

Leviathan



Thomas Hobbes

THE INTRODUCTION

Nature (the art whereby God hath made and governes the world) is by the art of man, as in many other things, so in this also imitated, that it can make an Artificial Animal. For seeing life is but a motion of Limbs, the begining whereof is in some principall part within; why may we not say, that all Automata (Engines that move themselves by springs and wheelles as doth a watch) have an artificiall life? For what is the Heart, but a Spring; and the Nerves, but so many Strings; and the Joynts, but so many Wheelles, giving motion to the whole Body, such as was intended by the Artificer? Art goes yet further, imitating that Rationall and most excellent worke of Nature, Man. For by Art is created that great LEVIATHAN called a COMMON-WEALTH, or STATE, (in latine CIVITAS) which is but an Artificiall Man; though of greater stature and strength than the Naturall, for whose protection and defence it was intended; and in which, the Sovereignty is an Artificiall Soul, as giving life and motion to the whole body; The Magistrates, and other Officers of Judicature and Execution, artificiall Joynts; Reward and Punishment (by which fastned to the seat of the Sovereignty, every joynt and member is moved to performe his duty) are the Nerves, that do the same in the Body Naturall; The Wealth and Riches of all the particular members, are the Strength; Salus Populi (the Peoples Safety) its Businesse; Counsellors, by whom all things needfull for it to know, are suggested unto it, are the Memory; Equity and Lawes, an artificiall Reason and Will; Concord, Health; Sedition, Sicknesse; and Civill War, Death. Lastly, the Pacts and Covenants, by which the parts of this Body Politique were at first made, set together, and united, resemble that Fiat, or the Let Us Make Man, pronounced by God in the Creation.

To describe the Nature of this Artificiall man, I will consider

First the Matter thereof, and the Artificer; both which is Man.

Secondly, How, and by what Covenants it is made; what are the Rights and just Power or Authority of a Sovereigne; and what it is that Preserveth and Dissolveth it.

Thirdly, what is a Christian Common-Wealth.

Lastly, what is the Kingdome of Darkness.

Concerning the first, there is a saying much usurped of late, That Wisedome is acquired, not by reading of Books, but of Men. Consequently whereunto, those persons, that for the most part can give no other proof of being wise, take great delight to shew what they think they have read in men, by uncharitable censures of one another behind their backs. But there is another saying not of late understood, by which they might learn truly to read one another, if they would take the pains; and that is, Nosce Teipsum, Read Thy Self: which was not meant, as it is now used, to countenance, either the barbarous state of men in power, towards their inferiors; or to encourage men of low degree, to a sawcie behaviour towards their betters; But to teach us, that for the similitude of the thoughts, and Passions of one man, to the thoughts, and Passions of another, whosoever looketh into himselfe, and considereth what he doth, when he does Think, Opine, Reason, Hope, Feare, &c, and upon what grounds; he shall thereby read and know, what are the thoughts, and Passions of all other men, upon the like occasions. I say the similitude of Passions, which are the same in all men, Desire, Feare, Hope, &c; not the similitude or The Objects of the Passions, which are the things Desired, Feared, Hoped, &c: for these the constitution individuall, and particular education do so vary, and they are so easie to be kept from our knowledge, that the characters of mans heart, blotted and confounded as they are, with dissembling, lying, counterfeiting, and erroneous doctrines, are legible onely to him that searcheth hearts. And though by mens actions wee do discover their designee sometimes; yet to do it without comparing them with our own, and distinguishing all circumstances, by which the case may come to be altered, is to decypher without a key, and be for the most part deceived, by too much trust, or by too much diffidence; as he that reads, is himselfe a good or evill man.

But let one man read another by his actions never so perfectly, it serves him onely with his acquaintance, which are but few. He that is to govern a whole Nation, must read in himselfe, not this, or that particular man; but Man-kind; which though it be hard to do, harder than to learn any Language, or Science; yet, when I shall have set down my own reading orderly, and perspicuously, the pains left

another, will be onely to consider, if he also find not the same in himselfe. For this kind of Doctrine, admitteth no other Demonstration.

PART I. OF MAN

CHAPTER I. OF SENSE

Concerning the Thoughts of man, I will consider them first Singly, and afterwards in Trayne, or dependance upon one another. Singly, they are every one a Representation or Apparence, of some quality, or other Accident of a body without us; which is commonly called an Object. Which Object worketh on the Eyes, Eares, and other parts of mans body; and by diversity of working, produceth diversity of Apparences.

