









Maria (AN Briese

# ABRIDGMENT

OF

Mr. LOCKE's

# ESSAY

CONCERNING

HUMAN UNDERSTANDING.

THE SEVENTH EDITION.

GLASGOW,

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M DCC LII.



# MR JOHN LOCKE.

HONOURED SIR.

I Send you this imperfect draught of your excellent Essay concerning Human Underflanding; which, I must confess, falls as much short of the Perfection, as it does of the length of the original. Nevertheless, as I lately intimated to you (and you were pleased to think, that what I propos'd in reference to this Defign, would not be wholly lost Labour) I am not without Hopes, that it may in this contracted Ferm, prove in some Measure serviceable to that noble End, which you have so successfully aimed at in it, viz. The Advancement of Real and ufeful Knowledge. The Inducement which moved me to think of abridging it, was a Confideration purely extrinsical to the Work itself; and in effect no other than this; that it would be better fuited to the Eafe and Convenience of fome fort of Readers, when reduced into this narrow Compais. In order to this, I thought the First Book, which is employed in refuting the common Opinion of Innate Notions and Ideas, might be best spared in this Abridg-

## DEDICATION.

ment; especially, since the Reader may be convinced by what he shall find here, that fuch a Supposition is at least needless, in regard he may attain to all the Knowledgehe has, or finds himfelf capable of, without the help of any fuch Innate Ideas. Besides this, I have retrench'd most of the larger Explications; and fome useful Hints, and instructive Theories, I have wholly omitted; not because they are less considerable in themselves, but because they seemed not so necessary to be insisted on in this Abridgment, considered as a previous Instrument, and preparatory Help, to guide and conduct the Mind in its Search after Truth and Knowledge. I did particularly pass by that accurate Discourse, concerning the Freedom and Determination of the Will, contained in Cap. 21. L. 2. because I found it too long to be inferted here at large, and too weighty and momentous to be but flightly and imperfectly reprefented. This, I hope, will prove no prejudice to the Effay it felf, fince none, I prefume, will think it reasonable to form a Judgment of the whole Work from this Abridgment of it: and I perswade my felf, that few Readers will be content with

## DEDICATION.

this Epitome, who can conveniently furnish themselves with the Essay at large. However, I am apt to think, that this alone will ferve to make the Way to Knowledge somewhat more plain and easie; and afford such Helps for the Improvement of Reason, as are perhaps in vain fought after in those Books, which profess to teach the Art of Reafoning. But nevertheless, whether you shall think fit to let it come abroad under the Disadvantages that attend it in this Form, I must leave you to judge. I shall only add, that I think my own Pains abundantly recompenc'd by the agreeable, as well as instructive Entertainment, which this nearer View, and closer Inspection into your Esfay, afforded me: and I am not a little pleased, that it has given me this Opportunity of expressing the just Value and Esteem I have for it, as well as the Honour and Respect I have for its Author. I am,

Honoured SIR,

Oxon. Ap. 17,

Your very humble, and obliged Servant,

JOHN WYNNE.



#### THE

# INTRODUCTION.

- I. S INCE it is the Understanding that fets man above the rest of sensible beings, and gives him all the advantage and dominion which he has over them; it is certainly a subject, even for its nobleness, worth the enquiring into.
- 2. My purpose therefore is to enquire into the Original, Certainty, and Extent of human knowledge; together with the grounds and degrees of Belief, Opinion, and Affent, which I shall do in the sollowing method.
- 3. First, I shall enquire into the Original of those Ideas or notions, which a man observes, and is conscious to himself he has in his mind, and the Ways whereby the understanding comes to be furnished with them.

Secondly, what Knowledge the understanding hath by those ideas; and the certainty, evidence, and extent of it.

Thirdly, I shall make some enquiry into the nature and grounds of Faith and Opinion.

4. If by this enquiry into the nature of the understanding, I can discover the powers thereof, how far they reach, and where they fail us, it may be of use to prevail with the busic mind of man

to be more cautious in meddling with things exceeding its comprehension, to stop when it is at the utmost extent of its tether, and to sit down in a quiet ignorance of those things, which upon examination are found to be beyond the reach of our capacities. We should not then perhaps be so forward out of an affectation of Universal Knowledge, to perplex our selves with disputes about things to which our understandings are not suited; and of which we cannot frame in our minds any clear or distinct perceptions, or whereof (as it has perhaps too often happened) we have not any notions at all: but should learn to content our selves with what is attainable by us in this state.

5. For though the Comprehension of our understanding comes exceeding short of the vast extent of things; yet we shall have cause enough to magnifie the bountiful Author of our being, for that portion and degree of knowledge he has bestowed on us so far above all the rest of the Inhabitants of this our mansion. Men have reason to be well fatissied with what God hath thought sit for them, since he has given them (as St. Peter says, Πάντα πρὸς ζωνικὸς ἐνσέβειαν) whatsoever is necessary for the conveniencies of Life, and information of Virtue; and has put within the reach of their discovery, the comfortable provision for this life, and the way that leads to a better. How short soever their knowledge may come of an universal,

or perfed comprehension of whatsoever is, it yet fecures their great concernments, that they have light enough to lead them to the knowledge of their Maker, and the fight of their own duties. Men may find matter sufficient to busie their heads, and employ their hands with variety, delight, and fatisfaction; if they will not boldly quarrel with their own constitution, and throw away the bleffings their hands are filled with, because they are not big enough to grasp every thing. We shall not have much reason to complain of the narrowness of our minds, if we will but employ them about what may be of use to us; for of that they are very capable: and it will be an unpardonable, as well as childish peevishness, if we undervalue the advantages of our knowledge, and neglect to improve it to the ends for which it was given us, because there are some things that are set out of the reach of it. It will be no excuse to an idle and untoward fervant, who would not attend his business by candlelight, to plead that he had not broad fun-shine. The candle that is fet up in us, shines bright cnough for all our purposes. The discoveries we can make with this, ought to fatisfie us. And we shall then use our understandings right, when we entertain all objects in that way and proportion, that they are fuited to our faculties; and upon those grounds they are capable of being proposed to us; and not peremptorily or intemperately require

commission, and demand certainty, where probability only is to be had, and which is sufficient to govern all our concernments. If we will disbelieve every thing, because we cannot certainly know all things; we shall do much-what as wifely as he who would not use his legs, but sit still and perish because he had no wings to sly.

- 6. When we know our own strength, we shall the better know what to undertake with hopes of fuccefs. And when we have well furvey'd the powers of our own minds, we shall not be enclin'd either to fit still, and not fet our thoughts on work at all, in despair of knowing any thing; nor on the other fide, question every thing, and disclaim all knowledge, because some things are not to be underflood. Our Business here, is not to know all things, but those things which concern our conduct. if we can find out those measures whereby a rational creature, put into that state which man is in, in this world, may and ought to govern his opinions and actions depending thereon, we need not be troubled that some other things scape our knowledge.
- 7. This was that which gave the first rise to this essay concerning the understanding. For I thought that the first step towards satisfying several enquiries the mind of man was very apt to run into, was to take a survey of our Understandings, examine our own towers, and see to what things

they were adapted. Till that was done, I suspected we began at the wrong end, and in vain fought for fatisfaction in a quiet and secure possession of truths that most concern'd us, whilst we let loofe our thoughts in the valt ocean of being, as if all that boundless extent were the natural and undoubted possessions of our understandings; wherein there was nothing exempt from its decisions, or that escaped its comprehension. Thus men extending their enquiries beyond their capacities, and letting their thoughts wander into those depths where they can find no fure footing, it is no wonder that they raise questions and multiply disputes, which never coming to any clear resolution, are proper only to continue and increase their doubts, and to confirm them at last in perfect scepticism. Whereas were the capacities of our understandings well confidered, the extent of our knowledge once discovered, and the horizon found, which sets bounds between the enlightned and dark parts of things, between what is, and what is not comprehenfible by us, men would perhaps with less scruple acquicfce in the avow'd ignorance of the one, and imploy their thoughts and difcourfe, with more adyantage and fatisfaction in the other.

## BOOK II.

#### CHAP. I.

Of Ideas in General, and their Original.

BY the term idea, I mean whatever is the object of the understanding, when a man thinks; or whatever it is which the mind can be employ'd about in thinking.

I prefume it will be eafily granted me, that there are such ideas in mens minds: every one is conficious of them in himself; and mens words and actions will satisfie him that they are in others. our first inquiry then shall be, how they come into the mind.

It is an establish'd opinion amongst some men, that there are in the understanding certain innate principles, some primary notions, (Kolva) Eyrolay) characters, as it were stampt upon the mind of man, which the soul receives in its very first being, and brings into the world with it.

This opinion is accurately discuss'd, and refuted in the first book of this essay, to which I shall refer the reader, that desires satisfaction in this particular.

It shall be sufficient here to shew, how men barely by the use of their natural faculties, may attain to all the knowledge they have, without the help of any innate impressions; and may arrive at certainty without any such original notions or principles. For I imagine, any one will easily grant, that it would be impertinent to suppose the ideas of colours innate in a creature to whom God hath given fight, and a power to receive them by the eyes from external objects. I shall shew by what ways and degrees all other ideas come into the mind; for which I shall appeal to every one's own experience and observation.

Let us then suppose the mind to be, as we say white paper, void of all characters, without any ideas: how comesit to be surnished? whence has it all the materials of reason and knowledge? to this I answer, in one word, from experience and observation. This, when employ'd about external sensible objects, we may call sensation: by this we have the ideas of bitter, sweet, yellow, hard, &c. which are commonly call'd sensible qualities, because convey'd into the mind by the senses. The same experience, when employ'd about the internal operations of the mind, perceiv'd, and restected on by us, we may call restection. Hence we have the ideas of perception, thinking, doubting, willing, reasoning, &c.

These two, viz. external material things, as the objects of sensation; and the operations of our own minds, as the objects of reslection, are to me the only originals from whence all our ideas take their

beginnings. The understanding seems not to have the least glimmering of ideas, which it doth not receive from one of these two fources. These, when we have taken a full survey of them, and their several modes and compositions, we shall find to contain our whole stock of ideas; and that we have nothing in our minds which did not come in one of these two ways.

'Tis evident that children come by degrees to be furnish'd with ideas from the objects they are conversant with. They are so surrounded with bodies that perpetually and diverfly affect them, that fome ideas will (whether they will or no) be imprinted on their minds. Light and colours, founds, and tangible qualities, do continually follicite their proper senses, and force an entrance into the mind. 'Tis late commonly before children come to have ideas of the operation of their minds; and some men have not any very clear or perfect ideas of the greatest part of them all their lives. Because, tho' they pass there continually; yet, like floating visions, they make not deep impreffions enough to leave in the mind clear and lasting ideas, till the understanding turns inward upon its felf, and reflects on its own operations, and makes them the objects of its own contemplation.

When a man first perceives, then he may be faid to have ideas; having ideas, and perception, fignifying the same thing. It is an opinion main-

tain'd by fome, that the foul always thinks, and that it always has the actual perception of ideas as long as it exists: and that actual thinking is as inseparable from the foul, as actual extension is from the body. But I cannot conceive it any more necessary for the foul always to think, than for the body always to move: the perception of ideas being (as I conceive) to the foul, what motion is to the body, not its effence, but one of its operations: and therefore, though thinking be never fo much the proper action of the foul, yet it is not necessary to suppose, that it should always think, always be in action. That perhaps is the priviledge of the infinite author and preferver of all things, who never flumbers nor fleeps; but is not competent to any finite being. We know certainly by experience, that we fometimes think; and thence draw this infallible confequence, that there is fomething in us that has a power to think, but whether that substance perpetually thinks or no, we can be no farther affuredthan experience informs us.

I would be glad to learn from those men, who so considently pronounce, that the human soul always thinks, how they come to know it: nay, how they come to know that they themselves think, when they themselves do not perceive it. The most that can be said of it, is, that 'tis possible the soul may always think; but not always retain it in memory: and, I say, it is as possible the soul

may not always think; and much more probable that it should sometimes not think, than that it should often think, and that a long while together, and not be conscious to it self the next moment after that it had thought.

I fee no reason therefore to believe, that the soul thinks before the senses have surnished it with ideas to think on; and as those are increased and retained, so it comes by exercise to improve its faculty of thinking, in the several parts of it; as well as afterwards by compounding those ideas, and resecting on its own operations, it increases its slock, as well as facility in remembring, imagining, reasoning, and other modes of thinking.

## CHAP. II.

# Of Simple Ideas.

Fideas some are simple, others complex. A simple idea, is one uniform appearance or conception in the mind, which is not distinguishable into different ideas. Such are the ideas of sensible qualities, which though they are in the things themselves so united and blended, that there is no separation, no distance between them; yet the ideas they produce in the mind, enter by the sensite simple and unmix'd. Thus, tho' the hand seels softness and warmth in the same piece of wax;

yet the fimple ideas thus united in the same subject, are as perfectly distinct as those that come in by different senses.

These simple ideas are suggested no other way than from the two ways above-mentioned, viz. lensation and reflexion.

The mind being once stored with the simple ideas, has the power to repeat, compare, and unite them to an infinite variety: and so can make at pleasure new complex ideas. But the most enlarged understanding cannot strame one new simple idea; nor by any force destroy them that are there.

## CHAP. III.

## Of Ideas of one Sense.

Deas with reference to the different ways wherein they approach the mind, are of four forts.

First, There are some which come into our minds by one fense only.

Secondly, There are others convey'd into the mind by more senses than one.

Thirdly, Others that are had from reflexion only.

Fourthly, There are some suggested to the mind by all the ways of fensation and reflexion.

First, Some enter into the mind only by one sense peculiarly adapted to receive them. Thus colours, founds, finells, &c. come in only by the

eyes, ears, and nose. And if these organs are any of them so disorder'd as not to perform their sunctions, they have no postern to be admitted by; no other way to bring themselves in view, and be perceiv'd by the understanding. It will be needless to enumerate all the particular simple ideas belonging to each sense; nor indeed is it possible; there being a great many more than we have names for.

## CHAP. IV.

# Of Solidity.

I Shall here mention one which we receive by our touch, because it is one of the chiefingredients in many of our complex ideas; and that is the idea of folidity: it arises from the resistance, one body makes to the entrance of another body into the place it possesses, till it has left it. There is no idea which we more constantly receive from fensation than this. In whatever possure we are, we seel somewhat that supports us, and hinders us from sinking downwards: and the bodies we daily handle, make us perceive, that while they remain between them, they do by an unsurmountable force hinder the approach of the parts of our hands that press them. This idea is commonly called impenetrability. I conceive folidity is more proper

to express it, because this carries something more of positive in it than impenetrability, which is negative, and is perhaps more a consequence of solidity, than solidity it self. This seems to be the most essential property of body, and that whereby we conceive it to sill space: The idea of which is, that where we imagine any space taken up by a solid substance, we conceive it so to possess it, that it excludes all other solid substances. This resistance is so great, that no force can surmount it. all the bodies in the world pressing a drop of water on all sides, will never be able to overcome the resistance it makes to their approaching one another, till it be removed out of their way.

The idea of folidity is distinguished from that of pure space, in as much as this latter is neither capable of resistance, nor motion: 'tis distinguished from hardness, in as much as hardness is a firm cohaesion of the folid parts of matter making up masses of a sensible bulk, so that the whole doth not easily change its figure. Indeed, hard and soft, as commonly apprehended by us, are but relative to the constitutions of our bodies: that being called hard which will put us to pain sooner than change its figure, by the pressure of any part of our bodies; and that soft, which changes the situation of its parts upon an easie and unpainful touch.

This difficulty of changing fituation amongst

the parts gives no more folidity to the hardest body, than to the fostest; nor is an adamant one jot more folid than water: he that shall fill a yielding foft body well with air or water, will quickly find its refistance. By this we may distinguish the idea of the extension of body, from the idea of the extension of space: that of body, is the cohaesion or continuity of folid, separable, and movable parts; that of /pace, the continuity of unfolid, inseparable, and immovable parts. Upon the solidity of bodies depends their mutual impulse, resistance, and protrusion. Of pure space and solidity there are several (among which I confess my self one) who perswade themselves they have clear and distinct ideas: and that they can think on space without any thing in it that relists, or is protruded by body, as well as on fomething that fills space, that can be protruded by the impulse of other bodies, or refift their motion; the idea of the distance between the opposite parts of a concave. furface, being equally clear without, as with the idea of any solid parts between. If any one ask what this folidity is, I fend him to his fenfes to inform him: let him put a flint or foot-ball between his hands, and then endeavour to join them, and he will know.

## CHAP V.

Of simple Ideas of divers Senses.

Ome ideas we get into the mind by more than one sense, as space, extension, figure, rest and motion. These are perceivable by the eyes and touch.

## CHAP. VI.

## Of simple Ideas of Reflection.

Some are had from reflection, only: fuch are the ideas we have of the Operations of our minds: of which the two principal are perception or thinking; and volition or willing. The powers of producing these operations are call'd faculties, which are the understanding and will, the several modes of thinking, &c. belong to this head.

## CHAP. VII.

Of simple Ideas of Sensation and Reflection.

There are some simple ideas convey'd into the mind by all the ways of sensation and reflection; such are pleasure, pain, power, existence,

unity, succession. Pleasure or delight, pain or uneasincs accompany almost every impression on our senses, and every action or thought of the mind. By pleasure or pain we mean whatever delights or molests us, whether it arises from the thoughts of our minds; or any thing operating on our bodies. Satisfaction, delight, pleasure, happiness and uneasiness, trouble, torment, misery, &c. are but different degrees, the one of pleasure, the other of pain.

The author of our beings having given us a power over feveral parts of our bodies to move or keep them at reft as we think fit; and also by their motion to move our felves and other contiguous bodies; having also given a power to our minds in several instances, to chuse amongst its ideas which it will think on: to excite us to these actions of thinking and motion he has join'd to several thoughts and sensations a perception of delight: without this we should have no reason to prefer one thought or action to another, motion to rest. In which state, man however surnish'd with the faculties of understanding and will, would be a very idle unactive creature, and pass his time only in a lazy lethargick dream.

Pain has the same efficacy to set us on work that pleasure has; since we are as ready to avoid that, as to pursue this. This is worth our consideration, that pain is often produc'd by the same objests and ideas that produce pleasure in us. This their near conjunction gives us new occasion of admiring the wisdom and goodness of our Maker, who defigning the preservation of our being, has annexed pain to the application of many things to our bodies, to warn us of the harm they will do us, and as advices to withdraw us from them. But he not defigning our preservation barely, but the preservation of every part and organ in its perfection, hath in many cases annex'd pain to those very ideas which delight us. Thus heat that is very agreeable to us in one degree, by a little greater increase of it, proves no ordinary torment: which is wifely order'd by nature, that when any object does by the vehemence of its operation diforder the instruments of sensation, whose structures cannot but be very delicate, we might by the pain be warn'd to withdraw before the organ be quite put out of order. That this is the end of pain, appears from this confideration; that the great light is infufferable to the eyes; yet the highest degree of darkness does not at all disease them : because that causes no disorderly motion in that curious organ the eye. But excess of cold as well as heat pains us; because it is equally destructive to the temper which is necessary to the preservation of life.

Another reason why God hath annex'd several degrees of pleasure and pain to all the things that

environ and affect us, and blended them together in all things that our thoughts and fenfes have to do with, is, that we finding imperfection and diffatisfaction, and want of compleat happiness in all the enjoyments of the creatures, might be led to feek it in the enjoyment of him with whom is fulness of joy, and at whose right hand are pleasures for evermore. Tho' what is here faid concerning pleasure and pain may not perhaps make those ideas clearer to us, than our own experience does, yet it may ferve to give us due fentiments of the wifdom and goodness of the fovereign disposer of all things, which is not unfuitable to the main end of thefe enquiries: the knowledge and veneration of him being the chief end of all our thoughts, and the proper business of all understandings.

Existence and unity are two other ideas suggested by every object without, and every idea within: when ideas are in our minds, we consider them as being actually there, as well as we consider things to be actually without us; which is, that they exist, or have existence: and whatever we consider as one thing, whether a real being or idea, suggests the idea of unity.

Power is another idea deriv'd from these sources: for finding in our selves that we can think, and move several parts of our bodies at pleasure; and observing the effects that natural bodies pro-

duce in one another: by both these ways we get the idea of power.

Succession is another idea suggested by our senses, and by reflection on what passes in our minds. For if we look into our selves, we shall find our ideas always whilst we are awake, or have any thought, passing in train, one going and another coming without intermission.

### CHAP. VIII.

Some farther considerations concerning simple Ideas.

Whatsoever is able by affecting our fenses, to cause any perception in the mind, doth thereby produce in the understanding a simple idea; which whatsoever be the cause of it, is look'd upon as a real positive idea in the understanding. Thus the ideas of heat and cold, light and darkness, motion and rest, &c. are equally positive in the mind, tho' some of their causes may be meer privations. An enquiry into their causes concerns not the ideas as in the understanding; but the nature of the things existing without us. Thus a painter has distinct ideas of white and black, as well as the philosopher, who tells us what kind of particles, and how rang'd in the surface, occasion'd those colours.

That a privative cause may produce a positive

idea, appears from shadows; which (tho' nothing but the absence of light) are discernible; and cause clear and positive ideas. The natural reason of which may be this, viz. that since sensation is produc'd only by different degrees and modes of motion in our animal spirits, variously agitated by external objects; the abatement of any former motion must as necessarily produce a new sensation as the increase and variation of it; and thereby introduce a new idea. We have indeed some negative names which stand not directly for positive ideas, but for their absence; such as instipid, silence, which denote positive ideas, viz. taste and sound, with a signification of their absence.

It will be useful to distinguish ideas as they are perceptions in our minds, from what they are in the bodies that cause such perceptions in us: for we are not to think the former exact images and resemblances of something inherent in the subject, most of those of sensation being in the mind, no more the likeness of something existing without us, than the names that stand for them are the likeness of our ideas, which yet upon hearing, they are apt to excite in us.

Whatsoever the mind perceives in its self, or is the immediate object of perception, thought or understanding, that I call an idea: and the power to produce any idea in our mind, I call the quality of the subject wherein that power is: thus a snow ball

having the power to produce in us the ideas of white, cold, and round, those powers as they are in the fnow-ball, I call qualities; and as they are Censations or perceptions in our understandings I call them ideas: which ideas if I speak of sometimes, as in the things themselves, I would be understood to mean those qualities in the objects which produce them in us. These qualities are of two forts, first, original or primary, such are folidity, extension, motion or rest, number and figure. These are inseparable from body, and such as it constantly keeps in all its changes and alterations: thus take a grain of wheat, divide it into two parts, each part has still folidity, extension, figure, mobility : divide it again, and it still retains the same qualities, and will do still, tho' you divide it on till the parts become infenfible.

Secondly, Secondary qualities, fuch as colours, fmells, tastes, sounds, &c. which whatever reality we by mistake may attribute to them, are in truth nothing in the objects themselves, but powers to produce various sensations in us; and depend on

the qualities before-mentioned.

The ideas of primary qualities of bodies are refemblances of them: and their patterns really exist in bodies themsclves: but the ideas produced in us by fecondary qualities, have no refemblance of them at all: and what is fweet, blue or warm in the idea, is but the certain bulk, figure, and motion of the infensible parts in the bodies themselves, which we call so.

Thus we fee that fire at one distance produces in us the fensation of warmth, which at a nearer approach causes the sensation of pain. Now what reason have we to say that the idea of warmth is actually in the fire, but that of pain not in the fire, which the fame fire produces in us the fame way? the bulk, number, figure and motion of the parts of fire, are really in it, whether we perceive them or no; and therefore may be call'd real qualities, because they really exist in that body. But light and heat are no more really in it, than fickness or pain: take away the fenfation of them; let not the eyes fee light or colours, nor the ear hear founds; let the palate not tafte, or the nose smell, and all colours, tastes, odours and sounds, as they are fuch particular ideas vanish and cease, and are reduc'd to their causes (that is) bulk, motion, figure, &c. of parts.

These fecondary qualities are of two forts, first immediately perceivable, which by immediately operating on our bodies, produce several different ideas in us. Secondly, mediately perceivable, which by operating on other bodies, change their primary qualities, so as to render them capable of producing ideas in us different from what they did before. These last are powers in bodies which proceed from the particular constitution of those primary

and original qualities, to make fuch a change in the bulk, figure, texture, &c. of another body, as to make it operate on our fenfes different from what it did before; as in fire to make lead fluid: thefe two last being nothing but powers relating to other bodies, and refulting from the different modifications of the original qualities are yet otherwife thought of; the former being esteemed real qualities: but the latter barely powers: the reason of this mistake seems to be this; that our ideas of senfible qualities containing nothing in them of bulk, figure, &c. we cannot think them the effect of those primary qualities which appear not to our fenfes to operate in their productions, and with which they have not any apparent congruity, or conceivable connexion: nor can reason shew how bodies by their bulk, figure, &c. should produce in the mind the ideas of warm, yellow, &c. but in the o. ther case, when bodies operate upon one another, we plainly fee that the quality produced hath commonly no refemblance with any thing in the thing producing it, and therefore we look upon it as the effect of power: but our fenses not being able to discover any unlikeness between the idea produced in us, and the quality of the object producing it, we imagine that our ideas are refemblances of fomething in the objects, and not the effects of certain powers plac'd in the modification of the primary qualities, with which primary qualities the ideas produced in us have no refemblance.

This little excursion into natural philosophy was necessary in our present enquiry to distinguish the primary and real qualities of bodies which are always in them, from those secondary and imputed qualities, which are but the powers of several combinations of those primary ones, when they operate without being distinctly discerned; whereby we learn to know what ideas are, and what are not resemblances of something really existing in the bodies we denominate from them.

#### CHAP. IX.

# Of Perception.

Perception is the first idea we receive from reflection: it is by some called thinking in general: tho' thinking in the propriety of the English tongue, signifies that fort of operation of the mind about its ideas, wherein the mind is active; where it considers any thing with some degree of voluntary attention: for in bare perception the mind is for the most part only passive; and what it perceives it cannot avoid perceiving. What this is, we cannot otherwise know, than by reflecting on what passics in our minds when we see, feel, hear, &cc.

Impressions made on the outward parts if they

are not taken notice of within, cause no perception: as we see in those whose minds are intently busied in the contemplation of certain objects. A sufficient impulse there may be upon the organs of sensation: but if it reach not the observation of the mind, there follows no perception: so that where-ever there is sense or perception, there some idea is actually produced and present in the understanding.

We may observe that the ideas we receive from fensation, are often in grown people alter'd by the judgment without our taking notice of it. Thus a globe of any uniform colour (as of gold or jet) being fet before our eyes, the idea thereby imprinted is of a flat circle varioully shadowed. But being accustomed to perceive what kind of appearances convex bodies are wont to make in us; the judgment alters the appearances into their causes; and from that variety of shadow or colour, frames to itfelf the perception of a convex figure of one uniform colour. This in many cases by a settl'd habit is perform'd fo readily, that we take that for the perception of our fensation, which is but an idea form'd by the judgment: so that one ferves only to excite the other, and is scarce taken notice of itself. As a man who reads or hears with attention, takes little notice of the characters or founds, but of the ideas that are excited in him by them. Thus habits come at last to produce actions in us, which often escape our observation.

The faculty of perception feems to be that which puts the diffinction between the animal kingdom and the inferior parts of nature: fince vegetables many of them have fome degrees of motion, and upon the different application of other bodies to them, do very brifkly alter their figures and motions, and thence have obtain'd the name of fensitive plants: which yet is, I suppose, but bare mechanism, and no otherways produced, than the shortning of a rope by the affusion of water. But perception, I believe, is in some degree in all forts of animals: tho' I think we may from the make of an Oyster or Cockle, reasonably conclude that it has not so many nor so quick senses a man, or several other animals.

Perception is also the first step and degree towards knowledge, and the inlet of all the materials of it: so that the sewer senses any man has, and the duller the impressions that are made by them are, the more remote he is from that knowledge which is to be sound in other men.

#### CHAP. X.

## Of Retention.

THE next faculty of the mind whereby it makes a farther progrefs towards knowledge, I call Retention: which is the keeping of those ideas it has receiv'd: which is done two ways.

First, By keeping the idea which is brought into the mind for some time actually in view, which is called Contemplation.

Secondly, By reviving those ideas in our minds which have disappear'd, and have been as it were, laid out of fight: and this is memory, which is as it were the store-house of our ideas; for the narrow mind of man not being capable of having many ideas under view at once, it was necessary to have a repository to lay up those ideas which at another time it may have use of. But our ideas being nothing but actual perceptions in the mind which cease to be any thing, when there is no perception of them, this laying up of our ideas in the repository of the memory signifies no more but this. that the mind has a power in many cases to revive perceptions it has once had, with this additional perception annex'd to them, that it has had them before. And it is by the affiltance of this faculty. that we are faid to have all those ideas in our understandings, which we can bring in fight, and make the objects of our thoughts, without the help of those sensible qualities which first imprinted them there.

Attention and repetition help much to the fixing ideas in our memories: but those which make the deepest and most lasting impressions are those which are accompanied with pleasure or pain. Ideas but once taken in and never again repeated are soon lost; as those of colours in such as lost their sight when very young.

The memory in fome men is tenacious, even to a miraele: but yet there scems to be a constant decay of all our ideas, even of those which are struck deepest; and in minds the most retentive: fo that if they be not fometimes renewed, the print wears out, and at last there remains nothing to be feen. Those ideas that are often refresh'd by a frequent return of the objects or actions that produce them, fix themselves best in the memory, and remain longest there: such are the original qualities of bodies, viz. Solidity, Extension, Figure, Motion, &c. and those that almost constantly affect us, as heat and cold: and those that are the affections of all kinds of beings, as Existence, Duration, Number: thefe and the like are feldom quite lost while the mind retains any ideas at all.

In memory the mind is oftentimes more than barely passive; for it often sets itself on work to

fearch some hidden ideas; sometimes they start of their own accord: and sometimes turbulent and tempestuous passions tumble them out of their cells.

The defects of the memory are two.

First, that it loses the idea quite, and so far it produces perfect ignorance.

Secondly, That it moves flowly, and retrieves not the ideas laid up in store quick enough to serve the mind upon occasions. This, if it be to a great degree, is flupidity. In the having ideas ready at hand on all occasions, consists what we call Invention, Fancy, and quickness of parts.

This faculty other animals feem to have to a great degree, as well as Man, as appears by birds learning of tunes, and their endeavour to hit the notes right. For it feems impossible that they should endeavour to conform their voices (as 'tis plain they do) to notes, whereof they have no ideas.

## CHAP. XI.

Of Discerning, and other operations of the mind.

A Nother faculty of the mind is, that of discerning between its ideas: on this depends the evidence, and certainty of several even general propositions, which pass for innate truths: whereas indeed they depend on this clear discerning facul-

ty of the mind, whereby it perceives two ideas to be the same or different. In being able nicely to distinguish one thing from another, where there is the least difference, consists in a great measure that exactness of judgment and clearness of reason, which is to be observed in one man above another; which is quite opposite to wit, which consists most in the assemblage of ideas, and putting those together with quickness and variety, which have the least resemblance, to form agreeable visions: whereas judgment separates carefully those ideas, wherein can be found the least difference to prevent error and delusion.

