



Of Man

Thomas Hobbes

CHAPTER I OF SENSE

CONCERNING the thoughts of man, I will consider them first singly, and afterwards in train or dependence upon one another. Singly, they are every one a representation or appearance of some quality, or other accident of a body without us, which is commonly called an object. Which object worketh on the eyes, ears, and other parts of man's body, and by diversity of working produceth diversity of appearances.

The original of them all is that which we call sense, (for there is no conception in a man's mind which hath not at first, totally or by parts, been begotten upon the organs of sense). The rest are derived from that original.

To know the natural cause of sense is not very necessary to the business now in hand; and I have elsewhere written of the same at large. Nevertheless, to fill each part of my present method, I will briefly deliver the same in this place.

The cause of sense is the external body, or object, which presseth the organ proper to each sense, either immediately, as in the taste and touch; or mediately, as in seeing, hearing, and smelling: which pressure, by the mediation of nerves and other strings and membranes of the body, continued inwards to the brain and heart, causeth there a resistance, or counter-pressure, or endeavour of the heart to deliver itself: which endeavour, because outward, seemeth to be some matter without. And this seeming, or fancy, is that which men call sense; and consisteth, as to the eye, in a light, or colour figured; to the ear, in a sound; to the nostril, in an odour; to the tongue and palate, in a savour; and to the rest of the body, in heat, cold, hardness, softness, and such other qualities as we discern by feeling. All which qualities called sensible are in the object that causeth them but so many several motions of the matter, by which it presseth our organs diversely. Neither in us that are pressed are they anything else but diverse motions (for motion produceth nothing but motion). But their appearance to us is fancy, the same waking that dreaming. And as pressing, rubbing, or striking the eye makes us fancy a light, and pressing the ear produceth a din; so do the bodies also we see, or hear, produce the same by their strong, though unobserved action. For if those colours and sounds were in the bodies or objects that cause them, they could not be severed from them, as by glasses and in echoes by reflection we see they are: where we know the thing we see is in one place; the appearance, in another. And though at some certain distance the real and very object seem invested with the fancy it begets in us; yet still the object is one thing, the image or fancy is another. So that sense in all cases is nothing else but original fancy caused (as I have said) by the pressure that is, by the motion of external things upon our eyes, ears, and other organs, thereunto ordained.

But the philosophy schools, through all the universities of Christendom, grounded upon certain texts of Aristotle, teach another doctrine; and say, for the cause of vision, that the thing

seen sendeth forth on every side a visible species, (in English) a visible show, apparition, or aspect, or a being seen; the receiving whereof into the eye is seeing. And for the cause of hearing, that the thing heard sendeth forth an audible species, that is, an audible aspect, or audible being seen; which, entering at the ear, maketh hearing. Nay, for the cause of understanding also, they say the thing understood sendeth forth an intelligible species, that is, an intelligible being seen; which, coming into the understanding, makes us understand. I say not this, as disapproving the use of universities: but because I am to speak hereafter of their office in a Commonwealth, I must let you see on all occasions by the way what things would be amended in them; amongst which the frequency of insignificant speech is one.

CHAPTER II OF IMAGINATION

That when a thing lies still, unless somewhat else stir it, it will lie still for ever, is a truth that no man doubts of. But that when a thing is in motion, it will eternally be in motion, unless somewhat else stay it, though the reason be the same (namely, that nothing can change itself), is not so easily assented to. For men measure, not only other men, but all other things, by themselves: and because they find themselves subject after motion to pain and lassitude, think everything else grows weary of motion, and seeks repose of its own accord; little considering whether it be not some other motion wherein that desire of rest they find in themselves consisteth. From hence it is that the schools say, heavy bodies fall downwards out of an appetite to rest, and to conserve their nature in that place which is most proper for them; ascribing appetite, and knowledge of what is good for their conservation (which is more than man has), to things inanimate, absurdly.

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, and apply the same, though improperly, to all the other senses. But the Greeks call it fancy, which signifies appearance, and is as proper to one sense as to another. 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. But because amongst many strokes which our eyes, ears, and other organs receive from external bodies, the predominant only is sensible; therefore the light of the sun being predominant, we are not affected with the action of the stars. And any object being removed from our eyes, though the impression it made in us remain, yet other objects more present succeeding, and working on us, the imagination of the past is obscured and made weak, as the voice of a man is in the noise of the day. From whence it followeth that the longer the time is, after the sight or sense of any object, the weaker is the imagination. For the continual change of man's body destroys in time the parts which in sense were moved: so that distance of time, and of place, hath one and the same effect in us. For as at a great distance of place that which we look at appears dim, and without distinction of the smaller parts, and as voices grow weak and inarticulate: so also after great distance of time our imagination of the past is weak; and we lose, for example,

of cities we have seen, many particular streets; and of actions, many particular circumstances. 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.

Much memory, or memory of many things, is called experience. Again, imagination being only of those things which have been formerly perceived by sense, either all at once, or by parts at several times; the former (which is the imagining the whole object, as it was presented to the sense) is simple imagination, as when one imagineth a man, or horse, which he hath seen before. The other is compounded, when from the sight of a man at one time, and of a horse at another, we conceive in our mind a centaur. So when a man compoundeth the image of his own person with the image of the actions of another man, as when a man imagines himself a Hercules or an Alexander (which happeneth often to them that are much taken with reading of romances), it is a compound imagination, and properly but a fiction of the mind. There be also other imaginations that rise in men, though waking, from the great impression made in sense: as from gazing upon the sun, the impression leaves an image of the sun before our eyes a long time after; and from being long and vehemently attent upon geometrical figures, a man shall in the dark, though awake, have the images of lines and angles before his eyes; which kind of fancy hath no particular name, as being a thing that doth not commonly fall into men's discourse.

The imaginations of them that sleep are those we call dreams. And these also (as all other imaginations) have been before, either totally or by parcels, in the sense. And because in sense, the brain and nerves, which are the necessary organs of sense, are so benumbed in sleep as not easily to be moved by the action of external objects, there can happen in sleep no imagination, and therefore no dream, but what proceeds from the agitation of the inward parts of man's body; which inward parts, for the connexion they have with the brain and other organs, when they be distempered do keep the same in motion; whereby the imaginations there formerly made, appear as if a man were waking; saving that the organs of sense being now benumbed, so as there is no new object which can master and obscure them with a more vigorous impression, a dream must needs be more clear, in this silence of sense, than are our waking thoughts. And hence it cometh to pass that it is a hard matter, and by many thought impossible, to distinguish exactly between sense and dreaming. For my part, when I consider that in dreams I do not often nor constantly think of the same persons, places, objects, and actions that I do waking, nor remember so long a train of coherent thoughts dreaming as at other times; and because waking I often observe the absurdity of dreams, but never dream of the absurdities of my waking thoughts, I am well satisfied that, being awake, I know I dream not; though when I dream, I think myself awake.