The Originall of them all, is that which we call Sense; (For there is no conception in a mans mind, which hath not at first, totally, or by parts, been begotten upon the organs of Sense.) The rest are derived from that originall.

To know the naturall cause of Sense, is not very necessary to the business now in hand; and I have els-where 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 Externall Body, or Object, which presseth the organ proper to each Sense, either immediatly, as in the Tast 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 it self: 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 Eare, in a Sound; To the Nostrill, in an Odour; To the Tongue and Palat, in a Savour; and to the rest of the body, in Heat, Cold, Hardnesse, Softnesse, 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 diversly. Neither in us that are pressed, are they anything els, but divers motions; (for motion, produceth nothing but motion.) But their apparence 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

Eare, produceth a dinne; 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 bee severed from them, as by glasses, and in Ecchoes by reflection, wee see they are; where we know the thing we see, is in one place; the apparence, in another. And though at some certain distance, the reall, 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 els but originall fancy, caused (as I have said) by the pressure, that is, by the motion, of externall things upon our Eyes, Eares, and other organs thereunto ordained.

But the Philosophy-schooles, through all the Universities of Christendome, 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 Shew, 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 entring at the Eare, maketh Hearing. Nay for the cause of Understanding also, they say the thing Understood sendeth forth Intelligible Species, that is, an Intelligible Being Seen; which comming 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 Common-wealth, 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, unlesse somewhat els stirre it, it will lye 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 els stay it, though the reason be the same, (namely, that nothing can change it selfe,) is not so easily assented to. For men measure, not onely other men, but all other things, by themselves: and because they find themselves subject after motion to pain, and lassitude, think every thing els growes 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 Schooles 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 els hinder it) eternally; and whatsoever hindreth it, cannot in an instant, but in time, and by degrees quite extinguish it: And as wee see in the water, though the wind cease, the waves give not over rowling for a long time after; so also it happeneth in that motion, which is made in the internall parts of a man, then, when he Sees, Dreams, &c. For after the object is removed, or the eye shut, wee still retain an image of the thing seen, though more obscure than when we see it. And this is it, that Latines 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 Apparence, 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.

Memory

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 Starres; which starrs do no less exercise their vertue by which they are visible, in the day, than in the night. But because amongst many stroaks, which our eyes, eares, and other organs receive from externall bodies, the predominant onely is sensible; therefore the light of the Sun being predominant, we are not affected with the action of the starrs. 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 voyce of a man is in the noyse 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 continuall change of mans body, destroyes in time the parts which in sense were moved: So that the distance of time, and of place, hath one and the same effect in us. For as at a distance of place, that which wee look at, appears dimme, and without distinction of the smaller parts; and as Voyces grow weak, and inarticulate: so also after great distance of time, our imagination of the Past is weak; and wee lose(for example) of Cities wee have seen, many particular Streets; and of Actions, many particular Circumstances. This Decaying Sense, when wee would express the thing it self, (I mean Fancy it selfe,) wee call Imagination, as I said before; But when we would express the Decay, and signifie that the Sense is fading, old, and past, it is called Memory. So that Imagination and Memory, are but one thing, which for divers considerations hath divers names.

Much memory, or memory of many things, is called Experience. Againe, Imagination being only of those things which have been formerly perceived by Sense, either all at once, or by parts at severall 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; as when from the sight of a man at one time, and of a horse at another, we conceive in our mind a Centaure. So when a man compoundeth the image of his own person, with the image of the actions of an other man; as when a man imagins himselfe a Hercules, or an Alexander, (which happeneth often to them that are much taken with reading of Romants) 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 Geometricall 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 mens discourse.

Dreams

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 parcells 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 Externall Objects, there can happen in sleep, no Imagination; and therefore no Dreame, but what proceeds from the agitation of the inward parts of mans body; which inward parts, for the connexion they have with the Brayn, and other Organs, when they be distempered, do keep the same in motion; whereby the Imaginations there formerly made, appeare 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 Dreame must needs be more cleare, 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 Dreames, I do not often, nor constantly think of the same Persons, Places, Objects, and Actions that I do waking; nor remember so long a trayne of coherent thoughts, Dreaming, as at other times; And because waking I often observe the absurdity of Dreames, but never dream of the absurdities of my waking Thoughts; I am well satisfied, that being awake, I know I dreame not; though when I dreame, I think my selfe awake.