To the well diffinguishing our ideas, it chiefly contributes that they be clear and determinate; and when they are so, it will not breed any confusion or mistake about them, tho' the senses should convey them from the same object differently on different occasions.

The comparing of our ideas one with another in respect of Extent, Degree, Time, Place, or any other circumstances, is another operation of the mind about its ideas, which is the ground of Relations. Brutes seem not to have this faculty in any great degree. They have probably several ideas distinct enough; but cannot compare them farther than some sensible circumstances annex'd to the objects themselves. The power of comparing general ideas, which we may observe in men, we

may probably conjecture Beafts have not at all.

Composition is another operation of the mind, whereby it combines several of its simple ideas into complex ones: under which operation we may reckon that of Enlarging, wherein we put several ideas together of the same kind, as several unites to make a dozen. In this also I suppose brutes come far short of Man, for the they take in and retain together several combinations of simple ideas, as possibly a dog does the shape, smell and voice of his Master; yet these are rather so many distinct marks, whereby he knows him than one complex idea made out of those several simple ones.

Abstraction is another operation of the mind, whereby the mind forms general ideas from such as it receiv'd from particular objects, which it does by considering them as they are in the mind such appearances, separate from the circumstances of real existence, as Time, Place, &c. These become general representatives of all of the same kind, and their names applicable to whatever exists conformable to such abstract ideas. Thus the colour which I receive from Chalk, Snow and Milk, is made a representative of all of that kind; and has a name given it (Whiteness) which signifies the same quality, wherever to be found or imagin'd. And thus Universals, both ideas and terms, are made.

This puts the great difference between Man and Brutes: they feem to reason about particular ob-

jects, and ideas, but there appear no footsteps of Abstraction in them, or of making general ideas.

## CHAP. XII.

# Of Complex Ideas.

I N the reception of fimple ideas the mind is only passive, having no power to frame any one to its felf, nor have any idea which does not wholly confift of them. But about these simple ideas it exerts feveral acts of its own, whereby out of them as the materials and foundations of the rest, the other are fram'd: the acts of the mind, wherein it exerts its power over its simple ideas, are chiefly these three: first, it combines several simple ideas into one compound one, and thus all complex ideas are made. Secondly, it brings two ideas whether fimple or complex together, and fets them by one another, so as to take a view of them at once without uniting them into one; by which way it gets all its ideas of relations. Thirdly, it separates them from all other ideas that accompany them in their real existence. And thus all its general ideas are made. I shall here begin with the first of thefe, and come to the other two in their due places. As fimple ideas are observ'd to exist in several combinations united together, so the mind may confider them as united, not only as they are really united in external objects, but as it felf has join'd

them. Ideas thus made up of feveral ones put together, I call complex, as Man, Army, Beauty, Gratitude, &c. By this faculty of repeating and joyning together its ideas, the mind has great power in varying and multiplying the objects of its thoughts. But it is still confin'd to those simple ideas which it receiv'd from the two sources of fensation and reflection. It can have no other ideas of sensible qualities, than what come from without by the senses, nor any other ideas of the operations of a thinking substance, than what it finds in its self: but having once got these simple ideas, it can by its own power put them together and make new complex ones, which it never receiv'd so united.

Complex ideas however compounded, and decompounded, tho' their number be infinite, and their variety endless, may all be reduc'd under these three heads, first Modes, secondly Substances, thirdly Relations.

Modes, 1 call fuch complex ideas which contain not the supposition of subsisting by themselves, but are consider'd as dependences on, and affections of substances, as Triangle, Gratitude, Murder, &c. These modes are of two sorts, first Simple, which are combinations of the same simple idea, as a Dozen, Score, &c. which are but the ideas of so many distinct unites put together. Secondly, Mix'd, which are compounded of simple ideas of several kinds, as Beauty, which consists in a certain com-

position of colour and figure, causing delight in the beholder. Theft, which is the concealed change of the possession of any thing without the consent of the proprietor. These visibly contain a combination of ideas, of several kinds.

Secondly, Substances, the ideas of substances are only such combinations of simple ideas as are taken to represent distinct particular things subsisting by themselves; in which the confused idea of substance is always the chief. Thus a combination of the ideas of a certain figure, with the powers of Motion, Thought, and Reasoning joyn'd to substance, make the ordinary idea of Man.

These again are either of single substances, as Man, Stone; or of collective, or several put together, as Army, Heap: Ideas of several substances thus put together, are as much each of them one single idea, as that of a Man, or an Unite.

Thirdly, Relations which confidentiation and comparing one idea with another. Of these several kinds we shall treat in their order.

#### CHAP. XIII.

Of Simple Modes, and first of the Simple Modes of Space.

Oncerning Simple Modes we may observe that the modifications of any Simple Idea, are as

perfectly different and distinct ideas in the mind, as those of the greatest distance or contrariety; thus Two is as distinct from Three, as Blueness from Heat. Under this head I shall first consider the modes of Space.

Space is a fimple idea which we get both by our fight and touch. When we confider it barely in length between two bodies, 'tis called Diffance; when in length, breadth and thickness it may be called Capacity. When confider'd between the extremities of matter, which fills the capacity of space with something solid, tangible and moveable, it is called Extension; and thus Extension will be an idea belonging to body: but Space may be conceiv'd without it.

Each different distance is a different modification of space; and each idea of any different space is a Simple Mode of this idea. Such are an Inch, Foot, Yard, &c. which are the ideas of certain stated lengths which men settle in their minds for the use, and by the custom of measuring. When these ideas are made samiliar to mens thoughts, they can in their minds repeat them as often as they will, without joyning to them the idea of body, and frame to themselves the ideas of Feet, Yards, or Fathoms beyond the utmost bounds of all bodies, and by adding these still one to another, enlarge their idea of space as much as they please. From this power of repeating any idea of Distance,

without being ever able to come to an end, we come by the idea of immensity.

Another modification of Space is taken from the Relation of the parts of the termination of Extension or circumferib'd space amongst themselves: and this is what we call Figure. This the Touch discovers in sensible bodies, whose extremities come within our reach: and the Eye takes both from bodies and colours, whose boundaries are within its view; where observing how the extremities terminate either in straight lines, which meet at discernible angles; or in crooked lines, wherein no angles can be perceived; by considering these as they relate to one another in all parts of the extremities of any body or space, it has that idea we call Figure: which affords to the mind infinite variety.

Another Mode belonging to this head, is that of Place. Our idea of Place is nothing but the relative position of any thing with reference to its distance from some six'd and certain points. Whence we say, that a thing has or has not changed Place, when its distance either is or is not altered with respect to those bodies with which we have occation to compare it. That this is so, we may easily gather from hence; that we can have no idea of the place of the Universe, tho' we can of all its parts. To say that the world is somewhere, means no more, than that it does exist. The word Place is sometimes

taken to fignifie that Space which any body takes up; and to the Universe may be conceived in a Place.

#### CHAP. XIV.

Of Duration and its Simple Modes.

THERE is another fort of Distance, the idea of which we get from the fleeting, and perpetually perishing parts of succession, which we call Duration. The Simple Modes of it are any different lengths of it, whereof we have distinct ideas, as Hours, Days, Years, &c. Time and Eternity.

The idea of Succession is got by respecting on that train of ideas which constantly follow one another in our minds as long as we are awake. The distance between any parts of this Succession is what we call Duration: and the continuation of the existence of our selves, or any thing else commensurate to the succession of any ideas in our minds, is what we call our own Duration, or that of another thing co-existing with our thinking. That this is so, appears from hence, that we have no perception of succession or duration, when that succession of our ideas ccases, as in Sleep: the moment that we sleep, and awake, how distant soever, seems to be joyn'd and connected. And possibly it would be so to a waking man, could he fix upon one idea

without variation, and the succession of others. And we see that they whose thoughts are very intent upon one thing, let slip out of their account a good part of that Duration, and think that time shorter than it is. But if a man during his sleep dream, and variety of ideas make themselves perceptible in his mind, one after another he hath then, during such dreaming, a sense of duration and of the length of it.

A man having once got this *idea* of duration, can apply it to things which exist while he does not think: and thus we measure the time of our sleep, as well as that wherein we are awake.

Those who think we get the idea of succession from our observation of Motion, by our fenses, will be of our opinion, when they confider that Motion produces in the mind an idea of Succession, no otherways than as it produces there a continu'd train of diffinguishable ideas. A man that looks upon a body really moving perceives no motion, unlefs that motion produces a constant train of successive ideas. But wherever a man is, tho' all things be at rest about him, if he thinks, he will be conscious of Succession without perceiving any motion. Hence motions very flow are not perceived by us; because the change of distance is so slow, that it caufes no new ideas in us, but after a long interval. The fame happens in things that move very fwift, which not affecting the fense with several distinguishable distances of their motion, cause not any train of *ideas* in our minds, and consequently are not perceived. Thus any thing that moves round in a circle in less time than our *ideas* are wont to succeed one another in our minds, is not perceived to move, but seems to be a persect intire circle of that matter which is in motion. Such a part of duration as takes up the time of only one *idea* in our minds, wherein we perceive no succession, we call an *Instant*.

Duration, as mark'd by certain periods and meafures, is what we most properly call *Time*: which we measure by the diurnal and annual *Revolutions* of the Sun, as being constant, regular, and univerfally observable by all mankind, and supposed equal to one another.

It is not necessary that time should be measured by motion: any constant periodical appearance in seemingly equidistant spaces, may as well distinguish the intervals of Time as what we make use of. For supposing the Sun to be lighted, and then extinguished every day: and that in the space of an annual revolution, it should sensibly encrease in brightness, and so decrease again; such a regular appearance would serve to measure out the distances of Duration, to all that could observe it, as well without, as with motion. The sreezing of water, the blowing of a plant returning at equidistant periods in all the parts of the earth would serve for

the same purpose. In effect, we find that a people of America counted their years by the coming and going away of Birds at certain seasons.

The mind having once got fuch a measure of Time, as the annual revolution of the Sun, can easily apply it to Duration wherein that measure it felf did not exist: and the idea of Duration equal to an Annual Revolution of the Sun, is as easily applicable in our thoughts to Duration where no Sun, nor motion was, as the idea of a Foot or Yard to distances beyond the confines of the world.

By the fame means, and from the fame original that we come to have the *idea* of Time, we have also that *idea* which we call *Eternity*: For having got the *ideas* of certain lengths of Duration, we can in our thoughts add them to one another as oft as we please, without ever coming to an end.

And thus it is plain, that from the two fountains of all knowledge before-mentioned, viz. Senfation and Reflection, we get the ideas of Duration, and the feveral measures of it. For,

1/l. By observing what passes in our minds, how our ideas there in train constantly, some vanish, and others begin to appear, we come by the idea of Succession.

2dly. By observing a distance in the parts of this Succession we get the idea of Duration.

3dly. By observing certain appearances at regular and seemingly equidistant periods, we get the

ideas of certain lengths or measures of Duration, as Minutes, Hours, Days, &c.

4thly. By being able to repeat those measures of Time, as often as we will, we can come to imagine Duration, where nothing does really endure or exist: Thus we imagine to morrow, next year, or seven years hence.

5thly. By being able to repeat any fuch idea of any length of time, as of a Minute, Year, &c. as often as we will, and add them one to another without ever coming to an end, we come by the idea of Eternity.

6thly. By confidering any part of infinite Duration, as fet out by periodical measures, we come by the idea of what we call *Time* in general.

#### CHAP. XV.

Of Duration and Expansion considered together.

IME is to Duration as Place is to Space or Expansion. They are so much of those boundless oceans of Eternity and Immensity as is set out and distinguished from the rest: and so are made use of to denote the position of finite real beings in respect one to another, in those infinite oceans of Duration and Space. Each of these have a twofold acceptation.

First, Time in general is taken for so much of

infinite Duration as is coexistent with the Universe, and measured out by the motions of its great bodies. Thus it is used in the phrases before all time, when time shall be no more.

Place is likewise taken for that portion of infinite space possessed by the material world, tho' this might be more properly called Extension. Within these two are confined the particular Time or Duration, Extension or place of all corporeal beings.

Secondly, Time is fometimes applied to parts of that infinite Duration that were not really meafur'd out by real Existence, but such as we upon occasion do suppose equal to certain lengths of measur'd Time, as in the Julian Period, which makes an excursion of seven hundred sixty sour years beyond the Creation. Thus we may speak of Place or Distance in the great Inane, wherein I can conceive a space equal to, or capable of receiving a body of any assigned dimensions.

### CHAP. XVI.

# Of Numbers.

HE complex ideas of Number are form'd by adding feveral Unites together. The Simple Modes of it are each feveral combinations, as, Two, Three, &cc. These are of all others most distinct, the nearest being as clearly different from each o-

ther as the most remote: Two being as distinct from One, as two hundred. But it is hard to form distinct ideas of every the least excess in Extension. Hence demonstrations in numbers are more general in their use, and more determinate in their application than those of Extension.

Simple Modes of Numbers, being in our minds but so many combinations of Unites which have no variety, but more or less: Names for each distinct combination, seem more necessary than in any other fort of ideas. For without a name or mark, to distinguish that precise collection, it will hardly be kept from being a heap of consussion. Hence some Americans have no distinct idea of any number beyond twenty: so that when they are discoursed with of greater numbers, they shew the hairs of their head. So that to reckon right two things are required.

First, That the mind distinguish carefully two ideas which are different one from another, only by the addition or substraction of one Unite.

Secondly, that it retain in memory the names or marks of the feveral combinations from a Unite to that number; and that in exact order, as they follow one another. In either of which if it fails, the whole business of Numbring will be disturbed; and there will remain only the confused idea of Multitude: but the ideas necessary to distinct Numeration will not be attained to.

## CHAP. XVII.

# Of Infinity.

HE idea fignified by the name Infinity, is best examin'd, by considering to what Infinity is by the Mind attributed, and then how it frames it. Finite and Infinite then are look'd upon as the modes of Quantity, and attributed primarily to things that have parts, and are capable of increase or diminution, by the Addition or Substraction of any the least part. Such are the ideas of Space, Duration, and Number.

When we apply this idea to the Supreme Being, we do it primarily in respect of his Duration and U-biquity; more figuratively when to his Wisdom, Power, Goodness, and other attributes which are properly inexhaustible and incomprehensible: for when we call them Infinite, we have no other idea of this Infinity, but what carries with it some resection on the Number, or the Extent of the acts or objects of God's Power and Wisdom, which can never be supposed so great or so many, that these attributes will not always surmount and exceed, tho' we multiply them in our thoughts, with the Infinity of endless Number. I do not pretend to say, how these attributes are in God, who is infinitely beyond the reach of our narrow capacities; but this

is our way of conceiving them, and these our ideas of their Infinity.

• The next thing to be confidered, is how we come by the idea of Infinity. Every one that has any idea of any stated lengths of Space, as a Foot, Yard, &c. finds that he can repeat that idea, and join it to another, to a Third, and so on without ever coming to an end of his Additions: from this power of enlarging his idea of Space, he takes the idea of Infinite Space or Immensity. By the same power of repeating the idea of any length of Duration we have in our minds, with all the endless addition of Number, we come by the idea of Eternity.

If our idea of Infinity be got by repeating without end our own ideas; why do we not attribute it to other ideas, as well as those of Space and Duration; fince they may be as eafily and as often repeated in our minds as the other: yet no body ever thinks of infinite Sweetness or Whit eness, tho' he can repeat the idea of Sweet or White as frequently as those of Yard or Day. I answer, that those ideas that have parts, and are capable of increase, by the addition of any parts, afford us by their repetition an idea of Infinity; because with the endless repetition there is continued an enlargement, of which there is no end: but it is not fo in other ideas: for if to the perfecteft idea I have of White, I add another of equal whiteness; it enlarges not my idea at all. Those ideas that confist not

of parts, cannot be augmented to what proportion men pleafe, or be firetch'd beyond what they have receiv'd by their fenfes, but Space, Duration, and Number being capable of increase by repetition, leave in the mind an idea of an endless room for more; and so those ideas alone lead the mind towards the thought of Infinity.

We are carefully to diffinguish between the idea of the Infinity of Space, and the idea of a Space Infinite. The first is nothing but a supposed endless progression of the mind over any repeated idea of Space. But to have actually in the mind the idea of a Space Infinite, is to suppose the mind already passed over all those repeated ideas of Space, which an endless repetition can never totally represent to it; which carries in it a plain contradiction.

This will be plainer, if we consider Infinity in Numbers. The Infinity of numbers, to the end of whose addition every one perceives there is no approach, easily appears to any one that reslects on it: but how clear soever this idea of the Infinity of Number be, there is nothing yet more evident, than the absurdity of the actual idea of Infinite Number.

#### CHAP. XVIII.

## Of other Simple Modes.

THE mind has feveral distinct ideas of Sliding, Rowling, Walking, Creeping, &c. which are all but the different modifications of motion. Swift and Slow are two different ideas of Motion, the measures whereof are made out of the distances of Time and Space put together.

The like variety we have in Sounds: every articulate word is a different modification of found: as are also notes of different length put together, which make that complex idea call'd Tune.

The modes of Colours might be also very various: some of which we take notice of, as the different degrees, or as they are term'd shades of the same colour. But since we seldom make assemblages of Colours, without taking in Figure also, as in Painting, &c. Those which are taken notice of do most commonly belong to mix'd modes, as Beauty, Rainbow, &c.

All compounded Taftes and Smells are also modes made up of the simple ideas of those senses: but they being such as generally we have no names for, cannot be set down in writing, but must be less to the thoughts and experience of the reader.

### CHAP. XIX.

# Of the Modes of Thinking.

TATHEN the mind turns its view inwards upon its felf, Thinking is the first idea that occurs: wherein it observes a great variety of modifications; and thereof frames to its felf diffinct ideas. Thus the perception annex'd to any impres-Con on the body made by an external object, is call'd Sensation. When an idea recurs without the presence of the object, it is call'd Remembrance. When fought after by the mind, and brought again in view, it is Recollection. When held there long under attentive confideration, it is Contemplation. When ideas float in the mind without regard or reflection, 'tis call'd in French Refvery, our language has scarce a name for it. When the ideas are taken notice of, and as it were registred in the memory, it is Attention. When the mind fixes its view on any one idea, and confiders it on all fides, it is Intention and Study. Sleep without dreaming is rest from all these. And Dreaming is the perception of Edeas in the mind, not fuggested by any external objects, or known occasions; nor under any choice or conduct of the Understanding. Of these various modes of Thinking, the mind forms as distinct ideas, as it does of White and Red, a Square or a Circle.

#### CHAP. XX.

## Of the Modes of Pleasure and Pain.

PLeasure and Pain are simple ideas which we receive both from Senfation and Reflection. There are thoughts of the Mind, as well as fenfations, accompany'd with Pleafure or Pain. Their causes are term'd Good or Evil. For things are efteem'd Good or Evil only in reference to Pleafure or Pain. That we call Good which is apt to cause or increase Pleasure, or diminish Pain in us: to procure or preserve the possession of any Good, or abfence of any Evil: and on the contrary, that we call Evil, which is apt to produce or increase any Pain, or diminish any Pleasure in us; or else to procure us any Evil, or deprive us of any Good: by Pleasure and Pain I would be understood to mean of Body or Mind, as they are commonly distinguish'd; tho' in truth they are only different constitutions of the mind, sometimes occasion'd by diforder in the body, fometimes by thoughts of the mind. Pleasure and Pain, and their causes Good and Evil, are the hinges upon which our passions turn: by reflecting on the various modifications or tempers of mind, and the internal fensations which Pleasure and Pain, Good and Evil produce in us, we may thence form to ourselves the ideas

of our Passions. Thus by reflecting upon the thought we have of the delight, which any thing is apt to produce in us, we have an idea we call Love: and on the contrary, the thought of the pain, which any thing present or absent produces in us, is what we call Hatred. Desire is that uncafiness which a man finds in himfelf upon the absence of any thing, the present enjoyment of which carries the idea of Delight with it. Foy is a Delight of the mind arifing from the prefent or affur'd approaching poffeffion of a Good. Sorrow is an uneafiness of the mind. upon the thought of a Good loft, or the fense of a present Evil. Hope is a Pleasure in the mind upon the thought of a probable future enjoyment of a thing which is apt to delight. Fear is an uneafinefs of the mind upon the thought of a future Evil likely to befal us. Anger is a discomposure of mind upon the receipt of injury, with a present purpose of Revenge. Despair is the thought of the unattainableness of any Good. Envy is an uncaliness of mind, caused by the consideration of a Good we defire, obtained by one we think should not have had it before us.

It is to be confidered that in reference to the Paffions, the removal or leffening of a Pain, is confider'd, and operates as a Pleafure: and the lofs or diminishing of a Pleafure, as a Pain. And farther, that the Passions in most persons operate on the body, and cause various changes in it: but these being not always fensible, do not make a necessary part of the idea of each Passion. Besides these modes of Pleasure and Pain which result from the various considerations of Good and Evil, there are many others, I might have instanced in, as the Pain of Hunger and Thirst, and the Pleasure of Eating and Drinking; and of Musick, &cc. but I rather chose to instance in the Passions, as being of much more concernment to us.

#### CHAP. XXI.

## Of Power.

THE mind being every day informed by the fenses, of the alteration of those simple ideas it observes in things without: restecting also on what passes within itself, and observing a constant change of its ideas, sometimes by the impressions of outward objects upon the sense; and sometimes by the determination of its own choice: and concluding from what it has so constantly observ'd to have been, that the like changes will for the surface be made in the same things, by the same agents, and by the like ways, considers in one thing, the possibility of having any of its simple ideas chang'd; and in another, the possibility of making that change, and so comes by that idea which we call Power. Thus we say Fire has a Power to

melt Gold, and make it fluid; and Gold has a Power to be melted.

Power thus confider'd, is twofold, viz. as able to make, or able to receive any change: the one may be call'd Active, the other Paffive Power. Of Paffive Power all fensible things abundantly furnish us with ideas, whose fensible qualities and beings we find to be in a continual flux, and therefore with reason we look on them as liable still to the fame change. Nor have we of Active Power fewer instances: since whatever change is observed, the mind mult collect a power somewhere able to make that change. But yet if we will confider it attentively, bodies by our fenfes do not afford us fo clear and diffinet an idea of Active Power, as we have from reflection on the operations of our minds. For all power relating to Action, and there being but two forts of Action, viz. Thinking and Motion, let us confider whence we have the clearest ideas of the powers which produce these actions.

Of Thinking, Body affords us no idea at all: it is only from Reflection that we have that; neither have we from Body any idea of the beginning of Motion. A Body at rest affords us no idea of any Active Power to move; and when it is set in Motion itself, that Motion is rather a Passion than an Action in it. The idea of the beginning of Motion we have only by reslection on what passes in our selves; where we find by experience that bare-

by by willing it, we can move the parts of our bodies which were before at rest.

We find in our felves a Power to begin or forbear, continue or end several actions of our minds, and motions of our bodies, barely by a thought or preference of the mind. This power which the mind has thus to order the consideration of any idea, or the forbearing to consider it; or to prefer the Motion of any part of the Body to its Rest, and vice versa in any particular instance, is that we call the Will. The actual exercise of that power, is that which we call Volition or Willing:

The forbearance or performance of that Action, confequent to such order or command of the mind, is called *Voluntary*: and what soever Action is performed without such a shought of the mind, is called *Involuntary*.

The Power of Perception is that we cali the Understanding. Perception, which we make the Act of the Understanding, is of three sorts. First, The Perception of ideas in our minds. Secondly, The Perception of the Signification of Signs. Thirdly, The Perception of the Agreement or Disagreement of any distinct ideas. These powers of the mind, viz. of perceiving and preferring are usually called by another name; and the ordinary way of speaking is that the Understanding and Will are two faculties of the mind. A word proper enough, if it be used so as not to breed any consultion in

mens thoughts, by being supposed, (as I suspect it has been) to stand for some real Beings in the Soul that performs those actions of Understanding and Volition.

From the confideration of the Extent of the power of the mind, over the actions of the man. which every one finds in himfelf, arife the ideas of Liberty and Necessity: fo far as a man has a power to think or not to think; to move or not to move according to the preference or direction of his own mind, fo far is a man free. Where-ever any performance or forbearance are not equally in a man's power; where-ever doing or not doing will not equally follow upon the preference of his mind, there he is not free, tho' perhaps the action may be voluntary. So that the idea of Liberty is the idea of a power in any agent, to do or forbear any action according to the determination or thought of the mind, whereby either of them is preferred to the other; where either of them is not in the power of the agent to be produc'd by him, according to his volition, there he is not at liberty: that agent is under Necessity. So that Liberty cannot be where there is no Thought, no Volition, no Will: but there may be Thought, there may be Will, there may be Volition where there is no Liberty. Thus a Tennis-ball, whether in motion by the stroke of a racket, or lying still at rest, is not by any one taken to be a fice Agent; because we conceive not

a Tennis-ball to think, and confequently not to have any Volition or Preference of Motion to Rest, or vice verfa. So a man flriking himself or his friend by a convultive motion of his arm, which it is not in his power by Volition or the direction of his mind, to stop or forbear; no body thinks he has in this Liberty, every one pities him as acting by Necessity and Constraint. Again, suppose a man be carried whilst fast asleep into a room where is a person he longs to see, and be there lock'd fast in beyond his power to get out; he awakes, and is glad to fee himfelf in fo defirable company, which he stays willingly in; that is, prefers his staying to going away. Is not this flay voluntary? I think no body will doubt it, and yet being lock'd fast in, he is not at liberty to stay, he has not freedom to be gone. So that Liberty is not an idea belonging to Volition or Preferring; but to the person having the power of doing or sorbearing to do, according as the mind shall chuse or direct.

As it is in the motions of the body, so it is in the thoughts of our minds: where any one is such that we have power to take it up, or lay it by according to the Preserence of the mind, there we are at liberty. A waking man is not at liberty to think or not to think, no more than he is at liberty whether his body shall touch any other or no: but whether he will remove his contemplation from one idea to another, is many times in his

choice. And then he is in respect of his ideas, as much at liberty as he is in respect of bodies he rests on. He can at pleasure remove himself from one to another: but yet some ideas to the mind, like some motions to the body are such, as in certain circumstances it cannot avoid nor obtain their absence by the utmost effort it can use. Thus a man on the rack is not at liberty to lay by the idea of Pain, and entertain other contemplations.

Where-ever Thought is wholly wanting, or the power to act or forbear, according to the direction of Thought, there Necessity takes place. This in an agent capable of Volition, when the beginning or continuation of any action is contrary to the preference of his mind, is call'd Compulsion; when the hindring or stopping any action is contrary to his Volition, it is called Restraint. Agents that have no Thought, no Volition at all, are in every thing necessary agents.

And thus I have in a short draught given a view of our original ideas, from whence all the rest are deriv'd, and of which they are made up. And which may be all reduc'd to these sew primary and original ones, viz. Extension, Solidity, and Mobility which by our senses we receive from body: Thinking and the power of moving, which by resection we receive from our minds. Existence, Duration, Number, which belong both to the one and to the other. By these I imagine might be

explain'd the nature of Colours, Sounds, Tafles, Smells, and all other ideas we have; if we had but faculties acute enough to perceive the feveral modify'd extensions and motions of these minute bodies which produce those several sensations in us.

## CHAP. XXII.

# Of Mixed Modes.

M Ixed Modes are combinations of simple ideas of different kinds, (whereby they are distinguish'd from simple modes, which consist only of fimple ideas of the fame kind, put together by the mind) as Virtue, Vice, a Lie, &c. The mind being once furnish'd with simple ideas, can put them together in feveral compositions, without examining whether they exist so together in nature. And hence I think it is, that these ideas are called Notions, as if they had their original and constant existence more in the thoughts of men than in the reality of things: and to form fuch ideas it fufficed that the mind put the parts of them together, and that they were confishent in the understanding. without confidering whether they had any real being. There are three ways whereby we get these complex ideas of mixed Modes.

First, By experience and observation of things

themselves: thus by seeing two men wrestle, we get the idea of wrestling.

Secondly, By invention or voluntary putting together of several simple ideas in our own minds; so he that first invented Printing, had an idea of it first in his mind, before it ever existed.

Thirdly, By explaining the names of actions we never faw, or notions we cannot fee; and by enumerating all those ideas which go to the making them up. Thus the mixed Mode which the word Lie stands for, is made up of these simple ideas: First, Articulate sounds. Secondly, Certain ideas in the mind of the speaker. Thirdly, Those words, the figns of these ideas. Fourthly, Those signs put together by Affirmation or Negation, otherwise than the ideas they stand for, are in the mind of the speaker. Since languages are made, complex ideas are usually got by the explication of those terms that stand for them: for fince they confist of simple ideas combined, they may by words standing for those simple ideas be represented to the mind of one who understands those words, though that combination of fimple ideas was never offer'd to his mind by the real existence of things.

Mixed Modes have their unity from an act of the mind, combining those several simple ideas together, and considering them as one complex one: The mark of this union is one name given to that combination. Men seldom reckon any number

of ideas to make one complex one: but such collections as there be names for. Thus the killing of an old man, is as fit to be united into one complex idea, as that of a futher: yet there being no name for it, it is not taken for a particular complex idea; nor a diffinct species of action, from that of killing any other man.

Those collections of ideas have names generally affix'd, which are of frequent use in conversation: in which cases men endeavour to communicate their thoughts to one another with all possible dispatch. Those others which they have seldom occasion to mention, they tie not together, nor give them names.

This gives the reason, why there are words in every language, which cannot be rendred by any one single word of another. For the sassina and customs of one nation, make several combinations of ideas samiliar in one, which another had never any occasion to make. Such were, 'Ospania μος among the Greeks, Proscriptio among the Romans. This also occasions the constant change of languages; because the change of custom and opinions, brings with it new combinations of ideas, which, to avoid long descriptions, have new names annex'd to them, and so they become new species of mixed modes.

Of all our simple ideas, those that have had most mixed modes made out of them, are Thinking, and

Motion; (which comprehend in them all Action) and Power, from whence these actions are conceiv'd to flow. For actions being the great business of mankind, it is no wonder if the feveral modes of Thinking and Motion should be taken notice of, the ideas of them observ'd and laid up in memory, and have names affign'd them. For without fuch complex ideas with names to them, men cou'd not eafily hold any communication about them. Of this kind are the modes of actions diflinguish'd by their Causes, Means, Objects, Ends, Instruments, Time, Place, and other circumstances; as also of the powers fitted for those actions: thus Boldness is the power to do or fpeak what we intend without fear or disorder: which power of doing any thing, when it has been acquir'd by the frequent doing the same thing, is that idea we call Habit: when forward and ready upon every occasion to break into action, we call it Disposition. Thus Tefliness, is a disposition or aptness to be angry.

