13

5 And I, who to the goal of all my longings was drawing nigh, even as was meet the ardour of the yearning quenched within me.

Bernard gave me the sign and smiled to me that I should look on high, but I already of myself was such as he would have me;

because my sight, becoming purged, now more and more was entering through the ray of the deep light which in itself is true.

Thenceforward was my vision mightier than our discourse, which faileth at such sight, and faileth memory at so great outrage.

As is he who dreaming seeth, and when the dream is gone the passion stamped remaineth, and naught else cometh to the mind again;

even such am I; for almost wholly faileth me my vision, yet doth the sweetness that was born of it still drop within my heart.

So doth the snow unstamp it to the sun, so to the wind on the light leaves was lost the Sibyl's wisdom.

Dante, Paradiso, XXXIII, 46

6 So it is with minds. Unless you keep them busy with some definite subject that will bridle and control them, they throw themselves in disorder hither and you in the vague field of imagination.

. . And there is no mad or idle fancy that they do not bring forth in this agitation.

Montaigne, Essays, I, 8, Of Idleness

7 How many men have been made sick by the mere power of imagination?

Montaigne, Essays, II, 12, Apology for Raymond Sebond

8 Holofemes. This is a gift that I have, simple, simple; a foolish extravagant spirit, full of forms, figures, shapes, objects, ideas, apprehensions, motions, revolutions: these are begot in the ventricle of memory, nourished in the womb of pia mater, and delivered upon the mellowing of occasion.

Shakespeare, Love's Labour's Lost, IV, ii, 67

9 Theseus. Such tricks hath strong imagination, That, if it would but apprehend some joy, It comprehends some bringer of that joy; Or in the night, imagining some fear, How easy is a bush supposed a bear!

Shakespeare, Midsummer-Night's

Dream, V, i, 18

- 10 Tell me where is fancy bred,
  Or in the heart or in the head?
  How begot, how nourished?
  Reply, reply.
  It is engender'd in the eyes,
  With gazing fed; and fancy dies
  In the cradle where it lies.
  Let us all ring fancy's knell:
  I'll begin it—Ding, dong, bell.
  Shakespeare, Merchant of Venice, III, ii, 63
- 11 Chorus. O for a Muse of fire, that would ascend The brightest heaven of invention A kingdom for a stage, princes to act And monarchs to behold the swelling scene! Then should the warlike Harry, like himself, Assume the port of Mars; and at his heels, Leash'd in like hounds, should famine, sword, and fire

Crouch for employment. But pardon, gentles all, The flat unraised spirits that have dared On this unworthy scaffold to bring forth So great an object: can this cockpit hold The vasty fields of France? or may we cram Within this wooden O the very casques That did affright the air at Agincourt? O, pardon! since a crooked figure may Attest in little place a million; And let us, ciphers to this great accompt, On your imaginary forces work. Suppose within the girdle of these walls Are now confined two mighty monarchies, Whose high upreared and abutting fronts The perilous narrow ocean parts asunder: Piece out our imperfections with your thoughts; Into a thousand parts divide one man, And make imaginary puissance: Think, when we talk of horses, that you see them Printing their proud hoofs i' the receiving earth; For 'tis your thoughts that now must deck our kings,

Carry them here and there; jumping o'er times, Turning the accomplishment of many years Into an hour-glass: for the which supply, Admit me Chorus to this history.

Shakespeare, Henry V, Prologue

12 Chorus. Thus with imagined wing our swift scene flies
In motion of no less celerity
Than that of thought. Suppose that you have seen The well-appointed king at Hampton pier Embark his royalty; and his brave fleet
With silken streamers the young Phæbus fanning: Play with your fancies, and in them behold
Upon the hempen tackle ship-boys climbing; Hear the shrill whistle which doth order give
To sounds confused; behold the threaden sails,