And seeing dreams are caused by the distemper of some of the inward parts of the body, diverse distempers must needs cause different dreams. And hence it is that lying cold breedeth dreams of fear, and raiseth the thought and image of some fearful object, the motion from the brain to the inner parts, and from the inner parts to the brain being reciprocal; and that as anger causeth heat in some parts of the body when we are awake, so when we sleep the overheating of the same parts causeth anger, and raiseth up in the brain the imagination of an enemy. In the same manner, as natural kindness when we are awake causeth desire, and desire makes heat in certain other parts of the body; so also too much heat in those parts, while we sleep, raiseth in the brain an imagination of some kindness shown. In sum, our dreams are the reverse of our waking imaginations; the motion when we are awake beginning at one end, and when we dream, at another.

The most difficult discerning of a man's dream from his waking thoughts is, then, when by

some accident we observe not that we have slept: which is easy to happen to a man full of fearful thoughts; and whose conscience is much troubled; and that sleepeth without the circumstances of going to bed, or putting off his clothes, as one that noddeth in a chair. For he that taketh pains, and industriously lays himself to sleep, in case any uncouth and exorbitant fancy come unto him, cannot easily think it other than a dream. We read of Marcus Brutus (one that had his life given him by Julius Caesar, and was also his favorite, and notwithstanding murdered him), how at Philippi, the night before he gave battle to Augustus Caesar, he saw a fearful apparition, which is commonly related by historians as a vision, but, considering the circumstances, one may easily judge to have been but a short dream. For sitting in his tent, pensive and troubled with the horror of his rash act, it was not hard for him, slumbering in the cold, to dream of that which most affrighted him; which fear, as by degrees it made him wake, so also it must needs make the apparition by degrees to vanish: and having no assurance that he slept, he could have no cause to think it a dream, or anything but a vision. And this is no very rare accident: for even they that be perfectly awake, if they be timorous and superstitious, possessed with fearful tales, and alone in the dark, are subject to the like fancies, and believe they see spirits and dead men's ghosts walking in churchyards; whereas it is either their fancy only, or else the knavery of such persons as make use of such superstitious fear to pass disguised in the night to places they would not be known to haunt.

From this ignorance of how to distinguish dreams, and other strong fancies, from vision and sense, did arise the greatest part of the religion of the Gentiles in time past, that worshipped satyrs, fauns, nymphs, and the like; and nowadays the opinion that rude people have of fairies, ghosts, and goblins, and of the power of witches. For, as for witches, I think not that their witchcraft is any real power, but yet that they are justly punished for the false belief they have that they can do such mischief, joined with their purpose to do it if they can, their trade being nearer to a new religion than to a craft or science. And for fairies, and walking ghosts, the opinion of them has, I think, been on purpose either taught, or not confuted, to keep in credit the use of exorcism, of crosses, of holy water, and other such inventions of ghostly men. Nevertheless, there is no doubt but God can make unnatural apparitions: but that He does it so often as men need to fear such things more than they fear the stay, or change, of the course of Nature, which he also can stay, and change, is no point of Christian faith. But evil men, under pretext that God can do anything, are so bold as to say anything when it serves their turn, though they think it untrue; it is the part of a wise man to believe them no further than right reason makes that which they say appear credible. If this superstitious fear of spirits were taken away, and with it prognostics from dreams, false prophecies, and many other things depending thereon, by which crafty ambitious persons abuse the simple people, men would be would be much more fitted than they are for civil obedience.

And this ought to be the work of the schools, but they rather nourish such doctrine. For (not knowing what imagination, or the senses are) what they receive, they teach: some saying that imaginations rise of themselves, and have no cause; others that they rise most commonly from the will; and that good thoughts are blown (inspired) into a man by God, and evil thoughts, by the Devil; or that good thoughts are poured (infused) into a man by God, and evil ones by the Devil. Some say the senses receive the species of things, and deliver them to the common sense; and the common sense delivers them over to the fancy, and the fancy to the memory, and the memory to the judgement, like handing of things from one to another, with many words making nothing understood.

The imagination that is raised in man (or any other creature endued with the faculty of imagining) by words, or other voluntary signs, is that we generally call understanding, and is common to man and beast. For a dog by custom will understand the call or the rating of

his master; and so will many other beasts. That understanding which is peculiar to man is the understanding not only his will, but his conceptions and thoughts, by the sequel and contexture of the names of things into affirmations, negations, and other forms of speech: and of this kind of understanding I shall speak hereafter.

CHAPTER III OF THE CONSEQUENCE OR TRAIN OF IMAGINATIONS

By consequence, or train of thoughts, I understand that succession of one thought to another which is called, to distinguish it from discourse in words, mental discourse.

When a man thinketh on anything whatsoever, his next thought after is not altogether so casual as it seems to be. Not every thought to every thought succeeds indifferently. But as we have no imagination, whereof we have not formerly had sense, in whole or in parts; so we have no transition from one imagination to another, whereof we never had the like before in our senses. The reason whereof is this. All fancies are motions within us, relics of those made in the sense; and those motions that immediately succeeded one another in the sense continue also together after sense: in so much as the former coming again to take place and be predominant, the latter followeth, by coherence of the matter moved, in such manner as water upon a plain table is drawn which way any one part of it is guided by the finger. But because in sense, to one and the same thing perceived, sometimes one thing, sometimes another, succeedeth, it comes to pass in time that in the imagining of anything, there is no certainty what we shall imagine next; only this is certain, it shall be something that succeeded the same before, at one time or another.

This train of thoughts, or mental discourse, is of two sorts. The first is unguided, without design, and inconstant; wherein there is no passionate thought to govern and direct those that follow to itself as the end and scope of some desire, or other passion; in which case the thoughts are said to wander, and seem impertinent one to another, as in a dream. Such are commonly the thoughts of men that are not only without company, but also without care of anything; though even then their thoughts are as busy as at other times, but without harmony; as the sound which a lute out of tune would yield to any man; or in tune, to one that could not play. And yet in this wild ranging of the mind, a man may oft-times perceive the way of it, and the dependence of one thought upon another. For in a discourse of our present civil war, what could seem more impertinent than to ask, as one did, what was the value of a Roman penny? Yet the coherence to me was manifest enough. For the thought of the war introduced the thought of the delivering up the King to his enemies; the thought of that brought in the thought of the delivering up of Christ; and that again the thought of the 30 pence, which was the price of that treason: and thence easily followed that malicious question; and all this in a moment of time, for thought is quick.

The second is more constant, as being regulated by some desire and design. For the impression made by such things as we desire, or fear, is strong and permanent,

or (if it cease for a time) of quick return: so strong it is sometimes as to hinder and break our sleep. From desire ariseth the thought of some means we have seen produce the like of that which we aim at; and from the thought of that, the thought of means to that mean; and so continually, till we come to some beginning within our own power. And because the end, by the greatness of the impression, comes often to mind, in case our thoughts begin to wander they are quickly again reduced into the way: which, observed by one of the seven wise men, made him give men this precept, which is now worn out: respice finem; that is to say, in all your actions, look often upon what you would have, as the thing that directs all your thoughts in the way to attain it.

