

## 7.1 | *The Nature of Language*

The passages assembled here deal with questions about the origin of language, the conventions of language, the diversity of languages, the power of words to perform the function of signs, and the relation of verbal signs to thought and knowledge, as well as to the objects of thought and knowledge.

Points are made about the manifold senses in which words can be used and their modes of ambiguity, about the distinction between words that name objects of thought or knowledge and words that play a role in sentences without naming anything, about the relation of spoken to written language, about the distinction between proper and common or general names, about the various uses to which language can be put, and

about the conditions underlying its effective use for the purpose of communication.

That other animals communicate by sounds or gestures is acknowledged even by those writers who assert that man alone possesses a language in which questions can be asked and statements made in the service of inquiry and thought quite apart from the purposes of communication between individuals. Whether it is thought that the difference between man and other animals is one of kind or degree, it is universally agreed that the way in which the human species has developed and employed language is one of its most distinctive characteristics.

- 1 And out of the ground the Lord God formed every beast of the field, and every fowl of the air; and brought them unto Adam to see what he would call them: and whatsoever Adam called every living creature, that was the name thereof.

And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field.

*Genesis 2:19–20*

- 2 And the whole earth was of one language, and of one speech.

And it came to pass, as they journeyed from the east, that they found a plain in the land of Shinar; and they dwelt there.

And they said one to another, Go to, let us make brick, and burn them thoroughly. And they had brick for stone, and slime had they for mortar.

And they said, Go to, let us build us a city and a tower, whose top may reach unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole earth.

And the Lord came down to see the city and the tower, which the children of men builded.

And the Lord said, Behold, the people is one, and they have all one language; and this they begin to do; and now nothing will be restrained from them, which they have imagined to do.

Go to, let us go down, and there confound their

language, that they may not understand one another's speech.

So the Lord scattered them abroad from thence upon the face of all the earth: and they left off to build the city.

Therefore is the name of it called Babel; because the Lord did there confound the language of all the earth: and from thence did the Lord scatter them abroad upon the face of all the earth.

*Genesis 11:1–9*

- 3 *Socrates.* A name is an instrument of teaching and of distinguishing natures, as the shuttle is of distinguishing the threads of the web.

*Plato, Cratylus, 388A*

- 4 *Socrates.* I would recommend you . . . not to encourage yourself in this polemical and controversial temper, but to find out, in a friendly and congenial spirit, what we really mean when we say that all things are in motion, and that to every individual and state what appears, is. In this manner you will consider whether knowledge and sensation are the same or different, but you will not argue, as you were just now doing, from the customary use of names and words, which the vulgar pervert in all sorts of ways, causing infinite perplexity to one another.

*Plato, Theaetetus, 168A*

5 *Eleatic Stranger*. At present we are only agreed about the name, but of the thing to which we both apply the name possibly you have one notion and I another; whereas we ought always to come to an understanding about the thing itself in terms of a definition, and not merely about the name minus the definition.

Plato, *Sophist*, 218A

6 No man of intelligence will venture to express his philosophical views in language, especially not in language that is unchangeable, which is true of that which is set down in written characters.

Plato, *Seventh Letter*

7 Things are said to be named 'equivocally' when, though they have a common name, the definition corresponding with the name differs for each. Thus, a real man and a figure in a picture can both lay claim to the name 'animal'; yet these are equivocally so named, for, though they have a common name, the definition corresponding with the name differs for each. For should any one define in what sense each is an animal, his definition in the one case will be appropriate to that case only.

On the other hand, things are said to be named 'univocally' which have both the name and the definition answering to the name in common. A man and an ox are both 'animal', and these are univocally so named, inasmuch as not only the name, but also the definition, is the same in both cases: for if a man should state in what sense each is an animal, the statement in the one case would be identical with that in the other.

Things are said to be named 'derivatively', which derive their name from some other name, but differ from it in termination. Thus the grammarian derives his name from the word 'grammar', and the courageous man from the word 'courage'.

Aristotle, *Categories*, 1<sup>st</sup>1

8 Spoken words are the symbols of mental experience and written words are the symbols of spoken words. Just as all men have not the same writing, so all men have not the same speech sounds, but the mental experiences, which these directly symbolize, are the same for all, as also are those things of which our experiences are the images.

Aristotle, *On Interpretation*, 16<sup>th</sup>4

9 Nature . . . makes nothing in vain, and man is the only animal whom she has endowed with the gift of speech. And whereas mere voice is but an indication of pleasure or pain, and is therefore found in other animals (for their nature attains to the perception of pleasure and pain and the intimation of them to one another, and no further), the power of speech is intended to set forth the expedient and inexpedient, and therefore likewise

the just and the unjust. And it is a characteristic of man that he alone has any sense of good and evil, of just and unjust, and the like, and the association of living beings who have this sense makes a family and a state.

Aristotle, *Politics*, 1253<sup>rd</sup>8

10 Why then should words challenge Eternity,  
When greatest men, and greatest actions die?

Use may revive the obsoletest words,  
And banish those that now are most in vogue;  
Use is the judge, the law, and rule of speech.

Horace, *Ars Poetica*

11 I have . . . discovered by observation how I learned to speak. I did not learn by elders teaching me words in any systematic way, as I was soon after taught to read and write. But of my own motion . . . I strove with cries and various sounds and much moving of my limbs to utter the feelings of my heart—all this in order to get my own way. Now I did not always manage to express the right meanings to the right people. So I began to reflect. [I observed that] my elders would make some particular sound, and as they made it would point at or move towards some particular thing: and from this I came to realize that the thing was called by the sound they made when they wished to draw my attention to it. That they intended this was clear from the motions of their body, by a kind of natural language common to all races which consists in facial expressions, glances of the eye, gestures, and the tones by which the voice expresses the mind's state—for example whether things are to be sought, kept, thrown away, or avoided. So, as I heard the same words again and again properly used in different phrases, I came gradually to grasp what things they signified; and forcing my mouth to the same sounds, I began to use them to express my own wishes. Thus I learnt to convey what I meant to those about me.

Augustine, *Confessions*, I, 8

12 All instruction is either about things or about signs; but things are learnt by means of signs. I now use the word "thing" in a strict sense to signify that which is never employed as a sign of anything else: for example, wood, stone, cattle, and other things of that kind. Not, however, the wood which we read Moses cast into the bitter waters to make them sweet, nor the stone which Jacob used as a pillow, nor the ram which Abraham offered up instead of his son; for these, though they are things, are also signs of other things. There are signs of another kind, those which are never employed except as signs: for example, words. No one uses words except as signs of something else; and hence may be understood what I call signs: those things, to wit, which are used to indicate something else. Accordingly, every sign is also a thing; for what is not a thing is nothing at all.

Every thing, however, is not also a sign.

Augustine, *Christian Doctrine*, I, 2

- 13 When we speak, in order that what we have in our minds may enter through the ear into the mind of the hearer, the word which we have in our hearts becomes an outward sound and is called speech; and yet our thought does not lose itself in the sound, but remains complete in itself, and takes the form of speech without being modified in its own nature by the change.

Augustine, *Christian Doctrine*, I, 13

- 14 As when I was writing about things, I introduced the subject with a warning against attending to anything but what they are in themselves, even though they are signs of something else, so now, when I come in its turn to discuss the subject of signs, I lay down this direction, not to attend to what they are in themselves, but to the fact that they are signs, that is, to what they signify. For a sign is a thing which, over and above the impression it makes on the senses, causes something else to come into the mind as a consequence of itself: as when we see a footprint, we conclude that an animal whose footprint this is has passed by; and when we see smoke, we know that there is fire beneath; and when we hear the voice of a living man, we think of the feeling in his mind; and when the trumpet sounds, soldiers know that they are to advance or retreat, or do whatever else the state of the battle requires.