Borne with the invisible and creeping wind, Draw the huge bottoms through the furrow'd sea, Breasting the lofty surge: O, do but think You stand upon the rivage and behold A city on the inconstant billows dancing; For so appears this fleet majestical, Holding due course to Harfleur. Follow, follow: Grapple your minds to sternage of this navy, And leave your England, as dead midnight still, Guarded with grandsires, babies, and old women Either past or not arrived to pith and puissance: For who is he, whose chin is but enrich'd With one appearing hair, that will not follow These cull'd and choice-drawn cavaliers to Work, work your thoughts, and therein see a

Behold the ordnance on their carriages, With fatal mouths gaping on girded Harfleur. Suppose the ambassador from the French comes

Tells Harry that the King doth offer him Katharine his daughter, and with her, to dowry, Some petty and unprofitable dukedoms. The offer likes not: and the nimble gunner With linstock now the devilish cannon touches, Alarum, and chambers go off.

And down goes all before them. Still be kind, And eke out our performance with your mind. Shakespeare, Henry V, III, Prologue

13 Macbeth. Why do I yield to that suggestion Whose horrid image doth unfix my hair And make my seated heart knock at my ribs, Against the use of nature? Present fears Are less than horrible imaginings.

Shakespeare, Macbeth, I, iii, 134

14 So, Sancho, as to the Use which I make of the Lady Dulcinea, she is equal to the greatest Princesses in the World. Pr'ythee tell me, Dost thou think the Poets, who every one of 'em celebrate the Praises of some Lady or other, had all real Mistresses? Or that the Amaryllis's, the Phyllis's, the Sylvia's, the Diana's, the Galatea's, the Alida's, and the like, which you shall find in so many Poems, Romances, Songs and Ballads, upon ever Stage, and even in every Barber's Shop, were Creatures of Flesh and Blood, and Mistresses to those that did and do celebrate 'em? No, no, never think it; for I dare assure thee, the greatest Part of 'em were nothing but the meer Imaginations of the Poets, for a Ground-work to exercise their Wits upon, and give to the World Occasion to look on the Authors as Men of an amorous and gallant Disposition: And so 'tis sufficient for me to imagine, that Aldonza Lorenzo is beautiful and chaste; as for her Birth and Parentage, they concern me but little; for there's no need to make an Enquiry about a Woman's Pedigree, as there is of us Men, when some Badge of Honour is bestowed on us; and so

she's to me the greatest Princess in the World: For thou ought'st to know, Sancho, if thou know'st it not already, that there are but two things that chiefly excite us to love a Woman, an attractive Beauty, and unspotted Fame. Now these two Endowments are happily reconcil'd in Dulcinea; for as for the one, she has not her Equal, and few can vie with her in the other: But to cut off all Objections at once, I imagine, that All I say of her is really so, without the least Addition or Diminution: I fancy her to be just such as I would have her for Beauty and Quality. Helen cannot stand in Competition with her; Lucretia cannot rival her; and all the Heroines which Antiquity has to boast, whether Greeks, Romans or Barbarians, are at once out-done by her incomparable Perfections. Therefore let the World say what it will; should the Ignorant Vulgar foolishly censure me, I please my self with the Assurances I have of the Approbation of Men of the strictest Morals, and the nicest Judgment.

Cervantes, Don Quixote, I, 25

15 Sancho. Heaven defend me, said he to himself, what a Heart of a Chicken have I! This now, which to me is a sad Disaster, to my Master, Don Quixote, would be a rare Adventure. He would look upon these Caves and Dungeons as lovely Gardens, and glorious Palaces, and hope to be led out of these dark narrow Cells into some fine Meadow; while I, luckless, helpless, heartless Wretch that I am, every Step I take, expect to sink into some deeper Pit than this, and go down I don't know whither.