The train of regulated thoughts is of two kinds: one, when of an effect imagined we seek the causes or means that produce it; and this is common to man and beast. The other is, when imagining anything whatsoever, we seek all the possible effects that can by it be produced; that is to say, we imagine what we can do with it when we have it. Of which I have not at any time seen any sign, but in man only; for this is a curiosity hardly incident to the nature of any living creature that has no other passion but sensual, such as are hunger, thirst, lust, and anger. In sum, the discourse of the mind, when it is governed by design, is nothing but seeking, or the faculty of invention, which the Latins call sagacitas, and solertia; a hunting out of the causes of some effect, present or past; or of the effects of some present or past cause. 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: the Latins call it reminiscencia, as it were a re-conning of our former actions.

Sometimes a man knows a place determinate, within the compass whereof he is to seek; and then his thoughts run over all the parts thereof in the same manner as one would sweep a room to find a jewel; or as a spaniel ranges the field till he find a scent; or as a man should run over the alphabet to start a rhyme.

Sometimes a man desires to know the event of an action; and then he thinketh of some like action past, and the events thereof one after another, supposing like events will follow like actions. As he that foresees what will become of a criminal re-cons what he has seen follow on the like crime before, having this order of thoughts; the crime, the officer, the prison, the judge, and the gallows. Which kind of thoughts is called foresight, and prudence, or providence, and sometimes wisdom; though such conjecture, through the difficulty of observing all circumstances, be very fallacious. But this is certain: by how much one man has more experience of things past than another; by so much also he is more prudent, and his expectations the seldomer fail him. The present only has a being in nature; things past have a being in the memory only; but things to come have no being at all, the future being but a fiction

of the mind, applying the sequels of actions past to the actions that are present; which with most certainty is done by him that has most experience, but not with certainty enough. And though it be called prudence when the event answereth our expectation; yet in its own nature it is but presumption. For the foresight of things to come, which is providence, belongs only to him by whose will they are to come. From him only, and supernaturally, proceeds prophecy. The best prophet naturally is the best guesser; and the best guesser, he that is most versed and studied in the matters he guesses at, for he hath most signs to guess by.

A sign is the event antecedent of the consequent; and contrarily, the consequent of the antecedent, when the like consequences have been observed before: and the oftener they have been observed, the less uncertain is the sign. And therefore he that has most experience in any kind of business has most signs whereby to guess at the future time, and consequently is the most prudent: and so much more prudent than he that is new in that kind of business, as not to be equalled by any advantage of natural and extemporary wit, though perhaps many young men think the contrary.

Nevertheless, it is not prudence that distinguisheth man from beast. There be beasts that at a year old observe more and pursue that which is for their good more prudently than a child can do at ten.

As prudence is a presumption of the future, contracted from the experience of time past: so there is a presumption of things past taken from other things, not future, but past also. For he that hath seen by what courses and degrees a flourishing state hath first come into civil war, and then to ruin; upon the sight of the ruins of any other state will guess the like war and the like courses have been there also. But this conjecture has the same uncertainty almost with the conjecture of the future, both being grounded only upon experience.

There is no other act of man's mind, that I can remember, naturally planted in him, so as to need no other thing to the exercise of it but to be born a man, and live with the use of his five senses. Those other faculties, of which I shall speak by and by, and which seem proper to man only, are acquired and increased by study and industry, and of most men learned by instruction and discipline, and proceed all from the invention of words and speech. For besides sense, and thoughts, and the train of thoughts, the mind of man has no other motion; though by the help of speech, and method, the same faculties may be improved to such a height as to distinguish men from all other living creatures.

Whatsoever we imagine is finite. Therefore there is no idea or conception of anything we call infinite. No man can have in his mind an image of infinite magnitude; nor conceive infinite swiftness, infinite time, or infinite force, or infinite power. When we say anything is infinite, we signify only that we are not able to conceive the ends and bounds of the thing named, having no conception of the thing, but of our own inability. And therefore the name of God is used, not to make us conceive Him (for He is incomprehensible, and His greatness and power are unconceivable), but that we may honour Him. Also because whatsoever, as I said

before, we conceive has been perceived first by sense, either all at once, or by parts, a man can have no thought representing anything not subject to sense. No man therefore can conceive anything, but he must conceive it in some place; and endued with some determinate magnitude; and which may be divided into parts; nor that anything is all in this place, and all in another place at the same time; nor that two or more things can be in one and the same place at once: for none of these things ever have or can be incident to sense, but are absurd speeches, taken upon credit, without any signification at all, from deceived philosophers and deceived, or deceiving, Schoolmen.

CHAPTER IV OF SPEECH

The invention of printing, though ingenious, compared with the invention of letters is no great matter. But who was the first that found the use of letters is not known. He that first brought them into Greece, men say, was Cadmus, the son of Agenor, King of Phoenicia. A profitable invention for continuing the memory of time past, and the conjunction of mankind dispersed into so many and distant regions of the earth; and withal difficult, as proceeding from a watchful observation of the diverse motions of the tongue, palate, lips, and other organs of speech; whereby to make as many differences of characters to remember them. But 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, though not so copious as an orator or philosopher has need of. For I do not find anything in the Scripture out of which, directly or by consequence, can be gathered that Adam was taught the names of all figures, numbers, measures, colours, sounds, fancies, relations; much less the names of words and speech, as general, special, affirmative, negative, interrogative, optative, infinitive, all which are useful; and least of all, of entity, intentionality, quiddity, and other insignificant words of the school.

But all this language gotten, and augmented by Adam and his posterity, was again lost at the tower of Babel, when by the hand of God every man was stricken for his rebellion with an oblivion of his former language. And being hereby forced to disperse themselves into several parts of the world, it must needs be that the diversity of tongues that now is, proceeded by degrees from them in such manner as need, the mother of all inventions, taught them, and in tract of time grew everywhere more copious.

The general use of speech is to transfer our mental discourse into verbal, or the train of our thoughts into a train of words, and that for two commodities; whereof one is the registering of the consequences of our thoughts, which being apt to slip out of our memory and put us to a new labour, may again be recalled by such words as they were marked by. So that the first use of names is to serve for marks or notes of remembrance. Another is when many use the same words to signify, by their connexion and order one to another, what they conceive or think of

each matter; and also what they desire, fear, or have any other passion for. And for this use they are called signs. Special uses of speech are these: first, to register what by cogitation we find to be the cause of anything, present or past; and what we find things present or past may produce, or effect; which, in sum, is acquiring of arts. Secondly, to show to others that knowledge which we have attained; which is to counsel and teach one another. Thirdly, to make known to others our wills and purposes that we may have the mutual help of one another. Fourthly, to please and delight ourselves, and others, by playing with our words, for pleasure or ornament, innocently.

To these uses, there are also four correspondent abuses. First, when men register their thoughts wrong by the inconstancy of the signification of their words; by which they register for their conceptions that which they never conceived, and so deceive themselves. Secondly, when they use words metaphorically; that is, in other sense than that they are ordained for, and thereby deceive others. Thirdly, when by words they declare that to be their will which is not. Fourthly, when they use them to grieve one another: for seeing nature hath armed living creatures, some with teeth, some with horns, and some with hands, to grieve an enemy, it is but an abuse of speech to grieve him with the tongue, unless it be one whom we are obliged to govern; and then it is not to grieve, but to correct and amend.