Now some signs are natural, others conventional. Natural signs are those which, apart from any intention or desire of using them as signs, do yet lead to the knowledge of something else, as, for example, smoke when it indicates fire. For it is not from any intention of making it a sign that it is so, but through attention to experience we come to know that fire is beneath, even when nothing but smoke can be seen. And the footprint of an animal passing by belongs to this class of signs. And the countenance of an angry or sorrowful man indicates the feeling in his mind, independently of his will: and in the same way every other emotion of the mind is betrayed by the tell-tale countenance, even though we do nothing with the intention of making it known. This class of signs, however, it is no part of my design to discuss at present. But as it comes under this division of the subject, I could not altogether pass it over. It will be enough to have noticed it thus far.

Conventional signs, on the other hand, are those which living beings mutually exchange for the purpose of showing, as well as they can, the feelings of their minds, or their perceptions, or their thoughts. Nor is there any reason for giving a sign except the desire of drawing forth and conveying into another's mind what the giver of the sign has in his own mind. We wish, then, to consider and discuss this class of signs so far as men

are concerned with it, because even the signs which have been given us of God, and which are contained in the Holy Scriptures, were made known to us through men—those, namely, who wrote the Scriptures. The beasts, too, have certain signs among themselves by which they make known the desires in their mind. For when the poultry-cock has discovered food, he signals with his voice for the hen to run to him, and the dove by cooing calls his mate, or is called by her in turn; and many signs of the same kind are matters of common observation. Now whether these signs, like the expression or the cry of a man in grief, follow the movement of the mind instinctively and apart from any purpose, or whether they are really used with the purpose of signification, is another question, and does not pertain to the matter in hand. And this part of the subject I exclude from the scope of this work as not necessary to my present object.

Of the signs, then, by which men communicate their thoughts to one another, some relate to the sense of sight, some to that of hearing, a very few to the other senses. For, when we nod, we give no sign except to the eyes of the man to whom we wish by this sign to impart our desire. And some convey a great deal by the motion of the hands: and actors by movements of all their limbs give certain signs to the initiated, and, so to speak, address their conversation to the eyes: and the military standards and flags convey through the eyes the will of the commanders. And all these signs are as it were a kind of visible words. The signs that address themselves to the ear are, as I have said, more numerous, and for the most part consist of words. For though the bugle and the flute and the lyre frequently give not only a sweet but a significant sound, yet all these signs are very few in number compared with words. For among men words have obtained far and away the chief place as a means of indicating the thoughts of the mind. Our Lord, it is true, gave a sign through the odour of the ointment which was poured out upon His feet; and in the sacrament of His body and blood He signified His will through the sense of taste; and when by touching the hem of His garment the woman was made whole, the act was not wanting in significance. But the countless multitude of the signs through which men express their thoughts consist of words. For I have been able to put into words all those signs, the various classes of which I have briefly touched upon, but I could by no effort express words in terms of those signs.

Augustine, *Christian Doctrine*, II, 1–3

- 15 Because words pass away as soon as they strike upon the air, and last no longer than their sound, men have by means of letters formed signs of words. Thus the sounds of the voice are made visible to the eye, not of course as sounds, but by

means of certain signs.

Augustine, *Christian Doctrine*, II, 4

- 16 Since according to the Philosopher [Aristotle], words are signs of ideas, and ideas the similitude of things, it is evident that words relate to the meaning of things signified through the medium of the intellectual conception. It follows therefore that we can give a name to anything in as far as we can understand it. . . . Thus . . . the idea expressed by the name is the definition.

Aquinas, *Summa Theologica*, I, 13, 1

- 17 A name is communicable in two ways, properly, and by likeness. It is properly communicable in the sense that its whole signification can be given to many; by likeness it is communicable according to some part of the signification of the name. For instance this name "lion" is properly communicated to all things of the same nature as lion; by likeness it is communicable to those who participate in something lion-like, as for instance by courage, or strength, and those who thus participate are called lions metaphorically.

Aquinas, *Summa Theologica*, I, 13, 9

- 18 If man were by nature a solitary animal the passions of the soul by which he was conformed to things so as to have knowledge of them would be sufficient for him; but since he is by nature a political and social animal it was necessary that his conceptions be made known to others. This he does through vocal sound. Therefore there had to be significant vocal sounds in order that men might live together. Whence those who speak different languages find it difficult to live together in social unity.

Aquinas, *Commentary on Aristotle's "On Interpretation,"* I, 2

- 19 If man had only sensitive cognition, which is of the here and now, such significant vocal sounds as the other animals use to manifest their conceptions to each other would be sufficient for him to live with others. But man also has the advantage of intellectual cognition, which abstracts from the here and now, and as a consequence, is concerned with things distant in place and future in time as well as things present according to time and place. Hence the use of writing was necessary so that he might manifest his conceptions to those who are distant according to place and to those who will come in future time.

Aquinas, *Commentary on Aristotle's "On Interpretation,"* I, 2

- 20 Man alone amongst the animals speaks and has gestures and expression which we call rational, because he alone has reason in him. And if anyone should say in contradiction that certain birds talk, as seems to be the case with some, especially the magpie and the parrot, and that certain beasts

have expression or gestures, as the ape and some others seem to have, I answer that it is not true that they speak, nor that they have gestures, because they have no reason, from which these things must needs proceed; nor have they the principle of these things within them, nor do they understand what it is; nor do they purpose to signify anything by them, but they merely reproduce what they see and hear. Wherefore, even as the image of bodies is reproduced by certain shining things (for instance, a mirror), and the corporeal image that the mirror displays is not real, so the semblance of reason, namely the expression and the speech which the brute beast reproduces or displays, is not real.

Dante, *Convivio*, III, 7

- 21 What we call the vernacular speech is that to which children are accustomed by those who are about them when they first begin to distinguish words; or to put it more shortly, we say that the vernacular speech is that which we acquire without any rule, by imitating our nurses. There further springs from this another secondary speech, which the Romans called grammar. And this secondary speech the Greeks also have, as well as others, but not all. Few, however, acquire the use of this speech, because we can only be guided and instructed in it by the expenditure of much time, and by assiduous study. Of these two kinds of speech also, the vernacular is the nobler, as well because it was the first employed by the human race, as because the whole world makes use of it, though it has been divided into forms differing in pronunciation and vocabulary. It is also the nobler as being natural to us, whereas the other is rather of an artificial kind.

Dante, *De Vulgari Eloquentia*, I, 1

- 22 In a certain bark of the dog the horse knows there is anger; at a certain other sound of his he is not frightened. Even in the beasts that have no voice, from the mutual services we see between them we easily infer some other means of communication; their motions converse and discuss. . . . Why not; just as well as our mutes dispute, argue, and tell stories by signs? I have seen some so supple and versed in this, that in truth they lacked nothing of perfection in being able to make themselves understood. Lovers grow angry, are reconciled, entreat, thank, make assignations, and in fine say everything, with their eyes. . . . What of the hands? We beg, we promise, call, dismiss, threaten, pray, entreat, deny, refuse, question, admire, count, confess, repent, fear, blush, doubt, instruct, command, incite, encourage, swear, testify, accuse, condemn, absolve, insult, despise, defy, vex, flatter, applaud, bless, humiliate, mock, reconcile, commend, exalt, entertain, rejoice, complain, grieve, mope, despair, wonder, exclaim, are silent, and what not, with a variation and multiplication

that vie with the tongue. With the head: we invite, send away, avow, disavow, give the lie, welcome, honor, venerate, disdain, demand, show out, cheer, lament, caress, scold, submit, brave, exhort, menace, assure, inquire. What of the eyebrows? What of the shoulders? There is no movement that does not speak both a language intelligible without instruction, and a public language; which means, seeing the variety and particular use of other languages, that this one must rather be judged the one proper to human nature.

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

- 23 As for speech, it is certain that if it is not natural, it is not necessary. Nevertheless, I believe that a child who had been brought up in complete solitude, remote from all association (which would be a hard experiment to make), would have some sort of speech to express his ideas. And it is not credible that Nature has denied us this resource that she has given to many other animals: for what is it but speech, this faculty we see in them of complaining, rejoicing, calling to each other for help, inviting each other to love, as they do by the use of their voice? How could they not speak to one another? They certainly speak to us, and we to them. In how many ways do we not speak to our dogs? And they answer us. We talk to them in another language, with other names, than to birds, hogs, oxen, horses; and we change the idiom according to the species.