Cervantes, Don Quixote, II, 55

16 That power by which we are properly said to know things, is purely spiritual, and not less distinct from every part of the body than blood from bone, or hand from eye. It is a single agency, whether it receives impressions from the common sense simultaneously with the fancy, or applies itself to those that are preserved in the memory, or forms new ones. Often the imagination is so beset by these impressions that it is unable at the same time to receive ideas from the common sense, or to transfer them to the motor mechanism in the way befitting its purely corporeal character. In all these operations this cognitive power is at one time passive, at another active, and resembles now the seal and now the wax. But the resemblance on this occasion is only one of analogy, for among corporeal things there is nothing wholly similar to this faculty. It is one and the same agency which, when applying itself along with the imagination to the common sense, is said to see, touch, etc.; if applying itself to the imagination alone in so far as that is endowed with diverse impressions, it is said to remember; if it turn to the imagination in order to create fresh impressions, it is said to imagine or conceive; finally if it act alone it is said

to understand. . . . Now it is the same faculty that in correspondence with those various functions is called either pure understanding, or imagination, or memory, or sense. It is properly called mind when it either forms new ideas in the fancy, or attends to those already formed. . . . But after having grasped these facts the attentive reader will gather what help is to be expected from each particular faculty, and discover how far human effort can avail to supplement the deficiencies of our mental powers.

Descartes, Rules for Direction of the Mind, XII

17 When a body is once in motion, it moveth (unless something else hinder it) eternally; and whatsoever hindreth it, cannot in an instant, but in time, and by degrees, quite extinguish it: and as we see in the water, though the wind cease, the waves give not over rolling for a long time after; so also it happeneth in that motion which is made in the internal parts of a man, then, when he sees, dreams, etc. For after the object is removed, or the eye shut, we still retain an image of the thing seen, though more obscure than when we see it. And this is it the Latins call imagination, from the image made in seeing. . . . Imagination, therefore, is nothing but decaying sense; and is found in men and many other living creatures, as well sleeping as waking.

The decay of sense in men waking is not the decay of the motion made in sense, but an obscuring of it, in such manner as the light of the sun obscureth the light of the stars; which stars do no less exercise their virtue by which they are visible in the day than in the night. . . . This decaying sense, when we would express the thing itself (I mean fancy itself), we call imagination, as I said before. But when we would express the decay, and signify that the sense is fading, old, and past, it is called memory. So that imagination and memory are but one thing, which for diverse considerations hath diverse names.

Hobbes, Leviathan, I, 2

18 It is that deceitful part in man, that mistress of error and falsity, the more deceptive that she is not always so; for she would be an infallible rule of truth, if she were an infallible rule of falsehood. But being most generally false, she gives no sign of her nature, impressing the same character on the true and the false.

I do not speak of fools, I speak of the wisest men; and it is among them that the imagination has the great gift of persuasion. Reason protests in vain; it cannot set a true value on things.

This arrogant power, the enemy of reason, who likes to rule and dominate it, has established in man a second nature to show how all-powerful she is. She makes men happy and sad, healthy and sick, rich and poor; she compels reason to believe, doubt, and deny; she blunts the senses, or quickens them; she has her fools and sages; and nothing vexes us more than to see that she fills her devotees with a satisfaction far more full and entire than does reason. Those who have a lively imagination are a great deal more pleased with themselves than the wise can reasonably be. They look down upon men with haughtiness; they argue with boldness and confidence, others with fear and diffidence; and this gaiety of countenance often gives them the advantage in the opinion of the hearers, such favour have the imaginary wise in the eyes of judges of like nature. Imagination cannot make fools wise; but she can make them happy, to the envy of reason which can only make its friends miserable; the one covers them with glory, the other with shame,

What but this faculty of imagination dispenses reputation, awards respect and veneration to persons, works, laws, and the great? How insufficient are all the riches of the earth without her consent!

Would you not say that this magistrate, whose venerable age commands the respect of a whole people, is governed by pure and lofty reason, and that he judges causes according to their true nature without considering those mere trifles which only affect the imagination of the weak? See him go to sermon, full of devout zeal, strengthening his reason with the ardour of his love. He is ready to listen with exemplary respect. Let the preacher appear, and let nature have given him a hoarse voice or a comical cast of countenance, or let his barber have given him a bad shave, or let by chance his dress be more dirtied than usual, then, however great the truths he announces, I wager our senator loses his gravity.

If the greatest philosopher in the world find himself upon a plank wider than actually necessary, but hanging over a precipice, his imagination will prevail, though his reason convince him of his safety. Many cannot bear the thought without a cold sweat. I will not state all its effects.