Power being the source of all action, the substances wherein these powers are, when they exert this power, are call'd Causes: and the substances thereupon produc'd, or the simple ideas introduc'd into any subject, effects. The efficacy whereby the new substance or idea is produc'd, is call'd in the subject exerting that power, Action; in the subject wherein any simple idea is chang'd, or produc'd, Passion: which efficacy in intellectual agents, we

can. I think, conceive to be nothing else but modes of Thinking and Willing: in corporeal agents, nothing else but modifications of motion. Whatever fort of action, besides these produces any effect: I confess my felf to have no notion, or idea of. And therefore many words which feem to exprefs fome action, fignifie nothing of the action, but barely the effect, with some circumstances of the fubject wrought on, or cause operating. Thus Creation, Annihilation, contain in them no idea of the action or manner, whereby they are produc'd, but barely of the cause, and the thing done. And when a country-man fays the cold freezes water, tho' the word Freezing, feem to import some action, yet it truly fignifies nothing but the effect, viz. That water that was before fluid, is become hard, and confistent, without containing any idea of the action whereby it is done.

### C H A P. XXIII.

Of our Complex Ideas of Substances.

THE mind observing several simple ideas to go constantly together, which being presum'd to belong to one thing, are call'd so united in one subject by one name, which we are apt asterward to talk of and consider as one simple idea, which indeed is a complication of many ideas to-

gether. We imagine not these simple ideas to sub-fift by themselves, but suppose some Substratum, wherein they subsist, which we call Substance. The idea of pure substance is nothing but the suppos'd, but unknown support of these qualities, which are capable of producing simple ideas in us.

The ideas of particular Substances are compos'd out of this obscure and general idea of Substance, together with such combinations of simple ideas, as are observed to exist together, and supposed to show from the internal constitution, and unknown effence of that substance. Thus we come by the ideas of Man, Horse, Gold, &c. Thus the sensible qualities of Iron, or a Diamond make the complex ideas of those substances, which a Smith or a Jeweller commonly knows better than a philosopher.

The fame happens concerning the operations of the mind, viz. Thinking, Reafining, &c. which we concluding not to subfift by themselves, nor apprehending how they can belong to body, or be produc'd by it; we think them the actions of some other substance, which we call Spirit: of whose substance or nature we have as clear a notion as of that of body; the one being but the suppos'd Substratum of the simple ideas we have from without; as the other of those operations which we experiment in our selves within: so that the idea of corporeal Substance in matter, is as remote from our conceptions as that of spiritual Substance.

Hence we may conclude that he has the perfectest idea of any particular substance, who has collected most of those simple ideas which do exist in it: among which we are to reckon its active powers, and passive capacities, the not strictly simple ideas.

Secondary qualities for the most part serve to distinguish substances. For our senses fail us in the discovery of the Bulk, Figure, Texture, &c. of the minute parts of bodies on which their real conftitutions and differences depend: and fecondary qualities are nothing but powers with relation to our fenfes. The ideas that make our complex ones of corporeal fubstances, are of three forts. First, The ideas of primary qualities of things, which are difcover'd by our fenses: such are Bulk, Figure, Motion, &c. Secondly, The fenfible fecondary qualities, which are nothing but powers to produce several ideas in us by our fenses. Thirdly, The aptness we consider in any substance to cause, or receive such alterations of primary qualities, as that the fubflance fo alter'd, should produce in us different ideas, from what it did before: and they are call'd Active and Passive Powers. All which, as far as we have any notice, or notion of them, terminate in simple ideas.

Had we fenses acute enough to discern the minute particles of bodies, it is not to be doubted, but they would produce quite different ideas in us;

as we find in viewing things with microscopes. Such bodies as to our naked eyes are colour'd and opaque, will through microscopes appear pellucid. Blood to the naked eye appears all red; but by a good microscope we see only some red globules swimming in a transparent liquor.

The infinite wife Author of our beings has fitted our organs, and faculties to the conveniences of life and the business we have to do here: we may by our senses know and distinguish things so far as to accommodate them to the exigencies of this life. We have also insight enough into their admirable contrivances, and wonderful effects to admire, and magnifie the wisdom, power and goodness of their Author. Such a knowledge as this which is suited to our present condition, we want not faculties to attain; and we are fitted well enough with abilities to provide for the conveniences of living.

Besides the complex ideas we have of material Substances; by the simple ideas taken from the operations of our own minds, which we experiment in ourselves, as Thinking, Understanding, Willing, Knowing, &cc. co-existing in the same substance, we are able to frame the complex idea of a Spirit. And this idea of an immaterial substance, is as clear as that we have of a material. By joining these with Substance, of which we have no distinct idea, we have the idea of a Spirit: and by putting together the ideas of coherent, solid parts, and power

of being mov'd, join'd with Substance, of which likewife we have no politive idea, we have the idea of Matter. The one is as clear and diftinct as the other. The substance of Spirit is unknown to us; and so is the substance of Body equally unknown to us: two primary qualities or properties of Body, viz. Solid coherent parts, and impulse, we have distinct clear ideas of: so likewise have we. of two primary qualities or properties of Spirit, Thinking and a power of Action. We have also clear and distinct ideas of several qualities inherent in bodies, which are but the various modifications of the extension of cohering folid parts, and their motion. We have likewise the ideas of the several modes of Thinking, viz. Believing, Doubting, Hoping, Fearing, &c. as also of Willing and Moving the Body confequent to it.

If this notion of Spirit may have some difficulties in it, not casie to be explain'd, we have no more reason to deny or doubt of the existence of Spirits, than we have, to deny or doubt of the existence of Body: because the notion of Body is cumbred with some difficulties very hard, and perhaps impossible to be explain'd. The divisibility in infinitum, for instance, of any finite extension involves us whether we grant or deny it in consequences impossible to be explicated, or made consistent. We have therefore as much reason to be satisfied with our notion of Spirit, as with our notion of Body;

and the existence of the one, as well as the other. We have no other idea of the Supream Being, but a complex one of Existence, Power, Knowledge, Duration, Pleasure, Happiness, and of several other qualities, and powers which it is better to have than be without, with the addition of infinite to each of these.

In which complex idea we may observe that there is no simple one, bating Infinity, which is not also a part of our complex idea of other spirits; because in our ideas, as well of spirits as other things, we are restrain'd to those we receive from Sensation and Reflection.

### CHAP. XXIV.

Of Collective Ideas of Substances.

Here are other ideas of Substances which may be call'd Collective, which are made up of many particular substances consider'd as united into one idea, as a Troop, Army, &c. which the mind makes by its power of composition. These collective ideas are but the artificial draughts of the mind bringing things remote, and independent into one view, the better to contemplate and discourse of them united into one conception, and signify'd by one name. For there are no things so

remote, which the mind cannot by this art of composition, bring into one *idea*, as is visible in that fignished by the name *Universe*.

### CHAP. XXV.

### Of Relation.

Here is another fet of ideas which the mind gets from the comparing of one thing with another. When the mind so considers one thing, that it does as it were bring it to, and fet it by another, and carry its view from one to the other, this is Relation or Respect: and the denominations given to things intimating that Respect, are what we call Relatives, and the things so brought together Related. Thus when I call Cajus, Husband, or Whiter, I intimate some other person, or thing in both cases, with which I compare him. Any of our ideas may be the soundation of Relation.

Where languages have fail'd to give cor-relative names, there the Relation is not so easily taken notice of: as in *Concubine*, which is a Relative name, as well as *Wife*.

The *ideas* of Relation may be the fame, in those men who have far different *ideas* of the things that are Related. Thus those who have different *ideas*, of *Man*, may agree in that of *Father*.

There is no idea of any kind, which is not capable of an almost infinite number of considerations, in reference to other things: and therefore this makes no finall part of mens words and thoughts. Thus one fingle man may at once fuftain the Relations of Father, Brother, Son, Husband, Friend, Subject, General, European, Englishman, Islander, Master, Servant, Bigger, Less, &c. to an almost infinite number; he being capable of as many Relations as there can be occasions of comparing him to other things in any manner of agreement, disagreement, or respect whatsoever.

The ideas of Relations are much clearer and more distinct than of the things related; because the knowledge of one simple idea is oftentimes sufficient to give me the notion of a Relation: but to the knowing of any substantial being, an accurate collection of fundry ideas is necessary.

### C H A P. XXVI.

Of Cause and Effect, and other Relations.

T. HE ideas of Cause and Effect, we get from our observation of the vicissitude of things, while we perceive some qualities or substances begin to exist, and that they receive their existence from the due application and operation of other beings: that which produces, is the Cause; that

which is produced the Effect. Thus Fluidity in wax is the effect of a certain degree of heat, which we observe to be constantly produced by the application of such heat.

We distinguish the originals of things into two forts.

First, When the thing is wholly made new, so that no part thereof did ever exist before, as when a new particle of matter doth begin to exist, which had before no being; 'tis called Greation.

Secondly, When a thing is made up of particles which did all of them before exist, but the thing so constituted of pre-existing particles, which altogether make up such a collection of simple ideas; had not any existence before, as this Man, this Egg, this Rose, &c. This, when referr'd to a substance, produced in the ordinary course of nature, by an internal principle, but set on work by some external agent, and working by insensible ways which we perceive not, is called Generation.

When the Cause is extrinsical, and the Effect produced by a sensible Separation or Juxta position of discernible parts, we call it Making; and such are all artificial things. When any simple idea is produced, which was not in that subject before, we call it Alteration.

The denominations of things taken from Time, are for the most part only Relations. Thus when it is said that queen Elisabeth lived fixty-nine, and

reigned forty-five years, no more is meant, than that the duration of her existence was equal to fixty-nine, and of her government to forty-five annual revolutions of the sun: and so are all words answering, How long.

Young and Old, and other words of Time, that are thought to stand for positive ideas, are indeed Relative; and intimate a Relation to a certain length of Duration, whereof we have the idea in our minds. Thus we call a Man Young or Old, that has lived little or much of that time that men usually attain to. This is evident from our application of these names to other things; for a Man is called Young at Twenty, but a Horse Old, &c. The Sun and Stars we call not Old at all, because we know not what period God has set to that fort of Beings.

There are other ideas, that are truly Relative, which we fignifie by names, that are thought Positive and Abfolute; such as Great and Little, Strong and Weak. The things thus denominated are referred to some standards with which we compare them. Thus we call an Apple Great, that is bigger than the ordinary fort of those we have been used to. And a Man Weak, that has not so much strength or power to move as men usually have, or those of his own size.

#### CHAP. XXVII.

## Of Identity and Diversity.

A Nother occasion the mind takes of comparing, is the very Being of Things: when considering a thing as existing at any certain time, or place, and comparing it with it self as existing at any other time, &c. it forms the ideas of Identity and Diversity. When we see any thing in any certain time and place, we are sure, it is that very thing; and can be no other, how like soever it may be in all other respects.

We conceiving it impossible, that two things of the same kind should exist together in the same place, we conclude that whatever exists any where at the same time, excludes all of the same kind, and is there it self alone. When therefore we demand whether any thing be the same, or no, it refers always to something that existed such a time, in such a place, which it was certain at that instant was the same with it self, and no other.

We have ideas of three forts of fubliances, First, Of God, Secondly, Finite Intelligences, Thirdly, Badies.

First, God being Eternal, Unalterable, and every

where concerning his *Identity*, there can be no doubt.

Secondly, Finite Spirits having had their determinate time and place of beginning to exist, the Relation to that time and place will always determine to each its *Identity*, as long as it exists.

Thirdly, The same will hold of every particle of matter to which no addition or substraction is made. These three exclude not one another out of the same place, yet each exclude those of the same kind, out of the same place.

The Identity and Diversity of Modes and Relations are determined after the same manner that Substances are: only the Actions of Finite Beings, as Motion and Thought, consisting in Succession, they cannot exist in different times and places as permanent Beings: for no motion or thought considered as at different times can be the same, each part thereof having a different beginning of existence.

From whence it is plain, that Existence it self is the Principium Individuationis, which determines a Being to a particular time and place, incommunicable to two Beings of the same kind. Thus, suppose an Atom existing in a determin'd time, and place; it is evident that considered in any instant, it is the same with it self, and will be so, as long as its existence continues. The same may be said of two, or more, or any number of particles, whilst they continue together. The Mass will be the same

however jumbled: but if one atom be taken away, it is not the same mass.

In Vegetables, the identity depends not on the fame mass, and is not applyed to the same thing. The reason of this is the difference between an animate body, and mass of matter; This being only the cohesion of particles any how united; The other, fuch a disposition and organization of parts, as is fit to receive and distribute nourishment, so as to continue and frame the wood, bark, leaves, &c. (of an Oak, for instance) in which consists the vegetable life. That therefore which has fuch an organization of parts partaking of one common life, continues to be the same Plant, tho' that life be communicated to new particles of matter vitally united to the living plant. The case is not so much different in Brutes, but that any one may hence fee what makes an Animal, and continues it the Same.

The identity of the fame Man likewise confists in a participation of the same continued life, in succeeding particles of matter vitally united to the same organized body.

To understand *Identity* aright, we must consider what *Idea* the word it is applied to stands for. It being one thing to be the *same Substance*, another the *same Man*, and a third the *same Person*.

An Animal, is a living organized body: and the fame animal, is the fame continued life communi-

cated to different particles of matter, as they happen fuccessively to be united to that body, and our notion of *Man*, is but of a particular fort of Animal.

Person stands for an intelligent being, that reafons and reslects, and can consider it self the same thing in different times and places; which it doth by that Consciousness that is inseparable from thinking. By this every one is to himself what he calls Self, without considering whether that Self be continu'd in the same, or divers substances. In this consists Personal Identity, or the sameness of a rational being: and so far as this consciousness extends backward to any past action, or thought, so far reaches the identity of that person. It is the same Self now, it was then: and it is by the same Self, with this present one, that now reslects on it, that that action was done.

Self is that confcious thinking thing, whatever fubstance it matters not, which is conscious of pleasure or pain, capable of happiness or misery; and so is concerned for it self, as far as that consciousness extends. That with which the consciousness of this present thinking thing, can join it self, makes the same person, and is one self with it; and so attributes to it self, and owns all the actions of that thing, as its own, as far as that consciousness reaches.

This Personal Identity is the object of reward

and punishment, being that by which every one is concerned for himself. If the Consciousness went along with the little singer, when that was cut off, it would be the same self that was just before concerned for the whole body.

If the same Socrates, waking and sleeping, did not partake of the same consciousness, they would not be the same Person. Socrates waking, could not be in justice accountable for what Socrates sleeping did, no more than one Twin, for what his brother Twin did, because their outsides were so like, that they could not be distinguished.

But suppose I wholly lose the memory of some parts of my life, beyond a possibility of retrieving them, fo that I shall never be conscious of them again; am I not the fame Person that did those actions, tho' I have now forgot them? I answer, that we must here take notice what the word I is applied to, which in this case is the man only: and the same man being presumed to be the same person, I is eafily here suppos'd to stand also for the same person. But if it be possible for the same man, to have diffinct incommunicable confciousness at different times, it is past doubt the same man would, at different times, make different perfons. Which we fee is the fenfe of mankind in the folemnest declaration of their opinions, human laws not punishing the madman for the fober man's actions, nor the fober man for what the madman did; thereby

making them two persons. Thus we say in English, such a one is not himself, or is besides himself, in which phrases it is infinuated, that Self is changed, and the Self same Person is no longer in that man.

But is not a man drunk or fober the fame Perfon? why elfe is he punished for the same fact he commits when drunk, tho' he be never afterwards conscious of it? just as much the same person, as a man that walks, and does other things in his fleep, is the fame person, and is as answerable for any mischief he shall do in it. Human laws punish both with a justice suitable to their way of knowledge: because in these cases they cannot distinguish certainly what is real, and what is counterfeit; and so the ignorance in drunkenness or sleep is not admitted as a plea. For tho' punishment be annexed to perfonality, and perfonality to consciousness; and the drunkard perhaps is not conscious of what he did; yet human judicatures justly punish him, because the fact is proved against him; but want of consciousness cannot be proved for him. But in the great day wherein the Secrets of all Hearts shall be i.i.d open, it may be reasonable to think no one shall be made to answer for what he knows nothing of, but shall receive his doom, his own Conscience accusing, or else excusing him.

To conclude, whatever fubiliance begins to exist, it must during its existence be the same: whatever compositions of substances begin to exist, during

the union of those substances, the concrete must be the same. Whatsoever mode begins to exist, during its existence it is the same: and so if the composition be of distinct substances, and different modes, the same rule holds. Whence it appears that the difficulty or obscurity that has been about this matter, rather arises from names ill us'd, than from any obscurity in the things themselves. For whatever makes the specifick Idea, to which the name is applied, if that Idea be steadily kept to, the distinction of any thing into the same, and divers, will easily be conceived, and there can arise no doubt concerning it.

### C H A P. XXVIII.

## Of other Relations.

A LL simple Ideas, wherein are parts or degrees, afford an occasion of comparing the subjects wherein they are to one another in respect of those simple Ideas. As Whiter, Sweeter, More, Less, &c. these depending on the equality and excess of the same simple Idea, in several subjects may be called, Proportional Relations.

Another occasion of comparing things is taken from the circumstances of their origine, as Father, Son, Brother, &c. these may be called Natural Relations.

Sometimes the foundation of confidering things, is some act whereby any one comes by a moral right, power, or obligation to do something: such are General, Captain, Burgher; these are Instituted, and Voluntary Relations, and may be distinguished from the Natural, in that they are alterable and separable from the persons to whom they sometimes belonged, tho' neither of the substances so related be destroyed. But natural relations are not alterable, but are as lasting as their subjects.

Another relation is the conformity or difagreement of mens voluntary actions to a rule to which they are referred, and by which they are judged of: these may be called Moral Relations. It is this conformity or difagreement of our actions to some law (whereby good or evil is drawn on us from the will and power of the law-maker, and is what we call Reward or punishment) that renders our actions morally good, or evil.

Of these moral Rules or Laws there seem to be three sorts with their different enforcements. First, the Divine Law. Secondly, Civil Law. Thirdly, The Law of Opinion or Reputation. By their relation to the sirst, our actions are either Sins or Duties: to the second, Criminal or Innocent: to the third Virtues or Vices.

Ist. By the Divine Law, I mean that law which God has set to the actions of men, whether promul-

gated to them by the light of nature, or the voice of Revelation.

That God has given a law to mankind, feems undeniable, fince he has, First, A right to do it, we are his creatures. Secondly, Goodness and wisdom to direct our actions to what is best. Thirdly, Power to enforce it by reward, and punishment of infinite weight, and duration. This is the only true touchstone of moral rectitude, and by which men judge of the most considerable moral good or evil of their actions: that is, whether as duties or fins they are like to procure them happiness or misery from the hands of the Almighty.

2dly. The Civil Law, is the rule fet by the Common-wealth, to the actions of those that belong to it. This law no body over-looks; the rewards and punishments being ready at hand to enforce it, extending to the protecting or taking away of life, liberty, and estate of those who observe or disobey it.

3dly. The law of Opinion or Reputation. Virtue and Vice are names supposed every where, to stand for actions in their own nature, Right and Wrong. As far as they are really so applied, they so far are co-incident with the divine law. But it is visible that these names in the particular instances of their application, through the several nations and societies of men, are constantly attributed only to such actions as in each country and society, are in reputation or discredit. So that the measure

of what is every where called and esteemed Virtue and Vice, is the approbation or dislike, praise or blame, which by a tacit consent establishes it self in the societies and tribes of men in the world; whereby several actions come to find credit or disgrace amongst them, according to the judgment, maxims, or fashions of the place.

That this is so, appears hence: that tho' that passes for Virtue in one place, which is elsewhere accounted Vice; yet every Virtue and Praise, Vice and Blame go together; Virtue is every where that which is thought praise-worthy: and nothing else but that which has the allowance of publick esteem, is called Virtue. These have so close an alliance, that they are often called by the same name.

'Tis true, Virtue and Vice do in a great measure every where correspond with the unchangeable rule of Right and Wrong, which the laws of God have established; because the observation of these laws visibly secures and advances the general good of mankind, and the neglect of them breeds mischief and consusion: and therefore men without renouncing all sense and reason, and their own interest, could not generally mistake in placing their commendation and blame on that side that deserved it not.

They who think not commendation and difgrace fufficient motives to engage men to accommodate themselves to the opinions and rules of those with whom they converse, seem little skill'd in the history of mankind. The greatest part whereof govern themselves chiefly by this law of Fashion.

The penalties that attend the breach of God's laws are feldom feriously reflected on, and those that do reflect on them, entertain thoughts of surface reconciliation. And for the punishment due from the laws of the common-wealth, men flatter themselves with the hopes of impunity: but no man escapes censure and dislike who offends against fashion; nor is there one of ten thousand stiff and insensible enough, to bear up under the constant dislike and condemnation of his own club.

Morality then is nothing but a relation to these laws or rules; and these rules being nothing but a collection of several simple ideas; the conformity thereto is but so ordering the action, that the simple ideas belonging to it, may correspond to those which the law requires. By which we see how moral beings, and notions are founded on, and terminated in the simple ideas of sensation and reflection. For example, let us consider the complex idea signified by the word Murder. First from reflection, we have the ideas of Willing, Considering, Purposing, Malice, &c. Also of Life, Perception, and Self-Motion. Secondly from sensation where-

by we put an end to that perception and motion in the man, all which fimple *ideas*, are comprehended in the word *Murder*.

This collection of fimple ideas being found to agree or difagree with the esteem of the country I have been bred in, and to be held worthy of praise or blame, I call the action Virtuous, or Vicious. If I have the will of a Supreme Invisible Law-maker for my rule, then, as I suppose the action commanded or forbidden by God, I call it Good or Evil, Sin or Duty: if I compare it with the Civil-Law of my Country, I call it Lawful or Unlawful, a Crime or no Crime.

Moral actions may be confidered two ways.

First, as they are in themselves a collection of fimple ideas, in which sense they are positive absolute ideas.

Secondly, As Good or Bad, or Indifferent: in this respect they are Relative, it being their conformity or disagreement with some rule that makes them be so. We ought carefully to distinguish between the positive idea of the action, and the reference it has to a rule: both which are commonly comprehended under one name, which often occasions consusion, and misleads the judgment.

Thus the taking from another what is his, without his confent, is properly called *Stealing*: but that name being commonly understood to fignific also the moral pravity of the action, men are apt to condemn whatever they hear called Stealing as an ill action, difagreeing with the rule of Right. And yet the private taking away his fword from a madman to prevent his doing mischief, tho' it be properly denominated Stealing, as the name of such a mixed Mode, yet when compared to the law of God, it is no sin or transgression, tho' the name Stealing ordinarily carries such an intimation with it.

It would be infinite to go over all forts of Relations; I have here mentioned fome of the most confiderable, and fuch as may serve to let us see from whence we get our ideas of Relations, and wherein they are founded.

#### CHAP. XXIX.

Of clear, obscure, distinct and confused ideas.

Having shewn the original of our ideas, and taken a view of their several sorts: I shall offer some sew other considerations concerning them. The first is, that some are clear, others obscure: some distinct, and others confused.

Our fimple ideas are clear, when they are fuch as the objects themselves from whence they were taken, did in a well-ordered sensation or perception present them. Whilst the memory retains them thus, and can produce them so to the mind when it has occasion to consider them, they are clear ideas.

Our complex ideas are clear when the ideas that go to their composition are clear: and the number and order of those simple ideas, that are their ingredients, is determinate and certain.

The cause of Obscurity in simple ideas seems to be either dull organs, or slight impressions made by the objects, or a weakness in the memory, not able to retain them as receiv'd.

A distinct idea is that wherein the mind perceives a difference from all other: and a confused, is such an one as is not sufficiently distinguishable from another from which it ought to be different. Obscurity is opposed to clearness, consusion to distinctness.

This confusion incident to ideas, is only in reference to their names. For every idea a man has being visibly what it is, and distinct from all other ideas but it felf, that which makes it confus'd is, when it is such that it may as well be called by another name as that which it is expressed by, the difference which keeps the things distinct, and makes some of them to belong rather to the one, and some of them to the other of those names being left out; and so the distinction which was intended to be kept up by these different names is quite lost.

Confusion is occasioned chiefly by the following defaults.

First, When any complex idea (for it is complex ideas that are molt liable to confusion) is made up of too small a number of simple ideas, and such as are common to other things: whereby the differences that make it deserve a different name, are left out. Thus an idea of a Leopard being conceived only as a spotted beast, is consused; it not being thereby sufficiently distinguished from a Panther, and other forts of beasts that are spotted. Where the ideas for which we use different terms, have not a difference answerable to their distinct names, and so cannot be distinguished by them, there it is that they are truly confus'd.

Secondly, When the ideas are so jumbled together in the complex one, that it is not easily discernible, whether it more belongs to the name given it, than to any other. We may conceive this consussion by a fort of pictures usually shewn, wherein the colours mark out very odd and unusual sigures, and have no discernible order in their position. This, when said to be the picture of a Man or Caesar, we reckon consused, because it is not discernible in that state, to belong more to the name Man or Caesar, than to the name Babeon or Pompey. But when a cylindrical mirrour rightly placed, hath reduced those irregular lines on the table, into their due order and proportion, then

the eye presently sees that it is a Man or Caefar; that is, that it belongs to those names, and is sufficiently distinguishable from a Baboon or Pompey; that is, from the ideas signified by those names.

Thirdly, When any one of our ideas fignified by a name is uncertain and undetermined. Thus he that puts in, or leaves out an idea out of his complex one of Church or Idolatry, every time that he thinks of either, and holds not steady to any one precife combination of ideas, that makes it up, is faid to have a confus'd idea of Church or Idolatry. Confusion always concerns two ideas, and those most, which most approach one another. To avoid confusion therefore we ought to examine what other it is in danger to be confounded with, or which it cannot eafily be feparated from; and that will be found an idea belonging to another name, and so should be a different thing, from which yet it is not fufficiently diffinct, and so keeps not that difference from that other idea which the different name imports.

It is to be observed that our complex ideas may be very clear and distinct in one part, and very obscure and confused in another. Thus in Chiliaedrum, or Body of a Thousand Sides, the idea of the figure may be confused, tho' that of the number be very distinct: we can discourse and demonstrate concerning that part of this complex idea which depends on the number Thousand; tho' it

is plain we have no precise idea of its figure, so as to distinguish it by that from one that has but Nine Hundred Ninety-nine sides. The not observing this, causes no small error in mens thoughts, and confusion in their discourses.

### CHAP. XXX.

## Of Real and Fantastical Ideas.

UR ideas in reference to things from whence they are taken, or which they may be supposed to represent, come under a Threefold distinction, and are, First, either Real or Fantassical. Secondly, Adequate or Inadequate. Thirdly, True or False.

By real ideas I mean fuch as have a foundation in nature, fuch as have a conformity with the real being and existence of things, or with their Archetypes.

Fantastical are such as have no foundation in nature, nor any conformity with that reality of being, to which they are referred as to their Archetypes. By examining the several sorts of ideas we shall find, that, First, our simple ideas are all real; not that they are images or representations of what does exist, but as they are the certain effects of powers in things without us, ordained by our Maker, to produce in us such sensations: they

are real ideas in us, whereby we distinguish the qualities that are really in things themselves.

Their reality lies in the steady correspondence they have with the distinct constitutions of real beings. But whether they answer to those constitutions as to Causes or Patterns it matters not; it suffices that they are constantly produced by them.

Complex ideas being arbitrary combinations of fimple ideas put together, and united under one general name, in forming of which the mind uses its liberty; we must enquire which of these are real, and which imaginary combinations, and to this I say, that,

First, Mixed modes and relations having no other reality than what they have in the minds of men: nothing else is required to make them real, but a possibility of existing conformable to them. These ideas being themselves Archetypes, cannot differ from their Archetypes, and so cannot be chimerical; unless any one will jumble together in them inconsistent ideas. Those indeed that have names assigned them in any language, must have a conformity to the ordinary signification of the name that is given them, that they may not be thought fantassical.

Secondly, Our complex ideas of Substances being made, in reference to things existing without us, whose representations they are thought, are no farther real, than as they are such combinations of

fimple ideas, as are really united, and co-exist in things without us. Those are fantastical which are made up of several ideas, that never were sound united, as Gentaur, &cc.

### CHAP. XXXI.

Of Ideas Adequate or Inadequate.

REAL ideas are either Adequate or Inadequate; First, Adequate, which perfectly represent those Archetypes which the mind supposes them taken from, and which it makes them to stand for. Secondly, Inadequate, which are such as do but partially or incompleatly represent those Archetypes to which they are referred: whence it appears.

First, That all our simple ideas are Adequate; for they being but the effects of certain powers in things fitted and ordained by God, to produce such sensations in us, they cannot but be correspondent and adequate to such powers, and we are sure they agree to the reality of things.

Secondly, Our complex ideas of modes being voluntary collections of fimple ideas, which the mind puts together without reference to any real Archetypes, cannot but be Adequate ideas. They are referred to no other pattern, nor made by any original, but the good-liking and will of him that makes the combination. If indeed one would confirm his ideas, to those which are formed by another

person, they may be wrong or *Inadequate*, because they agree not to that which the mind designs to be their archetype and pattern. In which respect only, any *ideas* of modes can be wrong, impersect, or inadequate.

Thirdly, Our ideas of Substances, have in the mind a double reference: First, They are sometimes referred to a supposed real essence, of each species of things. Secondly, They are designed for representations in the mind of things that do exist, by ideas discoverable in them: in both which respects they are Inadequate.

6

First, If the names of Substances stand for things, as supposed to have certain real essences, whereby they are of this or that species, (of which real effences men are wholly ignorant and know nothing) it plainly follows that the ideas they have in their minds, being referred to real essences, as Archetypes which are unknown, they must be fo far from being Adequate, that they cannot be supposed to be any representation of them at all. Our complex ideas of Substances are, as have been shewn, nothing but certain collections of simple ideas that have been observed, or supposed constantly to exist together. But such a complex idea cannot be the real effence of any Substance: for then the properties we discover in it would be deducible from it, and their necessary connexion with it be known, as all the properties

of a Triangle depend on, and are deducible from the complex idea of Three Lines including a Space: but it is certain that in our complex ideas of Substances, are not contained such ideas on which all the other qualities that are to be found in them

depend.

Secondly, Those that take their ideas of Substances from their sensible qualities, cannot form Adequate ideas of them: because their qualities and powers are so various, that no man's complex idea can contain them all. Most of our simple ideas, whereof our complex ones of Substances do consist, are powers which being relations to other Substances; we cannot be sure we know all the powers, till we have tryed what changes they are sitted to give and receive from other Substances, in their several ways of application: which being not possible to be tryed upon one body, much less upon all, it is impossible we should have Adequate ideas of any Substance, made of a collection of all its properties.

### CHAP. XXXII.

Of True and False Ideas.

RUTH and Falshood in propriety of speech belong only to propositions; and when ideas are termed True or False, there is some secret or tacit proposition, which is the soundation of that

denomination. Our ideas being nothing but Aptearances or Perceptions in the mind, can in strictness of speech no more be said to be true or salse, than fingle names of things can be faid to be true or falle. The idea of Centaur has no more fallhood in it. when it appears in our minds, than the name Centeur when it is pronounced or writ on paper. For truth or falshood lying always in some affirmation or negation, our ideas are not capable any of them, of being false, till the mind passes some judgment on them; that is, affirms or denies fomething of them. In a metaphyfical fense they may be said to be true, that is, to be really fuch as they exist; tho' in things called true, even in that fense, there is perhaps a fecret reference to our ideas, look'd upon as the standards of that truth; which amounts to a mental proposition.