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

- 24 *Juliet*. What's in a name? that which we call a rose  
By any other name would smell as sweet.

Shakespeare, *Romeo and Juliet*, II, ii, 43

- 25 *Prospero*. Abhorred slave,  
Which any print of goodness wilt not take,  
Being capable of all ill! I pitied thee,  
Took pains to make thee speak, taught thee each  
hour  
One thing or other. When thou didst not, savage,  
Know thine own meaning, but wouldst gabble  
like  
A thing most brutish, I endow'd thy purposes  
With words that made them known. But thy vile  
race,  
Though thou didst learn, had that in't which good  
natures  
Could not abide to be with; therefore wast thou  
Deservedly confined into this rock,  
Who hadst deserved more than a prison.

*Caliban*. You taught me language; and my profit  
on't

Is, I know how to curse. The red plague rid you  
For learning me your language!

Shakespeare, *Tempest*, I, ii, 352

- 26 Custom is the most certain mistress of language, as the public stamp makes the current money. But we must not be too frequent with the mint, every day coining, nor fetch words from the extreme and utmost ages; since the chief virtue of a style is perspicuity, and nothing so vicious in it as to need an interpreter. Words borrowed of antiquity do lend a kind of majesty to style, and are not without their delight sometimes; for they have the authority of years, and out of their intermission do win themselves a kind of gracelike newness. But the eldest of the present, and newest of the past language, is the best. For what was the ancient language, which some men so dote upon, but the ancient custom? Yet when I name custom, I understand not the vulgar custom; for that were a precept no less dangerous to language than life, if we should speak or live after the manners of the vulgar: but that I call custom of speech, which is the consent of the learned; as custom of life, which is the consent of the good.

Jonson, *Discoveries*: Consuetudo

- 27 Men converse by means of language, but words are formed at the will of the generality, and there arises from a bad and unapt formation of words a wonderful obstruction to the mind.

Bacon, *Novum Organum*, I, 43

- 28 We may also recognise the difference that exists between men and brutes. For it is a very remarkable fact that there are none so depraved and stupid, without even excepting idiots, that they cannot arrange different words together, forming of them a statement by which they make known their thoughts; while, on the other hand, there is no other animal, however perfect and fortunately circumstanced it may be, which can do the same. It is not the want of organs that brings this to pass, for it is evident that magpies and parrots are able to utter words just like ourselves, and yet they cannot speak as we do, that is, so as to give evidence that they think of what they say. On the other hand, men who, being born deaf and dumb, are in the same degree, or even more than the brutes, destitute of the organs which serve the others for talking, are in the habit of themselves inventing certain signs by which they make themselves understood by those who, being usually in their company, have leisure to learn their language. And this does not merely show that the brutes have less reason than men, but that they have none at all, since it is clear that very little is required in order to be able to talk. And when we notice the inequality that exists between animals of the same species, as well as between men, and observe that some are more capable of receiving instruction than others, it is not credible that a monkey or a parrot, selected as the most perfect of its species, should not in these matters equal the stupidest child to be found, or at least a child

whose mind is clouded, unless in the case of the brute the soul were of an entirely different nature from ours. And we ought not to confound speech with natural movements which betray passions and may be imitated by machines as well as be manifested by animals; nor must we think, as did some of the ancients, that brutes talk, although we do not understand their language. For if this were true, since they have many organs which are allied to our own, they could communicate their thoughts to us just as easily as to those of their own race.

Descartes, *Discourse on Method*, V

- 29 The most noble and profitable invention of all other was that of *speech*, consisting of names or appellations, and their connexion; whereby men register their thoughts, recall them when they are past, and also declare them one to another for mutual utility and conversation; without which there had been amongst men neither Commonwealth, nor society, nor contract, nor peace, no more than amongst lions, bears, and wolves. The first author of speech was God himself, that instructed Adam how to name such creatures as He presented to his sight; for the Scripture goeth no further in this matter. But this was sufficient to direct him to add more names, as the experience and use of the creatures should give him occasion; and to join them in such manner by degrees as to make himself understood; and so by succession of time, so much language might be gotten as he had found use for.

Hobbes, *Leviathan*, I, 4

- 30 The manner how speech serveth to the remembrance of the consequence of causes and effects consisteth in the imposing of *names*, and the connexion of them.

Of names, some are *proper*, and singular to one only thing; as Peter, John, this man, this tree: and some are *common* to many things; as man, horse, tree; every of which, though but one name, is nevertheless the name of diverse particular things; in respect of all which together, it is called a *universal*, there being nothing in the world universal but names; for the things named are every one of them individual and singular.

Hobbes, *Leviathan*, I, 4

- 31 When a man, upon the hearing of any speech, hath those thoughts which the words of that speech, and their connexion, were ordained and constituted to signify, then he is said to understand it: *understanding* being nothing else but conception caused by speech. And therefore if speech be peculiar to man, as for ought I know it is, then is understanding peculiar to him also. And therefore of absurd and false affirmations, in case they be universal, there can be no understanding; though many think they understand then, when

they do but repeat the words softly, or con them in their mind.

Hobbes, *Leviathan*, I, 4

- 32 There are . . . those who go to the absurdity of explaining a word by the word itself. I know of some who have defined light in this way: "Light is a luminary motion of luminous bodies," as if we could understand the words *luminary* and *luminous* without understanding the word *light*.

We cannot undertake to define being without falling into this absurdity, for we cannot define any word without beginning with these words *it is*, and thus use the word defined in the definition.

It is sufficiently clear from this that there are words incapable of definition. And if nature had not made up for this defect by giving a like idea to all men, all our expressions would be confused; whereas we make use of them with the same assurance and the same certainty we should have if they had been explained in a perfectly unambiguous way, because nature itself has given us, without words, a clearer understanding of them than we gain through art with all our explanations.

Pascal, *Geometrical Demonstration*

- 33 The senses at first let in *particular* ideas, and furnish the yet empty cabinet; and the mind by degrees growing familiar with some of them, they are lodged in the memory, and names got to them. Afterwards, the mind proceeding further, abstracts them, and by degrees learns the use of general names. In this manner the mind comes to be furnished with ideas and language, the *materials* about which to exercise its discursive faculty. And the use of reason becomes daily more visible, as these materials that give it employment increase.

Locke, *Concerning Human Understanding*, Bk. I, I, 15

- 34 Man . . . had by nature his organs so fashioned, as to be fit to frame articulate sounds, which we call words. But this was not enough to produce language; for parrots, and several other birds, will be taught to make articulate sounds distinct enough, which yet by no means are capable of language.

Besides articulate sounds, therefore, it was further necessary that he should be able to use these sounds as signs of internal conceptions; and to make them stand as marks for the ideas within his own mind, whereby they might be made known to others, and the thoughts of men's minds be conveyed from one to another.

But neither was this sufficient to make words so useful as they ought to be. It is not enough for the perfection of language, that sounds can be made signs of ideas, unless those signs can be so made use of as to comprehend several particular things: for the multiplication of words would have perplexed their use, had every particular thing need

of a distinct name to be signified by. To remedy this inconvenience, language had yet a further improvement in the use of *general terms*, whereby one word was made to mark a multitude of particular existences: which advantageous use of sounds was obtained only by the difference of the ideas they were made signs of: those names becoming general, which are made to stand for *general ideas*, and those remaining particular, where the *ideas* they are used for are *particular*.

Besides these names which stand for ideas, there be other words which men make use of, not to signify any idea, but the want or absence of some ideas, simple or complex, or all ideas together; such as are *nihil* in Latin, and in English, *ignorance* and *barrenness*. All which negative or privative words cannot be said properly to belong to, or signify no ideas: for then they would be perfectly insignificant sounds; but they relate to positive ideas, and signify their absence.