Pascal, Pensées, II, 82

19 Imagination has this peculiarity that it produces the greatest things with as little time and trouble as little things.

Pascal, Concerning the Vacuum

20 An imagination is an idea which indicates the present constitution of the human body rather than the nature of an external body, not indeed distinctly but confusedly, so that the mind is said to err. For example, when we look at the sun, we imagine his distance from us to be about 200 feet, and in this we are deceived so long as we remain in ignorance of the true distance. When this is known, the error is removed, but not the imagination, that is to say, the idea of the sun which manifests his nature in so far only as the body is affected by him; so that although we know his true distance, we nevertheless imagine him close to us. For . . . it is not because we are ignorant of the sun's true distance that we imagine him to be so close to us, but because the mind conceives the magnitude of the sun just in so far as the body is affected by him. So when the rays of the sun falling upon a surface of water are reflected to our eyes, we imagine him to be in the water, although his true place is known to us. So with the other imaginations by which the mind is deceived: whether they indicate the natural constitution of the body or an increase or diminution in its power of action, they are not opposed to the truth, nor do they disappear with the presence of the truth. We know that when we groundlessly fear any evil, the fear vanishes when we hear correct intelligence; but we also know, on the other hand, that when we fear an evil which will actually come upon us, the fear vanishes when we hear false intelligence, so that the imaginations do not disappear with the presence of the truth, in so far as it is true, but because other imaginations arise which are stronger, and which exclude the present existence of the objects we imagine.

Spinoza, Ethics, IV, Prop. 1, Schol.

21 The composition of all poems is, or ought to be, of wit; and wit in the poet, or wit writing (if you will give me leave to use a school-distinction) is no other than the faculty of imagination in the writer, which like a nimble spaniel, beats over and ranges thro' the field of memory, till it springs the quarry it hunted after; or, without metaphor, which searches over all the memory for the species or ideas of those things which it designs to represent. Wit written is that which is well defin'd, the happy result of thought, or product of imagination.

Dryden, Annus Mirabilis, Pref.

22 True wit is Nature to advantage dressed, What oft was thought, but ne'er so well expressed; Something whose truth convinced at sight we find,

That gives us back the image of our mind. Pope, Essay on Criticism, II, 297

23 It is evident that there is a principle of connexion between the different thoughts or ideas of the mind, and that, in their appearance to the memory or imagination, they introduce each other with a certain degree of method and regularity. In our more serious thinking or discourse this is so observable that any particular thought, which breaks in upon the regular tract or chain of ideas, is immediately remarked and rejected. And even in our wildest and most wandering reveries, nay in our very dreams, we shall find, if we reflect, that the imagination ran not altogether at adventures, but that there was still a connexion upheld among the different ideas, which succeeded each other. Were the loosest and freest conversation to

be transcribed, there would immediately be observed something which connected it in all its transitions. Or where this is wanting, the person who broke the thread of discourse might still inform you, that there had secretly revolved in his mind a succession of thought, which had gradually led him from the subject of conversation. Among different languages, even where we cannot suspect the least connexion or communication, it is found, that the words, expressive of ideas, the most compounded, do yet nearly correspond to each other: a certain proof that the simple ideas, comprehended in the compound ones, were bound together by some universal principle, which had an equal influence on all mankind.

Though it be too obvious to escape observation, that different ideas are connected together; I do not find that any philosopher has attempted to enumerate or class all the principles of association; a subject, however, that seems worthy of curiosity. To me, there appear to be only three principles of connexion among ideas, namely, Resemblance, Contiguity in time or place, and Cause or Effect.

Hume, Concerning Human Understanding, III, 18-19

24 Nothing is more free than the imagination of man; and though it cannot exceed that original stock of ideas furnished by the internal and external senses, it has unlimited power of mixing, compounding, separating, and dividing these ideas, in all the varieties of fiction and vision. It can feign a train of events, with all the appearance of reality, ascribe to them a particular time and place, conceive them as existent, and paint them out to itself with every circumstance, that belongs to any historical fact, which it believes with the greatest certainty.