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.

One universal name is imposed on many things for their similitude in some quality, or other accident: and whereas a proper name bringeth to mind one thing only, universals recall any one of those many.

And of names universal, some are of more and some of less extent, the larger comprehending the less large; and some again of equal extent, comprehending each other reciprocally. As for example, the name body is of larger signification than the word man, and comprehendeth it; and the names man and rational are of equal extent, comprehending mutually one another. But here we must take notice that by a name is not always understood, as in grammar, one only word, but sometimes by circumlocution many words together. For all these words, He that in his actions observeth the laws of his country, make but one name, equivalent to this one word, just.

By this imposition of names, some of larger, some of stricter signification, we turn the reckoning of the consequences of things imagined in the mind into a reckoning of the consequences of appellations. For example, a man that hath no use of speech at all, (such as is born and remains perfectly deaf and dumb), if he set before his eyes a triangle, and by it two right angles (such as are the corners of a square figure), he may by meditation compare and find that the three angles of that triangle are equal to those two right angles that stand by it. But if another triangle be shown him different in shape from the former, he cannot know without a new labour whether the three angles of that also be equal to the same. But he that hath the use of words, when he observes that such equality was consequent, not to the length of the sides, nor to any other particular thing in his triangle; but only to this, that the sides were straight, and the angles three, and that that was all, for which he named it a triangle; will boldly conclude universally that such equality of angles is in all triangles whatsoever, and register his invention in these general terms: Every triangle hath its three angles equal to two right angles. And thus the consequence found in one particular comes to be registered and remembered as a universal rule; and discharges our mental reckoning of time and place, and delivers us from all labour of

the mind, saving the first; and makes that which was found true here, and now, to be true in all times and places.

But the use of words in registering our thoughts is in nothing so evident as in numbering. A natural fool that could never learn by heart the order of numeral words, as one, two, and three, may observe every stroke of the clock, and nod to it, or say one, one, one, but can never know what hour it strikes. And it seems there was a time when those names of number were not in use; and men were fain to apply their fingers of one or both hands to those things they desired to keep account of; and that thence it proceeded that now our numeral words are but ten, in any nation, and in some but five, and then they begin again. And he that can tell ten, if he recite them out of order, will lose himself, and not know when he has done: much less will he be able to add, and subtract, and perform all other operations of arithmetic. So that without words there is no possibility of reckoning of numbers; much less of magnitudes, of swiftness, of force, and other things, the reckonings whereof are necessary to the being or well-being of mankind.

When two names are joined together into a consequence, or affirmation, as thus, A man is a living creature; or thus, If he be a man, he is a living creature; if the latter name living creature signify all that the former name man signifieth, then the affirmation, or consequence, is true; otherwise false. For true and false are attributes of speech, not of things. And where speech is not, there is neither truth nor falsehood. Error there may be, as when we expect that which shall not be, or suspect what has not been; but in neither case can a man be charged with untruth.

Seeing then that truth consisteth in the right ordering of names in our affirmations, a man that seeketh precise truth had need to remember what every name he uses stands for, and to place it accordingly; or else he will find himself entangled in words, as a bird in lime twigs; the more he struggles, the more belimed. And therefore in geometry (which is the only science that it hath pleased God hitherto to bestow on mankind), men begin at settling the significations of their words; which settling of significations, they call definitions, and place them in the beginning of their reckoning.

By this it appears how necessary it is for any man that aspires to true knowledge to examine the definitions of former authors; and either to correct them, where they are negligently set down, or to make them himself. For the errors of definitions multiply themselves, according as the reckoning proceeds, and lead men into absurdities, which at last they see, but cannot avoid, without reckoning anew from the beginning; in which lies the foundation of their errors. From whence it happens that they which trust to books do as they that cast up many little sums into a greater, without considering whether those little sums were rightly cast up or not; and at last finding the error visible, and not mistrusting their first grounds, know not which way to clear themselves, spend time in fluttering over their books; as birds that entering by the chimney, and finding themselves enclosed in a chamber, flutter at the false light of a glass window, for want of wit to consider which way they came in. So that in the right definition of names lies the first use of speech; which is the acquisition of science: and in wrong, or no definitions, lies the first abuse; from which proceed all false and senseless tenets; which make those men that take their instruction from the authority of books, and not from their own meditation, to be as much below the condition of ignorant men as men endued with true science are above it. For between true science and erroneous doctrines, ignorance is in the middle. Natural sense and imagination are not subject to absurdity. Nature itself cannot err: and as men abound in copiousness of language; so they become more wise, or more mad, than ordinary. Nor is it possible without letters for any man to become either excellently wise or (unless his memory be hurt by disease, or ill constitution of organs) excellently foolish. For words are wise men's counters; they do but reckon by them: but they are the money of fools, that value them by the authority of an Aristotle, a Cicero, or a Thomas, or any other doctor whatsoever, if but a man.

Subject to names is whatsoever can enter into or be considered in an account, and be added one to another to make a sum, or subtracted one from another and leave a remainder. The Latins called accounts of money rationes, and accounting, ratiocinatio: and that which we in bills or books of account call items, they called nomina; that is, names: and thence it seems to proceed that they extended the word ratio to the faculty of reckoning in all other things. The Greeks have but one word, logos, for both speech and reason; not that they thought there was no speech without reason, but no reasoning without speech; and the act of reasoning they called syllogism; which signifieth summing up of the consequences of one saying to another. And because the same things may enter into account for diverse accidents, their names are (to show that diversity) diversely wrested and diversified. This diversity of names may be reduced to four general heads.

First, a thing may enter into account for matter, or body; as living, sensible, rational, hot, cold, moved, quiet; with all which names the word matter, or body, is understood; all such being names of matter.

Secondly, it may enter into account, or be considered, for some accident or quality which we conceive to be in it; as for being moved, for being so long, for being hot, etc.; and then, of the name of the thing itself, by a little change or wresting, we make a name for that accident which we consider; and for living put into the account life; for moved, motion; for hot, heat; for long, length, and the like: and all such names are the names of the accidents and properties by which one matter and body is distinguished from another. These are called names abstract, because severed, not from matter, but from the account of matter.

Thirdly, we bring into account the properties of our own bodies, whereby we make such distinction: as when anything is seen by us, we reckon not the thing itself, but the sight, the colour, the idea of it in the fancy; and when anything is heard, we reckon it not, but the hearing or sound only, which is our fancy or conception of it by the ear: and such are names of fancies.

Fourthly, we bring into account, consider, and give names, to names themselves, and to speeches: for, general, universal, special, equivocal, are names of names. And affirmation, interrogation, commandment, narration, syllogism, sermon, oration, and many other such are names of speeches. And this is all the variety of names positive; which are put to mark somewhat which is in nature, or may be feigned by the mind of man, as bodies that are, or may be conceived to be; or of bodies, the properties that are, or may be feigned to be; or words and speech.