Locke, *Concerning Human Understanding*,  
Bk. III, I, 1–4

- 35 Because by familiar use from our cradles, we come to learn certain articulate sounds very perfectly, and have them readily on our tongues, and always at hand in our memories, but yet are not always careful to examine or settle their significations perfectly; it often happens that men, even when they would apply themselves to an attentive consideration, do set their thoughts more on words than things. Nay, because words are many of them learned before the ideas are known for which they stand: therefore some, not only children but men, speak several words no otherwise than parrots do, only because they have learned them, and have been accustomed to those sounds. But so far as words are of use and signification, so far is there a constant connexion between the sound and the idea, and a designation that the one stands for the other; without which application of them, they are nothing but so much insignificant noise.

Locke, *Concerning Human Understanding*,  
Bk. III, II, 7

- 36 It is plain, by what has been said, that *general* and *universal* belong not to the real existence of things; but are the inventions and creatures of the understanding, made by it for its own use, and concern only signs, whether words or ideas. Words are general, as has been said, when used for signs of general ideas, and so are applicable indifferently to many particular things; and ideas are general when they are set up as the representatives of many particular things: but universality belongs not to things themselves, which are all of them particular in their existence, even those words and ideas which in their signification are general. When therefore we quit particulars, the generals that rest are only creatures of our own making;

their general nature being nothing but the capacity they are put into, by the understanding, of signifying or representing many particulars. For the signification they have is nothing but a relation that, by the mind of man, is added to them.

Locke, *Concerning Human Understanding*,  
Bk. III, III, 11

- 37 Besides words which are names of ideas in the mind, there are a great many others that are made use of to signify the *connexion* that the mind gives to ideas, or to propositions, one with another. The mind, in communicating its thoughts to others, does not only need signs of the ideas it has then before it, but others also, to show or intimate some particular action of its own, at that time, relating to those ideas. This it does several ways; as *Is*, and *Is not*, are the general marks, of the mind, affirming or denying. But besides affirmation or negation, without which there is in words no truth or falsehood, the mind does, in declaring its sentiments to others, connect not only the parts of propositions, but whole sentences one to another, with their several relations and dependencies, to make a coherent discourse.

Locke, *Concerning Human Understanding*,  
Bk. III, VII, 1

- 38 I leave it to be considered, whether it would not be well for mankind, whose concernment it is to know things as they are, and to do what they ought, and not to spend their lives in talking about them, or tossing words to and fro;—whether it would not be well, I say, that the use of words were made plain and direct; and that language, which was given us for the improvement of knowledge and bond of society, should not be employed to darken truth and unsettle people's rights; to raise mists, and render unintelligible both morality and religion? Or that at least, if this will happen, it should not be thought learning or knowledge to do so?

Locke, *Concerning Human Understanding*,  
Bk. III, X, 13

- 39 There has been a late deservedly esteemed philosopher [Locke] who, no doubt, has given [the doctrine of abstraction] very much countenance, by seeming to think the having abstract general ideas is what puts the widest difference in point of understanding betwixt man and beast. . . . I readily agree with this learned author, that the faculties of brutes can by no means attain to abstraction. But then if this be made the distinguishing property of that sort of animals, I fear a great many of those that pass for men must be reckoned into their number. The reason that is here assigned why we have no grounds to think brutes have abstract general ideas is, that we observe in them no use of words or any other general signs; which is built on this supposition—that the making use of

words implies the having general ideas. From which it follows that men who use language are able to abstract or generalize their ideas. That this is the sense and arguing of the author will further appear by his answering the question he in another place puts: "Since all things that exist are only particulars, how come we by general terms?" His answer is: "Words become general by being made the signs of general ideas."—*Essay on Human Understanding*, III. iii. 6. But it seems that a word becomes general by being made the sign, not of an abstract general idea, but of several particular ideas, any one of which it indifferently suggests to the mind. For example, when it is said "the change of motion is proportional to the impressed force," or that "whatever has extension is divisible," these propositions are to be understood of motion and extension in general; and nevertheless it will not follow that they suggest to my thoughts an idea of motion without a body moved, or any determinate direction and velocity, or that I must conceive an abstract general idea of extension, which is neither line, surface, nor solid, neither great nor small, black, white, nor red, nor of any other determinate colour. It is only implied that whatever particular motion I consider, whether it be swift or slow, perpendicular, horizontal, or oblique, or in whatever object, the axiom concerning it holds equally true. As does the other of every particular extension, it matters not whether line, surface, or solid, whether of this or that magnitude or figure.

Berkeley, *Principles of Human Knowledge*,  
Introduction, 11

- 40 Of late many have been very sensible of the absurd opinions and insignificant disputes which grow out of the abuse of words. And, in order to remedy these evils, they advise well, that we attend to the ideas signified, and draw off our attention from the words which signify them. But, how good soever this advice may be they have given others, it is plain they could not have a due regard to it themselves, so long as they thought the only immediate use of words was to signify ideas, and that the immediate signification of every general name was a determinate abstract idea.

But, these being known to be mistakes, a man may with greater ease prevent his being imposed on by words. He that knows he has no other than *particular* ideas, will not puzzle himself in vain to find out and conceive the *abstract* idea annexed to any name. And he that knows names do not always stand for ideas will spare himself the labour of looking for ideas where there are none to be had.

Berkeley, *Principles of Human Knowledge*,  
Introduction, 23–24

- 41 We next went to the school of languages, where three professors sat in consultation upon improving that of their own country.

The first project was to shorten discourse by cutting polysyllables into one, and leaving out verbs and participles, because in reality all things imaginable are but nouns.

The other, was a scheme for entirely abolishing all words whatsoever: and this was urged as a great advantage in point of health as well as brevity. For, it is plain, that every word we speak is in some degree a diminution of our lungs by corrosion; and consequently contributes to the shortening of our lives. An expedient was therefore offered, that since words are only names for *things*, it would be more convenient for all men to carry about them, such *things* as were necessary to express the particular business they are to discourse on. And this invention would certainly have taken place, to the great ease as well as health of the subject, if the women in conjunction with the vulgar and illiterate had not threatened to raise a rebellion, unless they might be allowed the liberty to speak with their tongues, after the manner of their forefathers: such constant irreconcilable enemies to science are the common people. However, many of the most learned and wise adhere to the new scheme of expressing themselves by *things*; which hath only this inconvenience attending it; that if a man's business be very great, and of various kinds, he must be obliged in proportion to carry a greater bundle of *things* upon his back, unless he can afford one or two strong servants to attend him. I have often beheld two of those sages almost sinking under the weight of their packs, like pedlars among us; who, when they met in the streets would lay down their loads, open their sacks, and hold conversation for an hour together; then put up their implements, help each other to resume their burthens, and take their leave.

But, for short conversations, a man may carry implements in his pockets and under his arms, enough to supply him, and in his house he cannot be at a loss; therefore the room where company meet who practise this art, is full of all things ready at hand, requisite to furnish matter for this kind of artificial converse.

Another great advantage proposed by this invention, was, that it would serve as an universal language to be understood in all civilized nations, whose goods and utensils are generally of the same kind, or nearly resembling, so that their uses might easily be comprehended. And thus, ambassadors would be qualified to treat with foreign princes or ministers of State, to whose tongues they were utter strangers.

Swift, *Gulliver's Travels*, III, 5

- 42 This society hath a peculiar cant and jargon of their own, that no other mortal can understand, and wherein all their laws are written, which they take special care to multiply; whereby they have wholly confounded the very essence of truth and falshood, of right and wrong; so that it will take

thirty years to decide whether the field, left me by my ancestors for six generations, belong to me, or to a stranger three hundred miles off.

Swift, *Gulliver's Travels*, IV, 5

- 43 Jones now declared that they must certainly have lost their way; but this the guide insisted upon was impossible; a word which, in common conversation, is often used to signify not only improbable, but often what is really very likely, and, sometimes, what hath certainly happened; and hyperbolical violence like that which is so frequently offered to the words infinite and eternal; by the former of which it is usual to express a distance of half a yard, and by the latter, a duration of five minutes. And thus it is as usual to assert the impossibility of losing what is already actually lost. This was, in fact, the case at present.