Hume, Concerning Human Understanding, V, 39

25 The imagination of man is naturally sublime, delighted with whatever is remote and extraordinary, and running, without control, into the most distant parts of space and time in order to avoid the objects, which custom has rendered too familiar to it.

Hume, Concerning Human Understanding, XII, 130

26 The world of reality has its bounds, the world of imagination is boundless; as we cannot enlarge the one, let us restrict the other; for all the sufferings which really make us miserable arise from the difference between the real and the imaginary.

Rousseau, Emile, II

27 Our conversation to-day, I know not how, turned, (I think for the only time at any length, during

our long acquaintance,) upon the sensual intercourse between the sexes, the delight of which he [Johnson] ascribed chiefly to imagination. "Were it not for imagination, Sir, (said he,) a man would be as happy in the arms of a chambermaid as of a Duchess. But such is the adventitious charm of fancy, that we find men who have violated the best principles of society, and ruined their fame and their fortune, that they might possess a woman of rank."

Boswell, Life of Johnson (May 9, 1778)

28 In truth, it is not images of objects, but schemata, which lie at the foundation of our pure sensuous conceptions. No image could ever be adequate to our conception of a triangle in general. For the generalness of the conception it never could attain to, as this includes under itself all triangles, whether right-angled, acute-angled, etc., whilst the image would always be limited to a single part of this sphere. The schema of the triangle can exist nowhere else than in thought, and it indicates a rule of the synthesis of the imagination in regard to pure figures in space. Still less is an object of experience, or an image of the object, ever adequate to the empirical conception. On the contrary, the conception always relates immediately to the schema of the imagination, as a rule for the determination of our intuition, in conformity with a certain general conception. The conception of a dog indicates a rule, according to which my imagination can delineate the figure of a four-footed animal in general, without being limited to any particular individual form which experience presents to me, or indeed to any possible image that I can represent to myself in concreto. This schematism of our understanding in regard to phenomena and their mere form, is an art, hidden in the depths of the human soul, whose true modes of action we shall only with difficulty discover and unveil. Thus much only can we say: "The image is a product of the empirical faculty of the productive imagination—the schema of sensuous conceptions (of figures in space, for example) is a product, and, as it were, a monogram of the pure imagination a priori, whereby and according to which images first become possible, which, however, can be connected with the conception only mediately by means of the schema which they indicate, and are in themselves never fully adequate to it." On the other hand, the schema of a pure conception of the understanding is something that cannot be reduced into any image—it is nothing else than the pure synthesis expressed by the category, conformably to a rule of unity according to conceptions. It is a transcendental product of the imagination, a product which concerns the determination of the internal sense, according to conditions of its form (time) in respect to all representations, in so far as these representations must be conjoined a priori in one conception, conformably to the unity of apperception. Kant, Critique of Pure Reason. Transcendental Analytic

29 The imagination (as a productive faculty of cognition) is a powerful agent for creating, as it were, a second nature out of the material supplied to it by actual nature. It affords us entertainment where experience proves too commonplace; and we even use it to remodel experience, always following, no doubt, laws that are based on analogy, but still also following principles which have a higher seat in reason (and which are every whit as natural to us as those followed by the understanding in laying hold of empirical nature). By this means we get a sense of our freedom from the law of association (which attaches to the empirical employment of the imagination), with the result that the material can be borrowed by us from nature in accordance with that law, but be worked up by us into something else-namely, what surpasses nature.

Such representations of the imagination may be termed ideas. This is partly because they at least strain after something lying out beyond the confines of experience, and so seek to approximate to a presentation of rational concepts (i.e., intellectual ideas), thus giving to these concepts the semblance of an objective reality. But, on the other hand, there is this most important reason, that no concept can be wholly adequate to them as internal intuitions. The poet essays the task of interpreting to sense the rational ideas of invisible beings, the kingdom of the blessed, hell, eternity, creation, etc. Or, again, as to things of which examples occur in experience, e.g., death, envy, and all vices, as also love, fame, and the like, transgressing the limits of experience he attempts with the aid of an imagination which emulates the display of reason in its attainment of a maximum, to body them forth to sense with a completeness of which nature affords no parallel; and it is in fact precisely in the poetic art that the faculty of aesthetic ideas can show itself to full advantage. This faculty, however, regarded solely on its own account, is properly no more than a talent (of the imagination).