When the mind refers any of its ideas to any thing extraneous to it, they are then capable of being true or false: because in such a reference the mind makes a tacit supposition of their conformity to that thing; which supposition, as it is true of false, so the ideas themselves come to be denominated. This happens in these cases:

First, When the mind supposes its idea, conformable to that in other mens minds; called by the same name, such as that of Justice, Virtue, &c.

Secondly, When the mind supposes any idea conformable to some real existence. Thus that of.

Man is true, that of Centaur false, the one having a conformity to what has really existed; the other not.

Thirdly, When the mind refers any of its ideas to that real constitution, and essence of any thing whereon all its properties depend: and thus the greatest part, if not all our ideas of Substances, are false.

As to the First, When we judge of our ideas by their conformity to those of other men, they may be any of them false. But simple ideas are least liable to be so mistaken; we seldom mistake Green for Blue, or Bitter for Sweet; much less do we confound the names belonging to different fenfes, and call a Colour by the name of a Taste. Complex ideas are much more liable to falshood in this particular: and those of Mixed Modes more than Substances. Because in Substances their sensible qualities serve for the most part to distinguish them clearly: but in Mixed Modes we are more uncertain, and we may call that Juflice, which ought to be called by another name. The reason of this is, that the abstract ideas of Mixed Modes, being mens voluntary combinations of fuch a precise collection of simple ideas, we have nothing else to refer our ideas of Mixed Modes as standards to; but the ideas of those who are thought to use names in their proper fignifications: and fo as our ideas conform or differ from them, they pass for true or false.

As to the Second, When we refer our ideas to the real existence of things, none can be termed false, but our complex ideas of Substances. For our fimple ideas being nothing but perceptions in us answerable to certain powers in external objects, their truth confifts in nothing but fuch appearances, as are produced in us fuitable to those powers: neither do they become liable to the imputation of falshood, whether we judge these ideas to be in the things themselves, or no. For God having set them as marks of distinguishing things, that we may be able to discern one thing from another; and thereby chuse them as we have occasion: it alters not the nature of our simple ideas, whether we think the idea of Blue (for instance) to be in the Violet it self, or in the mind only: and it is equally from that appearance to be denominated Blue, whether it be that real colour, or only a peculiar texture in it, that causes in us that idea: since the name Blue notes properly nothing but that mark of diffinction, that is in a Violet, discernible only by our eyes, whatever it consists in.

Neither would our simple ideas be falle, if by the different structure of our organs it were so ordered, that the same object should produce in several mens minds different ideas. For this could never be known, since objects would operate constantly after the same manner. It is most probable nevertheless, that the ideas produced by the same

objects in different mens minds, are very near and undiffernibly like. Names of simple ideas may be mis-applied, as a manignorant in the English tongue may call Purple, Scarlet: but this makes no falshood in the ideas.

Complex *ideas* of modes cannot be false in reference to the essence of any thing really existing; because they have no reference to any pattern existing, or made by nature.

Our complex ideas of Substances, being all referr'd to patterns in things themselves, may be salse. They are so, First, When look'd upon as representations of the unknown essences of things. Secondly, When they put together simple ideas which in the real existence of things, have no union: as in Centaur. Thirdly, When from any collection of simple ideas, that do always exist together, there is separated by a direct negation any one simple idea, which is constantly joined with them. Thus, if from extension, solidity, fixedness, malleableness, sufficiently, &c. we remove the colour observed in Gold.

If this idea be only left out of the complex one of Gold, it is to be looked on as an inadequate and imperfect, rather than a false one: fince, tho' it contains not all the simple ideas, that are united in nature: yet it puts none together, but what do really exist together.

Upon the whole, I think that our ideas as they

are considered by the mind, either in reserence to the proper signification of their names, or in reference to the reality of things, may more properly be called Right or Wrong ideas, according as they agree or disagree to those patterns to which they are reserred. The ideas that are in mens minds simply considered, cannot be wrong, unless complex ideas, wherein inconsistent parts are jumbled together. All other ideas are in themselves right, and the knowledge about them right, and true knowledge. But when we come to refer them to any patterns, or archetypes, then they are capable of being wrong, as far as they disagree with such archetypes.

### CHAP. XXXIII.

# Of the Association of ideas.

THERE is scarce any one that does not obferve something that seems odd to him,
and is in it self really extravagant in the opinions,
reasonings, and actions of other men. The least
flaw of this kind, if at all different from his own,
every one is quick-sighted enough to espy, and forward to condemn in another, tho' he be guilty of
much greater unreasonableness in his own tenets
and conduct, which he never perceives, and will
very hardly be convinc'd of.

This fort of unreasonableness is usually imputed to Education and Prejudice, and for the most part truly enough; tho' that reaches not the bottom of the disease, nor shews distinctly enough whence it rises, or wherein it lies. Education is often rightly assigned for the cause; and prejudice is a good general name for the thing it self; but yet I think he ought to look a little farther who would trace it to the root it springs from, and so explain it, as to shew whence this slaw has its original in very sober and rational minds, and wherein it consists. For this being a weakness to which all men are liable, and a taint which universally insects mankind, the greater care should be taken to lay it open.

Some of our *ideas* have a natural correspondence and connexion one with another: it is the office and excellency of our reason to trace these, and hold them together in that union and correspondence which is sounded in their peculiar beings. Besides this, there is another connexion of *ideas* wholly owing to chance or custom: *ideas* that in themselves are not at all of kin, come to be so united in some mens minds, that 'tis very hard to separate them; they always keep company, and the one no sooner comes into the understanding, but its associate appears with it; and if they are more than two, the whole gang always inseparable shew themselves together. This strong combina-

tion of ideas not ally'd by nature, the mind makes in it felf either voluntarily, or by chance: and hence it comes in different men to be very different, according to their different Inclinations, Educations, Interests, &c. Custom settles habits of Thinking in the Understanding as well as of Determining in the Will, and of motions in the Body; all which feem to be but trains of motion in the Animal Spirits, which once fet a going, continue on in the same steps they have been us'd to; which by often treading are worn into a smooth path, and the motion in it becomes case, and, as it were, natural. As far as we can comprehend Thinking, thus ideas feem to be produced in our minds; or if they are not, this may ferve to explain their following one another in an habitual train, when once they are put into that track, as well as it does to explain fuch motions of the Body.

This connexion in our minds of ideas in themfelves loose and independent one of another, is of so great force to set us awry in our actions, as well moral as natural, passions, reasonings, and notions themselves, that perhaps there is not any one thing that deserves more to be look'd after. Thus the ideas of Goblins and Sprights have really no more to do with Darkness than Light; yet let but a soolish Maid inculcate these often on the mind of Child, and raise them there together, possibly he shall never be able to separate them again so long as he lives; but Darkness shall ever afterwards bring with it those frightful ideas. A man has suffer'd pain or sickness in any place; he saw his friend die in such a room; tho' these have in nature nothing to do one with another, yet when the idea of the place occurs to his mind, it brings that of the Pain and Displeasure with it, he consounds them in his mind, and can as little bear the one as the other.

Intellectual Habits and Defects this way contracted are not less frequent and powerful, tho' less observed. Let the ideas of Being and Matter be strongly joined either by Education or much Thought, whilft these are still combined in the mind, what notions, what reasonings will there be about separate Spirits? Let Custom from the very Childhood have joined Figure and Shape to the idea of God, and what abfurdities will that mind be liable to about the Deity? Let the idea of Infallibility be joined to any person, and these two constantly together possess the mind, and then one Body in two places at once, shall be swallowed for a certain truth, whenever that imagined Infallible Person dictates and demands affent without inquiry.

Some fuch wrong combinations of *ideas* will be found to establish the irreconcilable opposition between different fects of philosophy and religion:

for we cannot imagine every one of their followers to impose wilfully on himself, and knowingly refuse truth offer'd by plain Reason. Interest, tho' it does a great deal in the case, yet cannot be thought to work whole focieties of men to fo univerfal a perverfeness, as that every one of them should knowingly maintain falshood: some at least must be allowed to do what all pretend to; i.e. to purfue truth fincerely. That therefore which captivates their reasons, and leads men of sincerity blindfold from common fense, will, when examined, be found to be, what we are speaking of: some independent ideas, are by education, custom, and the constant din of their party so coupled in their minds, that they always appear there together, and they can no more scparate them in their thoughts, than if they were but one idea; and they operate as if they were so. This gives fense to jargon, demonstration to absurdities, and consistency to nonfense, and is the foundation of the greatest, I had almost said, of all the errors in the world: or if it does not reach so far, it is at least the most dangerous one, fince fo far as it obtains it hinders men from feeing and examining. The confusion of two different ideas which a customary connexion of them in their minds bath to them in effect made but one, cannot but fill mens heads with false views, and their reasonings with false consequences.

Having thus given an account of the Original

Sorts and Extent of our ideas, which are the infiruments or materials of our knowledge, I should immediately proceed to shew, what use the understanding makes of them, and what knowledge we have by them. But upon a nearer approach I find that there is so close a connexion between ideas and words; and our abstract ideas and general words have so constant a relation one to another, that it is impossible to speak clearly and distinctly of our knowledge, which all consists in propositions, without considering first, the Nature, Use, and Signification of Language, which therefore must be the business of the next Book.

### BOOK III.

#### CHAP. I.

Of Words or Language in General.

OD having defign'd man for a fociable creature, made him not only with an inclination, and under a necessity to have fellowship with those of his own kind, but furnished him also with Language, which was to be the great instrument and common tye of fociety. Man therefore had by nature his organs fo fashioned, as to be fit to frame articulate founds, which we call Words.

But besides articulate & "Is (which birds may be taught to imitate) it was further necessary that he should be able to use these founds as signs of Internal Conceptions, and make them stand as marks of the ideas in his mind, whereby they might be made known to others.

But neither is it enough for the perfection of language, that founds can be made figns of ideas, unless these can be made use of, so as to comprehend feveral particular things; for the multiplication of words would have perplexed their use, had every particular thing need of a diffinct name to be fignified by. To remedy this inconvenience,

Language had yet a farther improvement in the use of General Terms, whereby one word was made to mark a multitude of particular existences, which advantageous use of sounds was obtained only by the difference of the ideas they were made signs of. Those names becoming general, which are made to stand for general ideas; and those remaining particular, where the ideas they are used for are particular. There are other words which significe the want or absence of ideas, as Ignorance, Barrenness, Sec. which relate to positive ideas, and significe their absence.

It is observable that the words which stand for Actions and Notions, quite removed from fenfe, are borrowed from fenfible ideas, v. g. to Imagine, Apprehend, Comprehend, Understand, Adhere, Conceive, Instill, Disgust, Disturbance, Tranquility, &c. which are all taken from the Operations of Things Senfible, and applied to modes of Thinking. Spirit in its primary fignification is no more than breath; Angel a messenger. By which we may guess what kind of notions they were, and whence derived; which filled the minds of the first beginners of languages, and how nature, even in the naming of things unawares, suggested to men the originals of all their knowledge: whilst to give names that might make known to others any operations they felt in themselves, or any other ideas, that came not under

their fenses, they were fain to borrow words from the ordinary and known ideas of Sensation.

The better to understand the *Use* and *Force* of Language, as subservient to Knowledge, it will be convenient to consider,

First, To what it is that Names in the use of Language are immediately applied.

Secondly, Since all (except proper names) are General, and so stand not for this or that single thing, but for Sorts and Ranks: it will be necessary to consider what those forts and kinds of things are; wherein they consist, and how they come to be made. This shall be considered in the sollowing chapters.

#### CHAP. II.

# Of the Signification of Words.

A N, tho' he have great variety of thoughts, yet are they all within his own breast, invisible and hidden from others, nor can of themselves be made to appear. It was necessary therefore, for the comfort and advantage of Society, that man should find out some External Signs, whereby those invisible ideas might be made known to others. For which purpose nothing was so fit, either for plenty or quickness, as those Articulate Sounds he sound himself able to make. Hence words came

to be made use of by men, as signs of their ideas: not upon the account of any natural connexion between articulate sounds, and certain ideas; for then there would be but one Language amongst all men; but by a voluntary imposition, whereby such a word is made arbitrarily the mark of such an idea. The use then of words, is to be sensible marks of our ideas; and the ideas they stand for, are their proper and immediate Signification: in which they stand for nothing more but the ideas in the mind of him that uses them. For when a man speaks to another, it is that he may be understood; that is, that his sounds may make known his ideas to the hearer.

Words being voluntary Signs cannot be imposed on things we know not: this would be to make them figns of nothing, founds without fignifications. A man cannot make his words the figns either of *Qualities* in things, or of *Conceptions* in the mind of another, whereof he has no *ideas* in his own.

Words in all mens mouths (that speak with any meaning) stand for the ideas which those that use them have, and which they would express by them. Thus a Child that takes notice of nothing more in the metal he hears called Gold, than the Yellow Colour, calls the same colour in a Peacock's tail Gold. Another, that hath better observed, adds to shining Yellow, great Weight; and then the

found Gold stands, when he uses it, for a complex idea of a shining Yellow, and very weighty Substance.

The' words fignifie properly nothing but the ideas in mens minds, yet they are in their thoughts

fecretly referred to two other things.

First, They suppose their words to be marks of ideas, in the minds of other men with whom they communicate; else they could not discourse intelligibly with one another: in this case men stand not to examine whether their ideas and those of other men be the same; they think it enough that they use the word in the common acceptation of that Language.

Secondly, They suppose their words to stand also

for the reality of things.

Words then being immediately the figns of mens ideas, whereby they express their thoughts and imaginations to others, there arises by constant use such a connexion between certain sounds and the ideas they stand for; that the names heard almost as readily excite certain ideas, as if the objects themselves were present to the senses.

· And because we examine not precisely the fignification of words, we often in attentive confideration set our thoughts more on words than things: nay, some (because we often learn words before we know the ideas they stand for) speak several words no otherwise than Parrots do, without any ( 113 )

meaning at all. But so far as words are of use and signification, so far there is a constant connexion between the found and idea; and a designation that the one stand for the other; without which application of them, they are nothing but insignificant noise.

Since then words fignific only mens peculiar ideas, and that by an arbitrary imposition, it follows that every man has an inviolable liberty to make words stand for what ideas he pleases. It is true, common use by a tacit consent appropriates certain founds to certain ideas in all Languages; which fo far limits the fignification of each found, that unless a man applies it to the same ideas, he cannot fpeak properly: and unless a man's words excite the same ideas in the hearer, which he makes them stand for in speaking, he cannot speak intelligibly. But whatever be the confequence of any man's use of words, different either from their publick use, or that of the persons to whom he addresses them, this is certain, their signification in his use of them is limited to his ideas, and they can be figns of nothing elfe.

#### CHAP. III.

# Of General Terms.

A LL things that exist being Particulars, it might be expected that words should be so too in their signification: but we find it quite contrary; for most of the words that make all Languages are General Terms. This is the effect of Reason and Necessity, for,

First, It is impossible that every particular thing should have a distinct peculiar name, because it is impossible to have distinct ideas of every particular thing; to retain its name, with its peculiar appro-

priation to that idea.

Secondly, It would be ufelefs, unless all could be supposed to have these same ideas in their minds. For names applied to particular things, whereof I alone have the ideas in my mind, could not be significant or intelligible to another, who is not acquainted with all those particular things which had fallen under my notice.

Thirdly, It would be of no great use for the Improvement of Knowledge: which, tho' founded in particular things, enlarges it self by general views; to which things reduced into forts under general names, are properly subservient. In things where we have occasion to consider and discourse of Indi-

viduals, and particulars, we use proper names: as in Persons, Countries, Cities, Rivers, Mountains, &c. Thus we see that Jockeys have particular names for their horses, because they often have occasion to mention this or that particular horse when he is out of sight.

The next thing to be confidered, is how General Words come to be made. Words become general by being made figns of General ideas: ideas become general by feparating from them, the circumftances of Time, Place, or any other ideas that may determine them to this or that particular existence. By this way of Abstraction, they become capable of representing more Individuals, than one: each of which having a conformity to that abstract idea, is of that fort.

But it may not be amiss to trace our notions and names, from their beginning; and observe by what degrees we proceed and enlarge our *ideas*, from our first infancy. It is evident that the first ideas Children get, are only particular, as of the Nurse or Mother, and the names they give them are confined to these Individuals. Afterwards observing that there are a great many other things in the world, that resemble them in shape, and other qualities, they frame an *idea* which they find those many particulars do partake in; to that they give with others the name Man for example; in this they make nothing new, but only leave out of the

complex idea they had of Peter, James, Mary, &c. that which is peculiar to each, and retain only what is common to all. And thus they come to have a general name, and a general idea.

By the same method they advance to more general names and notions. For observing several things that differ from their idea of Man, and cannot therefore be comprehended under that name, to agree with Man in some certain qualities, by retaining only those qualities, and uniting them into one idea, they have another more general idea, to which giving a name they make a term of a more comprehensive extension. Thus by leaving out the shape, and some other properties signified by the name Man, and retaining only a body with life, fense, and spontaneous motion; we form the idea, fignified by the name Animal. By the same way the mind proceeds to Body, Substance, and at last to Being, Thing, and such universal Terms which stand for any ideas whatsoever. Hence we see that the whole mystery of Genus and Species, is nothing else but abstract ideas more or less comprehensive, with names annexed to them.

This shews us the reason why in defining words, we make use of the Genus: namely to save the labour of enumerating the several simple ideas, which the next general term stands for. From what has been said it is plain that General and U-

niversal belong not to the real existence of things; but are inventions of the Understanding made by it for its own use, and concern only signs, either words or ideas.

It must be considered in the next place, what kind of signification it is that general words have. It is evident that they do not barely signify one particular thing: for then they would not be general terms, but proper names: neither do they signifie a Plurality: for then Man and Men would signifie the same thing; but that which they signifie, is a fort of things, and this they do, by being made a sign of an abstract idea in the mind, to which idea, as things existing are found to agree, so they come to be ranked under that name, or to be of that fort. The Essences then of the sorts or species of things, are nothing but these abstract indeas.

It is not denyed here that Nature makes things alike, and so lays the foundation of this sorting and classing: but the forts or species themselves are the workmanship of Human Understanding: so that every distinct abstract idea, is a distinct Effence, and the names that stand for such distinct ideas, are the names of things essentially different. Thus Oval, Circle, Rain and Snow are essentially different. To make this clearer, it may not be amiss to consider the several significations of the word Essence.

First, It may be taken for the very being of any thing whereby it is, what it is; thus the real internal, (but unknown) constitution in Substances, may be called their Essence. This is the proper signification of the word.

Secondly, In the Schools the word Effence has been almost wholly applyed to the artificial constitution of Genus and Species; it is true, there is ordinarily supposed a real constitution of the forts of things: and it is past doubt there must be some real constitution, on which any collection of simple ideas, co-existing, must depend. But it being evident, that things are ranked into forts, under names only as they agree to certain abstract ideas, to which we have annexed those names, the essence of each Genus or Species, is nothing but the abstract idea, which the name stands for; this the word Effence imports in its most familiar use.

These two sorts of Essence may not unsitly be termed the one Real, the other Nominal. Between the nominal Essence and the name, there is so near a connexion, that the name of any sort of things, cannot be attributed to any particular being, but what has the Essence whereby it answers that abstract idea, whereof that name is the sign.

Concerning the real Effences of corporeal Subflances, there are two opinions.

First, Some using the word Essence for they know not what, suppose a certain number of those Essence.

fences, according to which, all natural things are made, and of which they equally partake, and do become of this or of that Species.

Secondly, Others look on all natural things to have a real, but unknown constitution of their infenfible parts, from whence flow their fenfible qualities, which ferve us to diffinguish them one from another; and according to which we rank them into forts, under common denominations. The former supposition seems irreconcilable with the frequent production of monflers, in all the species of Animals: fince it is impossible that two things partaking of the same real Essence, should have different Properties. But were there no other reason against it; yet the supposition of Essences which cannot be known, and yet the making them to be that which diflinguisheth the species of things, is fo wholly useless and unserviceable to any part of Knowledge, that that alone were fufficient to make us lay it by.

We may further observe that the nominal, and real Essences of simple ideas and modes, are always the same: but in Substances always quite different. Thus a sigure including a space between three lines, is the real as well as nominal Essence of a triangle; it being that soundation from which all its properties flow, and to which they are inseparably annexed; but it is far otherwise in Gold or any other fort of Substance; it is the real consti-

tution of its infensible parts, on which depend all those Properties that are to be sound in it; which constitution since we know not, nor have any particular idea of, we can have no name that is the sign of it. But yet it is its Colour, Weight, Fusibility, and Fixedness, &c. which makes it to be Gold, or gives it a right to that name; which is therefore its nominal Essence, since nothing can be called Gold but what has a conformity to that abstract complex idea, to which that name is annexed.

That Essences are but abstract ideas, may sarther appear by their being held ingenerable and incorruptible. This cannot be true of the real constitution of things. All things in Nature (save the Author of it) are liable to change: their real Essences and Constitutions are destroyed and perish: but as they are ideas established in the mind, they remain immutable. For whatever becomes of Alexander or Bucephalus, the ideas of man and horse remain the same. By these means the Essence of a Species rests safe and entire, without the existence of one Individual of that kind.

It is evident t' en that this doctrine of the immutability of Essences proves them to be only abstract ideas, and is sounded on the relation established between them and certain sounds, as signs of them, and will always be true, as long as the same name can have the same signification.

### CHAP. IV.

# Of the Names of Simple Ideas.

WORDS tho' they signifie nothing immediately, but the ideas in the mind of the Speaker; yet we shall find that the names of simple Ideas, mixed Modes, and natural Substances have each of them something peculiar. And,

First, The names of simple Ideas and substances, with the abstract Ideas in the Mind, intimate some real Existence, from which was derived their original pattern: but the names of mixed Modes terminate in the idea that is in the Mind.

Secondly, The names of fimple Ideas and Modes fignifie the real as well as nominal Effences of their species: the names of fubstances fignifie rarely, if ever any thing, but barely the nominal Essences of those species.

Thirdly, The names of fimple Ideas are not capable of Definitions; those of complex Ideas are: the reason of which I shall shew from the nature of our ideas, and the signification of words.

It is agreed that a Definition is nothing else but the shewing the meaning of one word, by several other, not synonymous Terms. The meaning of words being only the ideas they are made to stand for; the meaning of any term is then shewed, or the word defined, when by other words the idea it is made the sign of, is as it were, represented or set before the view of another, and thus its signification ascertained. The names then of simple ideas are incapable of being defined, because the several terms of a Definition signifying several ideas, they can altogether by no means represent an idea which has no composition at all, and therefore a Desinition, which is but the shewing of the meaning of one word, by several others not signifying each the same thing, can in the names of simple ideas have no place.

The not observing this difference in our ideas, has occasioned those trifling Definitions which are given us of some simple ideas: such as is that of motion, viz. The Ast of a Being in Power, as far forth as in Power.

The Atomists who define Motion to be a Paffage frome one place to another, what do they more than put one synonymous word for another? For what is Passage other than a Motion? Nor will the successive application of the parts of the superficies of one body to those of another, which the Cartesians give us, prove a much better desinition of Motion when well examined.

The Act of Perspicuous, as far forth as perspicuous, is another Peripatetick definition of a simple i-dea, which it is certain can never make the mean-

ing of the word Light, which it pretends to define, understood by a blind man. And when the Cartefians tell us, that Light is a great number of little globules striking briskly on the bottom of the eye; these words would never make the idea the word Light stands for, known to a man that had it not before.

Simple ideas then can only be got by the impressions objects make on our minds, by the proper In-letts appointed to each fort. If they are not received this way, all the words in the world will never be able to produce in us the ideas they stand for. Words being sounds, can produce in us no other simple ideas than of those very sounds, nor excite any in us, but by that voluntary connexion which they have with some ideas which common use has made them signs of: and therefore he that has not before received into his mind by the proper In-lett the simple idea, which any word stands for, can never come to know the signification of that word, by any other words or sounds whatsoever.

But in complex ideas which confift of feveral fimple ones, the case is quite otherwise; for words standing for those several ideas that make up the composition, may imprint complex ideas in the mind, that never were there before, and so make their names be understood. In them definitions take place. Thus the word Rainbow, to one who

knew all those colours, but yet had never seen that *Phoenomenon*, might, by enumerating the *Figure*, *Largeness*, *Position*, and *Order* of the *Colours*, be so well defined, that it might be persectly understood.

The names of fimple Ideas, Substances, and mixed Modes have also this difference, that those of mixed Modes stand for ideas persectly arbitrary: Those of Substances are not persectly so, but refer to a pattern, tho' with some latitude; and those of simple ideas are persectly taken from the existence of things, and are not arbitrary at all.

The names of fimple modes differ little from those of fimple ideas.

#### CHAP. V.

Of the Names of Mixed Modes and Relations.

THE names of mixed Modes being general, fland for abstract ideas in the mind, as other general names do; but they have something peculiar which may deserve our attention.

And First, the ideas they stand for, or if you please the essences of the several species of mixed Modes, are made by the understanding; wherein they differ from those of simple ideas.

Secondly, They are made arbitrarily, without patterns, or reference to any real existence, where-

in they differ from those of Substances. The mind unites and retains certain collections, as so many distinct specifick ideas, whilst other combinations that as often in nature occur, and are as plainly suggested by outward things, pass neglected without particular names, or specifications.

The mind in forming those complex ideas, makes no new idea, but only puts together those which it had before, wherein it does three things. First, It chuses a certain number. Secondly, It gives them connexion, and combines them into one idea. Thirdly, It ties them together by a name; all this may be done before any one individual of that species of Modes ever existed: as the ideas of Sacrilege or Adultery might be framed, before either of them was committed; and we cannot doubt but law-makers have often made laws about species of Actions, which were only the creatures of their own understanding.

But tho' mixed Modes depend on the mind, and are made arbitrarily; yet they are not made at random, and jumbled together without any reason at all, but are always made for the convenience of communication, which is the chief end of language, and therefore such combinations are only made, as men have frequent occasion to mention. Thus men having joined to the idea of killing the idea of Father and Mother, and so made a distinct species from the killing a man's Son or Neighbour,

because of the different heinousness of the crime, and the distinct punishment due to it, found it necessary to mention it by a distinct name, which is the end of making that distinct combination.

In mixed Modes it is the name that feems to preserve their Essences, and to give them their lasting duration. The collection of ideas is made by the mind, but the name is as it were the Knot which ties them fast together: hence we seldom take any other for diffinct species of mixed Modes, but fuch as are fet out by names. We must obferve that the names of mixed Modes always fignifie the real Essences of their species, which being nothing but the abstract complex ideas, and not referred to the real existence of things; there is no Supposition of any thing more signified by any name of a mixed Mode, but barely that complex idea the mind it felf has formed; which when the mind has formed, is all it would express by it, and is that on which all the properties of the species depend, and from which alone they flow; and fo in these the real and nominal Essence is the same.

This also shews the reason why the names of mixed Modes are commonly got, before the ideas they stand for are perfectly known: because there being no species of these ordinarily taken notice of, but such as have names, and those species being complex ideas made arbitrarily by the mind, it is convenient, if not necessary, to know the names,

before we learn the complex ideas; unless a main will fill his head with a company of abstract complex ideas, which others having no names for, he has nothing to do with, but to lay by, and forget again. In the beginning of languages it was necessary to have the idea before one gave it the name; and so it is still, where a new complex idea is to be made, and a name given it. In simple ideas and substances I grant it is otherwise; which being such ideas as have real existence and union in nature, the ideas or names are got, one before the other, as it happens.

What has been faid here of mixed Modes, is with very little difference applicable to Relations also; which fince every man himself may observe, I may spare my self the pains to enlarge on.

### CHAP. VI.

Of the Names of Substances.

THE common names of Substances stand for forts as well as other general terms; that is, for such complex ideas, wherein several particular Substances do, or might agree, by virtue of which they are capable to be comprehended in one common conception, and be signified by one name; I say, do or might agree, for the there be but one

Sun existing, yet the idea of it being abstracted, is as much a fort, as if there were as many suns as there are stars.

The measure and boundary of each fort whereby it is constituted that particular fort, and distinguished from others, is what we call its Essence; which is nothing but that abstract idea to which that name is annexed, fo that every thing contained in that idea, is effential to that fort. This I call Nominal Essence, to distinguish it from that real constitution of substances, on which this Nominal Essence, and all the properties of that fort depend, and may be called its real Essence: thus the nominal Essence of Gold is that complex idea the word Gold stands for, let it be for instance a Body, Yellow, Weighty, Malleable, Fufible, and Fixed: but its real Essence is the constitution of its insenfible parts, on which those qualities, and all its other properties depend; which is wholly unknown to us.

That Esfence in the ordinary use of the word relates to Sorts, appears from hence, that if you take away the abstract ideas by which we fort Individuals, and rank them under common names, then the thought of any thing essential to any of them instantly vanishes: we have no notion of the one without the other, which plainly shews their Relation. No property is thought essential to any Individual whatsoever, till the mind re-

fers it to some fort or species of Things, and then prefently, according to the abiliract idea of that fort, something is found essential; so that esfential or not effential, relates only to our abstract ideas, and the names annexed to them, which amounts to no more but this, that whatever particular thing has not in it those qualities contained in the abstract idea which any general term stands for, cannot be ranked under that species, nor be called by that name; fince that abstract idea is the very Essence of that species. Thus if the idea of Body with some people be bare Extension, or Space, then Solidity is not effential to Body: if others make the idea, to which they give the name Body to be Solidity and Extension; then Solidity is elfential also to Body. That alone therefore is confidered as effential, which makes a part of the complex idea the name of a Sort stands for, without which no particular thing can be reckoned of that fort, nor be entituled to that name.

Substances are distinguished into Sorts and Species by their nominal Essence; for it is that alone, that the name which is the mark of the Sort signifies: and the species of Things to us are nothing but the ranking them under distinct names, according to the complex ideas in Us, and not according to precise, distinct, real Essences in Them.

We cannot rank and fort Things by their real Effences, because we know them not: our facul-

ties carry us no farther in the knowledge of Substances, than a collection of those sensible ideas we observe in them. But the internal Constitution whereon their properties depend, is utterly unknown to us. This is evident when we come to examine but the stones we tread on, or the iron we daily handle: we foon find that we know not their make, and can give no reason of the different qualities we find in them; and yet how infinitely these come thort of the fine contrivances and unconceivable real Essences of Plants and Animals, every one knows. The workmanship of the All-wife and Powerful God in the great fabrick of the Universe, and every part thereof farther exceeds the comprehension of the most inquisitive and intelligent man, than the best contrivance of the most ingenious man, doth the conceptions of the most igporant of rational creatures. In vain therefore do we pretend to range things into forts, and dispose them into certain Classes, under names by their real Essences, that are so far from our discovery or comprehension.