And seeing dreames are caused by the distemper of some of the inward parts of the Body; divers distempers must needs cause different Dreams. And hence it is, that lying cold breedeth Dreams of Feare, and raiseth the thought

and Image of some fearfull object (the motion from the brain to the inner parts, and from the inner parts to the Brain being reciprocall:) and that as Anger causeth heat in some parts of the Body, when we are awake; so when we sleep, the over heating of the same parts causeth Anger, and raiseth up in the brain the Imagination of an Enemy. In the same manner; as naturall 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 wee sleep, raiseth in the brain an imagination of some kindness shewn. In summe, 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.

Apparitions Or Visions

The most difficult discerning of a mans Dream, from his waking thoughts, is then, when by some accident we observe not that we have slept: which is easie to happen to a man full of fearfull 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 chayre. For he that taketh pains, and industriously layes himselfe to sleep, in case any uncouth and exorbitant fancy come unto him, cannot easily think it other than a Dream. We read of Marcus Brutes, (one that had his life given him by Julius Caesar, and was also his favorite, and notwithstanding murthered him,) how at Phillipi, the night before he gave battell to Augustus Caesar, he saw a fearfull 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 horreur of his rash act, it was not hard for him, slumbering in the cold, to dream of that which most affrighted him; which feare, 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 any thing but a Vision. And this is no very rare Accident: for even they that be perfectly awake, if they be timorous, and supperstitious, possessed with fearfull tales, and alone in the dark, are subject to the like fancies, and believe they see spirits and dead mens Ghosts walking in Churchyards; whereas it is

either their Fancy onely, or els the knavery of such persons, as make use of such superstitious feare, 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 Satyres, Fawnes, nymphs, and the like; and now adayes the opinion than rude people have of Fayries, Ghosts, and Goblins; and of the power of Witches. For as for Witches, I think not that their witch craft is any reall power; but yet that they are justly punished, for the false believe they have, that they can do such mischief, joyned with their purpose to do it if they can; their trade being neerer to a new Religion, than to a Craft or Science. And for Fayries, 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 Exorcisme, of Crosses, of holy Water, and other such inventions of Ghostly men. Neverthelesse, there is no doubt, but God can make unnaturall Apparitions. But that he does it so often, as men need to feare such things, more than they feare the stay, or change, of the course of Nature, which he also can stay, and change, is no point of Christian faith. But evill men under pretext that God can do any thing, are so bold as to say any thing 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, Prognostiques from Dreams, false Prophecies, and many other things depending thereon, by which, crafty ambitious persons abuse the simple people, men would be much more fitted than they are for civill Obedience.

And this ought to be the work of the Schooles; 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 evill thoughts by the Divell: or that Good thoughts are powred (infused) into a man, by God; and evill ones by the Divell. Some say the Senses receive the Species of things, and deliver them to the Commonsense; 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.

Understanding

The Imagination that is rayseed in man (or any other creature indued with the faculty of imagining) by words, or other voluntary signes, is that we generally call Understanding; and is common to Man and Beast. For a dogge by custome 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 onely his will; but his conceptions and thoughts, by the sequell and contexture of the names of things into Affirmations, Negations, and other formes of Speech: And of this kinde of Understanding I shall speak hereafter.

CHAPTER III.

OF THE CONSEQUENCE OR TRAYNE OF IMAGINATIONS

By Consequence, or Trayne of Thoughts, I understand that succession of one Thought to another, which is called (to distinguish it from Discourse in words) Mentall Discourse.

When a man thinketh on any thing 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 wee 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, reliques 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 praedominant, the later 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 passe in time, that in the Imagining of any thing, there is no certainty what we shall Imagine next; Onely this is certain, it shall be something that succeeded the same before, at one time or another.

Trayne Of Thoughts Unguided

This Trayne of Thoughts, or Mentall Discourse, is of two sorts. The first is Unguided, Without Designee, and inconstant; Wherein there is no Passionate Thought, to govern and direct those that follow, to it self, 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 onely without company, but also

without care of any thing; though even then their Thoughts are as busie as at other times, but without harmony; as the sound which a Lute out of tune would yeeld 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 dependance of one thought upon another. For in a Discourse of our present civill warre, what could seem more impertinent, than to ask (as one did) what was the value of a Roman Penny? Yet the Cohærence to me was manifest enough. For the Thought of the warre, 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.