Fielding, *Tom Jones*, XII, 11

- 44 Words do not constitute an overt act; they remain only in idea. When considered by themselves, they have generally no determinate signification; for this depends on the tone in which they are uttered. It often happens that in repeating the same words they have not the same meaning; this depends on their connection with other things, and sometimes more is signified by silence than by any expression whatever.

Montesquieu, *Spirit of Laws*, XII, 12

- 45 There is no such thing as abstract or general ideas, properly speaking; but . . . all general ideas are, in reality, particular ones, attached to a general term, which recalls, upon occasion, other particular ones, that resemble, in certain circumstances, the idea, present to the mind. Thus when the term Horse is pronounced, we immediately figure to ourselves the idea of a black or a white animal, of a particular size or figure: But as that term is also usually applied to animals of other colours, figures and sizes, these ideas, though not actually present to the imagination, are easily recalled; and our reasoning and conclusion proceed in the same way, as if they were actually present.

Hume, *Concerning Human Understanding*, XII, 125, in.

- 46 There is no complete language, no language which can express all our ideas and all our sensations; their shades are too numerous, too imperceptible. Nobody can make known the precise degree of sensation he experiences. One is obliged, for example, to designate by the general names of "love" and "hate" a thousand loves and a thousand hates all different from each other; it is the same with our pleasures and our pains. Thus all languages are, like us, imperfect.

Voltaire, *Philosophical Dictionary*: Languages

- 47 The first [difficulty] which presents itself is to conceive how language can have become necessary; for as there was no communication among men and no need for any, we can neither conceive the necessity of this invention, nor the possibility of it, if it was not somehow indispensable. I might affirm, with many others, that languages arose in the domestic intercourse between parents and their children. But this expedient would not obviate the difficulty, and would besides involve the blunder made by those who, in reasoning on the state of nature, always import into it ideas gathered in a state of society. . . . For to say that the mother dictated to her child the words he was to use in asking her for one thing or another, is an explanation of how languages already formed are taught, but by no means explains how languages were originally formed.

We will suppose, however, that this first difficulty is obviated. Let us for a moment then take ourselves as being on this side of the vast space which must lie between a pure state of nature and that in which languages had become necessary, and, admitting their necessity, let us inquire how they could first be established. Here we have a new and worse difficulty to grapple with: for if men need speech to learn to think, they must have stood in much greater need of the art of thinking, to be able to invent that of speaking. And though we might conceive how the articulate sound of the voice came to be taken as the conventional interpreters of our ideas, it would still remain for us to inquire what could have been the interpreters of this convention for those ideas, which, answering to no sensible objects, could not be indicated either by gesture or voice; so that we can hardly form any tolerable conjectures about the origin of this art of communicating our thoughts and establishing a correspondence between minds.

Rousseau, *Origin of Inequality*, I

- 48 The first language of mankind, the most universal and vivid, in a word the only language man needed, before he had occasion to exert his eloquence to persuade assembled multitudes, was the simple cry of nature. But as this was excited only by a sort of instinct on urgent occasions, to implore assistance in case of danger, or relief in case of suffering, it could be of little use in the ordinary course of life, in which more moderate feelings prevail. When the ideas of men began to expand and multiply, and closer communication took place among them, they strove to invent more numerous signs and a more copious language. They multiplied the inflections of the voice, and added gestures, which are in their own nature more expressive, and depend less for their meaning on a prior determination. Visible and movable objects were therefore expressed by gestures, and audible ones by imitative sounds: but, as hardly anything can be indicated by gestures, ex-

cept objects actually present or easily described, and visible actions; as they are not universally useful—for darkness or the interposition of a material object destroys their efficacy—and as besides they rather request than secure our attention; men at length bethought themselves of substituting for them the articulate sounds of the voice, which, without bearing the same relation to any particular ideas, are better calculated to express them all, as conventional signs. Such an institution could only be made by common consent, and must have been effected in a manner not very easy for men whose gross organs had not been accustomed to any such exercise. It is also in itself still more difficult to conceive, since such a common agreement must have had motives, and speech seems to have been highly necessary to establish the use of it.

Rousseau, *Origin of Inequality*, I

- 49 General ideas cannot be introduced into the mind without the assistance of words, nor can the understanding seize them except by means of propositions. This is one of the reasons why animals cannot form such ideas, or ever acquire that capacity for self-improvement which depends on them. When a monkey goes from one nut to another, are we to conceive that he entertains any general idea of that kind of fruit, and compares its archetype with the two individual nuts? Assuredly he does not; but the sight of one of these nuts recalls to his memory the sensations which he received from the other, and his eyes, being modified after a certain manner, give information to the palate of the modification it is about to receive. Every general idea is purely intellectual; if the imagination meddles with it ever so little, the idea immediately becomes particular. If you endeavour to trace in your mind the image of a tree in general, you never attain to your end. In spite of all you can do, you will have to see it as great or little, bare or leafy, light or dark, and were you capable of seeing nothing in it but what is common to all trees, it would no longer be like a tree at all. Purely abstract beings are perceivable in the same manner, or are only conceivable by the help of language. The definition of a triangle alone gives you a true idea of it: the moment you imagine a triangle in your mind, it is some particular triangle and not another, and you cannot avoid giving it sensible lines and a coloured area. We must then make use of propositions and of language in order to form general ideas. For no sooner does the imagination cease to operate than the understanding proceeds only by the help of words. If then the first inventors of speech could give names only to ideas they already had, it follows that the first substantives could be nothing more than proper names.

Rousseau, *Origin of Inequality*, I

- 50 For myself, I am so aghast at the increasing difficulties which present themselves, and so well convinced of the almost demonstrable impossibility that languages should owe their original institution to merely human means, that I leave, to any one who will undertake it, the discussion of the difficult problem, which was most necessary, the existence of society to the invention of language, or the invention of language to the establishment of society.

Rousseau, *Origin of Inequality*, I

- 51 Talking of the origin of language; *Johnson*. "It must have come by inspiration. A thousand, nay, a million of children could not invent a language. While the organs are pliable, there is not understanding enough to form a language; by the time that there is understanding enough, the organs become stiff. We know that after a certain age we cannot learn to pronounce a new language. No foreigner, who comes to England when advanced in life, ever pronounces English tolerably well; at least such instances are very rare. When I maintain that language must have come by inspiration, I do not mean that inspiration is required for rhetoric, and all the beauties of language; for when once man has language, we can conceive that he may gradually form modifications of it. I mean only that inspiration seems to me to be necessary to give man the faculty of speech; to inform him that he may have speech; which I think he could no more find out without inspiration, than cows or hogs would think of such a faculty."

Boswell, *Life of Johnson* (Apr. 18, 1783)