But tho' the nominal Essences of Substances are made by the mind, they are not yet made so arbitrarily as those of mixed Modes. To the making of any nominal Essence, it is necessary,

First, That the *ideas* whereof it consists, have such an union as to make but one *idea*, how compounded soever.

Secondly, That the particular ideas so united be exactly the same, neither more or less: for if two abstract complex ideas differ either in number or forts of their component parts, they make two different, and not one and the same Essence.

In the First of these, the mind in making its complex ideas of Substances, only follows Nature, and puts none together which are not supposed to have an union in nature. For men observing certain qualities always joined and existing together therein copy nature, and of ideas so united, make their complex ones of Substances.

Secondly, Tho' the mind in making its complex ideas of Substances, never puts any together that do not really, or are not supposed to co-exist: yet the number it combines depends upon the various care, industry or fancy of him that makes it. Men generally content themselves with some sew obvious qualities, and often leave out others as material and as firmly united as those that they take in.

In Bodies organized and propagated by Seeds, as Vegetables and Animals, the shape is that which to us is the leading quality, and most characteristical part that determines the species: in most other bodies not propagated by seed, it is the colour we chiefly fix on, and are most led by. Thus where we find the colour of Gold, we are apt to imagine all the other qualities comprehended in our complex idea of Gold, to be there also.

Tho' the nominal Effences of Substances are all supposed to be copied from Nature, yet they are all, or most of them, very impersect: and fince the composition of those complex ideas is in several men very different, we may conclude that these boundaries of species are as Men, and not as Nature makes them; if at least there are in Nature any such prefixed bounds.

It is true, that many particular Substances are so made by Nature, that they have an agreement and likeness one with another, and so afford a soundation of being ranked into Sorts: but the sorting of things by us, being in order to naming and comprehending them under general terms, I cannot see how it can be properly said, that Nature sets the boundaries of the species of things. But if it be so, our boundaries of species, are not exactly conformable to Nature.

If the first forting of Individuals depends on the mind of man, variously collecting the simple ideas, that make the nominal Essence of the lowest species; it is much more evident, that the more comprehensive Classes, called Genera, do so. In forming more general ideas that may comprehend different forts, the mind leaves out those qualities that distinguish them, and puts into its new collection only such ideas as are common to several forts. Thus by leaving out those qualities which are peculiar to Gold, Silver, &c. and retaining a complex idea,

made up of those that are common to each fpecies, there is a new Genus constituted, to which the name Metal is annexed.

So that in this whole business of Genera and Species, the Genus or more comprehensive, is but a partial conception of what is in the Species, and the species but a partial idea of what is to be found in each Individual. In all which there is no new thing made, but only more or less comprehensive figns, whereby we may be enabled to express in a few fyllables great numbers of particular things, as they agree in more or less general conceptions, which we have framed to that purpole. If these abstract general ideas be thought to be compleat, it can only be in respect of a certain established relation between them, and certain names, which are made use of to fignifie them, and not in respect of any thing existing as made by Nature.

This is adjusted to the true end of Speech, which is to be the easiest and shortest way of communicating our notions. This is the proper business of Genus and Species: and this men do without any confideration of real effences, and substantial forms. which come not within the reach of our knowledge, when we think of those things; nor within the fignification of our words when we discourse

with others.

## CHAP. VII.

## Of Particles.

B Esides words which are the names of ideas in the mind, there are others made use of to signifie the Connexion that the mind gives to ideas or propositions one with another, and to intimate some particular Assion of its own at that time relating to those ideas. This it does several ways; as is, is Not, are marks of the mind affirming or denying: besides which, the mind does in declaring its sentiments to others connect not only the parts of propositions, but whole sentences one to another with their several relations, and dependencies to make a coherent discourse.

The words fignifying that connexion the mind gives to several affirmations and negations, that it unites in one continued Reasoning or Narration, are called *Particles*. And it is in the right use of these, that more particularly consists the clearness and beauty of a *Good Stile*. To express the dependence of his Thoughts and Reasonings one upon another, a man must have words to shew what connexion, restriction, distinction, opposition, emphasis, &c. he gives to each respective part of his discourse.

These cannot be understood rightly, without a clear view of the postures, stands, turns, limitatize

ons, exceptions, and feveral other thoughts of the mind: of these there are a great variety, much exceeding the number of Particles that most languages have to express them by; for which reason it happens, that most of these Particles have divers, and fometimes almost opposite significations. Thus the particle But in English, has feveral very different fignifications; as, But to fay no more: here it intimates a stop of the mind in the course it was going, before it came to the end of it. I faw but two Planets: here it shews that the mind limits the fense to what is expressed with a Negation of all other: You pray, but it is not that God would bring you to the true Religion, but that he would confirm you in your own. The former of these intimates a supposition in the mind of something otherwise than it should be: the latter shews, that the mind makes a direct opposition between that and what goes before. All Animals have sense, but a Dog is an Animal. Here it fignifies the connexion of the latter proposition with the former. To these, divers other fignifications of this Particle might be added, if it were my bufiness to examine it in its full latitude.

I intend not here a full explication of this fort of Signs, the inflances I have given in this one, may give occasion to reflect on their use and force in language, and lead us into the contemplation of several actions of our minds in discoursing. which it has found a way to intimate to others by these Particles, some whercof constantly, and others in certain constructions, have the sense of a whole sentence contained in them.

## CHAP. VIII.

Of abstract and concrete Terms.

THE Mind, as has been shewn, has a power to abstract its idea, whereby the Sorts of Things are distinguished: now each abstract idea being distinct, so that the one can never be the other, the mind will, by its intuitive knowledge perceive their difference; and therefore in propositions, no two whole ideas can ever be affirmed one of another: nor does the common use of language permit that any two abstract words or names of abstract ideas, should be affirmed one of another. All our affirmations are only in Concrete, which is the affirming one abstract ideas in Substances, may be of any sort, tho' the most of them are of Powers: in all the rest these are little else but Relations.

All our fimple ideas have abstract as well as concrete names, as Whiteness White, Sweetness Sweet, &c. The like also holds in our ideas of Modes and Relations, as Justice Just, Equality Equal, &c. But as to our ideas of Substances, we have very sew abstract names at all. Those sew that the

fchools have forged, as Animalitas, Humanitas, &c. hold no proportion with the infinite number of names of fubstances, and could never get admittance into common use, or obtain the licence of publick approbation; which seems to intimate the consession of all mankind, that they have no ideas of the real Essences of Substances, since they have not names for such ideas. It was only the doctrine of substantial Forms, and the considence of mistaken Pretenders to a Knowledge they had not, which sirft coin'd, and then introduced Animalitas, Humanitas, and the like: which yet went very little farther than their own schools, and could never get to be current amongst understanding men.

#### CHAP. IX.

## Of the Imperfection of Words.

O examine the Perfection or Imperfection of Words, it is necessary to consider their use and end, which is twosold, First, to record our own thoughts: Secondly, to communicate our thoughts to others: the First is for the help of our own memories, whereby we do as it were talk to our selves: for this purpose any Words may serve the turn: words being arbitrary signs, we may use which we please for this purpose; and there will be no Impersection in them, if we constantly use the same sign for the same idea.

Secondly, As to Communication by Words; that too has a double use: First, Their Civil Use, which is such a Communication of thoughts and ideas by Words, as may serve in common Conversation and Commerce, about the ordinary Assairs and Conveniencies of civil Life. Secondly, The philosophical use of Words, by which I mean such an use of them, as may serve to convey the precise notions of things, and to express certain Truths in general Propositions, these two uses are very distinct, and a great deal less exactness will serve in the one, than in the other.

The end of Language in Communication is to be understood; that is, to excite by sounds in the hearer, the same idea which they stand for in the mind of the speaker. The doubtfulness and uncertainty of their signification, which is the imperfection we are here speaking of, has its cause more in the ideas themselves than in any incapacity in the sounds to signifie them; for in that regard they are all equally persect. That then which makes the difference, is the difference of ideas they stand for, which must be learned and retained by those, who would discourse together intelligibly. Now this is difficult in these cases,

First, Where the ideas they stand for are very complex. Hence the names of mixed Modes are stable to great uncertainty and obscurity in their signification. For here the idea being made up of

many parts, it is not easy to form and retain it exactly; of this fort chiefly are moral Words, which have seldom in two different men, the same precise signification.

Secondly, Where the ideas they stand for, have no certain connexion in nature, and therefore no settled standard to rectifie and adjust them by. This again is the case of the names of mixed Modes, which are assemblages of ideas put together at pleasure. Common use indeed regulates the meaning of Words pretty well for common Conversation: but it is not sufficient to adjust them to philosophical discourses, there being scarce a name of any very complex idea, which in common use has not a great latitude; and is not made the sign of far different ideas.

The way of learning these names does not a little contribute to the doubtfulness of their signification. For we may observe that children are taught the names of simple ideas, and substances, by having the things shewn them; and then they repeat the name that stands for it; as White, Sweet, Milk, Sugar, &c. But in mixed Modes the sounds are learned first, and men are to learn afterwards their signification, by their own observation and industry, or the explication of others: which is the reason that these words are little more than bare founds in the minds of most, because few are at the pains to settle their ideas and notions precisely;

and those which are, make them the figns of idear, different from what others understand by them, which is the occasion of most disputes.

Thirdly, Where the fignification of a word is referred to a flandard which is not eafily known: this is the case of the names of fubflances, which being supposed to stand for their real Essences, must needs be of uncertain application, because these Essences are utterly unknown; and it will be impossible to know what is, or is not Antimony, v. z. when that word is to stand for the real Essence of it; whereof we have no idea at all.

Or suppose these names only stand for simple i-deas, found to co-exist in substances, yet thus they will be liable to great uncertainty too: because these simple ideas being very numerous, men frame different ideas of the same subjects, by putting different ideas into their complex one, of such substances several men observe several properties in the same substance, and none of them all; who having but impersect descriptions of things, can have but uncertain significations of words.

Fourthly, Where the fignification of the word, and the real Effence of the thing, are not the fame, which is still the case of substances, from hence we may observe,

First, That the names of simple ideas are least liable to mistakes: First, Because the ideas they stand for, being each but one single perception, are eastier got, and more clearly retained, than the more complex ones of Substances and mixed Modes, Secondly, Because they are not referred to any other Essence, but barely that perception they immediately signify.

Secondly, Names of fimple Modes are next to fimple ideas least liable to doubt or uncertainty, especially those of Figure and Number, of which men have so clear and distinct ideas.

Thirdly, In mixed Modes, when they are composed of a few and obvious ideas, their names are clear and distinct enough; otherwise doubtful and uncertain.

Fourthly, The names of fubstances being annexed to ideas, that are neither the real Essences, nor exact Representations of things, are liable yet to greater Impersection, when we come to a philosophical use of them.

### CHAP. X.

# Of the Abuse of Words.

Beside the natural and unavoidable Imperfections of Languages, there are wilful Faults and Neglects, which men are often guilty of in their use of words. For,

First, They use words without clear and distinct Ideas, or, which is worse, signs without any thing signified; such are for the most part introduced by felts of Philosophy and Religion, either out of an affectation of fingularity, or to support some strange Opinion; or to cover the weakness of their Hypothesis. These are commonly such as had no determinate collection of ideas annexed to them, when they were first invented; or at least such, as if well examined will be found inconfistent, and therefore may justly be called infignificant terms: instances of this kind may easily be had from the school-men and metaphysicians. Others learn words which the propriety of language has affixed to very important ideas, and often upon occasion use them without any diffinct meaning at all: whence their notions being unfteady and confused, their discourse must be filled with empty unintelligible Noise and Jargon, especially in moral matters where the words stand for arbitrary, and numerous collections of ideas, not regularly and permanently united in Nature.

Secondly, Another Abuse is Inconstancy in the use of Words; it is hard to find a discourse on any subject wherein the same words are not used sometimes for one collection of ideas, sometimes for another. The wilful doing whereof can be imputed to nothing but great folly, or greater dishonesty: and a man in his accompts with another, may with as much sairness make the characters of numbers, stand sometimes for one, and sometimes for another collection of Unites; as in his

discourse, or reasoning, make the same words stand for different collections of simple ideas.

Thirdly, Another is an affected obscurity, either by using old words in new significations, or by introducing new and ambiguous terms, without defining them; or putting them together, fo as to confound their ordinary meaning. Tho' the Peripatetick philosophy has been most eminent in this way, yet other fects have not been wholly clear of it. The admir'd art of disputing hath added much to the natural imperfection of Languages, whilst it has been made use of, and fitted to perplex the fignification of words, more than to discover the Knowledge and Truth of things: and he that will look into that fort of learned writings, will find the words there much more obscure, uncertain, and undetermined in their meaning, than they are in ordinary Conversation.

Fourthly, Another is the taking words for things: this, tho' it in some degree concerns all names in general; yet more particularly affects those of Substances. Thus in the Peripatetick Philosophy, Substantial Forms, Abhorrence of Vacuum, &c. are taken for something real. To this Abuse those men are most subject, who confine their thoughts to any one fislem; and give themselves up into a firm belief of the persection of any received Hypothesis; whereby they come to be persuaded, that the terms of that self, are so suited to the nature of

things, that they perfectly correspond with their real existence.

Fifthly, Another is the fetting them in the place of things which they can by no means signify. We may observe that in the general names of Substances. whercof the nominal Effences are only known to us, when we affirm or deny any thing about them, we do most commonly tacitly suppose or intend they should stand for the real Essence of a certain fort of Substances. Thus when a man fays Gold is malleable, he would infinuate fomething more than this, what I call Gold is malleable, (tho' truly it amounts to no more) namely, that what has the real Essence of Gold is malleable, that is, that malleableness depends on, and is inseparable from the real Essence of Gold. But a man not knowing wherein that real Essence consists, the connexion in his mind of malleableness, is not truly with an Effence he knows not, but with the found Gold l.c. puts for it. It is true, the names of Substances would be much more useful; and Propositions exprest by them much more certain, were the real Essences of Substances the ideas in our minds. which those words fignified. And it is for want of those real Essences that our words convey so little knowledge, or certainty in our discourses about them. But to suppose these names to stand for a thing, having the real Essence on which the properties depend, is so far from diminishing the im-

perfection of our words, that by a plain abuse it adds to it; when we would make them fland for formething, which not being in our complex ideas, the name we use can no way be the sign of it. In mixed Modes, any idea of the complex one being left out, or changed, it is allowed to be another thing, that is, to be of another species, as is plain in Chance-medley, Man-flaughter, Murder, &c. because the complex idea signified by that name, is the real as well as nominal Essence; and there is no secret reference of that name to any other Esfence, but that. But in Substances it is not so; for tho' in that called Gold, one puts in his complex idea, what another leaves out, and vice versa, yet men do not usually think the species changed, because they refer the name in their minds to a real immutable Effence of a thing existing, on which those properties depend: but this reference of the name to a thing we have not the idea of, is fo far from helping us at all, that it only ferves the more to involve us in difficulties. This reference is grounded on this supposition, namely, that the fame precise internal constitution goes always with the fame specifick name: in which are contained these two false suppositions.

First, There are certain precise Essences, according to which, Nature makes all particular things; and by which they are distinguished into species.

Secondly, This tacitly infinuates as if we had i-

deas of these Essences; for why do we enquire, whether this or that thing have the real Essence of that species man for instance, if we did not suppose it known, which yet is utterly false; and therefore such applications of names as would make them stand for ideas we have not, must needs cause great disorder in discourse and reasonings about them; and be a great inconvenience in our communication by words.

Sixthly, Another more general, tho' lefs obferved, abuse of words, is, that men having by long and familiar use, annexed to them certain ideas, they are apt to imagine so near and necessary a connexion, between the names, and the significations they use them in, that they forwardly suppose one cannot but understand what their meaning is; as if it were past doubt, that in the use of these common received founds, the speaker and hearer had neceffarily the same precise ideas. And so likewise taking the words of others, as naturally standing for just, what they themselves have been accustomed to apply them to, they never trouble themselves to explain their own, or understand anothers meaning: from whence commonly proceeds noise, and wrangling without improvement or information; whilst men take words to be the constant regular marks of agreed notions, which in truth are no more but the vofuntary and unsteady signs of their own ideas.

Thus life, is a term, none more familiar: any one almost would take it for an affront, to be asked what he meant by it, and yet if it comes in question, whether such a thing has life, or not, it is easy to perceive, that a clear distinct settled idea, does not always accompany the use of so known a word.

Seventhly, Figurative Speech is also an abuse of Language: for tho' in discourses, where we seek rather pleasure and delight, than information and improvement, fuch ornaments as are borrowed from figurative speeches and allusions, can scarce pass for faults; yet if we would speak of things as they are, we must allow, that all the art of rhetorick, besides order and clearness, all the artificial and figurative application of words, eloquence hath invented, are for nothing elfe but to infinuate wrong ideas, move the passions, and thereby mislead the judgment, and so indeed are perfect cheat. And therefore however allowable they may be in harangues and popular addresses; they are certainly in all discourses that pretend to inform and instruct, wholly to be avoided; and where truth and knowledge are concerned, cannot but be thought a great fault, either of the language or person that makes use of them.

To conclude this confideration, the ends of language in our discourse with others, are chiefly these three.

First, To make our thoughts or ideas known to another; this we fail in: 1st, When we use names without clear and distinct ideas in our minds. 2dly, When we apply received names to ideas, to which the common use of that language does not apply them. 3dly, When we apply them unsteadily, making them stand now for one, and by and by for another idea.

Secondly, To make known our thoughts with as much ease and quickness as is possible. This men fail in when they have complex ideas, without having distinct names for them, which may happen either through the defect of a language, which has none, or the fault of that man who has not yet learned them.

Thirdly, To convey the knowledge of things: this cannot be done, but when our ideas agree to the reality of things.

He that hath names without ideas, wants meaning in his words, and speaks only empty sounds: he that hath complex ideas, without names for them, wants dispatch in his expression. He that uses his words loosely and unsteadily, will either not be minded, or not understood. He that applies his names to ideas, different from their common use, wants propriety in his language, and speaks gibberish. And he that hath ideas of substances, disagreeing with the real existence of things, so far wants the materials of true knowledge in his

understanding, and has instead thereof, chimeras.

Language being the great conduit whereby men convey their discoveries, reasonings, and knowledge from one to another; he that makes an ill use of it, tho' he does not corrupt the sountains of knowledge which are in things themselves, yet he does as much as in him lies, break or stop the pipes whereby it is distributed to the publick use and advantage of mankind. He that uses words without any clear and steady meaning, what does he but lead himself and others into errors? And he that designedly does it, ought to be look'd on as an enemy to truth and knowledge.

If we look into books of controversie of any kind, we shall see that the effect of obscure, unsteady and equivocal terms, is nothing but noise and wrangling about sounds, without convincing or bettering a man's understanding. For if the idea be not agreed on between speaker and hearer, for which the words stand, the argument is not about things but names.

It deferves to be confidered, and carefully examined, whether the greatest part of the disputes in the world, are not merely *verbal*, and about the signification of words; and that if the terms they are made in were defined and reduced in their significations, to the single *ideas* they stand for, those disputes would not end of themselves, and immediately vanish.

### CHAP. XI.

Of the Remedies of the foregoing Impersections and Abuses.

To remedy the defects of speech above-mentioned, the following rules may be of use. First, A man should take care to use no word without a signification, no name without an idea for which he makes it stand. This rule will not seem needless to any one, who will take the pains to recollect how often he has met with such words, as Instinct, Sympathy, Antipathy, &c. so made use of, as he might easily conclude, that those that used them had no ideas in their minds to which they applied them.

Secondly, Those ideas he annexes them to should be clear and distinct, which in complex ideas is by knowing the particular ones that make that composition; of which, if any one be again complex, we must know also the precise collection that is united in each, and so till we come to simple ones. In Substances the ideas must not only be distinct, but also conformable to things as they exist.

Thirdly, He must apply his words, as near as may be, to such ideas, as common use has annexed them to: for words, especially of languages already framed, are no man's private possession, but

the common measure of commerce and communication; and therefore it is not for any one to change the stamp they are current in, nor alter the ideas they are affixed to; or at least, when there is a necessity to do so, he is bound to give notice of it. And therefore,

Fourthly, When common use has lest the fignification of a word uncertain and loose, or where it is to be used in a peculiar sense; or where the term is liable to any doubtfulness or mistake, there it ought to be defined, and its signification ascertained.

Words standing for simple ideas being not definable, their fignification must be shewn either, First, By a fynonymous word. Secondly, By naming a fubject, wherein that simple idea is to be found. Thirdly, By prefenting to the fenses that subject, which may produce it in the mind, and make him actually have the idea that word stands for. Mixed Modes may be perfectly defined, by exactly enumerating those ideas that go to each composition. This ought more especially to be done in mixed Modes belonging to Morality: fince definition is the only way whereby the precife meaning of moral Words can be known: and yet a way whereby their precise meaning may be known certainly, and without leaving any room for any contest about it.

For the explaining the fignification of the names

of substances, both the fore-mentioned ways, viz. of shewing, and defining are requisite in many cases to be made use of; their names are best defined by their leading Qualities, which are mostly shape in animals and vegetables; and colour in inanimate bodies; and in fome, both together. Now thefe leading Qualities are bolt made known by shewing, and can hardly be made known otherwife. The shape of a Horse or Cassowary will be but imperfectly imprinted on the mind by words: the fight of the animals doth it much better. And the idea of the particular colour of Gold is not to be got by any description of it, but only by the frequent exercife of the eyes about it. The like may be faid of those other simple ideas, peculiar in their kind to any substance, for which precise ideas there are no peculiar names.

But because many of the simple ideas, which make up our specifick ideas of substances, are powers which lie not obvious to our sense in the things, as they ordinarily appear; therefore in the signification of our names of Substances, some part of the signification will be better made known, by enumerating those simple ideas, than in shewing the substance it self. For he that to the Yellow shining colour of Gold, got by sight, shall from my enumerating them have the ideas of great Dustibility, Fusibility, Fixedness, and Solubility in Aqua Regia will have a perfecter idea of Gold,

than he can have by feeing a piece of Gold, and thereby imprinting in his mind only its obvious qualities.

It were to be wished that words standing for things, which are known and diffinguished by their outward shapes, should be expressed by little draughts and prints made of them. A Vocabulary made after this fashion, would perhaps with more ease, and in less time, teach the true fignification of many terms, especially in languages of remote countries, or ages; and fettle truer ideas in mens minds of feveral things, whereof we read the names in ancient authors, than all the large and laborious comments of learned criticks. Naturalists that treat of Plants and Animals, have found the benefit of this way: and he that confults them will find that he has a clearer idea of Apium and Ibex from a little print of that herb or beaft, than he could have from a long definition of the names of either of them; and fo no doubt he would have of Strigil, and Sistrum, if instead of a Curry-comb or Cymbal, which are the English names dictionaries render them by, he could fee stamped in the margin small pictures of these instruments, as they were in use amongst the ancients.

Fifthly, The last rule that I shall mention is, that in all discourses wherein one man pretends to instruct or convince another, he should use the same word constantly in the same sense; if this

were done (which no body can refuse, without great disingenuity) many of the books extant might be spared; many of the controversies in dispute, would be at an end; several of those great volumes swollen with ambiguous words, now used in one sense, and by and by in another, would shrink into a very narrow compass: and many of the Philosophers (to mention no other) as well as Poets works, might be contained in a Nutsbel.

( 155 )

## BOOK IV.

# CHAP. I.

Of Knowledge in General.

SINCE the mind in all its thoughts and rea-fonings, has no other immediate object but its own ideas, which alone it does or can contemplate; it is evident that our knowledge is only converfant about them. Knowledge then feems to be nothing but the perception of the connexion and agreement, or disagreement and repugnancy of any of our ideas: where this perception is, there is knowledge; and where it is not, there, tho' we fancy, guess, or believe, yet we always come short of Knowledge. When we know that White is not Black, what do we but perceive that these two ideas do not agree? Or that the three angles of a Triangle, are equal to two right ones; what do we more but perceive that equality to two right ones, does necessarily agree to, and is inseparable from the three angles of a Triangle? But to understand a little more distinctly, wherein this agreement or disagreement consists; we may reduce it all to these four forts; First, Identity or

Diversity; Secondly, Relation; Thirdly, Co-existence; Fourthly, Real Existence.

- 1. Identity or Diversity: 'tis the first act of the mind, to perceive its ideas; and so far as it perceives them, to know each what it is, and thereby to perceive their difference, that is, the one not to be the other: by this the mind clearly perceives each idea to agree with it self, and to be what it is; and all distinct ideas to disagree. This it does without any pains or deduction, by its natural power of perception and distinction. This is what men of art have reduced to those general rules, viz. What is, is. And it is impossible for the same thing to be, and not to be. But no maxim can make a man know it clearer, that Round is not Square, than the bare perception of those two ideas, which the mind at first sight perceives to disagree.
- 2. The next fort of agreement or difagreement the mind perceives in any of its ideas, may be called Relative, and is nothing but the perception of the Relation, between any two ideas of what kind foever: that is, their agreement or difagreement one with another in feveral ways the mind takes of comparing them.
- 3. The third fort of agreement or disagreement to be found in our *ideas*, is *Co-existence*, or *Non-co-existence* in the same subject; and this belongs particularly to Substances. Thus when we pronounce concerning *Gold*, that it is fixed, it amounts to no

more but this, that fixedness, or a power to remain in the fire unconfumed, is an idea that always accompanies that particular fort of Yellowness, Weight, Fusibility, &c. which make our complex idea, fignished by the word Gold.

4. The fourth fort is that of actual and real Existence agreeing to any idea. Within these four forts of agreement or disagreement, I suppose is contained all the knowledge we have, or are capable of. For all that we know or can affirm concerning any idea, is, that it is, ot is not the same with some other: as that Blew is not Yellow. That it does, or does not co-exist with another in the same subject: as that Iron is susceptible of Magnetical Impressions: that it has that or this Relation to some other ideas: as that two Triangles upon equal bases between two parallels are equal; or that it has a real Existence without the mind: as that God is.

There are feveral ways wherein the mind is posfess'd of truth, each of which is called Knowledge. First, There is actual Knowledge, when the mind has a present view of the agreement or disagreement of any of its ideas, or of the Relation they have one with another. Secondly, A man is said to know any proposition, when having once evidently perceived the agreement or disagreement of the ideas whereof it consists, and so lodged it in his memory, that whenever it comes to be reslected on again, the mind affents to it without doubt or hefitation, and is certain of the truth of it. And this may be called habitual Knowledge: and thus a man may be faid to know all those truths which are lodged in his memory, by a foregoing, clear, and full perception.

Of habitual Knowledge there are two forts: the one is of fuch truths laid up in the memory, as whenever they occur to the mind, it actually perceives the Relation that is between those ideas. And this is in all those truths, where the ideas themselves, by an immediate view, discover their agreement or disagreement one with another. The other is of fuch truths, whereof the mind having been convinced, it retains the memory of the conviction, without the proofs. Thus a man that remembers certainly, that he once perceiv'd the demonstration, that the three angles of a Triangle are equal to two right ones, knows it to be true, when that demonstration is gone out of his mind, and possibly cannot be recollected: but he knows it in a different way from what he did before; namely, not by the intervention of those intermediate ideas, whereby the agreement or difagrcement of those in the proposition was at first perceiv'd; but by remembring, i.e. knowing that he was once certain of the truth of this proposition, that the three angles of a Triangle are equal to two right ones. The immutability of the same Relations between the same immutable things, is now the *idea* that shews him, that if the three angles of a Triangle were once equal to two right ones, they will always be so. And hence he comes to be certain, that what was once true, is always true; what *ideas* once agreed, will always agree; and consequently, what he once knew to be true, he will always know to be true, as long as he can remember that he once knew it.

#### CHAP. II.

# Of the Degrees of our Knowledge.

ALL our Knowledge confisting in the view the mind has of its own ideas, which is the utmost light, and greatest certainty we are capable of: the different clearness of our Knowledge, seems to lie in the different way of perception the mind has of the agreement or disagreement of any of its ideas.

When the mind perceives this agreement or difagreement of two ideas immediately by themselves, without the intervention of any other; we may call it intuitive Knowledge, in which cases the mind perceives the truth, as the eye does light, only by being directed towards it. Thus the mind perceives that White is not Black, that Three are more than Two, and equal to One and Two. This

part of Knowledge is irrefished, and like the bright sun-shine, sorces it self immediately to be perceived as soon as ever the mind turns its view that way. It is on this intuition, that depends all the certainty and evidence of our other Knowledge; which certainty every one finds to be so great, that he cannot imagine, and therefore not require a greater.

The next degree of Knowledge is, where the mind perceives not this agreement or disagreement immediately, or by the Juxta-position as it were of the ideas, because those ideas concerning whose agreement or difagreement the enquiry is made, cannot by the mind be so put together, as to shew it. In this case the mind is fain to discover the agreement or disagreement which it searches, by the intervention of other ideas: and this is that which we call Reasoning: and thus if we would know the agreement or disagreement in bigness, between the three angles of a Triangle, and two right Angles; we cannot by an immediate view, and comparing them do it; because the three angles of a Triangle cannot be brought at once. and be compared with any other one, or two angles. And so of this, the mind has no immediate or intuitive Knowledge. But we must find out some other Angles, to which the three Angles of a Triangle have equality, and finding those equal to two right ones, we come to know the equality of

these three Angles to two right ones. Those intervening ideas, which serve to shew the agreement of any two others, are called *Proofs*. And where the agreement or disagreement is by this means plainly and clearly perceived, it is called *Demonstration*. A quickness in the mind to find those Proofs, and to apply them right, is, I suppose, that which is called Sagacity.

This Knowledge, tho' it be certain, is not so clear and evident as intuitive Knowledge. It requires pains and attention, and steady application of mind, to discover the agreement or disagreement of the ideas it considers, and there must be a progression by steps and degrees, before the mind can in this way arrive at certainty. Before Demonstration there was a doubt, which in intuitive Knowledge cannot happen to the mind, that has its faculty of Perception lest to a degree capable of distinct ideas, no more than it can be a doubt to the Eye (that can distinctly see White and Black) whether this Ink and Paper be all of a Colour.

Now in every step that Reason makes in demonstrative Knowledge, there is an intuitive Knowledge of that agreement or disagreement it seeks with the next intermediate idea, which it uses as a Proof; for if it were not so, that yet would need a Proof; since without the Perception of such agreement or disagreement, there is no Knowledge produced. By which it is evident, that every step in Reasoning, that produces Knowledge, has intuitive Certainty; which when the mind perceives, there is no more required but to remember it, to make the agreement or disagreement of the ideas concerning which we enquire, visible and certain. This intuitive Perception of the agreement or disagreement of the intermediate ideas in each step and progression of the Demonstration, must also be exactly carried in the mind; and a man must be sure that no part is left out; which because in long deductions, the memory cannot easily retain; this Knowledge becomes more impersect than intuitive; and men often embrace Falshoods, for Demonstrations.