Trayne Of Thoughts Regulated

The second is more constant; as being Regulated by some desire, and designee. For the impression made by such things as wee desire, or feare, 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 ayme 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 greatnesse 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 praecept, which is now worne 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.

Remembrance

The Trayn of regulated Thoughts is of two kinds; One, when of an effect imagined, wee seek the causes, or means that produce it: and this is common to Man and Beast. The other is, when imagining any thing whatsoever, wee seek all the possible effects, that can by it be produced; that is to say, we imagine what we can do with it, when wee have it.

Of which I have not at any time seen any signe, but in man onely; for this is a curiosity hardly incident to the nature of any living creature that has no other Passion but sensuall, such as are hunger, thirst, lust, and anger. In summe, the Discourse of the Mind, when it is governed by designee, is nothing but Seeking, or the faculty of Invention, which the Latines 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 hee 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 Latines call it Reminiscentia, as it were a Re-Conning of our former actions.

Sometimes a man knows a place determinate, within the compasse whereof his 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 jewell; or as a Spaniel ranges the field, till he find a sent; or as a man should run over the alphabet, to start a rime.

Prudence

Sometime 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 wil 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 Wisdome; 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 faile him. The Present onely has a being in Nature; things Past have a being in the Memory onely, 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 onely to him by whose will they are to come. From him onely, 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 Signes to guesse by.

Signes

A Signe, is the Event Antecedent, of the Consequent; and contrarily, the Consequent of the Antecedent, when the like Consequences have been observed, before: And the oftner they have been observed, the lesse uncertain is the Signe. And therefore he that has most experience in any kind of businesse, has most Signes, whereby to guesse 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 naturall 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.

Conjecture Of The Time Past

As Prudence is a Praesumption of the Future, contracted from the Experience of time Past; So there is a Praesumption 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 civill warre, and then to ruine; upon the sights of the ruines of any other State, will guesse, the like warre, and the like courses have been there also. But his conjecture, has the same incertainty almost with the conjecture of the Future; both being grounded onely upon Experience.

There is no other act of mans 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 onely, are acquired, and encreased 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 Trayne of thoughts, the mind of man has no other motion; though by the help of Speech, and Method, the same Facultyes 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 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 greatnesse, 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 any thing, not subject to sense. No man therefore can conceive any thing, but he must conceive it in some place; and indued with some determinate magnitude; and which may be divided into parts; nor that any thing 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 Schoolemen.

CHAPTER IV. OF SPEECH

Originall 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 sonne of Agenor, King of Phaenicia. 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 with all difficult, as proceeding from a watchfull observation of the divers motions of the Tongue, Palat, 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 Apellations, and their Connexion; whereby men register their Thoughts; recall them when they are past; and also declare them one to another for mutuall utility and conversation; without which, there had been amongst men, neither Common-wealth, nor Society, nor Contract, nor Peace, no more than amongst Lyons, Bears, and Wolves. The first author of Speech was GOD himselfe, 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 adde more names, as the experience and use of the creatures should give him occasion; and to joyn them in such manner by degrees, as to make himselfe 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 any thing 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 Generall, Speciall, Affirmative, Negative, Interrogative, Optative, Infinitive, all which are usefull; and least of all, of

Entity, Intentionality, Quiddity, and other significant 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 severall 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 every where more copious.

The Use Of Speech

The generall use of Speech, is to transferre our Mentall Discourse, into Verbal; or the Trayne of our Thoughts, into a Trayne 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 Markes, or Notes of remembrance. Another is, when many use the same words, to signifie (by their connexion and order,) one to another, what they conceive, or think of each matter; and also what they desire, feare, or have any other passion for, and for this use they are called Signes. Speciall uses of Speech are these; First, to Register, what by cogitation, wee find to be the cause of any thing, present or past; and what we find things present or past may produce, or effect: which in summe, is acquiring of Arts. Secondly, to shew to others that knowledge which we have attained; which is, to Counsell, and Teach one another. Thirdly, to make known to others our wills, and purposes, that we may have the mutuall help of one another. Fourthly, to please and delight our selves, and others, by playing with our words, for pleasure or ornament, innocently.