- 52 So sensible were the Romans of the influence of language over national manners, that it was their most serious care to extend, with the progress of their arms, the use of the Latin tongue. The ancient dialects of Italy, the Sabine, the Etruscan, and the Venetian, sunk into oblivion; but in the provinces, the east was less docile than the west, to the voice of its victorious preceptors. This obvious difference marked the two portions of the empire with a distinction of colours, which, though it was in some degree concealed during the meridian splendour of prosperity, became gradually more visible as the shades of night descended upon the Roman world. The western countries were civilised by the same hands which subdued them. As soon as the barbarians were reconciled to obedience, their minds were opened to any new impressions of knowledge and politeness. The language of Virgil and Cicero, though with some inevitable mixture of corruption, was so universally adopted in Africa, Spain, Gaul, Britain, and Pannonia, that the faint traces of the Punic or Celtic idioms were preserved only in the mountains, or among the peasants. Education and study insensibly inspired the natives of those countries with the sentiments of Romans; and Italy gave fashions as well

as laws to her Latin provincials. They solicited with more ardour, and obtained with more facility, the freedom and honours of the state; supported the national dignity in letters and in arms; and, at length, in the person of Trajan, produced an emperor whom the Scipios would not have disowned for their countryman. The situation of the Greeks was very different from that of the Barbarians. The former had been long since civilised and corrupted. They had too much taste to relinquish their language, and too much vanity to adopt any foreign institutions. Still preserving the prejudices after they had lost the virtues of their ancestors, they affected to despise the unpolished manners of the Roman conquerors, whilst they were compelled to respect their superior wisdom and power. Nor was the influence of the Grecian language and sentiments confined to the narrow limits of that once celebrated country. Their empire, by the progress of colonies and conquest, had been diffused from the Hadriatic to the Euphrates and the Nile. Asia was covered with Greek cities, and the long reign of the Macedonian kings had introduced a silent revolution into Syria and Egypt. In their pompous courts those princes united the elegance of Athens with the luxury of the East, and the example of the court was imitated, at an humble distance, by the higher ranks of their subjects. Such was the general division of the Roman empire into the Latin and Greek languages. To these we may add a third distinction for the body of the natives in Syria, and especially in Egypt. The use of their ancient dialects, by secluding them from the commerce of mankind, checked the improvements of those barbarians. The slothful effeminacy of the former, exposed them to the contempt; the sullen ferociousness of the latter, excited the aversion of the conquerors.

Gibbon, *Decline and Fall of the Roman Empire*, II

- 53 The use of letters is the principal circumstance that distinguishes a civilized people from a herd of savages incapable of knowledge or reflection. Without that artificial help, the human memory soon dissipates or corrupts the ideas intrusted to her charge; and the nobler faculties of the mind, no longer supplied with models or with materials, gradually forget their powers; the judgment becomes feeble and lethargic, the imagination languid or irregular. Fully to apprehend this important truth, let us attempt, in an improved society, to calculate the immense distance between the man of learning and the *illiterate* peasant. The former, by reading and reflection, multiplies his own experience, and lives in distant ages and remote countries; whilst the latter, rooted to a single spot, and confined to a few years of existence, surpasses, but very little, his fellow-labourer the ox in the exercise of his mental faculties. The same, and even a greater, difference will be found between

nations than between individuals; and we may safely pronounce that, without some species of writing, no people has ever preserved the faithful annals of their history, ever made any considerable progress in the abstract sciences, or ever possessed, in any tolerable degree of perfection, the useful and agreeable arts of life.

Gibbon, *Decline and Fall of the Roman Empire*, IX

- 54 Though the origin of most of our words is forgotten, each word was at first a stroke of genius, and obtained currency because for the moment it symbolized the world to the first speaker and to the hearer. The etymologist finds the dearest word to have been once a brilliant picture. Language is fossil poetry.

Emerson, *The Poet*

- 55 If we possessed a perfect pedigree of mankind, a genealogical arrangement of the races of man would afford the best classification of the various languages now spoken throughout the world; and if all extinct languages, and all intermediate and slowly changing dialects, were to be included, such an arrangement would be the only possible one. Yet it might be that some ancient languages had altered very little and had given rise to few new languages, whilst others had altered much owing to the spreading, isolation, and state of civilisation of the several co-descended races, and had thus given rise to many new dialects and languages. The various degrees of difference between the languages of the same stock, would have to be expressed by groups subordinate to groups; but the proper or even the only possible arrangement would still be genealogical; and this would be strictly natural, as it would connect together all languages, extinct and recent, by the closest affinities, and would give the filiation and origin of each tongue.

Darwin, *Origin of Species*, XIV

- 56 The habitual use of articulate language is . . . peculiar to man; but he uses, in common with lower animals, inarticulate cries to express his meaning, aided by gestures and the movements of the muscles of the face. This especially holds good with the more simple and vivid feelings, which are but little connected with our higher intelligence. Our cries of pain, fear, surprise, anger, together with their appropriate actions, and the murmur of a mother to her beloved child are more expressive than any words. That which distinguishes man from the lower animals is not the understanding of articulate sounds, for, as every one knows, dogs understand many words and sentences. In this respect they are at the same stage of development as infants, between the ages of ten and twelve months, who understand many words and short sentences, but cannot yet utter a single word. It is

not the mere articulation which is our distinguishing character, for parrots and other birds possess this power. Nor is it the mere capacity of connecting definite sounds with definite ideas; for it is certain that some parrots, which have been taught to speak, connect unerringly words with things, and persons with events. The lower animals differ from man solely in his almost infinitely larger power of associating together the most diversified sounds and ideas; and this obviously depends on the high development of his mental powers.

Darwin, *Descent of Man*, I, 3

- 57 Language is an art, like brewing or baking. . . . It certainly is not a true instinct, for every language has to be learnt.

Darwin, *Descent of Man*, I, 3

- 58 With respect to the origin of articulate language . . . I cannot doubt that language owes its origin to the imitation and modification of various natural sounds, the voices of other animals, and man's own instinctive cries, aided by signs and gestures.

Darwin, *Descent of Man*, I, 3

- 59 A great stride in the development of the intellect will have followed, as soon as the half-art and half-instinct of language came into use; for the continued use of language will have reacted on the brain and produced an inherited effect; and this again will have reacted on the improvement of language. As Mr. Chauncey Wright has well remarked, the largeness of the brain in man relatively to his body, compared with the lower animals, may be attributed in chief part to the early use of some simple form of language,—that wonderful engine which affixes signs to all sorts of objects and qualities, and excites trains of thought which would never arise from the mere impression of the senses, or if they did arise could not be followed out. The higher intellectual powers of man, such as those of ratiocination, abstraction, self-consciousness, etc., probably follow from the continued improvement and exercise of the other mental faculties.

Darwin, *Descent of Man*, III, 21

- 60 "Why, Huck, doan' de French people talk de same way we does?"

"No, Jim; you couldn't understand a word they said—not a single word."

"Well, now, I be ding-busted! How do dat come?"

"I don't know; but it's so. I got some of their jabber out of a book. S'pose a man was to come to you and say Polly-voo-franzy—what would you think?"

"I wouldn't think nuffn; I'd take en bust him over de head—dat is, ef he warn't white. I wouldn't 'low no nigger to call me dat."

"Shucks, it ain't calling you anything. It's only

saying, do you know how to talk French?"

"Well, den, why couldn't he say it?"

"Why, he is a-saying it. That's a Frenchman's way of saying it."

"Well, it's a blame' ridicklous way, en I doan' want to hear no mo' 'bout it. Dey ain' no sense in it."

"Looky here, Jim; does a cat talk like we do?"

"No, a cat don't."

"Well, does a cow?"

"No, a cow don't, nuther."

"Does a cat talk like a cow, or a cow talk like a cat?"

"No, dey don't."

"It's natural and right for 'em to talk different from each other, ain't it?"

"Course."

"And ain't it natural and right for a cat and a cow to talk different from us?"

"Why, mos' sholy it is."

"Well, then, why ain't it natural and right for a Frenchman to talk different from us? You answer me that."

"Is a cat a man, Huck?"

"No."

"Well, den, dey ain't no sense in a cat talkin' like a man. Is a cow a man?—er is a cow a cat?"

"No, she ain't either of them."

"Well, den, she ain' got no business to talk like either one er the yuther of 'em. Is a Frenchman a man?"

"Yes."

"Well, den! Dad blame it, why doan' he talk like a man? You answer me dat!"

I see it warn't no use wasting words—you can't learn a nigger to argue. So I quit.