It has been generally taken for granted, that Mothematicks alone are capable of demonstrative Certainty. But to have such an agreement or disagreement as may be intuitively perceived, being as I imagine not the privilege of the ideas of Number, Extension and Figure alone; it may possibly be the want of due method and application in us, and not of sufficient evidence in things, that Demonstration has been thought to have so little to do in other parts of Knowledge. For in whatever ideas the mind can perceive the agreement or disagreement immediately, there it is capable of intuitive Knowledge: and where it can perceive the agreement or disagreement or disagreement of any two ideas, by an in-

tuitive Perception of the agreement or difagreement they have with any intermediate ideas, there the mind is capable of Demonstration, which is not limited to the ideas of Figure, Number, Extension, or their Modes. The reason why it has been generally supposed to belong to them only, is because in comparing their Equality or Excess, the Modes of Numbers have every the least difference, very clear and perceivable: and in Extension, tho' every the least Excess is not so perceptible, yet the mind has sound out ways to discover the just Equality of two Angles, Extensions, or Figures; and both, that is, Numbers and Figures, can be set down by visible and lasting marks.

But in other fimple ideas, whose Modes and Differences are made and counted by Degrees, and not Quantity, we have not so nice and accurate a distinction of their Differences, as to perceive or find ways to measure their just Equality, or the least Differences. For those other simple ideas being Appearances or Sensations produced in us, by the Size, Figure, Motion, &c. of minute Corpuscles singly insensible; their different Degrees also depend on the variation of some, or all of those causes; which since it cannot be observed by us in Particles of Matter, whereof each is too subtile to be perceived, it is impossible for us to have any exact measures of the different degrees of these simple ideas. Thus, for instance, not knowing what num-

ber of Particles, nor what Motion of them is fit to produce any precise degree of Whiteness; we cannot demonstrate the certain equality of any two degrees of Whiteness, because we have no certain standard to measure them by, nor means to distinguish every the least difference: the only help we have being from our senses, which in this point fail us.

But where the difference is so great as to produce in the mind ideas clearly distinct; there ideas of Colours, as we fee in different kinds, Blue and Red (for instance) are as capable of Demonstration, as ideas of Number and Extension. What is here faid of Colours, I think, holds true in all fecondary Qualities. These two then, Intuition and Demonstration, are the degrees of our Knowledge: whatever comes short of one of these, is but Faith or Opinion, not Knowledge, at least in all general Truths. There is indeed another Perception of the mind employed about the particular Existence of finite Beings, without us, which going beyond Probability, but not reaching to either of the foregoing degrees of Certainty, passes under the name of Knowledge.

Nothing can be more certain, than that the *i-dea* we receive from an external Object is in our minds: this is *intuitive Knowledge*; but whether we can thence certainly infer the Existence of any thing without us, corresponding to that *idea*, is

that whereof fome men think there may be a question made, because men may have such an idea in their minds, when no such thing exists, no such Object affects their senses. But 'tis evident that we are invincibly conscious to our selves of a different Perception, when we look upon the Sun in the day, and think on it by night; when we actually taste Wormwood, or smell a Rose, or only think on that Savour or Odour: so that I think we may add to the two former forts of Knowledge, this also of the Existence of particular external Objects, by that Perception and Consciousness we have, of the actual entrance of ideas from them, and allow these three degrees of Knowledge, viz. intuitive, demonstrative, and sensitive.

But fince our Knowledge is founded on, and employed about our ideas only: will it follow thence that it must be conformable to our ideas, and that where our ideas are clear and distinct, obscure and consused, there our Knowledge will be so too? I answer, No: for our Knowledge consusting in the Perception of the agreement or disagreement of any two ideas; its clearness or obscurity consusts in the clearness or obscurity of that Perception, and not in the clearness or obscurity of the ideas themselves. A man (for instance) that has a clear idea of the angles of a Triangle, and of Equality to two right ones, may yet have but an obscure Perception of their agreement; and so

have but a very obscure Knowledge of it. But obscure and confused ideas can never produce any clear or distinct Knowledge; because, as far as any ideas are obscure or confused, so far the mind can never perceive clearly, whether they agree or disagree: or, to express the same thing in a way less apt to be misunderstood: he that hath not determin'd ideas to the words he uses, cannot make propositions of them, of whose truth he can be certain.

## CHAP. III.

Of the Extent of Human Knowledge.

FROM what has been faid concerning Knowledge, it follows that, First, That we can have no Knowledge farther than we have ideas.

Secondly, That we have no Knowledge farther than we can have Perception of that agreement or difagreement of our ideas, either by Intuition, Demonstration, or Sensation.

Thirdly, We cannot have an intuitive Knowledge that shall extend it self to all our ideas, and all that we would know about them; because we cannot examine and perceive all the relations they have one to another, by Juxta-position, or an immediate Comparison one with another. Thus we cannot intuitively perceive the equality of two Extensions, the difference of whose figures makes their parts uncapable of an exact immediate application.

Fourthly, Our rational Knowledge cannot reach to the whole extent of our ideas; because between two different ideas we would examine, we cannot always find such Proofs as we can connect one to another, with an intuitive Knowledge in all the parts of the Deduction.

Fifthly, Sensitive Knowledge reaching no farther than the Existence of things actually present to our senses, is yet much narrower than either of the former.

Sixthly, From all which it is evident, that the extent of our Knowledge, comes not only short of the reality of Things, but even of the extent of our own ideas. We have the ideas of a Square, a Circle and Equality, and yet perhaps shall never be able to find a Circle equal to a Square.

The Affirmations or Negations we make concerning the ideas we have, being reduced to the four forts above-mentioned, viz. Identity, Co-existence, Relation, and real Existence; I shall examine how far our Knowledge extends in each of these.

First, As to Identity and Diversity, our intuitive Knowledge is as far extended as our ideas themselves; and there can be no idea in the mind, which it does not presently by an intuitive Knowledge, perceive to be what it is, and to be different from any other.

Secondly, As to the agreement or difagreement of our ideas in Co-existence: in this our Knowledge is very short, tho' in this confists the greatest and most material part of our Knowledge, concerning Substances: for our ideas of Substances, being, as I have shewed, nothing but certain Collections of simple ideas, co-existing in one subject, (our idea of Flame, for instance, is a Body hot, luminous and moving upward.) When we would know any thing farther concerning this or any other fort of Substance, what do we but enquire what other qualities or powers these Substances have or have not? which is nothing elfe but to know what other simple ideas do, or do not co-exist with those that make up that complex idea. The reason of this is, because the simple ideas which make up our complex ideas of Substances, have no visible necessary connexion or inconfiftence with other simple ideas, whose Co-existence with them we would inform our felves about. These ideas being likewise for the most part secondary Qualities which depend upon the primary Qualities of their minute or infensible parts, or on something yet more remote from our comprehension; it is impossible we should know which have a necessary Union, or Inconsistency one with another, fince we know not the Root from whence they fpring, or the Size, Figure, and Texture of Parts on which they depend, and from which they result.

Befides this, there is no discoverable Connexion between any secondary Quality, and those primary Qualities that it depends on. We are so far from knowing what Figure, Size, or Motion produces (for instance) a yellow Colour, or sweet Taste, or a sharp Sound, that we can by no means conceive how any Size, Figure, or Motion can possibly produce in us the idea of any Colour, Taste, or Sound whatsoever; and there is no conceivable Connexion between the one and the other.

Our knowledge therefore of Co-existence reaches little farther than Experience. Some few indeed of the primary Qualities have a necessary Dependence, and visible Connexion one with another: as Figure necessarily supposes Extension, receiving or communicating Motion by Impulse, supposes Solidity. But Qualities co-existent in any subject, without this Dependence and Connexion, cannot certainly be known to co-exist any farther, than experience by our fenfes informs us. Thus, tho' upon trial we find Gold Yellow, Weighty, Malleable, Fusible and Fixed, yet because none of these have any evident Dependence, or necessary Connexion with the other; we cannot certainly know, that where any four of these are, the fifth will be there also, how highly probable soever it may be: but the highest degree of Probability, amounts not to Certainty; without which there can be no true Knowledge: for this Co-existence can be no further known, than it is perceived; and it cannot be perceived, but either in particular subjects, by the observation of our senses; or in general, by the necessary Connexion of the ideas themselves.

As to Incompatibility, or Repugnancy to Co-existence, we may know that any subject can have of each fort of primary Qualities, but one particular at once. One Extension, one Figure; and so of sensible ideas peculiar to each sense; for whatever of each kind is present in any subject, excludes all other of that sort: for instance, one subject cannot have two Smells, or two Colours at the same time.

As to Powers of Substances, which makes a great part of our enquiries about them, and is no inconfiderable branch of our Knowledge: Our Knowledge as to these reaches little farther than Experience; because they consist in a Texture and Motion of parts, which we cannot by any means come to discover; and I doubt whether with those Faculties we have, we shall ever be able to carry our general Knowledge much farther in this part. Experience is that which in this part we must depend on; and it were to be wished that it were more improved: we find the advantages fome mens generous pains, have this way brought to the stock of natural Knowledge. And if others, especially the Philosophers by fire who pretend to it, had been so wary in their Observations, and fincere in their Reports, as those who call themfelves *Philosophers* ought to have been: our acquaintance with the Bodies here about us, and our infight into their powers and operations had been yet much greater.

As to the third fort the agreement or difagreement of our ideas in any other Relation: this is the largest field of Knowledge, and it is hard to determine how far it may extend. This part depending on our fagacity in finding intermediate ideas, that may shew the Habitudes and Relations of ideas: it is an hard matter to tell when we are at an end of fuch discoveries. They that are ignorant of Algebra, cannot imagine the wonders in this kind, are to be done by it: and what further improvements and helps, advantageous to other parts of Knowledge, the fagacious mind of man may yet find out, it is not easy to determine. This at least I believe that the ideas of Quantity, are not those alone that are capable of Demonstration and Knowledge: and that other, perhaps more useful parts of Contemplation, would afford us Certainty, if Vices, Passions, and domineering interest did not oppose or menace endeavours of this kind.

The idea of a fupream Being, infinite in Power, Goodness, and Wisdom, whose Workmanship we are, and on whom we depend; and the idea of our felves, as understanding rational Creatures, would I suppose, if duly considered, afford such Foundations of our Duty, and Rules of Assien, as might

place Morality among the Sciences capable of Demonstration: wherein I doubt not but from principles as incontestable as those of the Mathematicks, by necessary consequences, the measure of Right and Wrong might be made out, to any one that will apply himfelf with the fame indifferency and attention to the one, as he does to the other of these Sciences. The Relations of other Modes may certainly be perceived as well as those of Number and Extension. Where there is no Property. there is no Injustice, is a Proposition as certain as any Demonstration in Euclid: for the idea of Property being a right to any thing; and the idea of Injustice, being the invasion or violation of that right: it is evident that thefe ideas being thus established, and these names annexed to them, I can as certainly know this Proposition to be true, as that a Triangle has three Angles equal to two right ones. Again, no Government allows absolute Liberty. The idea of Government being the establishment of Society upon certain rules or laws, which require conformity to them; and the idea of absolute Liberty. being for any one to do whatever he pleases, I am as capable of being certain of the truth of this Proposition, as of any in Mathematicks.

What has given the advantage to the *ideas* of *Quantity*, and made them thought more capable of Certainty and Demonstration, is,

First, That they can be represented by sensible

marks, which have a nearer correspondence with them, than any Words or Sounds. Diagrams drawn on paper, are copies of the ideas, and not liable to the uncertainty that words carry in their fignification. But we have no fensible Marks that refemble our moral ideas, and nothing but words to express them by; which tho', when written, they remain the same; yet the ideas they stand for, may change in the same man; and it is very seldom that they are not different in different persons.

Secondly, moral ideas are commonly more complex than figures: whence thefe two inconveniencies follow: First, That their names are of more uncertain Signification; the precise collection of simple ideas they stand for, not being so easily agreed on, and so the Sign that is used for them in Communication always, and in thinking often, does not steadily carry with it the same idea. Secondly, The Mind cannot eafily retain those precise combinations fo exactly and perfectly as is necesfary; in the examination of the Habitudes and Correspondencies, agreements or disagreements of feveral of them one with another, especially where it is to be judged of by long deductions, and the Intervention of several other complex ideas, to shew the agreement or disagreement of two remote ones.

Now one part of these disadvantages in moral ideas, which has made them be thought not capable of Demonstration, may in a good measure be remedied by Definitions, setting down that collection of simple ideas which every term shall stand for, and then using the terms steadily and constantly for that precise collection.

As to the fourth fort of Knowledge, viz. Of the real actual Existence of things, we have an intuitive Knowledge of our own Existence: a demonstrative Knowledge of the Existence of God; and a sensitive Knowledge of the Objects that present themselves to our Senses.

From what has been faid we may discover the Causes of our Ignorance, which are chiefly these three, First, Want of ideas; Secondly, Want of a discoverable connection between the ideas we have: Thirdly, Want of tracing and examining our ideas.

First, There are some things we are ignorant of for want of ideas. All the simple ideas we have, are confined to the Observation of our Senses, and the Operations of our own Minds, that we are conscious of in our selves. What other ideas it is possible other creatures may have, by the affistance of other senses and faculties more or perfecter than we have, or different from ours, it is not for us to determine; but to say or think there are no such, because we conceive nothing of them, is no better an argument, than if a blind man should be positive in it, that there was no such thing as sight and colours, because he had no manner of idea

of any fach thing. What faculties therefore other species of creatures have to penetrate into the nature and inmost constitutions of things, we know not. This we know, and certainly find, that we want other views of them, besides those we have to make discoveries of them more perfect. The intellectual and sensible world are in this perfectly alike, that the parts which we see of either of them, hold no proportion with that we see not; and whatsoever we can reach with our eyes, or our thoughts of either of them, is but a point, almost nothing, in comparison of the rest.

Another great cause of Ignorance, is the want of ideas that we are capable of. This keeps us in ignorance of things we conceive capable of being known. Bulk, Figure and Motion we have ideas of: yet not knowing what is the particular bulk, motion and figure of the greatest part of the bodies of the Universe, we are ignorant of the several Powers, Essecies and Ways of Operation, whereby the Essecies and Ways of Operation, whereby the Essecies we daily see, are produced. These are hid from us in somethings, by being too remote, in others by being too minute.

When we confider the vast distance of the known and visible parts of the world, and the reafons we have to think that what lies within our ken, is but a small part of the immense Universe; we shall then discover an huge Abyss of Ignorance. What are the particular fabricks of the great mas-

fes of Matter, which make up the whole stupenduous frame of corporeal Beings, how far they are extended, and what is their motion, and how continued, and what influence they have upon one another, are contemplations that at first glimpse our thoughts lofe themselves in. If we confine our thoughts to this little Canton, I mean this System of our Sun, and the groffer Masses of Matter that visibly move about it; what feveral forts of Vegetables, Animals, and Intellectual corporeal Beings, infinitely different from those of our little spot of Earth, may probably be in other Planets, to the knowledge of which, even of their outward figures and parts, we can no way attain, whilst we are confined to this Earth, there being no natural means, either by Senfation or Reflection, to convey their certain ideas into our minds?

There are other Bodies in the Universe, no less concealed from us by their minuteness. These infensible Corpuscles being the active parts of Matter, and the great instruments of Nature, on which depend all their secondary Qualities and Operations, our want of precise distinct ideas of their primary Qualities, keeps us in incurable Ignorance of what we desire to know about them. Did we know the mechanical affections of Rhubarb or Opium, we might as easily account for their Operations of Purging and causing Sleep, as a Watch-maker can for the motions of his watch. The dissolving

of Silver in Aqua Fortis, or Gold in Aqua Regia, and not vice versa, would be then perhaps no more difficult to know, than it is to a Smith, to underfland why the turning of one key will open a lock, and not the turning of another. But whilft we are dellitute of fenfes, acute enough to difcover the minute particles of Bodies, and to give us ideas of their mechanical affections, we must be content to be ignorant of their Properties and Operations; nor can we be affured about them any farther, than fome few trials we make, are able to reach: but whether they will fucceed again another time, we cannot be certain. This hinders our certain knowledge of univerfal truths concerning natural Bodies: and our reason carries us herein very little beyond particular matter of fact. And therefore I am apt to doubt, that how far focuer human Industry may advance useful and experimental Philosophy in physical things, yet scientifical will still be out of our reach : because we want perfect and adequate ideas of those very Bodies which are nearest to us, and most under our command.

This at first sight shows us how disproportionate our knowledge is to the whole extent, even of material Beings: to which, if we add the consideration of that infinite number of Spirits that may be, and probably are, which are yet more remote from our Knowledge, whereof we have no cogni-

zance: we shall find this cause of Ignorance, conceal from us in an impenetrable obscurity, almost the whole intellectual world: a greater certainly and a more beautiful world than the material. For bating some very few ideas of Spirit, we get from our own mind by reflection, and from thence the best we can collect, of the Father of all Spirits, the Author of them, and us, and all things: we have no certain Information, so much as of the Existence of other Spirits but by Revelation: much less have we distinct ideas of their different Natures. States, Powers, and feveral Constitutions, wherein they agree or differ one from another, and from us. And therefore in what concerns their different Species and Properties, we are under an absolute Ignorance.

The fecond Cause of Ignorance is the want of discoverable connection between those ideas we have; where we want that, we are utterly incapable of universal and certain Knowledge; and are, as in the former case, lest only to Observation and Experiment. Thus the mechanical affections of Bodies, having no affinity at all with the ideas they produce in us, we can have no distinct Knowledge of such Operations beyond our Experience; and can reason no otherwise about them, than as the effects or appointment of an infinitely wise Agent, which perfectly surpass our comprehensions.

The Operation of our minds upon our bodies, is

as unconceivable. How any *Thought* should produce a motion in *Body*, is as remote from the nature of our *ideas*, as how any *Body* should produce any *thought* in the *mind*. That it is so, if experience did not convince us, the consideration of the things themselves, would never be able in the least to discover to us.

In some of our ideas there are certain Relations, Habitudes, and Connexions, so visibly included in the nature of the ideas themselves, that we cannot conceive them separable from them by any power whatsoever: in these only we are capable of certain and universal knowledge. Thus the idea of a right-lined Triangle, necessarily earries with it an Equality of its Angles to two right ones. But the coherence and continuity of the parts of matter; the production of Sensation in us, of Colours and Sounds, &cc. by Impulse, and Motion, being such wherein we can discover no natural Connexion with any ideas we have, we cannot but ascribe them to the arbitrary will and good pleasure of the wise Architect.

The things that we observe constantly to proceed regularly, we may conclude do act by a law set them; but yet by a law that we know not; whereby, tho' causes work steadily, and effects constantly flow from them; yet their connexions and dependencies being not discoverable in our ideas, we can have but an experimental know-

ledge of them. Several effects come every day within the notice of our Senles, of which we have to far fensitive Knowledge. But the Causes, Manner, and Certainty of their Production, we must for the foregoing reasons be content to be ignorant of. In these we can go no farther than particular Experience informs us of matter of sact, and by Analogy, guess what effects the like Bodies are upon other Trials like to produce. But as to perfect science of natural Bodies (not to mention spiritual Beings) we are, I think, so far from being capable of any such thing, that I conclude it lost labour to feek after it.

The third cause of Ignorance is our want of tracing these ideas we have, or may have; and finding out those intermediate ideas which may show us what Habitude of Agreement or Disagreement they may have one with another: and thus many are ignorant of mathematical Truths, for want of application in enquiring, examining, and by due ways comparing those ideas.

Hitherto we have examined the Extent of our Knowledge, in respect of the several sorts of Beings that are. There is another Extent of it, in respect of Univerfality, which will also deserve to be considered; and in this regard our Knowledge follows the Nature of our ideas. If the ideas are abstract, whose agreement or disagreement we perceive, our Knowledge is universal. For what is known

of such general ideas, will be true of every particular thing in which that Essence, that is, that abssection is to be found: and what is once known of such ideas, will be perpetually, and for ever true. So that as to all general Knowledge, we must search and find it only in our own minds: and it is only the examining of our own ideas, that surnishes us with that. Truths belonging to Essences of things (that is, to abstract ideas) are eternal, and are to be found out by the Contemplation only of those Essences; as the Existence of things is to be known only from Experience. But I shall say more of this in the following Chapters, where I shall speak of general, and real Knowledge.

### CHAP. IV.

# Of the Reality of our Knowledge.

Doubt not but my Reader by this time, may be apt to think that I have been all this while only building a Castle in the Air; and be ready to object, If it be true, that all Knowledge lies only in the perception of the agreement or disagreement of our own ideas, the visions of an Enthusias, and the reasonings of a solver man will be equally certain: it is no matter how things are, so a man observe but the agreement of his own imaginations, and talk conformably, It is all Truth, all Cer-

tainty. That an Harpy is not a Centaur, is by this way as certain Knowledge, and as much Truth, as that a Square is not a Circle. But of what use is all this Knowledge of mens own Imaginations, to a man that enquires after the reality of things?

To which I answer, That if our Knowledge of our ideas should terminate in them, and reach no farther, where there is something farther intended, our most serious thoughts would be of little more use, than the Reveries of a crazy brain. But I hope, before I have done, to make it evident, that this way of Certainty by the Knowledge of our own ideas, goes a little farther than bare Imagination: and that all the Certainty of general Truths a man has, lies in nothing else but this Knowledge of our ideas.

'Tis evident that the mind knows not things immediately, but by the intervention of the ideas it has of them. Our Knowledge therefore is real, only so far as there is a conformity between our ideas, and the reality of things. But how shall we know when our ideas agree with things themfelves? I answer, there be two forts of ideas that we may be affured agree with things: these are,

First, Simple ideas; which fince the mind can by no means make to it felf, must be the effect of things operating upon the mind in a natural way; and producing therein those perceptions, which by the will of our Maker, they are ordained and adapted to. Hence it follows, that fimple ideas are not fictions of our fancies, but the natural and regular productions of things without us, really operating upon us; which carry with them all the conformity our state requires, which is to represent things under those appearances they are fitted to produce in us. Thus the idea of Whiteness, as it is in the mind, exactly answers that power which is in any body to produce it there. And this conformity between our simple ideas, and the existence of things is sufficient for real Knowledge.

Secondly, All our complex ideas, except those of Substances, being Archetypes of the mind's own making, and not referred to the existence of things as to their originals, cannot want any conformity necessary to real Knowledge. For that which is not defigned to represent any thing but it felf, can never be capable of a wrong representation. Here the ideas themselves are considered as Archetypes, and things no otherwise regarded, than as they are conformable to them. Thus the Mathematician confiders the Truth and Properties belonging to a Rectangle or Circle only, as they are ideas in his own mind, which possibly he never found existing mathematically, that is, precifely true: yet his knowledge is not only certain, but real; because real things are no farther concern'd nor intended to be meant by any fuch propositions, than as things really agree to those Archetypes in his

mind. It is true of the idea of a Triangle, that its three Angles are equal to two right ones; it is true also of a Triangle where-ever it exists: what is true of those Figures, that have barely an ideal existence in his mind, will hold true of them also, when they come to have a real existence in Matter.

Hence it follows, that moral Knowledge is as capable of real Certainty as Mathematicks. For Certainty being nothing but the Perception of the agreement or difagreement of our ideas, and Demonstration nothing but the Perception of such agreement by the intervention of other ideas; our moral ideas as well as mathematical, being Archetypes themselves, and so adequate or complete ideas, all the agreement or difagreement we shall find in them, will produce real Knowledge as well as in mathematical Figures. That which is requisite to make our Knowledge certain, is the clearness of our ideas; and that which is required to make it real, is, that they answer their Archetyses.

But it will here be faid, that if moral Knowledge be placed in the Contemplation of our own moral ideas; and those be of our own making, what strange notions will there be of Justice and Temperance? What consusion of Virtues and Vices, if every man may make what ideas of them he pleafes? I answer, No consusion nor disorder at all,

in the things themselves, nor the reasonings about them, no more than there would be a change in the properties of Figures, and their Relations one to another, if a man should make a Triangle with four Corners, or a Trapezium with four Right Angles; that is, in plain English, change the names of the Figures, and call that by one name, which is called ordinarily by another. The change of name will indeed at first disturb him, who knows not what idea it stands for: but as foon as the Figure is drawn, the confequences and demonstration are plain and clear. Just the same is it in moral Knowledge: let a man have the idea of taking from others, without their confent, what they are justly possessed of, and call this Justice if he pleases; he that takes the name here, without the idea put to it, will be mistaken by joining another idea of his own to that name; but strip the idea of that name, or take it fuch as it is in the Speaker's mind; and the fame things will agree to it, as if you called it Injustice.

One thing we are to take notice of, That where God, or any other Law-maker, has defined any moral names, there they have made the Effence of that Species to which that name belongs: and there it is not fafe to apply, or use them otherwise. But in other cases it is bare impropriety of Speech, to apply them contrary to the common usage of the country they are used in.

Thirdly, But the complex ideas which we refer to Archetypes without us, may differ from them, and fo our Knowledge about them may come fhort of being real: and fuch are our ideas of Substances. These must be taken from something, that does or has existed, and not be made up of ideas arbitrarily put together, without any real Pattern. Herein therefore is founded the Reality of our Knowledge concerning Substances, that all our complex ideas of them mult be fuch, and fuch only, as are made up of fuch fimple ones, as have been difcovered to co-exist in Nature. And our ideas being thus true, tho' not perhaps very exact Copies, are the Subjects of real Knowledge of them. Whatever ideas we have, the agreement we find they have with others will be Knowledge. If those ideas be abstract, it will be general Knowledge: but to make it real concerning Substances, the ideas must be taken from the real Existence of things. Where-ever therefore we perceive the agreement or disagreement of our ideas, there is certain Knowledge: and where-ever we are fure those ideas agree with the Reality of Things, there is certain real Knowledge.

#### CHAP. V.

### Of Truth in General.

RUTH in the proper import of the word, fignifies the joining or feparating of figns; as the things fignified by them, do agree or difagree one with another. The joining or feparating of figns, is what we call Propositions; so that Truth properly belongs only to Propositions; whereof there are two Sorts, Mental and Verbal, as there are two forts of Signs commonly made use of, Ideas and Words.

'Tis difficult to treat of mental Propositions without verbal: because in speaking of mental, we must make use of Words, and then they become verbal. Again, men commonly in their thoughts and reafonings, use words instead of ideas; especially if the subject of their meditation contains in it complex ideas. If we have occasion to form mental Propositions about White, Black, Circle, &c. we can, and often do, frame in our minds the ideas themselves, without reflecting on the Names. But when we would consider, or make Propositions about the more complex ideas, as of a Man, Vitrial, Fortitude, Glory, &c. we usually put the name for the idea; because the idea these names stand for, being for the most part consuled, imperfect, and undeter-

mined; we reflect on the names themselves, as being more clear, certain, and distinct, and readier to occur to our thoughts, than pure ideas: and so we make use of these words instead of the ideas themselves, even when we would meditate and reason within our selves, and make tacit mental Propositions.

We must then observe two sorts of Propositions, that we are capable of making. First, mental Propositions, wherein the ideas in our Understandings are put together, or separated by the mind, perceiving or judging of their agreement or disagreement. Secondly, Verbal Propositions, which are words put together, or separated in affirmative or negative Sentences: so that Proposition consists in joining or separating Signs: and Truth consists in putting together, or separating these Signs, according as the things they stand for agree or disagree.

Truth as well as Knowledge may well come under the Diffinction of Verbal and Real; that being only verbal Truth, wherein Terms are joined according to the agreement or disagreement of the ideas they stand for, without regarding whether our ideas are such as really have, or are capable of having an Existence in Nature. But then it is they contain real Truth, when these Signs are joined, as our ideas agree; and when our ideas are such as we know, are capable of having an Existence in Nature; which in Substances we cannot know, but by

knowing that fuch have existed. Truth is the marking down in words the agreement or disagreement of ideas, as it is. Falshood is the marking down in words the agreement or disagreement of ideas, otherwise than it is; and so far as these ideas thus marked by Sounds, agree to their Archetypes, so far only is the Truth real. The Knowledge of this Truth consists in knowing what ideas the words stand for, and the Perception of the agreement or disagreement of those ideas, according as it is marked by those words.

Befides Truth taken in the strict Sense beforementioned, there are other forts of Truths: as, 1st, Moral Truth, which is, speaking things according to the persuasion of our own minds. 2dly, Metaphysical Truth, which is nothing but the real Existence of things conformable to the ideas to which we have annexed their names.

These Considerations of Truth either having been before taken notice of, or not being much to our present purpose, it may suffice here only to have mentioned them.

### CHAP. VI.

Of universal Propositions, their Truth and Certainty.

HE prevailing custom of using Sounds for i-deas, even when men think and reason within their own breasts, makes the consideration of Words and Propositions so necessary a part of the Treatise of Knowledge, that it is very hard to speak intelligibly of the one, without explaining the other. And since general Truths, which with reason are most sought after, can never be well made known, and are seldom apprehended, but as conceived and expressed in words; it is not out of our way in the exam nation of our own Knowledge, to enquire into the Truth and Certainty of universal Propositions. But it must be observed, that Certainty is two-fold, Certainty of Truth, and Certainty of Knowledge.

Certainty of Truth is, when words are so put together in Propositions, as exactly to express the agreement or disagreement of the ideas they stand for; as really it is. Certainty of Knowledge, is to perceive the agreement or disagreement of ideas as expressed in any Propositions. Thus we usually call Knowing, or being certain of the Truth of any Proposition.

Now because we cannot be certain of the Truth of any general Proposition, unless we know the precise bounds and extent of the Species its terms stand for; it is necessary we should know the Esfence of each Species, which is that which constitutes and bounds it. This in all simple ideas and modes is not hard to do: for in these the real and nominal Effence being the same, there can be no doubt how far the Species extends, or what things are comprehended under each Term: which it is evident are all that have an exact Conformity with the ideas it flands for, and no other. But in fubstances wherein a real Essence, distinct from the vominal, is supposed to constitute, and bound the Species, the extent of the general word is very uncertain; because not knowing this real Essence, we cannot know what is, or is not of that Species, and confequently what may, or may not with Certainty be affirmed of it.

Hence we may fee that the names of Substances, when made to stand for Species, supposed to be constituted by real Esfences, which we know not, are not capable of conveying Certainty to the Understanding. Of the truth of general Propositions made up of such Terms, we cannot be sure. For how can we be sure that this or that Quality is in Gold, for instance, when we know not what is, or is not Gold; that is, what has, or has not the real Essence of Gold, whereof we have no idea at all.

On the other fide, the names of Substances when made use of for the complex ideas men have in their minds; tho' they carry a clear and determinate Signification with them, will not yet ferve us to make many universal Propositions, of whose truth we can be certain: because the simple ideas, out of which the complex are combined, carry not with them any discoverable Connection or Repugnancy, but with a very few other ideas. For instance, All Gold is fixed, is a Proposition we cannot be certain of, how univerfally foever it be believed: for if we take the term Gold to Stand for a real Essence, it is evident we know not what particular Substances are of that Species, and so cannot with Certainty affirm any thing univerfally of Gold. But if we make the term Gold stand for a Species, determined by its nominal Essence, be its complex idea what it will: for instance, a body Yellow, Fusible, Malleable, and very heavy; no Quality can with Certainty be denied or affirmed univerfally of it, but what has a discoverable connection, or inconsistency with that nominal Effence: Fixedness, for instance, hav. ing no necessary connection that we can discover with any fimple idea that makes the complex one, or with the whole combination together; it is impossible that we should certainly know the truth of this Proposition, All is Gold fixed.