Abuses Of Speech

To these Uses, there are also foure 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, unlesse it be one whom wee 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.

Names Proper & Common Universall

Of Names, some are Proper, and singular to one onely 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 divers particular things; in respect of all which together, it is called an Universall; there being nothing in the world Universall but Names; for the things named, are every one of them Individual and Singular.

One Universall 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 onely; Universals recall any one of those many.

And of Names Universall, some are of more, and some of lesse extent; the larger comprehending the lesse large: and some again of equall 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 Rationall, are of equall extent, comprehending mutually one another. But here wee must take notice, that by a Name is not alwayes understood, as in Grammar, one onely word; but sometimes by circumlocution many words together. For all these words, Hee That In His Actions Observeth The Lawes 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 deafe 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 equall to those two right angles that stand by it. But if another triangle be shewn him different in shape from the former, he cannot know without a new labour, whether the three angles of that also be equall 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 onely 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 generall termes, Every Triangle Hath Its Three Angles Equall To Two Right Angles. And thus the consequence found in one particular, comes to be registred and remembred, as a Universall rule; and discharges our mentall 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 registring our thoughts, is in nothing so evident as in Numbering. A naturall foole that could never learn by heart the order of numerall words, as One, Two, and Three, may observe every stroak of the Clock, and nod to it, or say one, one, one; but can never know what houre it strikes. And it seems, there was a time when those names of number were not in use; and men were fayn 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 numerall 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 himselfe, and not know when he has done: Much lesse will he be able to add, and substract, and performe all other operations of Arithmetique. So that without words, there is no possibility of reckoning of Numbers; much lesse of Magnitudes, of Swiftnesse, of Force, and other things, the reckonings whereof are necessary to the being, or well-being of man-kind.

When two Names are joyned 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 later name Living Creature, signifie 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 Falshood. Errour there may be, as when wee 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 els he will find himselfe entangled in words, as a bird in lime-twiggs; the more he struggles, the more belimed. And therefore in Geometry, (which is the onely 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 himselfe. For the errors of Definitions multiply themselves, according as the reckoning proceeds; and lead men into absurdities, which at last they see, but cannot avoyd, without reckoning anew from the beginning; in which lyes the foundation of their errors. From whence it happens, that they which trust to books, do as they that cast up many little summs into a greater, without considering whether those little summes were rightly cast up or not; and at last finding the error visible, and not mistrusting their first grounds, know not which way to cleere themselves; but spend time in fluttering over their bookes; as birds that entring by the chimney, and finding themselves inclosed in a chamber, flitter at the false light of a glasse window, for want of wit to consider which way they came in. So that in the right Definition of Names, lyes the first use of Speech; which is the Acquisition of Science: And in wrong, or no Definitions' lyes the first abuse; from which proceed all false and senslesse 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. Naturall sense and imagination, are not subject to absurdity. Nature it selfe cannot erre: and as men abound in copiousnesse 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 mens counters, they do but reckon by them: but they are the mony of fooles, 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

Subject To Names, is whatsoever can enter into, or be considered in an account; and be added one to another to make a summe; or substracted one from another, and leave a remainder. The Latines called Accounts of mony 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 syllogisme; which signifieth summing up of the consequences of one saying to another. And because the same things may enter into account for divers accidents; their names are (to shew that diversity) diversly wrested, and diversified. This diversity of names may be reduced to foure generall heads.

First, a thing may enter into account for Matter, or Body; as Living, Sensible, Rationall, 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, &c; and then, of the name of the thing it selfe, by a little change or wresting, wee make a name for that accident, which we consider; and for Living put into 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 any thing is Seen by us, we reckon not the thing it selfe; but the Sight, the Colour, the Idea of it in the fancy: and when any thing is Heard, we reckon it not; but the Hearing, or Sound onely, which is our fancy or conception of it by the Eare: and such are names of fancies.

Fourthly, we bring into account, consider, and give names, to Names themselves, and to Speeches: For, Generall, Universall, Speciall, Oequivocall, are names of Names. And Affirmation, Interrogation, Commandement, Narration, Syllogisme, Sermon, Oration, and many other such, are names of Speeches.

Use Of Names Positive

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.

Negative Names With Their Uses

There be also other Names, called Negative; which are notes to signifie that a word is not the name of the thing in question; as these words Nothing, No Man, Infinite, Indocible, Three Want Foure, 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 any thing; because they make us refuse to admit of Names not rightly used.