There be also other names, called negative; which are notes to signify that a word is not the name of the thing in question; as these words: nothing, no man, infinite, indocible, three want four, and the like; which are nevertheless of use in reckoning, or in correcting of reckoning, and call to mind our past cogitations, though they be not names of anything; because they make us refuse to admit of names not rightly used.

All other names are but insignificant sounds; and those of two sorts. One, when they are new, and yet their meaning not explained by definition; whereof there have been abundance coined by Schoolmen and puzzled philosophers.

Another, when men make a name of two names, whose significations are contradictory and inconsistent; as this name, an incorporeal body, or, which is all one, an incorporeal substance, and a great number more. For whensoever any affirmation is false, the two names of which it is composed, put together and made one, signify nothing at all. For example, if it be a false affirmation to say a quadrangle is round, the word round quadrangle signifies nothing, but is a mere sound. So likewise if it be false to say that virtue can be poured, or blown up and down, the words in poured virtue, in blown virtue, are as absurd and insignificant as a round quadrangle. And therefore you shall hardly meet with a senseless and insignificant word that is

not made up of some Latin or Greek names. Frenchman seldom hears our Saviour called by the name of Parole, but by the name of Verbe often; yet Verbe and Parole differ no more but that one is Latin, the other French.

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.

What kinds of speeches signify the appetites, aversions, and passions of man's mind, and of their use and abuse, I shall speak when I have spoken of the passions.

The names of such things as affect us, that is, which please and displease us, because all men be not alike affected with the same thing, nor the same man at all times, are in the common discourses of men of inconstant signification. For seeing all names are imposed to signify our conceptions, and all our affections are but conceptions; when we conceive the same things differently, we can hardly avoid different naming of them. For though the nature of that we conceive be the same; yet the diversity of our reception of it, in respect of different constitutions of body and prejudices of opinion, gives everything a tincture of our different passions. And therefore in reasoning, a man must take heed of words; which, besides the signification of what we imagine of their nature, have a signification also of the nature, disposition, and interest of the speaker; such as are the names of virtues and vices: for one man calleth wisdom what another calleth fear; and one cruelty what another justice; one prodigality what another magnanimity; and one gravity what another stupidity, etc. And therefore such names can never be true grounds of any ratiocination. No more can metaphors and tropes of speech: but these are less dangerous because they profess their inconstancy, which the other do not.

CHAPTER V OF REASON AND SCIENCE

When man reasoneth, he does nothing else but conceive a sum total, from addition of parcels; or conceive a remainder, from subtraction of one sum from another: which, if it be done by words, is conceiving of the consequence of the names of all the parts, to the name of the whole; or from the names of the whole and one part, to the name of the other part. And though in some things, as in numbers, besides adding and subtracting, men name other operations, as multiplying and dividing; yet they are the same: for multiplication is but adding together of things equal; and division, but subtracting of one thing, as often as we can. These operations are not incident to numbers only, but to all manner of things that can be added together, and taken one out of another. For as arithmeticians teach to add and subtract in numbers, so the geometricians teach the same in lines, figures (solid and superficial), angles, proportions, times, degrees of swiftness, force, power, and the like; the logicians teach the same in consequences of words, adding together two names to make an affirmation, and two affirmations to make a syllogism, and many syllogisms to make a demonstration; and from the sum, or conclusion of a syllogism, they subtract one proposition to find the other. Writers of politics add together pactions to find men's duties; and lawyers, laws and facts to find what is right and wrong in the actions of private men. In sum, in what matter soever there is place for addition and subtraction, there also is place for reason; and where these have no place, there reason has nothing at all to do.

Out of all which we may define (that is to say determine) what that is which is meant by this word reason when we reckon it amongst the faculties of the mind. For reason, in this sense, is nothing but reckoning (that is, adding and subtracting) of the consequences of general names agreed upon for the marking and signifying of our thoughts; I say marking them, when we reckon by ourselves; and signifying, when we demonstrate or approve our reckonings to other men.

And as in arithmetic unpractised men must, and professors themselves may often, err, and cast up false; so also in any other subject of reasoning, the ablest, most attentive, and most practised men may deceive themselves, and infer false conclusions; not but that reason itself is always right reason, as well as arithmetic is a certain and infallible art: but no one man's reason, nor the reason of any one number of men, makes the certainty; no more than an account is therefore well cast up because a great many men have unanimously approved it. And therefore, as when there is a controversy in an account, the parties must by their own accord set up for right reason the reason of some arbitrator, or judge, to whose sentence they will both stand, or their controversy must either come to blows, or be undecided, for want of a right reason constituted by Nature; so is it also in all debates of what kind soever: and when men that think themselves wiser than all others clamour and demand right reason for judge, yet seek no more but that things should be determined by no other men's reason but their own, it is as intolerable in the society of men, as it is in play after trump is turned to use for trump on every occasion that suit whereof they have most in their hand. For they do nothing else, that will have every of their passions, as it comes to bear sway in them, to be taken for right reason, and that in their own controversies: bewraying their want of right reason by the claim they lay to it.

The use and end of reason is not the finding of the sum and truth of one, or a few consequences, remote from the first definitions and settled significations of names; but to begin at these, and proceed from one consequence to another. For there can be no certainty of the last conclusion without a certainty of all those affirmations and negations on which it was grounded and inferred. As when a master of a family, in taking an account, casteth up the sums of all the bills of expense into one sum; and not regarding how each bill is summed up, by those that give them in account, nor what it is he pays for, he advantages himself no more than if he allowed the account in gross, trusting to every of the accountant's skill and honesty: so also in reasoning of all other things, he that takes up conclusions on the trust of authors, and doth not fetch them from the first items in every reckoning (which are the significations of names settled by definitions), loses his labour, and does not know anything, but only believeth.

When a man reckons without the use of words, which may be done in particular things, as when upon the sight of any one thing, we conjecture what was likely to have preceded, or is likely to follow upon it; if that which he thought likely to follow follows not, or that which he thought likely to have preceded it hath not preceded it, this is called error; to which even the most prudent men are subject. But when we reason in words of general signification, and fall upon a general inference which is false; though it be commonly called error, it is indeed an absurdity, or senseless speech. For error is but a deception, in presuming that somewhat is past, or to come; of which, though it were not past, or not to come, yet there was no impossibility discoverable. But when we make a general assertion, unless it be a true one, the possibility of it is inconceivable. And words whereby we conceive nothing but the sound are those we call absurd, insignificant, and nonsense. And therefore if a man should talk to me of a round quadrangle; or accidents of bread in cheese; or immaterial substances; or of a free subject; a free will; or any free but free from being hindered by opposition; I should not say he were in an error, but that his words were without meaning; that is to say, absurd.

I have said before, in the second chapter, that a man did excel all other animals in this faculty, that when he conceived anything whatsoever, he was apt to enquire the consequences of it, and

what effects he could do with it. And now I add this other degree of the same excellence, that he can by words reduce the consequences he finds to general rules, called theorems, or aphorisms; that is, he can reason, or reckon, not only in number, but in all other things whereof one may be added unto or subtracted from another.