But is not this an univerful certain Proposition, All Gold is malleable? I answer, it is so, if Malle-

ableness be a part of the complex idea, the word Gold stands for: but then here is nothing affirmed of Gold, but that, that Sound stands for an idea, in which Malleableness is contained. And such a fort of Truth and Certainty it is, to fay, a Centaur is four-footed. I imagine amongst all the secondary Qualities of Substances, and the Powers relating to them, there cannot any two be named, whose necessary Co-existence or Repugnance to co-exist can be certainly known, unless in those of the fame Senfe, which necessarily exclude one another. Thus by the Colour we cannot certainly know what Smell, Tafte, &c. any body is of. 'Tis no wonder then that Certainty is to be found but in very few general Propositions concerning Substances: our Knowledge of their Qualities and Properties goes very feldom farther than our Senfes reach, or inform us. Inquisitive and observing men may by Strength of Judgment, penetrate farther; and on Probabilites taken from wary Observations, and Hints well laid together, often guess right at what Experience has not yet discovered to them: but this is but gueffing still; it amounts only to Opinion; and has not that Certainty which is requisite to Knowledge.

To conclude: general Propositions of what kind soever, are then only capable of Certainty, when the Terms used in them, stand for such ideas, whose agreement or disagreement, as there expressed, is capable to be discovered by us. And we are then certain of their Truth or Falshood, when we perceive the *ideas* they sland for, to agree or not agree, according as they are affirmed or denied one of another; whence we may take notice, that general Certainty is never to be found but in our *ideas*. Whenever we go to seek it elsewhere in Experiment or Observations without us, our Knowledge goes not beyond particulars.

#### CHAP. VII.

# Of Maxims.

THERE are a fort of Propositions, which under the name of Maxims and Axioms, have passed for Principles of Science: and because they are self-evident, have been supposed imnate. It may be worth while to enquire into the reason of their Evidence, and examine how far they influence our other Knowledge.

Knowledge being but the Perception of the agreement or difagreement of ideas, where that agreement or difagreement is perceived immediately by it felf, without the Intervention or Help of any other ideas, there our Knowledge is felf-evident: which being fo, not only Maxims, but an infinite number of other Propositions partake equally with them in this Self-evidence. For,

In respect of Identity and Diversity, we may have as many felf-evident Propositions as we have diffinct ideas. 'Tis the first act of the mind. to know every one of its ideas by it felf, and distinguish it from others. Every one finds in himfelf, that he knows the ideas he has; that he knows also when any one is in his Understanding, and what it is; and that when more than one are there, he knows them diffinelly and unconfusedly, one from another; fo that all affirmations, or negations concerning them, are made without any possibility of Doubt or Uncertainty; and must necesfarily be affented to as foon as understood: that is, as foon as we have in our minds the ideas clear and distinct, which the Terms in the Proposition stand for. Thus a Circle is a Circle, Blue is not Red, are as felf-evident Propositions, as those general ones, What is is, and 'tis impossible for the fame thing to be and not to be; nor can the Confideration of these Axioms add any thing to the Evidence, or Certainty of our Knowledge of them.

As to the agreement or disagreement of Co-existence, the mind has an immediate Perception of this, but in very sew. And therefore, in this fort we have very little intuitive Knowledge: tho', in some sew Propositions we have. Two Bodies cannot be in the same Place, I think is a self-evident Proposition. The idea of fitting a place equal to

the contents of its superficies being annexed to our idea of Body.

As to the Relations of Modes, Mathematicians have framed many Axioms concerning that one Relation of Equality, as Equals taken from Equals, the Remainder will be equal, &c. which however received for Axioms, yet I think have not a clearer felf-evidence than these, that One and One are equal to Two: that if from the five Fingers of one Hand, you take two, and from the five Fingers of the other Hand two, the remaining Numbers will be equal. These and a thousand other such Propositions may be found in Numbers, which carry with them an equal, if not greater clearness than those mathematical Axioms.

As to real Existence, fince that has no connection with any other of our ideas, but that of our selves, and of a first Being; we have not so much as a demonstrative, much less a self-evident Knowledge, concerning the real Existence of other Beings.

In the next place let us consider what influence these Maxims have upon the other parts of our Knowledge. The rules established in the schools, that all reasonings are ex praecognitis et praeconces, seem to lay the Foundation of all other Knowledge in these Maxims, and to suppose them to be praecognita; whereby I think is meant two things:

1st, That these Axioms are those truths that are

first known to the mind: 2dly, That upon them the other parts of our Knowledge depend.

First, That these Axioms are not the truths first known to the mind, is evident from experience: for who knows not that a child perceives that a stranger is not its mather, long before he knows, that it is impossible for the same thing to be and not to be. And how many truths are there about Numbers, which the mind is perfectly acquainted with, and fully convinced of, before it ever thought on these general Maxims? Of this the Reason is plain; for that which makes the mind affent to fuch Propositions, being nothing but the Perception it has of the agreement or disagreement of its ideas, according as it finds them affirmed or denied in words one of another; and every idea being known to be what it is, and every two distinct ideas not to be the same, it must necessarily follow, that such felf-evident truths must be first known, which confift of ideas, that are first in the mind; and the ideas first in the mind, it is evident, are those of particular things; from whence, by flow degrees the Understanding proceeds to some sew general ones, which being taken from the ordinary and familiar objects of Sense, are settled in the mind, with general names to them. Thus particular ideas are first received and distinguished, and so Knowledge got about them; and next to them the less general or specifick, which are next to particular ones.

For abstract ideas are not so obvious or easy to Children, or the yet unexercised mind, as particular ones. If they seem so to grown Men, 'tis only because by constant and familiar use they are made so.

Secondly, From what has been faid, it plainly follows, that these magnified Maxims are not the principles and foundations of all our other Knowledge: for if there be a great many other truths, as felf-evident as they, and a great many that we know before them, it is impossible that they should be the Principles, from which we deduce all other Truths. Thus, that One and Two are equal to Three, is as evident, and easier known than that the Whole is equal to all its Parts. Nor after the Knowledge of this Maxim, do we know that One and Two are equal to Three, better, or more certainly than we did before. For if there be any odds in these ideas, the ideas of Whole, and Parts, are more obscure, or at least more difficult to be settled in the mind, than those of One, Two and Three. Either therefore all Knowledge does not depend on certain Praecognita, or general Maxims, called Principles; or elfe, fuch as these, (That One and One are Two, that Two and Two are Four, &c.) and a great part of Numeration will be fo. To which if we add all the felf-evident propositions

that may be made about all our distinct ideas; Principles will be almost infinite, at least innumerable, which men arrive to the Knowledge of, at different ages; and a great many of those innate Principles, they never come to know all their lives. But whether they come in view early or later, they are all known by their native evidence, and receive no light, nor are capable of any proof one from another; much less the more particular, from the more general; or the more simple from the more compounded: the more simple and less abstract, being the most familiar, and the easier and earlier apprehended.

These general Maxims then, are only of use in disputes, to stop the mouths of wranglers; but not of much use to the discovery of unknown Truths; or to help the mind forwards in its search after Knowledge. Several general Maxims, are no more than bare verbal Propositions; and teach us nothing but the respect and import of names, one to another; as, The Whole is equal to all its Parts: what real Truth does it teach us more, than what the signification of the word Totum or whole does of it self import?

But yet, Mathematicians do not without reason place this, and some other such amongst their Maxims; that their scholars having in the entrance perfectly acquainted their thoughts with these Propositions made in such general Terms, may have

them ready to apply to all particular cases: not that if they be equally weighed, they are more clear and evident, than the particular instances they are brought to confirm; but that being more familiar to the mind, the very naming them is enough to satisfy the Understanding. But this I say, is more from our custom of using them, than the different evidence of the things.

So that, if rightly consider'd, I think we may fay, that where our ideas are clear and distinct, there is little, or no use at all of these Maxims, to prove the agreement or disagreement of any of them. He that cannot discern the truth, or falshood of such Propositions, without the help of these and the like Maxims, will not be helped by these Maxims to do it. He that needs any proof to make him certain, and give his assent to this Proposition, that Two are equal to Two, or that White is not Black, will also have need of a proof to make him admit that, What is, is, or, That it is impossible for the same thing to be and not to be.

And as these Maxims are of little use, where we have clear and distinct ideas; so they are of dangerous use, where our ideas are consused, and where we use words that are not annexed to clear and distinct ideas; but to such as are of a loose and wandering signification, sometimes standing for one, and sometimes for another idea, from which sollows Mistake and Error, which these Ma-

xims (brought as proofs to establish Propositions wherein the terms stand for consused and uncertain ideas) do by their authority confirm and rivet.

### CHAP. VIII.

# Of trifling Propositions.

THERE are universal Propositions, which tho' they be certainly true, yet add no light to our Understandings, bring no increase to our Knowledge: such are,

First, All purely identical Propositions. These at first blush, appear to contain no Instruction in them: for when weaffirm the same term of it self, it shews us nothing but what we must certainly know before, whether such a Proposition be either made by, or proposed to us.

Secondly, Another fort of trifling Propositions is, when a part of the complex idea is praedicated of the name of the whole; a part of the definition, of the word defined, as, Lead is a Metal, Man an Animal. These carry no information at all, to those who know the complex ideas, the names Lead, and Man stand for: indeed to a man that knows the signification of the word Metal, and not of the word Lead, it is a shorter way to explain the signification of the word Lead, by saying it is a Metal,

than by enumerating the simple ideas one by one, which make up the complex idea of Metal.

Alike trifling it is to pracdicate any one of the fimple ideas of a complex one, of the name of the whole complex idea; as all Gold is fufible; for fufibility being one of the fimple ideas that goes to the making up the complex one, the found Gold stands for; what can it be but playing with founds, to affirm that of the name Gold, which is comprehended in its received fignification? What instruction can it carry, to tell one that which he is supposed to know before? for I am supposed to know the signification of the word another uses to me, or else he is to tell me.

The general Propositions that are made about Substances, if they are certain, are for the most part but trissing; and if they are instructive, uncertain; and such as we have no Knowledge of their real truth, how much soever constant Observation and Analogy may assist our Judgments in Guessing. Hence it comes to pass, that one may often meet with very clear and coherent discourses, that amount yet to nothing. For names of substantial Beings, as well as others, having settled Significations assisted to them, may with great truth be joined negatively and affirmatively in Propositions, as their Definitions make them fit to be so joined; and Propositions consisting of such terms, may with the same clearness be deduced

one from another, as those that convey the most real truths; and all this without any Knowledge of the nature or reality of things existing without us. Thus he that has learnt the following words, with their ordinary acceptations annexed to them, viz. Substance, Man, Animal, Form, Soul, Vegetative, Sensitive, Rational, may make several undoubted Propositions about the Soul, without any Knowledge at all of what the Soul really is. And of this fort a man may find an infinite number of Propositions, Reasonings and Conclusions in books of Metaphysicks, School-Divinity, and some part of Natural Philosophy; and after all, know as little of God, Spirits, or Bodies, as he did before he set out.

Thirdly, The worst fort of Trisling is, to use words loosely and uncertainty, which fets us yet farther from the certainty of Knowledge we hope to attain to by them, or find in them. That which occasions this, is, that men may find it convenient to shelter their ignorance or obstinacy, under the obscurity or perplexedness of their terms; to which, perhaps, inadvertency and ill custom does in many men much contribute.

To conclude, barely verbal Propositions may be known by these following marks.

First, All Propositions, wherein two abstract terms are affirmed one of another, are barely about the signification of Sounds. For since no abstract idea can be the same with any other, but it self; when its abstract name is affirmed of any other term, it can signify no more but this, that it may or ought to be called by that name; or that these two names signify the same idea.

Secondly, All Propositions, wherein a part of the complex idea, which any term stands for, is predicated of that term, are only verbal: and thus all Propositions wherein more comprehensive terms called Genera, are affirmed of subordinate, or less comprehensive, called Species, or Individuals, are barely verbal. When by these two rules we examine the Propositions that make up the discourses we ordinarily meet with, both in and out of books; we shall, perhaps find, that a greater part of them, than is usually suspected, are purely about the Signification of words, and contain nothing in them but the use and application of these Signs.

#### CHAP. IX.

# Of our Knowledge of Existence.

ITHERTO we have only confider'd the Essences of things, which being only abstract ideas, and thereby removed in our thoughts from particular Existence, give us no Knowledge of Existence at all. We proceed now to enquire concerning our Knowledge of the Existence of things and how we come by it.

I fay then, that we have the Knowledge of our own Existence, by Intuition; of the Existence of God, by Demonstration; and of other Things, by Sensation. As for our own Existence, we perceive it so plainly, that it neither needs, nor is capable of any proof. I think, I reason; I feel pleasure and pain: can any of these be more evident to me than my own Existence? If I doubt of all other things, that very Doubt makes me perceive my own Existence. and will not fuffer me to doubt of that. If I know I doubt, I have as certain a Perception of the Thing Doubting, as of that Thought which I call Doubt. Experience then convinces us that we have an intuitive Knowledge of our own Existence; and an internal infallible Perception that we are. In every act of Sensation, Reasoning or Thinking, we are conscious to our felves of our own Being, and in this matter come not short of the highest degree of Certainty.

#### CHAP. X.

Of our Knowledge of the Existence of a God.

THO' God has given us no innate ideas of himself, yet having surnished us with those faculties our minds are endowed with, he hath not left himself without a witness, since we have Sense,

Perception, and Reason, and cannot want a clear proof of him, as long as we carry ourselves about us: nor can we justly complain of our ignorance in this great point, fince he has so plentifully provided us with means to discover, and know him, so far as is necessary to the end of our Being, and the great concernment of our Happiness. But the' this he the most obvious truth that Reason discovers. vet it requires Thought and Attention; and the mind must apply it self to a regular deduction of it, from some part of our intuitive Knowledge; or else we shall be as ignorant of this as of other Propositions which are in themselves capable of clear Demonstration. To shew therefore, that we are capable of knowing, that is, being certain, that there is a God; and how we may come by this certainty, I think we need go no farther than our felves, and that undoubted Knowledge we have of our own Existence. I think it is beyond question, that man has a clear perception of his own being: he knows certainly that he exists, and that he is fomething. In the next place, man knows by an intuitive Certainty, that bare nothing can no more produce any real being, than it can be equal to two right Angles. If therefore we know there is some real Being, it is an evident Demonstration, that from Eternity there has been something; fince what was not from Eternity, had a beginning; and what had a beginning, must be

produced by something else. Next it is evident, that what has its being from another, must also have all that which is in, and belongs to its being from another too: all the powers it has must be owing to, and received from the same source. This eternal source then of all Being must be also the source and original of all Power; and so this Eternal Being must be also the most Powerful.

Again, man finds in himself Perception and Knowledge: we are certain then that there is not only some Being, but some knowing, intelligent Being in the world. There was a time then, when there was no knowing Being, or else there has been a knowing Being from Eternity. If it be said, there was a time when that Eternal Being had no Knowledge; I reply, that then it is impossible there should have ever been any Knowledge. It being as impossible that things wholly void of Knowledge, and operating blindly, and without any Perception, should produce a knowing Being, as it is that a Triangle should make it self three Angles, bigger than two right ones.

Thus from the confideration of ourselves, and what we infallibly find in our own constitutions, our reason leads us to the knowledge of this certain and evident Truth, that there is an eternal, most powerful, and knowing Being, which, whether any one will call God, it matters not. The thing is evident, and from this idea duly consideration.

red, will easily be deduced all those other Attributes we ought to ascribe to this eternal Being.

From what has been faid, it is plain to me, we have a more certain knowledge of the Existence of a God, than of any thing our senses have not immediately discovered to us. Nay, I presume I may say, that we more certainly know that there is a God, than that there is any thing else without us. When I say, we know, I mean, there is such a Knowledge within our reach, which we cannot miss, if we will but apply our minds to that, as we do to several other Enquiries.

It being then unavoidable for all rational Creatures to conclude, that fomething has existed from Eternity; let us next see what kind of Thing that must be. There are but two forts of Beings in the world, that man knows or conceives: 1st, Such as are purely material, without sense or perception, as the clippings of our beards, and parings of our nails. 2dly, Sensible perceiving Beings; such as we find our selves to be. These two forts we shall hereaster call Cogitative and Incogitative Beings: which to our present purpose are better than material and immaterial.

If then there must be something Eternal, it is very obvious to Reason, that it must necessarily be a Cogitative Being; because it is as impossible to conceive that ever bare Incogitative Matter should produce a thinking intelligent Being, as that nothing

should of it self produce Matter. Let us suppose any parcel of matter Eternal, we shall find it in it felf unable to produce any thing. Let us suppose its parts firmly at reft together: if there were no other Being in the world, must it not eternally remain fo, a dead unactive lump? Is it possible to conceive it can add motion to it fell, or produce any thing? Matter then by its own flrength cannot produce in it felf, so much as Motion. The motion it has, must also be from Eternity, or else added to Matter by some other Being, more powerful than Matter. But let us suppose Motion eternal too, yet Matter, Incogitative Matter and Motion could never produce Thought: Knowledge will flill be as far beyond the power of motion and matter to produce, as matter is beyond the power of Nothing to produce. Divide matter into as minute parts as you will, vary the figure and motion of it, as much as you pleafe, it will operate no otherwise upon other Bodies of proportionable bulk, than it did before this division. The minutest particles of Matter, knock, impel, and refift one another, just as the greater do, and that is all they can do, fo that if we will suppose Nothing Eternal, Matter can never begin to be. If we suppose bare Matter without Motion Eternal, Motion can never begin to be. If we suppose only Matter and Motion Eternal, Thought can never begin to be: for it is impossible to conceive, that Matter, either with or without Motion, could have originally in and from it felf, Senfe, Perception, and Knowledge, as is evident fromhence, that then Senfe, Perception, and Knowledge, must be a Property eternally inseparable from Matter, and every particle of it. Since therefore whatsoever is the first eternal being, must necessarily be Cogitative: and whatsoever is first of all things, must necessarily contain in it, and actually have, at least, all the persections that can ever after exist, it necessarily follows, that the First Eternal Being cannot be Matter.

If therefore it be evident that fomething necessarily must exist from Eternity, it is also as evident that, that Something must necessarily be a cogitative Being. For it is as impossible that incogitative Matter should produce a cogitative Being, as that nothing, or the negation of all Being should produce

a politive Being or Matter.

This diffeovery of the necessary Existence of an eternal Mind, does sufficiently lead us into the Knowledge of God. For it will hence follow, that all other knowing Beings, that have a beginning, must depend on him, and have no other ways of Knowledge or extent of Power, than what he gives them: and therefore if he made those, he made also the less excellent pieces of this Universe, all inanimate Bodies, whereby his Omniscience, Power, and Providence will be established; and from thence all his other attributes necessarily follow.

#### CHAP. XI.

Of our Knowledge of the Existence of other Things.

HE Knowledge of our own Being we have by Intuition: the Existence of a God, Reafon clearly makes known to us, as has been shewn: the Knowledge of the Existence of any other thing, we can have only by Senfation; for there being no necessary Connection of real Existence with any idea a man hath in his memory; nor of any other Existence, but that of God, with the Existence of any particular man; no particular man can know the Existence of any other Being, but only, when by actually operating upon him, it makes it felf be perceived by him. The having the idea of any thing in our mind, no more proves the Existence of that thing, than the picture of a man evidences his being in the world, or the visions of a dream, make thereby a true history. It is therefore the actual receiving of ideas from without, that gives us notice of the Existence of other things, and makes us know that fomething doth exist at that time without us, which causes that i-'dea in us, tho' perhaps we neither know nor confider how it does it; for it takes not from the Cersainty of our Senses, and the ideas we receive by

them, that we know not the manner wherein they are produced. This Notice we have by our Senses of the existing of things without us, tho' it be not altogether to certain as Intuition and Demonstration, descrives the name of Knowledge, if we perfuade our felves that our faculties act and inform us right, concerning the Existence of those objects that affect them. But besides the assurance we have from our Senses themselves, that they do not err in the Information they give us of the Exiftence of things without us, we have other concurrent Reasons: as, First, It is plain those Perceptions are produced in us, by exteriour Causes affecting our Senses, because those that want the Organs of any fenfe, never can have the ideas belonging to that fense produced in their minds. This is too evident to be doubted, and therefore we cannot but be affored, that they come in by the Organs of that Sense, and no other way.

Secondly, Because we find sometimes that we cannot avoid the having those ideas produced in our minds; when my eyes are shut, I can at pleasure recall to my mind the ideas of Light or the Sun, which former Sensations had lodged in my memory; but if I turn my eyes towards the Sun, I cannot avoid the ideas which the Light or the Sun then produces in me: which shews a manifest difference between those ideas laid up in the memory, and such as some themselves upon us, and we

cannot avoid having. And therefore it must needs be some exterior cause, whose efficacy I cannot resist, that produces those ideas in my mind, whether I will or no.

Befiles, there is no body who doth not perceive the difference in himfelf, between actually looking upon the Sun, and contemplating the idea he has of it in his memory; and therefore he hath certain Knowledge, that they are not both memory or fancy; but that actual feeing has a cause without.

Thirdly, Add to this, that many ideas are produced in us with pain, which we afterwards remember without the least offence. Thus the pain of Heat or Cold, when the idea of it is received in our minds, gives us no diffurbance; which when felt was very troublesome; and we remember the pain of Hunger, Thirst, Head-Ach, &c. without any pain at all; which would either never diffurb us, or else constantly do it, as often as we thought of it, were there nothing more but ideas floating in our minds, and appearances entertaining our fancies, without the real Existence of things affecting us from abroad.

Fourthly, Our fenses in many cases bear witness to the truth of each others report, concerning the Existence of sensible things without us: he that doubts when he sees a Fire, whether it be real, may, if he please, feel it too; and by the exquisite

pain he will be convinced, that it is not a bare idea or phantom.

If after all this, any one will be fo fceptical, as to distrust his fenses, and to question the Existence of all things, or our Knowledge of any thing; let him confider that the Certainty of things existing in rerum natura, when we have the testimony of our fenfes for it, is not only as great as our frame can attain to, but as our condition needs. For our faculties being not suited to the full Extent of Being, nor a clear comprehensive knowledge of all things, but to the preservation of us, in whom they are, and accommodated to the use of life: they serve our purpose well enough, if they will but give us certain notice of those things, that are convenient or inconvenient to us. For he that fees a Candle burning, and has experimented the force of the flame, by putting his finger in it, will little doubt, that this is fomething existing without him, which does him harm and puts him to pain, which is affurance enough; when no man requires greater certainty to govern his actions by, than what is as certain as his actions themselves: fo that this evidence is as great as we can defire, being as certain to us as our pleasure or pain, that is, Happiness or Milery, beyond which we have no concernment either of Knowing, or Being.

In fine, when our fenfes do actually convey into

our Understandings any idea, we are assured that there is something at that time really existing without us. But this Knowledge extends only as far as the present testimony of our senses, employed about particular Objects, that do then affect them, and no farther. My seeing a Man a minute since, is no certain argument of his present Existence.

As when our fenses are actually employed about any Object, we know that it does exist; so by our memory we may be assured, that heretofore things that affected our senses, have existed: and thus we have the Knowledge of the past Existence of several things; whereof our senses having inform'd us, our memories still retain the ideas: and of this we are past all doubt, so long as we remember well.

As to the Existence of spirits, our having ideas of them, does not make us know, that any such things do exist without us; or that there are any finite spirits; or any other spiritual beings but the Eternal God. We have ground from Revelation, and several other reasons, to believe with assurance, that there are such Creatures: but our senses not being able to discover them, we want the means of knowing their particular Existence; for we can no more know that there are finite spirits really existing, by the idea we have of such Beings, than by the ideas any one has of Faries or Centaurs, he

can come to know that things answering those ideas, do really exist.

Hence we may gather, that there are two forts of Propositions, One concerning the Existence of any thing answerable to such an idea; as that of an Elephant, Phoenix, Motion, or Angel, viz. Whether such a thing does any where exist: and this Knowledge is only of Particulars, and not to be had of any thing without us, but only of God, any other way than by our senses.

Another fort of Proposition is, wherein is expresfed the agreement or disagreement of our abstract ideas, and their dependence one on another. And these may be universal and certain: so having the idea of God, and my felf, of Fear and Obedience, I cannot but be fure that God is to be feared and obeyed by me; and this Proposition will be certain concerning Man in general; if I have made an abstract idea of such a species, whereof I am one particular. But fuch a Proposition, how certain foever, proves not to me the Existence of men in the world; but will be true of all fuch Creatures, whenever they do exist: which Certainty of such general Propositions, depends on the agreement or disagreement discoverable in those abstract i.leas. In the former case, our Knowledge is the consequence of the Existence of things, producing ideas in our minds by our fenfes: in the latter, the con-

sequence of the ideas that are in our minds, and producing these general Propositions, many whereof are called Eternae veritates; and all of them indeed are so, not from being written all, or any of them in the minds of all men, or that they were any of them Propositions in any ones mind, till he having got the abstract ideas, joined or separated them by affirmation or negation: but wherefoever we can suppose such a Creature as Man is, endowed with fuch faculties, and thereby furnished with fuch ideas as we have; we must conclude, he must needs, when he applies his thoughts to the confideration of his ideas, know the truth of certain Propositions, that will arise from the agreement or difagreement he will perceive in his own ideas. Such Propositions being once made about abstract ideas, so as to be true, they will, whenever they can be supposed to be made again, at any time past, or to come, by a mind having those ideas, always be true. For names being supposed to stand perpetually for the same ideas; and the same ideas having immutably the fame habitudes one to another; Propositions concerning any abstract ideas that are once true, must needs be eternal Verities.

### CHAP. XII.

# Of the Improvement of our Knowledge.

It being the received opinion amongst men of letters, that maxims are the foundations of all Knowledge, and that Sciences are each of them built upon certain Praecognita, from whence the Understanding was to take its rife, and by which it was to conduct itself in its inquiries in the matters belonging to that fcience, the beaten road of the schools has been to lay down in the beginning one or more general Propositions, called Principles, as foundations whereon to build the Knowledge, that was to be had of that subject.

That which gave occasion to this way of proceeding, was, I suppose, the good success it seemed to have in Mathematicks, which of all other sciences, have the greatest certainty, clearness, and evidence, in them. But if we consider it, we shall find that the great advancement and certainty of real Knowledge men arrived to in these friences, was not owing to the influence of these Principles, but to the clear distinct and compleat ideas their thoughts were employed about; and the relation of Equality and Excess, so clear between some of them, that they had an intuitive Knowledge; and by that a

way to discover it in others: and this without the help of those maxims. For Iask, Is it not possible for a lad to know that his whole body is bigger than. his little finger, but by virtue of this Axiom, the whole is bigger than the part; nor be affured of it, till he has learned that maxim? Let any one confider from what has been elfewhere faid, which is known first and clearest by most people, the particular instance, or the general rule; and which it is that gives life and birth to the other. These general rules are but the comparing our more general and abstract ideas, which ideas are made by the mind, and have names given them, for the eafier dispatch in its reasonings: but Knowledge began in the mind, and was founded on Particulars, tho' afterwards perhaps no notice be taken thereof: it being natural for the mind, to lay up those general notions, and make the proper use of them, which is to disburthen the memory of the cumberfome load of Particulars.

The way to improve in Knowledge, is not to fwallow Principles, with an Implicit Faith, and without Examination, which would be apt to missead men, instead of guiding them into truth; but to get and fix in our minds, clear and complete ideas, as far as they are to be had, and annex to them proper and constant names: and thus barely by considering our ideas, and comparing them together, observing their agreement or disagreement.

their habitudes and relations, we shall get more true and clear Knowledge by the conduct of this one Rule, than by taking up Principles, and thereby putting our minds into the disposal of others.

We must therefore, if we will proceed as Reafon advises, adapt our methods of Inquiry, to the nature of the ideas we examine, and the truth we fearch after. General and certain Truths, are only founded in the habitudes and relations of abstract ileas. Therefore a fagacious methodical application of our thoughts for the finding out these Rclations, is the only way to discover all that can with Truth and Certainty be put into general Propositions. By what fleps we are to proceed in these, is to be learned in the schools of the Mathematicians, who from very plain and eafy beginnings, by gentle degrees, and a continued chain of Reasonings, proceed to the discovery and demonstration of Truths, that appear at first fight beyond humane Capacity. This, I think I may fay, that if other ideas, that are real as well as nominal Effences of their species, were pursued in the way familiar to Mathematicians, they would carry our thoughts farther and with greater Evidence and Clearness, than possibly we are apt to imagine. This gave me the Confidence to advance that Conjecture, which I fuggest, Chapter the Third, viz. that Morality is capable of Demonstration, as well as Mathematicks: for moral ideas being real

Effences, that have a discoverable Connexion and Agreement one with another, so far as we can find their Habitudes and Relations, so far we shall be possessed of real and general Truths.

In our Knowledge of Substances, we are to proceed after a quite different method: the bare Contemplation of their abstract ideas (which are but nominal Effences) will carry us but a very little way, in the fearch of Truth and Certainty. Here Experience must teach us what Reason cannot: and it is by trying alone, that we can certainly know, what other Qualities co-exist with those of our complex idea; (for instance) Whether that Yellow heavy fulible Body, I call Gold, be malleable, or no; which Experience (however it prove in that particular body we examine) makes us not certain that it is so in all, or any other yellow, heavy, fusible Bodies, but that which we have tried; because it is no consequence one way or the other from our complex idea: the necessity or inconsistence of Malleability, hath no visible Connexion with the combination of that Colour, Weight, and Fusibility in any Body. What I have here faid of the nominal Essence of Gold, supposed to consist of a Body of fuch a determinate Colour, Weight, and Fusibility. will hold true, if other Qualities be added to it. Our Reasonings from those ideas, will carry us but a little way in the certain Discovery of the other Properties, in those Masses of Matter wherein all those are to be found. As far as our Experience reaches, we may have certain knowledge, and no farther.

I deny not, but a man accustomed to rational and regular Experiments, shall be able to see farther into the nature of Bodies, and their unknown Properties, than one that is a stranger to them. But this is but Judgment and Opinion, not Knowledge and Certainty. This makes me suspect that Natural Philosophy is not capable of being made a science: from Experiments and historical Observations we may draw Advantages of Ease and Health, and thereby increase our slock of Conveniences for this Life: but beyond this, I sear our Talents reach not; nor are our faculties, as I guess, able to advance.

From whence it is obvious to conclude, that fince our faculties are not fitted to penetrate the real Effences of Bodies, but yet plainly to discover to us the Being of a God, and the Knowledge of our felves; enough to give us a clear Discovery of our Duty, and great Concernment; it will become us as rational Creatures, to employ our Faculties, about what they are most adapted to, and follow the Direction of Nature, where it seems to point us out the way. For it is rational to conclude, that our proper Employment lies in those Inquiries, and that fort of Knowledge which is most fuited to our natural Capacities, and carries in it

our greatest interest, that is, the condition of our eternal State: and therefore it is, I think, that morality is the proper science and business of mankind in general (who are both concerned and sitted to search out their Summum Bonum) as several Arts conversant about the several parts of nature, are the lot and private talent of particular men, for the common use of human life, and their own particular Subsistence in this World.