Words Insignificant

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 coyned by Schoole-men, and pusled Philosophers.

Another, when men make a name of two Names, whose significations are contradictory and inconsistent; as this

name, an Incorporeall Body, or (which is all one) an Incorporeall 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, signifie 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 meere sound. So likewise if it be false, to say that vertue can be powred, or blown up and down; the words In-powred Vertue, In-blown Vertue, are as absurd and insignificant, as a Round Quadrangle. And therefore you shall hardly meet with a senselesse and insignificant word, that is not made up of some Latin or Greek names. A Frenchman seldome 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.

Understanding

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 signifie; Then he is said to understand it; Understanding being nothing els, 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 universall, 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 signifie the Appetites, Aversions, and Passions of mans mind; and of their use and abuse, I shall speak when I have spoken of the Passions.

Inconstant Names

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 signifie our conceptions; and all our affections are but conceptions; when we conceive the same things differently, we can hardly avoyd 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, disposition, and interest of the speaker; such as are the names of Vertues, and Vices; For one man calleth Wisdome, what another calleth Feare; and one Cruelty, what another Justice; one Prodigality, what another Magnanimity; one Gravity, what another Stupidity, &c. 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.

Reason What It Is

When a man Reasoneth, hee does nothing els but conceive a summe totall, from Addition of parcels; or conceive a Remainder, from Substraction of one summe 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 Addition together of things equall; and Division, but Subtracting of one thing, as often as we can. These operations are not incident to Numbers onely, but to all manner of things that can be added together, and taken one out of another. For as Arithmeticians teach to adde and subtract in Numbers; so the Geometricians teach the same in Lines, Figures (solid and superficiall,) Angles, Proportions, Times, degrees of Swiftnesse, 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 syllogisme; and Many syllogismes to make a Demonstration; and from the Summe, or Conclusion of a syllogisme, they subtract one Proposition, to finde the other. Writers of Politiques, adde together Pactions, to find mens Duties; and Lawyers, Lawes and Facts, to find what is Right and Wrong in the actions of private men. In summe, in what matter soever there is place for Addition and Substraction, there also is place for Reason; and where these have no place, there Reason has nothing at all to do.

Reason Defined

Out of all which we may define, (that is to say determine,) what that is, which is meant by this word Reason, when wee reckon it amongst the Faculties of the mind. For

Reason, in this sense, is nothing but Reckoning (that is, Adding and Substracting) of the Consequences of generall names agreed upon, for the Marking and Signifying of our thoughts; I say Marking them, when we reckon by our selves; and Signifying, when we demonstrate, or approve our reckonings to other men.

Right Reason Where

And as in Arithmetique, unpractised men must, and Professors themselves may often erre, and cast up false; so also in any other subject of Reasoning, the ablest, most attentive, and most practised men, may deceive themselves, and inferre false Conclusions; Not but that Reason it selfe is always Right Reason, as well as Arithmetique is a certain and infallible art: But no one mans Reason, nor the Reason of any one number of men, makes the certaintie; 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 controversie must either come to blowes, 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, clamor and demand right Reason for judge; yet seek no more, but that things should be determined, by no other mens 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 suite whereof they have most in their hand. For they do nothing els, 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 claym they lay to it.

The Use Of Reason

The Use and End of Reason, is not the finding of the summe, 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 expence, into one sum; and not regarding how each bill is summed up, by those that give them in account; nor what it is he payes for; he advantages himselfe no more, than if he allowed the account in grosse, trusting to every of the accountants 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 any thing; but onely beleeveth.

Of Error And Absurdity

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, wee conjecture what was likely to have preceded, or is likely to follow upon it;) if that which he thought likely to follow, followes 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 generall signification, and fall upon a generall 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 generall assertion, unlesse it be a true one, the possibility of it is unconceivable. And words whereby we conceive nothing but the sound, are those we call Absurd, insignificant, and Non-sense. 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 hindred by opposition, I should not say he were in an Errour; but that his words were without meaning; that is to say, Absurd.

I have said before, (in the second chapter,) that a Man did excell all other Animals in this faculty, that when he conceived any thing whatsoever, he was apt to enquire the consequences of it, and what effects he could do with it. And now I adde this other degree of the same excellence, that he can by words reduce the consequences he findes to