Mark Twain, *Huckleberry Finn*, XIV

- 61 Language was originally made by men who were not psychologists, and most men to-day employ almost exclusively the vocabulary of outward things. The cardinal passions of our life, anger, love, fear, hate, hope, and the most comprehensive divisions of our intellectual activity, to remember, expect, think, know, dream, with the broadest genera of æsthetic feeling, joy, sorrow, pleasure, pain, are the only facts of a subjective order which this vocabulary deigns to note by special words. The elementary qualities of sensation, bright, loud, red, blue, hot, cold, are, it is true, susceptible of being used in both an objective and a subjective sense. They stand for outer qualities and for the feelings which these arouse. But the objective sense is the original sense; and still to-day we have to describe a large number of sensations by the name of the object from which they have most frequently been got. An orange color, an odor of violets, a cheesy taste, a thunderous sound, a fiery smart, etc., will recall what I mean. This absence of a special vocabulary for subjective facts hinders the study of all but the very coarsest

of them. Empiricist writers are very fond of emphasizing one great set of delusions which language inflicts on the mind. Whenever we have made a word, they say, to denote a certain group of phenomena, we are prone to suppose a substantive entity existing beyond the phenomena, of which the word shall be the name. But the *lack* of a word quite as often leads to the directly opposite error. We are then prone to suppose that no entity can be there; and so we come to overlook phenomena whose existence would be patent to us all, had we only grown up to hear it familiarly recognized in speech. It is hard to focus our attention on the nameless, and so there results a certain vacuousness in the descriptive parts of most psychologies.

But a worse defect than vacuousness comes from the dependence of psychology on common speech. Naming our thought by its own objects, we almost all of us assume that as the objects are, so the thought must be. The thought of several distinct things can only consist of several distinct bits of thought, or "ideas"; that of an abstract or universal object can only be an abstract or universal idea. As each object may come and go, be forgotten and then thought of again, it is held that the thought of it has a precisely similar independence, self-identity, and mobility. The thought of the object's recurrent identity is regarded as the identity of its recurrent thought; and the perceptions of multiplicity, of coexistence, of succession, are severally conceived to be brought about only through a multiplicity, a coexistence, a succession, of perceptions. The continuous flow of the mental stream is sacrificed, and in its place an atomism, a brickbat plan of construction, is preached for the existence of which no good introspective grounds can be brought forward, and out of which presently grow all sorts of paradoxes and contradictions, the heritage of woe of students of the mind.

These words are meant to impeach the entire English psychology derived from Locke and Hume, and the entire German psychology derived from Herbart, so far as they both treat "ideas" as separate subjective entities that come and go.

William James, *Psychology*, VII

- 62 The opinion so stoutly professed by many, that language is essential to thought, seems to have this much of truth in it, that all our inward images tend invincibly to attach themselves to something sensible, so as to gain in corporeity and life. Words serve this purpose, gestures serve it, stones, straws, chalk-marks, anything will do. As soon as any one of these things stands for the idea, the latter seems to be more real.

William James, *Psychology*, XXI

- 63 Language is a system of *signs*, different from the things signified, but able to suggest them. . . .

No doubt brutes have a number of such signs.

When a dog yelps in front of a door, and his master, understanding his desire, opens it, the dog may, after a certain number of repetitions, get to repeat in cold blood a yelp which was at first the involuntary interjectional expression of strong emotion. The same dog may be taught to "beg" for food, and afterwards come to do so deliberately when hungry. The dog also learns to understand the signs of men, and the word "rat" uttered to a terrier suggests exciting thoughts of the rat-hunt. If the dog had the varied impulse to vocal utterance which some other animals have, he would probably repeat the word "rat" whenever he spontaneously happened to think of a rat-hunt—he no doubt does have it as an auditory image, just as a parrot calls out different words spontaneously from its repertory, and having learned the name of a given dog will utter it on the sight of a different dog. In each of these separate cases the particular sign *may* be consciously noticed by the animal, as distinct from the particular thing signified, and will thus, so far as it goes, be a true manifestation of language. But when we come to man we find a great difference. *He has a deliberate intention to apply a sign to everything.* The linguistic impulse is with him generalized and systematic. For things hitherto unnoticed or unfelt, he *desires* a sign before he has one. Even though the dog should possess his "yelp" for this thing, his "beg" for that, and his auditory image "rat" for a third thing, the matter with him rests there. If a fourth thing interests him for which no sign happens already to have been learned, he remains tranquilly without it and goes no further. But the man *postulates* it, its absence irritates him, and he ends by inventing it. *This GENERAL PURPOSE constitutes, I take it, the peculiarity of human speech, and explains its prodigious development.*

How, then, does the general purpose arise? It arises as soon as the notion of a *sign as such*, apart from any particular import, is born; and this notion is born by dissociation from the outstanding portions of a number of concrete cases of signification. The "yelp," the "beg," the "rat," differ as to their several imports and natures. They agree only in so far as they have the same *use*—to *be signs*, to stand for something more important than themselves. The dog whom this similarity could strike would have grasped the sign *per se* as such, and would probably thereupon become a general sign-maker, or speaker in the human sense. But how can the similarity strike him? Not without the juxtaposition of the similars (in virtue of the law we have laid down, that in order to be segregated an experience must be repeated with varying concomitants)—not unless the "yelp" of the dog at the moment it occurs *recalls* to him his "beg," by the delicate bond of their subtle similarity of use—not till then can this thought flash through his mind: "Why, yelp and beg, in spite of all their unlikeness, are yet alike in this: that they

are actions, signs, which lead to important boons. Other boons, *any* boons, may then be got by other signs!" This reflection made, the gulf is passed. Animals probably never make it, because the bond of similarity is not delicate enough. Each sign is drowned in its import, and never awakens other signs and other imports in juxtaposition. The rat-hunt idea is too absorbingly interesting in itself to be interrupted by anything so uncontiguous to it as the idea of the "beg for food," or of "the door-open yelp," nor in their turn do these awaken the rat-hunt idea.

In the human child, however, these ruptures of contiguous association are very soon made; far off cases of sign-using arise when we make a sign now; and soon language is launched. The child in each case makes the discovery for himself. No one can help him except by furnishing him with the conditions. But as he is constituted, the conditions will sooner or later shoot together into the result.

William James, *Psychology*, XXII

- 64 A language is not a universal mode of expressing all ideas whatsoever. It is a limited mode of expressing such ideas as have been frequently entertained, and urgently needed, by the group of human beings who developed that mode of speech. It is only during a comparatively short period of human history that there has existed any language with an adequate stock of general terms. Such general terms require a permanent literature to define them by their mode of employment.

The result is that the free handling of general ideas is a late acquirement. I am not maintaining that the brains of men were inadequate for the task. The point is that it took ages for them to develop first the appliances and then the habits which made generality of thought possible and prevalent. For ages, existing languages must have been ready for development. If men had been in contact with a superior race, either personally or by a survival of their literature, a process which requires scores or even hundreds of generations might have been antedated, so as to have been effected almost at once. Such, in fact, was the later history of the development of the races of Northern Europe. Again, a social system which encourages developments of thought can procure the advent. This is the way in which the result was first obtained. Society and language grew together.

Whitehead, *Religion in the Making*, I, 5

- 65 It is natural to think of the meaning of a word as something conventional. This, however, is only true with great limitations. A new word can be added to an existing language by a mere convention, as is done, for instance, with new scientific terms. But the basis of a language is not conventional, either from the point of view of the individual or from that of the community. A child learn-

ing to speak is learning habits and associations which are just as much determined by the environment as the habit of expecting dogs to bark and cocks to crow. The community that speaks a language has learnt it, and modified it by processes almost all of which are not deliberate, but the results of causes operating according to more or less ascertainable laws. If we trace any Indo-European language back far enough, we arrive hypothetically (at any rate according to some authorities) at the stage when language consisted only of the roots out of which subsequent words have grown. How these roots acquired their meanings is not known, but a conventional origin is clearly just as mythical as the social contract by which Hobbes and Rousseau supposed civil government to have been established. We can hardly suppose a parliament of hitherto speechless elders meeting together and agreeing to call a cow a cow and a wolf a wolf. The association of words with their meanings must have grown up by some natural process, though at present the nature of the process is unknown.

Russell, *Analysis of Mind*, X

- 66 The essence of language lies, not in the use of this or that special means of communication, but in the employment of fixed associations (however these may have originated) in order that something now sensible—a spoken word, a picture, a gesture, or what not—may call up the "idea" of something else. Whenever this is done, what is now sensible may be called a "sign" or "symbol," and that of which it is intended to call up the "idea" may be called its "meaning." This is a rough outline of what constitutes "meaning."