Kant, Critique of Aesthetic Judgement, 49

30 The IMAGINATION then, I consider either as primary, or secondary. The primary imagination I hold to be the living Power and prime Agent of all human Perception, and as a repetition in the finite mind of the eternal act of creation in the infinite I AM. The secondary Imagination I consider as an echo of the former, co-existing with the conscious will, yet still as identical with the primary in the kind of its agency, and differing only in degree, and in the mode of its operation. It dissolves, diffuses, dissipates, in order to re-create; or where this process is rendered impossible, yet still at all events it struggles to idealize and to unify. It is essentially vital, even as all objects (as objects) are essentially fixed and dead.

Fancy, on the contrary, has no other counters to play with, but fixities and definites. The Fancy is indeed no other than a mode of Memory emancipated from the order of time and space; while it is blended with, and modified by that empirical phenomenon of the will, which we express by the word CHOICE. But equally with the ordinary memory the Fancy must receive all its materials ready made from the law of association.

Coleridge, Biographia Literaria, XIII

31 We want the creative faculty to imagine that which we know; we want the generous impulse to act that which we imagine; we want the poetry of life; our calculations have outrun conception; we have eaten more than we can digest. The cultivation of those sciences which have enlarged the limits of the empire of man over the external world has, for want of the poetical faculty, proportionally circumscribed those of the internal world; and man, having enslaved the elements, remains himself a slave.

Shelley, Defence of Poetry

32 Ever let the Fancy roam,
Pleasure never is at home:
At a touch sweet Pleasure melteth,
Like to bubbles when fain pelteth;
Then let winged Fancy wander
Through the thought still spread beyond her:
Open wide the mind's cage-door,
She'll dart forth, and cloudward soar. . . .

Oh, sweet Fancy! let her loose; Every thing is spoilt by use; Where's the cheek that doth not fade, Too much gazed at? Where's the maid Whose lip mature is ever new? Where's the eye, however blue, Doth not weary? Where's the face One would meet in every place? Where's the voice, however soft, One would hear so very oft? At a touch sweet Pleasure melteth Like to bubbles when rain pelteth. Let, then, winged Fancy find Thee a mistress to thy mind: Dulcet-eved as Ceres' daughter Ere the God of Torment taught her How to frown and how to chide; With a waist and with a side White as Hebe's, when her zone Slipt its golden clasp, and down Fell her kirtle to her feet, While she held the goblet sweet, And Jove grew languid.—Break the mesh Of the Fancy's silken leash; Quickly break her prison-string, And such joys as these she'll bring.-

Let the winged Fancy roam, Pleasure never is at home.

Keats, Fancy

- 33 Adieu! the fancy cannot cheat so well

  As she is famed to do, deceiving elf.

  Keats, Ode to a Nightingale
- 34 I am certain of nothing but of the holiness of the Heart's affections, and the truth of Imagination. What the Imagination seizes as Beauty must be truth—whether it existed before or not,—for I have the same idea of all our passions as of Love: they are all, in their sublime, creative of essential Beauty. In a Word, you may know my favourite speculation by my first Book, and the little Song I sent in my last, which is a representation from the fancy of the probable mode of operating in these Matters. The Imagination may be compared to Adam's dream,—he awoke and found it truth.

Keats, Letter to Benjamin Bailey (Nov. 22, 1817)

35 Fancy is a wilful, imagination a spontaneous act; fancy, a play as with dolls and puppets which we choose to call men and women; imagination, a perception and affirming of a real relation between a thought and some material fact. Fancy amuses; imagination expands and exalts us.