But this privilege is allayed by another; and that is by the privilege of absurdity, to which no living creature is subject, but men only. And of men, those are of all most subject to it that profess philosophy. For it is most true that Cicero saith of them somewhere; that there can be nothing so absurd but may be found in the books of philosophers. And the reason is manifest. For there is not one of them that begins his ratiocination from the definitions or explications of the names they are to use; which is a method that hath been used only in geometry, whose conclusions have thereby been made indisputable.

1. The first cause of absurd conclusions I ascribe to the want of method; in that they begin not their ratiocination from definitions; that is, from settled significations of their words: as if they could cast account without knowing the value of the numeral words, one, two, and three.

And whereas all bodies enter into account upon diverse considerations, which I have mentioned in the precedent chapter, these considerations being diversely named, diverse absurdities proceed from the confusion and unfit connexion of their names into assertions. And therefore,

2. The second cause of absurd assertions, I ascribe to the giving of names of bodies to accidents; or of accidents to bodies; as they do that say, faith is infused, or inspired; when nothing can be poured, or breathed into anything, but body; and that extension is body; that phantasms are spirits, etc.

3. The third I ascribe to the giving of the names of the accidents of bodies without us to the accidents of our own bodies; as they do that say, the colour is in the body; the sound is in the air, etc.

4. The fourth, to the giving of the names of bodies to names, or speeches; as they do that say that there be things universal; that a living creature is genus, or a general thing, etc.

5. The fifth, to the giving of the names of accidents to names and speeches; as they do that say, the nature of a thing is its definition; a man's command is his will; and the like.

6. The sixth, to the use of metaphors, tropes, and other rhetorical figures, instead of words proper. For though it be lawful to say, for example, in common speech, the way goeth, or leadeth hither, or thither; the proverb says this or that (whereas ways cannot go, nor proverbs speak); yet in reckoning, and seeking of truth, such speeches are not to be admitted.

7. The seventh, to names that signify nothing, but are taken up and learned by rote from the Schools, as hypostatical, transubstantiate, consubstantiate, eternal-now, and the like canting of Schoolmen.

To him that can avoid these things, it is not easy to fall into any absurdity, unless it be by the length of an account; wherein he may perhaps forget what went before. For all men by nature reason alike, and well, when they have good principles. For who is so stupid as both to mistake in geometry, and also to persist in it, when another detects his error to him?

By this it appears that reason is not, as sense and memory, born with us; nor gotten by experience only, as prudence is; but attained by industry: first in apt imposing of names; and secondly by getting a good and orderly method in proceeding from the elements, which are names, to assertions made by connexion of one of them to another; and so to syllogisms, which are the connexions of one assertion to another, till we come to a knowledge of all the consequences of names appertaining to the subject in hand; and that is it, men call science. And whereas sense and memory are but knowledge of fact, which is a thing past and irrevocable, science is the knowledge of consequences, and dependence of one fact upon another; by which, out of that we can presently do, we know how to do something else when we will, or the like,

another time: because when we see how anything comes about, upon what causes, and by what manner; when the like causes come into our power, we see how to make it produce the like effects.

Children therefore are not endued with reason at all, till they have attained the use of speech, but are called reasonable creatures for the possibility apparent of having the use of reason in time to come. And the most part of men, though they have the use of reasoning a little way, as in numbering to some degree; yet it serves them to little use in common life, in which they govern themselves, some better, some worse, according to their differences of experience, quickness of memory, and inclinations to several ends; but specially according to good or evil fortune, and the errors of one another. For as for science, or certain rules of their actions, they are so far from it that they know not what it is. Geometry they have thought conjuring: but for other sciences, they who have not been taught the beginnings, and some progress in them, that they may see how they be acquired and generated, are in this point like children that, having no thought of generation, are made believe by the women that their brothers and sisters are not born, but found in the garden.

But yet they that have no science are in better and nobler condition with their natural prudence than men that, by misreasoning, or by trusting them that reason wrong, fall upon false and absurd general rules. For ignorance of causes, and of rules, does not set men so far out of their way as relying on false rules, and taking for causes of what they aspire to, those that are not so, but rather causes of the contrary.

To conclude, the light of humane minds is perspicuous words, but by exact definitions first snuffed, and purged from ambiguity; reason is the pace; increase of science, the way; and the benefit of mankind, the end. And, on the contrary, metaphors, and senseless and ambiguous words are like *ignes fatui*; and reasoning upon them is wandering amongst innumerable absurdities; and their end, contention and sedition, or contempt.

As much experience is prudence, so is much science sapience. For though we usually have one name of wisdom for them both; yet the Latins did always distinguish between *prudencia* and *sapientia*; ascribing the former to experience, the latter to science. But to make their difference appear more clearly, let us suppose one man endued with an excellent natural use and dexterity in handling his arms; and another to have added to that dexterity an acquired science of where he can offend, or be offended by his adversary, in every possible posture or guard: the ability of the former would be to the ability of the latter, as prudence to sapience; both useful, but the latter infallible. But they that, trusting only to the authority of books, follow the blind blindly, are like him that, trusting to the false rules of a master of fence, ventures presumptuously upon an adversary that either kills or disgraces him.

The signs of science are some certain and infallible; some, uncertain. Certain, when he that pretendeth the science of anything can teach the same; that is to say, demonstrate the truth thereof perspicuously to another: uncertain, when only some particular events answer to his pretence, and upon many occasions prove so as he says they must. Signs of prudence are all uncertain; because to observe by experience, and remember all circumstances that may alter the success, is impossible. But in any business, whereof a man has not infallible science to proceed by, to forsake his own natural judgment, and be guided by general sentences read in authors, and subject to many exceptions, is a sign of folly, and generally scorned by the name of pedantry. And even of those men themselves that in councils of the Commonwealth love to show their reading of politics and history, very few do it in their domestic affairs where their particular interest is concerned, having prudence enough for their private affairs; but in public they study more the reputation of their own wit than the success of another's business.

CHAPTER VI

OF THE INTERIOR BEGINNINGS OF VOLUNTARY MOTIONS, COMMONLY CALLED THE PASSIONS; AND THE SPEECHES BY WHICH THEY ARE EXPRESSED

There be in animals two sorts of motions peculiar to them: One called vital, begun in generation, and continued without interruption through their whole life; such as are the course of the blood, the pulse, the breathing, the concoction, nutrition, excretion, etc.; to which motions there needs no help of imagination: the other is animal motion, otherwise called voluntary motion; as to go, to speak, to move any of our limbs, in such manner as is first fancied in our minds. That sense is motion in the organs and interior parts of man's body, caused by the action of the things we see, hear, etc., and that fancy is but the relics of the same motion, remaining after sense, has been already said in the first and second chapters. And because going, speaking, and the like voluntary motions depend always upon a precedent thought of whither, which way, and what, it is evident that the imagination is the first internal beginning of all voluntary motion. And although unstudied men do not conceive any motion at all to be there, where the thing moved is invisible, or the space it is moved in is, for the shortness of it, insensible; yet that doth not hinder but that such motions are. For let a space be never so little, that which is moved over a greater space, whereof that little one is part, must first be moved over that. These small beginnings of motion within the body of man, before they appear in walking, speaking, striking, and other visible actions, are commonly called endeavour.