Russell, *Analysis of Mind*, X

- 67 Language has two interconnected merits: first, that it is social, and second, that it supplies public expression for "thoughts" which would otherwise remain private. Without language, or some pre-linguistic analogue, our knowledge of the environment is confined to what our own senses have shown us, together with such inferences as our congenital constitution may prompt; but by the help of speech we are able to know what others can relate, and to relate what is no longer sensibly present but only remembered. When we see or hear something which a companion is not seeing or hearing, we can often make him aware of it by the one word "look" or "listen," or even by gestures. But if half an hour ago we saw a fox, it is not possible to make another person aware of this fact without language. This depends upon the fact that the word "fox" applies equally to a fox seen or a fox remembered, so that our memories, which in themselves are private, are represented to others by uttered sounds, which are public. Without language, only that part of our life which consists of public sensations would be communicable,

and that only to those so situated as to be able to share the sensations in question.

Russell, *Human Knowledge*, II, 1

- 68 Language serves not only to express thoughts, but to make possible thoughts which could not exist without it. It is sometimes maintained that there can be no thought without language, but to this view I cannot assent: I hold that there can be thought, and even true and false belief, without language. But however that may, it cannot be denied that all fairly elaborate thoughts require words. I can know, in a sense, that I have five fingers without knowing the word "five," but I cannot know that the population of London is about eight millions unless I have acquired the language of arithmetic, nor can I have any thought at all closely corresponding to what is asserted in the sentence: "The ratio of the circumference of a circle to the diameter is approximately 3.14159." Language, once evolved, acquires a kind of autonomy: we can know, especially in mathematics, that a sentence asserts something true, although what it asserts is too complex to be apprehended even by the best minds.

Russell, *Human Knowledge*, II, 1

- 69 I think the elementary uses of a word may be distinguished as indicative, imperative, and interrogative. When a child sees his mother coming, he may say, "Mother"; this is the indicative use. When he wants her, he calls, "Mother!"; this is the imperative use. When she dresses up as a witch and he begins to pierce the disguise, he may say, "Mother?" This is the interrogative use. The indicative use must come first in the acquisition of language, since the association of word and object signified can only be created by the simultaneous presence of both. But the imperative use very quickly follows. This is relevant in considering what we mean by "thinking of" an object. It is obvious that the child who has just learned to call his mother has found verbal expression for a state in which he had often been previously, that this state was associated with his mother, and that it has now become associated with the word "Mother." Before language, his state was only partially communicable; an adult, hearing him cry, could know that he wanted something, but had to guess what it was. But the fact that the word "Mother!" expresses his state shows that even before the acquisition of language his state had a relation to his mother, namely, the relation called "thinking of." This relation is not created by language, but antedates it. What language does is to make it communicable.

Russell, *Human Knowledge*, II, 2

- 70 When one has familiarized oneself with the extensive employment of symbolism for the representation of sexual material in dreams, one naturally

asks oneself whether many of these symbols have not a permanently established meaning, like the signs in shorthand; and one even thinks of attempting to compile a new dream-book on the lines of the cipher method. In this connection it should be noted that symbolism does not appertain especially to dreams, but rather to the unconscious imagination, and particularly to that of the people, and it is to be found in a more developed condition in folklore, myths, legends, idiomatic phrases, proverbs, and the current witticisms of a people than in dreams. We should have, therefore, to go far beyond the province of dream-interpretation in order fully to investigate the meaning of symbolism, and to discuss the numerous problems—for the most part still unsolved—which are associated with the concept of the symbol. We shall here confine ourselves to saying that representation by a symbol comes under the heading of the indirect representations, but that we are warned by all sorts of signs against indiscriminately closing symbolic representation with the other modes of indirect representation before we have clearly conceived its distinguishing characteristics. In a number of cases, the common quality shared by the symbol and the thing which it represents is obvious; in others, it is concealed; in these latter cases the choice of the symbol appears to be enigmatic. And these are the very cases that must be able to elucidate the ultimate meaning of the symbolic relation; they point to the fact that it is of a genetic nature. What is today symbolically connected was probably united, in primitive times, by conceptual and linguistic identity. The symbolic relationship seems to be a residue and reminder of a former identity. It may also be noted that in many cases the symbolic identity extends beyond the linguistic identity.

Freud, *Interpretation of Dreams*, VI, E

- 71 There is a specially close relation between true symbols and sexuality.

An important clue in this connection has recently been given to us in the view expressed by a philologist (H. Sperber, of Upsala, who works independently of psycho-analysis), that sexual needs have had the largest share in the origin and development of language. He says that the first sounds uttered were a means of communication, and of summoning the sexual partner, and that, in the later development, the elements of speech were used as an accompaniment to the different kinds of work carried on by primitive man. This work was performed by associated efforts, to the sound of rhythmically repeated utterances, the effect of which was to transfer a sexual interest to the work. Primitive man thus made his work agreeable, so to speak, by treating it as the equivalent of and substitute for sexual activities. The word uttered during the communal work had therefore two meanings, the one referring to the sexual act,

the other to the labour which had come to be equivalent to it. In time the word was dissociated from its sexual significance and its application confined to the work. Generations later the same thing happened to a new word with a sexual signification, which was then applied to a new form of work. In this way a number of root-words arose which were all of sexual origin but had all lost their sexual meaning. If the statement here outlined be correct, a possibility at least of understanding dream-symbolism opens out before us. We should comprehend why it is that in dreams, which retain something of these primitive conditions, there is such an extraordinarily large number of sexual symbols; and why weapons and tools in general stand for the male, and materials and things worked on for the female. The symbolic relations would then be the survival of the old identity in words; things which once had the same name as the genitalia could now appear in dreams as symbolizing them.

Freud, *General Introduction to Psycho-Analysis*, X

- 72 Things come and go; or we come and go, and either way things escape our notice. Our direct sensible relation to things is very limited. The suggestion of meanings by natural signs is limited to occasions of direct contact or vision. But a meaning fixed by a linguistic sign is conserved for future use. Even if the thing is not there to represent the meaning, the word may be produced so as to evoke the meaning. Since intellectual life depends on possession of a store of meanings, the impor-

ance of language as a tool of preserving meanings cannot be overstated. To be sure, the method of storage is not wholly aseptic; words often corrupt and modify the meanings they are supposed to keep intact, but liability to infection is a price paid by every living thing for the privilege of living.

Dewey, *How We Think*, Pt. III, XIII, 1

- 73 As is often said, grammar expresses the unconscious logic of the popular mind. *The chief intellectual classifications that constitute the working capital of thought have been built up for us by our mother tongue.* Our very lack of explicit consciousness in using language that we are employing the intellectual systematizations of the race shows how thoroughly accustomed we have become to its logical distinctions and groupings.

Dewey, *How We Think*, Pt. III, XIII, 1

- 74 Instruction always runs the risk of swamping the pupil's own vital, though narrow, experience under masses of communicated material. The instructor ceases and the teacher begins at the point where communicated matter stimulates into fuller and more significant life that which has entered by the strait and narrow gate of sense-perception and motor activity. Genuine communication involves contagion; its name should not be taken in vain by terming communication that which produces no community of thought and purpose between the child and the race of which he is the heir.

Dewey, *How We Think*, Pt. III, XVI, 3

## 7.2 | *The Arts of Language*

Among the categories of art to which attention is called in the first section of Chapter 16 on ART AND AESTHETICS is the group of arts traditionally called "the seven liberal arts," divided into the trivium, or the three arts of grammar, logic, and rhetoric, and the quadrivium, or the four arts of arithmetic, geometry, music, and astronomy. The contemporary reader will immediately recognize the first three as arts of language; the reader

would probably understand the second four better if they were referred to as the mathematical arts of calculation and measurement.

Many of the passages quoted in this section recommend steps to be taken to make speech serve more effectively as an instrument of communication or of thought. They call attention to the fallacies or faults to be avoided by a careless or uncritical use of