Emerson, Poetry and Imagination

36 There is a Catskill eagle in some souls that can alike dive down into the blackest gorges, and soar out of them again and become invisible in the sunny spaces. And even if he for ever flies within the gorge, that gorge is in the mountains; so that even in his lowest swoop the mountain eagle is still higher than other birds upon the plain, even though they soar.

Melville, Moby Dick, XCVI

37 What a faculty must that be which can paint the most barren landscape and humblest life in glorious colors! It is pure and invigorated senses reacting on a sound and strong imagination. Is not that the poet's case? The intellect of most men is barren. They neither fertilize nor are fertilized. It is the marriage of the soul with Nature that makes the intellect fruitful, that gives birth to imagination. When we were dead and dry as the highway, some sense which has been healthily fed will put us in relation with Nature, in sympathy with her; some grains of fertilizing pollen, floating in the air, fall on us, and suddenly the sky is all one rainbow, is full of music and fragrance and flavor. The man of intellect only, the prosaic man, is a barren, staminiferous flower; the poet is a fertile and perfect flower.

Thoreau, Journal (Aug. 20, 1851)

38 The Imagination is one of the highest prerogatives of man. By this faculty he unites former images

and ideas, independently of the will, and thus creates brilliant and novel results. A poet, as Jean Paul Richter remarks, "who must reflect whether he shall make a character say yes or no-to the devil with him; he is only a stupid corpse." Dreaming gives us the best notion of this power; as Jean Paul again says, "The dream is an involuntary art of poetry." The value of the products of our imagination depends of course on the number, accuracy, and clearness of our impressions, on our judgment and taste in selecting or rejecting the involuntary combinations, and to a certain extent on our power of voluntarily combining them. As dogs, cats, horses, and probably all the higher animals, even birds have vivid dreams, and this is shewn by their movements and the sounds uttered, we must admit that they possess some power of imagination. There must be something special, which causes dogs to howl in the night, and especially during moonlight, in that remarkable and melancholy manner called baying.

Darwin, Descent of Man, I, 3

39 Sensations, once experienced, modify the nervous organism, so that copies of them arise again in the mind after the original outward stimulus is gone. No mental copy, however, can arise in the mind, of any kind of sensation which has never been directly excited from without.

The blind may dream of sights, the deaf of sounds, for years after they have lost their vision or hearing; but the man bom deaf can never be made to imagine what sound is like, nor can the man bom blind ever have a mental vision. In Locke's words . . . "the mind can frame unto itself no one new simple idea." The originals of them all must have been given from without. Fantasy, or Imagination, are the names given to the faculty of reproducing copies of originals once felt. The imagination is called "reproductive" when the copies are literal; "productive" when elements from different originals are recombined so as to make new wholes.

After-images belong to sensation rather than to imagination; so that the most immediate phenomena of imagination would seem to be those tardier images . . . coercive hauntings of the mind by echoes of unusual experiences for hours after the latter have taken place. The phenomena ordinarily ascribed to imagination, however, are those mental pictures of possible sensible experiences, to which the ordinary processes of associative thought give rise.

When represented with surroundings concrete enough to constitute a date, these pictures, when they revive, form recollections. . . . When the mental pictures are of data freely combined, and reproducing no past combination exactly, we have acts of imagination properly so called.

William James, Psychology, XVIII

40 Renunciation of pleasure has always been very hard to man; he cannot accomplish it without some kind of compensation. Accordingly he has evolved for himself a mental activity in which all these relinquished sources of pleasure and abandoned paths of gratification are permitted to continue their existence, a form of existence in which they are free from the demands of reality and from what we call the exercise of testing reality. Every longing is soon transformed into the idea of its fulfilment; there is no doubt that dwelling upon a wish-fulfilment in phantasy brings satisfaction, although the knowledge that it is not reality remains thereby unobscured. In phantasy, therefore, man can continue to enjoy a freedom from the grip of the external world, one which he has long relinquished in actuality.

Freud, General Introduction to Psycho-Analysis, XXIII

41 In imagination, not in perception, lies the substance of experience, while knowledge and reason are but its chastened and ultimate form.

Santayana, Life of Reason, I, 2