This endeavour, when it is toward something which causes it, is called appetite, or desire, the latter being the general name, and the other oftentimes restrained to signify the desire of food, namely hunger and thirst. And when the endeavour is from ward something, it is generally called aversion. These words appetite and aversion we have from the Latins; and they both of them signify the motions, one of approaching, the other of retiring. So also do the Greek words for the same, which are *orome* and *aphorme*. For Nature itself does often press upon men those truths which afterwards, when they look for somewhat beyond Nature, they stumble at. For the Schools find in mere appetite to go, or move, no actual motion at all; but because some motion they must acknowledge, they call it metaphorical motion, which is but an absurd speech; for though words may be called metaphorical, bodies and motions cannot.

That which men desire they are said to love, and to hate those things for which they have aversion. So that desire and love are the same thing; save that by desire, we signify the absence of the object; by love, most commonly the presence of the same. So also by aversion, we signify the absence; and by hate, the presence of the object.

Of appetites and aversions, some are born with men; as appetite of food, appetite of excretion, and excretion (which may also and more properly be called aversions, from somewhat they feel in their bodies), and some other appetites, not many. The rest, which are appetites of particular things, proceed from experience and trial of their effects upon themselves or other men. For of things we know not at all, or believe not to be, we can have no further desire than to taste and try. But aversion we have for things, not only which we know have hurt us, but also that we do not know whether they will hurt us, or not.

Those things which we neither desire nor hate, we are said to contemn: contempt being nothing else but an immobility or contumacy of the heart in resisting the action of certain things; and proceeding from that the heart is already moved otherwise, by other more potent objects, or from want of experience of them.

And because the constitution of a man's body is in continual mutation, it is impossible that all the same things should always cause in him the same appetites and aversions: much less can all men consent in the desire of almost any one and the same object.

But whatsoever is the object of any man's appetite or desire, that is it which he for his part calleth good; and the object of his hate and aversion, evil; and of his contempt, vile and inconsiderable. For these words of good, evil, and contemptible are ever used with relation to the person that useth them: there being nothing simply and absolutely so; nor any common rule of good and evil to be taken from the nature of the objects themselves; but from the person of the man, where there is no Commonwealth; or, in a Commonwealth, from the person that representeth it; or from an arbitrator or judge, whom men disagreeing shall by consent set up and make his sentence the rule thereof.

The Latin tongue has two words whose significations approach to those of good and evil, but are not precisely the same; and those are pulchrum and turpe. Whereof the former signifies that which by some apparent signs promiseth good; and the latter, that which promiseth evil. But in our tongue we have not so general names to express them by. But for pulchrum we say in some things, fair; in others, beautiful, or handsome, or gallant, or honourable, or comely, or amiable: and for turpe; foul, deformed, ugly, base, nauseous, and the like, as the subject shall require; all which words, in their proper places, signify nothing else but the mien, or countenance, that promiseth good and evil. So that of good there be three kinds: good in the promise, that is pulchrum; good in effect, as the end desired, which is called jucundum, delightful; and good as the means, which is called utile, profitable; and as many of evil: for evil in promise is that they call turpe; evil in effect and end is molestum, unpleasant, troublesome; and evil in the means, inutile, unprofitable, hurtful.

As in sense that which is really within us is, as I have said before, only motion, caused by the action of external objects but in appearance; to the sight, light and colour; to the ear, sound; to the nostril, odour, etc.: so, when the action of the same object is continued from the eyes, ears, and other organs to the heart, the real effect there is nothing but motion, or endeavour; which consisteth in appetite or aversion to or from the object moving. But the appearance or sense of that motion is that we either call delight or trouble of mind.

This motion, which is called appetite, and for the appearance of it delight and pleasure, seemeth to be a corroboration of vital motion, and a help thereunto; and therefore such things as caused delight were not improperly called jucunda (a juvando), from helping or fortifying; and the contrary, molesta, offensive, from hindering and troubling the motion vital.

Pleasure therefore, or delight, is the appearance or sense of good; and molestation or displeasure, the appearance or sense of evil. And consequently all appetite, desire, and love is accompanied with some delight more or less; and all hatred and aversion with more or less displeasure and offence....

Fear without the apprehension of why, or what, panic terror; called so from the fables that make Pan the author of them; whereas in truth there is always in him that so feareth, first, some apprehension of the cause, though the rest run away by example; every one supposing his fellow to know why. And therefore this passion happens to none but in a throng, or multitude of people....

When in the mind of man appetites and aversions, hopes and fears, concerning one and the same thing, arise alternately; and diverse good and evil consequences of the doing or omitting the thing propounded come successively into our thoughts; so that sometimes we have an appetite to it, sometimes an aversion from it; sometimes hope to be able to do it, sometimes despair, or fear to attempt it; the whole sum of desires, aversions, hopes and fears, continued till the thing be either done, or thought impossible, is that we call deliberation.

Therefore of things past there is no deliberation, because manifestly impossible to be changed; nor of things known to be impossible, or thought so; because men know or think such deliberation vain. But of things impossible, which we think possible, we may deliberate, not

knowing it is in vain. And it is called deliberation; because it is a putting an end to the liberty we had of doing, or omitting, according to our own appetite, or aversion.

This alternate succession of appetites, aversions, hopes and fears is no less in other living creatures than in man; and therefore beasts also deliberate.

Every deliberation is then said to end when that whereof they deliberate is either done or thought impossible; because till then we retain the liberty of doing, or omitting, according to our appetite, or aversion.

In deliberation, the last appetite, or aversion, immediately adhering to the action, or to the omission thereof, is that we call the will; the act, not the faculty, of willing. And beasts that have deliberation must necessarily also have will. The definition of the will, given commonly by the Schools, that it is a rational appetite, is not good. For if it were, then could there be no voluntary act against reason. For a voluntary act is that which proceedeth from the will, and no other. But if instead of a rational appetite, we shall say an appetite resulting from a precedent deliberation, then the definition is the same that I have given here. Will, therefore, is the last appetite in deliberating. And though we say in common discourse, a man had a will once to do a thing, that nevertheless he forbore to do; yet that is properly but an inclination, which makes no action voluntary; because the action depends not of it, but of the last inclination, or appetite. For if the intervenient appetites make any action voluntary, then by the same reason all intervenient aversions should make the same action involuntary; and so one and the same action should be both voluntary and involuntary.

By this it is manifest that, not only actions that have their beginning from covetousness, ambition, lust, or other appetites to the thing propounded, but also those that have their beginning from aversion, or fear of those consequences that follow the omission, are voluntary actions.

The forms of speech by which the passions are expressed are partly the same and partly different from those by which we express our thoughts. And first generally all passions may be expressed indicatively; as, I love, I fear, I joy, I deliberate, I will, I command: but some of them have particular expressions by themselves, which nevertheless are not affirmations, unless it be when they serve to make other inferences besides that of the passion they proceed from. Deliberation is expressed subjunctively; which is a speech proper to signify suppositions, with their consequences; as, If this be done, then this will follow; and differs not from the language of reasoning, save that reasoning is in general words, but deliberation for the most part is of particulars. The language of desire, and aversion, is imperative; as, Do this, forbear that; which when the party is obliged to do, or forbear, is command; otherwise prayer; or else counsel. The language of vainglory, of indignation, pity and revengefulness, optative: but of the desire to know, there is a peculiar expression called interrogative; as, What is it, when shall it, how is it done, and why so? Other language of the passions I find none: for cursing, swearing, reviling, and the like do not signify as speech, but as the actions of a tongue accustomed.

These forms of speech, I say, are expressions or voluntary significations of our passions: but certain signs they be not; because they may be used arbitrarily, whether they that use them have such passions or not. The best signs of passions present are either in the countenance, motions of the body, actions, and ends, or aims, which we otherwise know the man to have.

And because in deliberation the appetites and aversions are raised by foresight of the good and evil consequences, and sequels of the action whereof we deliberate, the good or evil effect thereof dependeth on the foresight of a long chain of consequences, of which very seldom any man is able to see to the end. But for so far as a man seeth, if the good in those consequences be greater than the evil, the whole chain is that which writers call apparent or seeming good. And contrarily, when the evil exceedeth the good, the whole is apparent or seeming evil: so that he who hath by experience, or reason, the greatest and surest prospect of consequences,

deliberates best himself; and is able, when he will, to give the best counsel unto others.

Continual success in obtaining those things which a man from time to time desireth, that is to say, continual prospering, is that men call felicity; I mean the felicity of this life. For there is no such thing as perpetual tranquillity of mind, while we live here; because life itself is but motion, and can never be without desire, nor without fear, no more than without sense. What kind of felicity God hath ordained to them that devoutly honour him, a man shall no sooner know than enjoy; being joys that now are as incomprehensible as the word of Schoolmen, beatifical vision, is unintelligible....

CHAPTER VII OF THE ENDS OR RESOLUTIONS OF DISCOURSE

Of all discourse governed by desire of knowledge, there is at last an end, either by attaining or by giving over. And in the chain of discourse, wheresoever it be interrupted, there is an end for that time.

If the discourse be merely mental, it consisteth of thoughts that the thing will be, and will not be; or that it has been, and has not been, alternately. So that wheresoever you break off the chain of a man's discourse, you leave him in a presumption of it will be, or, it will not be; or it has been, or, has not been. All which is opinion. And that which is alternate appetite, in deliberating concerning good and evil, the same is alternate opinion in the enquiry of the truth of past and future. And as the last appetite in deliberation is called the will, so the last opinion in search of the truth of past and future is called the judgement, or resolute and final sentence of him that discourseth. And as the whole chain of appetites alternate in the question of good or bad is called deliberation; so the whole chain of opinions alternate in the question of true or false is called doubt.

No discourse whatsoever can end in absolute knowledge of fact, past or to come. For, as for the knowledge of fact, it is originally sense, and ever after memory. And for the knowledge of consequence, which I have said before is called science, it is not absolute, but conditional. No man can know by discourse that this, or that, is, has been, or will be; which is to know absolutely: but only that if this be, that is; if this has been, that has been; if this shall be, that shall be; which is to know conditionally: and that not the consequence of one thing to another, but of one name of a thing to another name of the same thing.

And therefore, when the discourse is put into speech, and begins with the definitions of words, and proceeds by connexion of the same into general affirmations, and of these again into syllogisms, the end or last sum is called the conclusion; and the thought of the mind by it signified is that conditional knowledge, or knowledge of the consequence of words, which is commonly called science. But if the first ground of such discourse be not definitions, or if the definitions be not rightly joined together into syllogisms, then the end or conclusion is again opinion, namely of the truth of somewhat said, though sometimes in absurd and senseless words, without possibility of being understood. When two or more men know of one and the same fact, they are said to be conscious of it one to another; which is as much as to know it together. And because such are fittest witnesses of the facts of one another, or of a third, it was and ever will be reputed a very evil act for any man to speak against his conscience; or to corrupt or force another so to do: insomuch that the plea of conscience has been always hearkened unto very diligently in all times. Afterwards, men made use of the same word metaphorically for the knowledge of their own secret facts and secret thoughts; and therefore it is rhetorically said that the conscience is a thousand witnesses. And last of all, men, vehemently in love with their own new opinions, though never so absurd, and obstinately bent to maintain them, gave those their

opinions also that revered name of conscience, as if they would have it seem unlawful to change or speak against them; and so pretend to know they are true, when they know at most but that they think so.

When a man's discourse beginneth not at definitions, it beginneth either at some other contemplation of his own, and then it is still called opinion, or it beginneth at some saying of another, of whose ability to know the truth, and of whose honesty in not deceiving, he doubteth not; and then the discourse is not so much concerning the thing, as the person; and the resolution is called belief, and faith: faith, in the man; belief, both of the man, and of the truth of what he says. So that in belief are two opinions; one of the saying of the man, the other of his virtue. To have faith in, or trust to, or believe a man, signify the same thing; namely, an opinion of the veracity of the man: but to believe what is said signifieth only an opinion of the truth of the saying. But we are to observe that this phrase, I believe in; as also the Latin, *credo in*; and the Greek, *πισeno eis*, are never used but in the writings of divines. Instead of them, in other writings are put: I believe him; I trust him; I have faith in him; I rely on him; and in Latin, *credo illi*; *fido illi*; and in Greek, *πισeno anto*; and that this singularity of the ecclesiastic use of the word hath raised many disputes about the right object of the Christian faith.

But by believing in, as it is in the Creed, is meant, not trust in the person, but confession and acknowledgement of the doctrine. For not only Christians, but all manner of men do so believe in God as to hold all for truth they hear Him say, whether they understand it or not, which is all the faith and trust can possibly be had in any person whatsoever; but they do not all believe the doctrine of the Creed.

From whence we may infer that when we believe any saying, whatsoever it be, to be true, from arguments taken, not from the thing itself, or from the principles of natural reason, but from the authority and good opinion we have of him that hath said it; then is the speaker, or person we believe in, or trust in, and whose word we take, the object of our faith; and the honour done in believing is done to him only. And consequently, when we believe that the Scriptures are the word of God, having no immediate revelation from God Himself, our belief, faith, and trust is in the Church; whose word we take, and acquiesce therein. And they that believe that which a prophet relates unto them in the name of God take the word of the prophet, do honour to him, and in him trust and believe, touching the truth of what he relateth, whether he be a true or a false prophet. And so it is also with all other history. For if I should not believe all that is written by historians of the glorious acts of Alexander or Caesar, I do not think the ghost of Alexander or Caesar had any just cause to be offended, or anybody else but the historian. If Livy say the gods made once a cow speak, and we believe it not, we distrust not God therein, but Livy. So that it is evident that whatsoever we believe, upon no other reason than what is drawn from authority of men only, and their writings, whether they be sent from God or not, is faith in men only.

Thomas Hobbes. *Leviathan*. Part 1, Chapters 1-7 (1660).

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