The ways to enlarge our Knowledge, as far as we are capable, feem to me to be thefe two: the first is to get and settle in our minds, as far as we can, clear, distinct, and constant ideas of those things we would consider and know. For it being evident that our Knowledge cannot exceed our ideas; where they are either impersect, consused, or obscure, we cannot expect to have certain, persect, or clear Knowledge. The other is the art of finding out the intermediate ideas, which may shew us the Agreement or Repugnancy of other ideas, which cannot be immediately compared.

That these two (and not the relying on maxims, and drawing consequences from some general Propositions) are the right method of improving our Knowledge, in the ideas of other modes, besides those of Quantity, the Consideration of mathematical Knowledge will easily inform us. Where First, we shall find that he that has not clear and perfect ideas of those Angles or Figures, of which he

defires to know any thing, is utterly thereby incapable of any Knowledge about them. Suppose a man not to have an exact idea of a right Angle. Scalenum, or Trapezium, and it is clear, that he will in vain feck any Demonstration about them. And farther it is evident, that it was not the influence of maxims or principles, that has led the matters of this Science into those wonderful Discoveries they have made. Let a man of good parts know all the maxims of Mathematicks never so well, and contemplate their Extent and Confequences as much as he pleases, he will by their affistance, I suppose, scarce ever come to know, that the square of the Hypotenuse, in a right-angled Triangle, is equal to the squares of the two other fides. This, and other mathematical Truths have been discovered by the Thoughts, otherwise applied. The mind had other objects, other views before it, far different from those maxims which men well enough acquainted with those received Axioms, but ignorant of their method, who first made these Demonstrations, can never sufficiently admire.

#### CHAP. XIII.

Some further Confiderations concerning Knowledge.

UR Knowledge, as in other things, fo in this, has a great Conformity with our fight, that it is neither wholly necessary, nor wholly voluntary. Men that have fenses cannot chuse but receive fome ideas by them; and if they have memory, they cannot but retain fome of them; and if they have any diffinguishing Faculty, cannot but perceive the Agreement or Difagreement of some of them, one with another. As he that has Eyes, if he will open them by day, cannot but see some Objects, and perceive a difference in them; yet he may chuse whether he will turn his Eyes towards an Object; curiously survey it, and observe accurately all that is visible in it. But what he does fee, he cannot fee otherwife than he does : it depends not on his Will, to fee that Black which appears Yellow. Just thus it is with our Un lerstanding: all that is voluntary in our Knowledge, is the employing or with-holding any of our Faculties from this or that fort of Objects; and a more or less accurate Survey of them: but they being employed, our Will hath no power to determine

the Knowledge of the mind, one way or other. That is done only by the *Objects* themselves, as far as they are clearly discovered.

Thus he that has got the ideas of Numbers, and hath taken the pains to compare One, Two and Three, to Six, cannot chuse but know that they are equal. He also that hath the idea of an intelligent, but weak and srail Being, made by, and depending on another, who is Eternal, Omnipotent, persectly wise and good, will as certainly know, that man is to honour, sear, and obey God, as that the Sun shines when he sees it. But yet these Truths, being never so certain, never so clear, he may be ignorant of either or both of them, who will not take the pains to employ his Faculties as he should, to inform himself about them.

### CHAP. XIV.

# Of Judgment.

HE Understanding Faculties being given to man, not barely for Speculation, but also for the Conduct of his Life: a man would be at a great loss if he had nothing to direct him but what has the Certainty of true Knowledge. He that will not eat till he has Demonstration that it will nourish him; nor stir, till he is infallibly as-

fured of success in his business, will have little else to do but sit still and perish.

Therefore as God hath fet some things in broad Day-light; as he has given us some certain Knowledge, tho' limited to a sew things, in comparison, (probably as a taste of what intellectual creatures are capable of, to excite in us a desire and endeavour after a better State) so in the greatest part of our Concernment, he has afforded us only the Twilight, as I may so say, of Probability, suitable to that state of Mediocrity and Probationership, he has been pleased to place us in here.

The Faculty which God has given man to enlighten him, next to certain Knowledge, is Judgment, whereby the mind takes its idea to agree or difagree, without perceiving a demonstrative Evidence in the Proofs. The mind exercises this Judgment, sometimes out of Necessity, where demonstrative Proofs, and certain Knowledge are not to be had; and sometimes out of Lexiness, Unskilfulness, or Haste, even where they are to be had.

This Faculty of the Mind when it is exercifed immediately about things, is called Judgment; when about truths delivered in words, is most commonly called Assent, or Dissent. Thus the mind has two Faculties conversant about Truth and Falshood: 1st, Knowledge, whereby it certainly perceives, and is undoubtedly satisfied of the Agree-

ment or Disagreement of any ideas. 2dly, Judgment, which is the putting ideas together, or separating them from one another in the mind, when their certain Agreement or Disagreement is not perceived, but prefumed to be so. And if it so unites or separates them, as in reality things are, it is right Judgment.

#### CHAP. XV.

## Of Probability.

Robability is nothing but the appearance of the Agreement or Disagreement of two ideas, by the Intervention of Proofs, whose Connexion is not constant, and immutable; or is not perceived to be so; but is, or appears for the most part to be so, and is enough to induce the mind to judge the Proposition to be true or false, rather than the contrary.

Of Probability there are degrees from the neighbourhood of Certainty and Demonstration, quite down to Improbability and Unlikeliness, even to the confines of Impossibility: and also degrees of Assent from certain Knowledge and what is next it, full Assurance and Considence, quite down to Conjecture, Doubt, Distrust, and Disbeliess.

That Proposition then is probable, for which there are arguments or proofs to make it pass, or be received for true. The Entertainment the mind gives to this fort of Propositions, is called Belief, Assent, or Opinion. Probability then being to supply the defect of our Knowledge, is always conversant about Propositions, whereof we have no Certainty, but only some Inducements to receive them for true. The Grounds of it are in short these two following.

First, The Conformity of any thing with our own Knowledge, Experience, or Observation.

Secondly, The Testimony of others, vouching their Observation and Experience. In the Testimony of others, is to be considered; 1st, The Number; 2dly, The Integrity; 3dly, The Skill of the Witnesses; 4thly, The Design of the Author, if it be a Testimony cited out of a Book; 5thly, The Consistency of the Parts and Circumstances of the Relation; 6thly, Contrary Testimonies.

The mind before it rationally affents or diffents to any probable Proposition, ought to examine all the grounds of Probability, and see how they make, more or less, for or against it; and upon a due balancing of the whole, reject or receive it, with a more or less firm Assent, according to the Preponderancy of the greater Grounds of Probability, on one side or the other.

#### CHAP. XVI.

## Of the Degrees of Affent.

HE Grounds of Probability Laid down in the foregoing Chapter, as they are the foundations on which our Affent is built, fo are they also the measure whereby its feveral Degrees are (or ought) to be regulated. Only we are to take notice, that no grounds of Probability operate any farther on the mind, which fearches after Truth, and endeavours to judge right, than they appear; at least in the first Judgment, or Search that the mind makes. It is indeed in many cases impossible, and in most very hard, even for those who have admirable memories, to retain all the Proofs, which upon a due Examination, made them embrace that fide of the question. It suffices that they have once with care and fairness, sisted the matter as far as they could; and having once found on which fide the Probability appeared to them, they lay up the Conclusion in their memories, as a Truth they have discovered; and for the future remain fatiffied with the Testimony of their memories, that this is the Opinion, that by the Proofs they have once feen of it, deserves such a Degree of their Affent as they afford it.

It is unavoidable then that the memory be relied on in this case, and that men be persuaded of several Opinions, whereof the Proofs are not actually in their thoughts, nay, which perhaps they are not able actually to recal: without this the greatest part of men, must be either Scepticks, or change every moment, when any one offers them arguments, which for want of memory, they are not presently able to answer.

It must be owned that mens sticking to past Judgments, is often the cause of great Obstinacy in Error and Mistake. But the fault is not, that they rely on their memories for what they have before well judged, but because they judged before they had well examined. Who almost is there that hath the Leifure, Patience, and Means to collect together, all the Proofs concerning most of the Opinions he has, fo as fafely to conclude that he has a clear and full view, and that there is no more to be alledged for his better Information? And yet we are forced to determine our felves on one fide or other: the conduct of our Lives, and the management of our great Concerns, will not bear Delay. For those depend for the most part on the determination of our Judgment in points wherein we are not capable of certain Knowledge, and wherein it is necessary for us to embrace one side or the other.

The Propositions we receive upon inducements

of Probability, are of two forts: First, Concerning fome particular Existence, or matter of Fact, which falling under Observation, is capable of human Testimony. Secondly, Concerning things, which being beyond the discovery of our Senses, are not capable of human Testimony.

Concerning the first of these, viz. Particular matter of Fact.

First, Where any particular thing, consonant to the constant Observation of our selves and others in the like case, comes attested with the concurrent Reports of all that mention it, we receive it as easily, and build as firmly upon it, as if it were certain Knowledge. Thus, if all Englishmen who have occasion to mention it, should report, that it froze in England last Winter, or the like, I think a man would as little doubt of it, as that Seven and Four are Eleven.

The First, and highest Degree of Probability then is, when the general consent of all men, in all ages, as far as can be known, concurs with a man's own constant Experience in the like cases, to confirm the truth of any particular matter of Fact, attested by fair Witnesses: such are the stated Constitutions and Properties of Bodies, and the regular Proceedings of Causes and Essess in the ordinary course of Nature; this we call an Argument from the nature of things themselves. For what we and others always observe to be after the same

manner, we conclude with Reason, to be the effects of steddy and regular Causes, tho' they come not within the reach of our Knowledge. As that Fire warmed a man, or made Lead stud; that Iron sunk in water, swam in quick-filver. A relation affirming any such thing to have been, or a praedication that it will happen again in the same manner, is received without doubt or hesitation: and our Belief thus grounded, rifes to Assurance.

Secondly, The next degree of Probability, is when by my own Experience, and the agreement of all others that mention it, a thing is found to be for the most part so; and that the particular instance of it is attested by many and undoubted witnesses. Thus History giving us such an account of men in all ages, and my own Experience confirming it, that most men prefer their own private Advantage, to the Publick. If all Historians that writ of Tiberius, say that he did so, it is extreamly probable: and in this case, our Assert rises to a degree which we may call Considence.

Thirdly, In matters happening indifferently, as that a Bird should fly this or that way: when any particular matter of Fact comes attested by the concurrent Testimony of unsuspected Witnesses, there our Assent is also unavoidable. Thus, that there is in Italy such a city as Rome; that about One thousand and seven hundred years ago, there lived such a man in it as Julius Caesar, dec.

A man can as little doubt of this, and the like, as he does of the Being and Actions of his own Acquaintance, whereof he himfelf is a witness.

Probability, on these grounds, carries so much Evidence with it, that it leaves us as little liberty to believe or disbelieve, as Demonstration does, whether we will know or be ignorant. But the difficulty is, when Testimonies contradict common Experience, and the Reports of Witnesses clash with the ordinary course of Nature, or with one another. Here diligence, attention, and exactness is required to form a right Judgment, and to proportion the Assent to the Evidence and Probability of the thing, which rifes and falls, according as the two foundations of Credibility favour, or contradict it. These are liable to such variety of contrary Observations, Circumstances, Reports, Tempers, Deligns, Overlights, &c. of Reporters, that it is impossible to reduce to precise rules, the various degrees wherein men give their Affent. This in general may be faid, that as the Proofs upon due Examination, shall to any one appear in a greater, or less degree, to preponderate on either fide, so they are fitted to produce in the mind, fuch different Entertainments, as are called Belief, Conjecture, Guess, Doubt, Wavering, Distrust, Disbelief, &c.

It is a Rule generally approved, that any Testmony, the farther off it is removed from the original truth, the less force it has: and in traditional truths, each remove weakens the force of the Proof. There is a Rule quite contrary to this, advanced by fome men, who look on Opinions to gain force by growing older. Upon this ground, Propositions evidently salse or doubtful in their sirst beginning, come by an inverted Rule of Probability, to pass for authentick Truths; and those which deserved little Credit from the mouths of their first Relators, are thought to grow venerable by Age, and are urged as undeniable.

But certain it is, that no Probability can rife above its first Original. What has no other evidence than the single Testimony of one Witness, must stand or fall by his only Testimony, the afterwards cited by Hundreds of others; and is so far from receiving any strength thereby, that it becomes the weaker. Because Passion, Interest, Inadvertency, Mistake of his Meaning, and a thousand odd Reassons, which capricious mens minds are acted by, may make one man quote another's words or meaning wrong. This is certain, that what in one age was affirmed upon slight grounds, can never after come to be more valid in suture ages by being often repeated.

The Second fort of Probability, is concerning things not falling under the reach of our fenses, and therefore not capable of Testimony: and such are, First, The Existence, Nature, and Operations of finite, immaterial Beings without us, as Spirits, Angels, &c. or the Existence of material Beings, such as for their finallness or remotences, our Senfes cannot take notice of: as whether there be any Plants, Animals, &c. in the Planets, and other mansions of the valt Universe.

Secondly, Concerning the manner of Operation in most parts of the works of Nature; wherein, tho' we see the sensible Esfects, yet their Causes are unknown, and we perceive not the ways, and manner how they are produced. We fee Animals are generated, nourished, and move; the Loadflone draws Iron, &c. but the Caufes that operate. and the manner they are produced in, we can only guess, and probably conjecture. In these matters Analogy is the only help we have; and it is from that alone we draw all our grounds of Prohability. Thus observing, that the bare rubbing of two Bodies violently upon one another, produces Heat and very often Fire; we have reason to think that what we call Heat and Fire, confifts, in a certain violent agitation of the imperceptible minute parts of the burning Matter. This fort of Probability, which is the best conduct of rational Experiments, and the rife of Hypothefes, has also its use and influence. And a wary reasoning from Analogy leads us often into the discovery of Truths, and useful Deductions, which would otherwise lie concealed.

Tho' the common experience, and the ordinary course of things, have a mighty influence on the minds of men, to make them give or resuse credit, to any thing proposed to their belief; yet there is one case wherein the strangeness of the fact lessens not the Assent to a sair Testimony given of it. For where such supernatural Events are suitable to ends aimed at by him, who has the power to change the course of Nature; there under such circumstances they may be the fitter to procure belief, by how much the more they are beyond, or contrary to ordinary observation. This is the proper case of miracles, which well attested, do not only find credit themselves, but give it also to other truths.

There are Propositions that challenge the highest degree of our Assent upon bare Testimony, whether the thing proposed agree or disagree with common Experience, and the ordinary course of things or no: the reason whereof is, because the Testimony is of such an one, as cannot deceive nor be deceived; and that is God himself. This carries with it Certainty beyond Doubt, Evidence beyond Exception. This is called by a peculiar name, Revelation, and our assent to it, Faith; which has as much Certainty in it, as our Knowledge it self; and we may as well doubt of our own Being, as we can, whether any Revelation from God be true. So that Faith is a settled and sure

Principle of Assent and Assurance, and leaves no Manner of Room for Doubt or Hesitation; only we must be sure, that it be a divine Revelation, and that we understand it right; else we shall expose our selves to all the extravagancy of Enthusiasm, and all the error of wrong Principles if we have Faith and Assurance, in what is not divine Revelation.

#### CHAP. XVII.

Of Reason.

HE word Reason in English, has different Significations. Sometimes it is taken for true and clear Principles: fometimes for clear and fair Deductions from those Principles: fometimes for the Cause, and particularly for the final Cause; but the Consideration I shall have of it here, is, as it stands for a Faculty, whereby Man is supposed to be distinguished from Beasis; and wherein it is evident, he much surpasses them.

Reason is necessary, both for the enlargement of our Knowledge, and regulating our Assent: for it hath to do both in Knowledge and Opinion, and is necessary and assisting to all our other intellectual Faculties; and indeed, contains two of them, viz. First, Sagacity, whereby it finds intermediate ideas. Secondly, Illation, whereby it so orders and disposes of them, as to discover what connexion there

is in each link of the Chain, whereby the extreams are held together, and thereby, as it were, to draw into view the Truth fought for; which is that we call *Illation* or *Inference*: and confifts in nothing, but the Perception of the Connection there is between the *ideas*, in each ftep of the Deduction, whereby the mind comes to fee, either the certain agreement or difagreement of any two *ideas*, as in *Demonstration*, in which it arrives at Knowledge: or their probable Connexion, on which it gives or with-holds its *Affent*, as in *Opinion*.

Sense and Intuition reach but a little way: the greatest part of our Knowledge depends upon Deductions and intermediate ideas. In those cases where we must take Propositions for true, without being certain of their being fo, we have need to find out, examine, and compare the grounds of their Probability: in both cases, the faculty which finds out the means, and rightly applies them to difcover Certainty in the one, and Probability in the other, is that which we call Reason. So that in Reason we may consider these four Degrees: 1st. The discovering and finding out of Proofs. 2dly. The regular and methodical Disposition of them. and laying them in fuch order, as their Connexion may be plainly perceived. Thirdly, The perceiving their Connexion. 4thly, The making a right Conclusion.

There is one thing more which I shall defire to be

considered concerning Reason, and that is, whether Syllogism, as is generally thought, be the proper instrument of it; and the usefullest way of exercising this faculty. The Causes I have to doubt of it, are these.

First, Because Syllogism serves our Reason but in one only of the fore-mentioned parts of it, and that is to shew the Connexion of the Proofs of any one Instance, and no more: but in this it is of no great use, fince the mind can perceive fuch Connexion, where it really is, as eafily, nay, perhaps better without it. We may observe that there are many men that reason exceeding clear and rightly, who know not how to make a Syllogifm: and I believe fearce any one makes Syllogifms in reafoning within himfelf. Indeed, fometimes they may ferve to discover a fallacy, hid in a rhetorical Flourish; or by stripping an absurdity of the cover of Wit and good Language, shew it in its naked Deformity. But the Weakness or Fallacy of fuch a loofe Difcourse it shews, by the artificial form it is put into, only to those who have throughly studied Mode and Figure, and have so examined the many ways, that three Propositions may be put together, as to know which of them does certainly conclude right, and which not, and upon what grounds it is that they do fo. But they who have not fo far look'd into those forms, are not fure by virtue of Syllogifm that the Conclusion certainly follows from the Premisses. The mind is not taught to reason by these Rules; it has a native faculty to perceive the Coherence or Incoherence of its ideas, and can range them right, without any such perplexing Repetitions.

And to shew the weakness of an argument, there needs no more but to strip it of the superfluous in deas, which blended and confounded with those on which the Inference depends, seem to shew a Connexion where there is none, or at least do hinder the Discovery of the want of it; and then to say the naked ideas on which the force of the Argumentation depends in their due order; in which position the mind taking a view of them, sees what Connexion they have, and so is able to judge of the Inference without any need of Syllogisin at all.

Secondly, Because Syllogisius are not less liable to Fallacies than the plainer ways of Argumentation: and for this I appeal to common Observation, which has always found these artificial methods of Reasoning more adapted to catch and entangle the mind, than to instruct and inform the Understanding. And if it be certain that Fallacy can be couch'd in Syllogisms, as it cannot be denied, it must be something esse, and not Syllogism, that must discover them. But if men skill'd in, and us'd to Syllogisms, find them affishing to their Reason in the Discovery of Truth, I think they

ought to make use of them. All that I aim at is, that they should not ascribe more to these Forms than belongs to them; and think that men have no use, or not so full a use of their reasoning faculty without them.

But however it be in Knowledge, I think it is of far lefs, or no use at all in *Probabilities*: for the *Affent* there being to be determined by the Preponderancy, after a due weighing of all the Proofs on both sides, nothing is so unfit to affill the mind in that, as *Syllozifm*; which running away with one assumed *Probability*, pursues that till it has led the mind quite out of fight of the thing under consideration.

But let it help us (as perhaps may be faid) in convincing men of their errors or mistakes; yet still it fails our reason in that part, which if not its highest perfeccion, is yet certainly its hardest task; and that which we most need its help in, and that is, The finding out of Proofs, and making new Difcoveries. This way of Reafoning discovers no new Proofs, but is the art of marshalling and ranging the old ones we have already. A man knows first, and then he is able to prove syllogistically; fo that Syllogifm comes after Knowledge; and then a man has little or no need of it. But it is chiefly by the finding out those ideas that shew the Connexion of diffant ones, that our flock of Knowledge is encreased; and that useful arts and sciences are advanced.

Reafon, tho' of a very large extent, fails us in feveral Instances: as, 1/1, Where our ideas fail. adly, It is often at a loss, because of the Obscurity, Confusion, or Imperfection of the ideas it is employed about. Thus having no perfect idea of the least Extension of matter, nor of Infinity, we are at a lofs about the divisibility of Matter. 3dly, Our Reason is often at a Hand, because it perceives not those ideas which would ferve to show the certain or probable agreement or difagreement of any two other ideas. 4thly, Our Reason is often engaged in abfurdities and difficulties, by proceeding upon false Principles, which being followed, lead men into Contradictions to themselves, and Inconfiftency in their own Thoughts. 5thly, Dubious words, and uncertain figns often puzzle mens Reafon, and bring them to a Non-plus.

Tho' the deducing one Proposition from another be a great part of Reason, and that which it is usually employed about: yet the principal act of Ratiocination is the finding the agreement or disagreement of two ideas one with another, by the intervention of a third. As a man, by a yard, finds two houses to be of the same length, which could not be brought together to measure their Equality by juxta-position. Words have their consequences as the signs of such ideas: and things agree, or disagree, as really they are; but we observe it only by our ideas.

In Reasoning men ordinarily use four sorts of Arguments.

The First, is to alledge the Opinions of men, whose parts, learning, eminency, power, or some other cause, has gained a name, and settled their Reputation in the common esteem with some kind of Authority. This may be called Argumentum ad Verecunsian.

Secondly, Another way is, to require the Adverfary to admit what they alledge as a Proof, or to affign a better. This I call Argumentum ad Ignorantiam.

A Third way, is to prefs a man with confequences drawn from his own Principles or Conceffions. This is already known under the name of Argumentum ad hominem.

Fourthly, The using of Proofs drawn from any of the foundations of Knowledge or Probability. This I call Argumentum ad Judicium. This alone of all the four, brings true Instruction with it, and advances us in our way to Knowledge. For 1st, It argues not another man's Opinion to be right, because I, out of respect, or any other consideration but that of Conviction, will not contradict him. 2dly, It proves not another man to be in the right way. nor that I ought to take the same with him, because I know not a better. 3dly, Nor does it sollow, that another man is in the right way, because he has shewn me that I am in the wrong.

This may dispose me perhaps for the Reception of truth, but helps me not to it; that must come from *Proofs* and *Arguments*, and Light arising from the Nature of Things themselves; not from my Shame-facedness, Ignorance, or Error.

By what has been faid of Reason, we may be able to make some guess at the distinction of things, into those that are according to, above, and contrary to Reason. According to Reason, are fuch Propolitions, whose truth we can difcover, by examining and tracing those ideas we have from Senfation and Reflection, and by natural deduction find to be true or probable. Above Reafon, are such Propositions, whose Truth or Probability we cannot by Reason derive from those Principles. Contrary to Reason, are such Propositions as are inconsistent with, or irreconcileable to, our clear and distinct ideas. Thus the Existence of one God, is according to Reason: the Existence of more than one God, contrary to Reason: the Resurrection of the Body after death, above Reason. Above Reason, may be also taken in a double sense, viz. Above Probability, or, above Certainty. In that large sense also, Contrary to Reason. is, I suppose, sometimes taken.

There is another use of the word Reason, wherein it is opposed to Faith; which, though authorized by common use, yet is it in it self a very improper way of speaking: for Faith is nothing but a firm Assent of the mind; which if it be regulated as is our duty, cannot be afforded to any thing but upon good Reason, and so cannot be opposite to it. He that believes without having any Reason for Believing, may be in love with his own fancies; but neither seeks Truth as he ought, nor pays the Obedience due to his Maker, who would have him use those discerning faculties he has given him, to keep him out of Mistake and Error. But since Reason and Faith are by some men opposed, we will so consider them in the following Chapter.

#### CHAP. XVIII.

Of Faith and Reason, and their distinct Provinces.

REASON, as contra-distinguished to Faith, I take to be the discovery of the Gertainty or Probability of such Propositions or Truths which the mind arrives at by deductions made from such ideas, which it has got by the use of its natural faculties, viz. by Sensation or Reflection.

Faith on the other fide, is the affent to any proposition, upon the credit of the proposer, as coming immediately from God; which we call Revelation: concerning which we must observe,

First, That no man inspired by God, can by any Revelation communicate to others, any new simple ideas, which they had not before from Sensation or

Reflection: because words, by their immediate operation on us, cannot cause other ideas, but of their natural founds, and as figns of latent ideas they can only recal to our Thoughts those ideas, which to us they have been wont to be figns of; but cannot introduce any new, and formerly unknown fimple ideas. The fame holds in all other figns, which cannot fignifie to us things, of which we have never before had any idea at all. For our simple ideas we must depend wholly on our natural faculties, and can by no means receive them from traditional Revelation; I say traditional, in distinction to original Revelation. By the one, I mean that impreffion which is made im nediately by Gad on the mind of any man, to which we cannot fet any bounds. And by the other, those impressions delivered over to others in words, and the ordinary ways of conveying our Conceptions one to another.

Secondly, I say, that the same Truths may be discovered by Revelation, which are discoverable to us by Reason; but in such there is little need or use of Revelation; God having surnished us with natural means to arrive at the Knowledge of them; and Truths discovered by our natural faculties, are more certain, than when conveyed to us by traditional Revelation. For the Knowledge we have, that this Revelation came at first from God, can never be so sure as the Knowledge we have from the

elear and diffinct Perception of the agreement and disagreement of our own ideas. This also holds in matters of fact, knowable by our fenfes: as the history of the Deluge is conveyed to us by Writings, which had their original from Revelation; and yet no body, I think, will fay he has as certain and clear Knowledge of the Flood, as Noah that faw it, or that he himself would have had, had he then been alive and feen it. For he has no greater Assurance, than that of his Senses, that it is writ in the Book, supposed to be writ by Moses inspired. But he has not so great an Assurance that Moles writ that Book, as if he had feen Moles write it; so that the Assurance of its being a Revelation, is still less than the Assurance of his Senses.

Revelation cannot be admitted against the clear evidence of Reason. For fince no evidence of our faculties, by which we receive such a Revelation, can exceed, if equal, the Certainty of our intuitive Knowledge; we can never receive for a Truth any thing that is directly contrary to our clear and distinct Knowledge. Thus the ideas of one body and one place do so clearly agree, that we can never affent to a Proposition that affirms the same body to be in two distinct places at once; however, it should pretend to the authority of a divine Revelation: since the evidence, First, That we deceive not our selves in ascribing it to God: Secondly, That we

understand it right, can never be so great as the evidence of our own intuitive Knowledge, whereby we discern it impossible for the same body to be in two places at once.

In Propositions therefore, contrary to our diffinct and clear ideas, it will be invain to urge them as matters of Faith. For Faith can never convince us of any thing that contradicts our Knowledge. Because, though Faith be founded upon the Testimony of God, who cannot lie, yet we cannot have an Assurance of the Truth of its being a divine Revelation, greater than our own Knowledge. For if the mind of man can never have a clearer evidence of any thing to be a divine Revelation, than it has of the principles of its own Reason; it can never have a ground to quit the clear evidence of its Reason, to give place to a Proposition, whose Revelation has not a greater evidence than those principles have.

In all things therefore where we have clear evidence from our *ideas*, and the principles of Knowledge above-mentioned, *Reafon* is the proper Judge; and *Revelation* cannot in fuch cases invalidate its decrees; nor can we be obliged, where we have the clear and evident sentence of Reason, to quit it for the contrary Opinion, under a pretence that it is *Matter of Faith*, which can have no authority against the plain and clear distates of *Reason*. But,

Thir.lly, There being many things of which we have but imperfect notions, or none at all; and other things, of whose past, present, or suture Existence, by the natural use of our faculties, we can have no Knowledge at all: these being begins when revealed, become the proper Matter of Faith. Thus, that part of the angels rebelled against God; that the bodies of men shall rise and live again, and the like, are purely Matters of Faith, with which Reason has directly nothing to do.

First then, Whatever Proposition is revealed, of whose truth our mind, by its natural faculties and notions cannot judge, that is purely Matter of Faith and above Reason.

Secondly, All Propositions, whereof the mind by its natural faculties, can come to determine and judge from natural acquired ideas, are Matter of Reason; but with this difference; that in those concerning which it has but an uncertain evidence, and so is persuaded of their Truth only upon probable grounds: in such, I say, an evident Revelation ought to determine our Assent, even against Probability. Because the mind, not being certain of the Truth of that it does not evidently know, is bound to give up its Assent to such a Testimony, which it is satisfied comes from one, who cannot err, and will not deceive. But yet it still belongs to Reason to judge of the Truth of its being a Re-

velation, and of the Signification of the Words wherein it is delivered.

Thus far the dominion of Faith reaches: and that without any violence to Reafon, which is not injured or diffurbed, but affifted and improved by new discoveries of Truth, coming from the eternal Fountain of all Knowledge. Whatever God hath revealed is certainly true; no doubt can be made of it. This is the proper Object of Faith: but whether it be a divine Revelation or no, Reason must judge; which can never permit the mind to reject a greater Evidence, to embrace what is less evident, nor prefer less Certainty to the greater. There can be no Evidence, that any traditional Revelation is of divine original, in the words we receive it, and the fense we understand it, so clear and fo certain, as that of the Principles of Reason: and therefore, Nothing that is contrary to the clear and self-evident distates of Reason, has a right to be urged or affented to, as a matter of Faith, wherein Reason has nothing to do. Whatsoever is divine Revelation, ought to over-rule all our Opinions, Prejudices, and Interests, and hath a right to be received with a full Affent. Such a submission as this, of our Reason to Faith, takes not away, the Land-marks of Knowledge: this shakes not the foundations of Reason, but leaves us that use of our faculties, for which they were given us.

#### CHAP. XIX.

## Of Enthusiasm.

HE that would feriously set upon the search of Truth, ought in the first place to prepare his mind with a Love of it. For he that loves it not, will not take much pains to get it, nor be much concern'd when he misses it. There is no body who does not profess himself a lover of truth. and that would not take it amiss to be thought otherwise of. And yet for all this, one may truly fay, there are very few lovers of truth for Truth's fake, even amongit those who persuade themselves that they are fo. How a man may know whether he be so in earnest, is worth Enquiry: and I think there is this one unerring mark of it, viz. The not entertaining any Proposition with greater assurance than the proofs it is built upon will warrant. Whoever goes beyond this measure of Assent, 'ris plain receives not Truth in the Love of it. For the evidence that any Proposition is true (except fuch as are felf-evident) lying only in the proofs a man has of it, whatever degrees of Affent he affords it beyond the degrees of that Evidence, 'tis plain all that furplufage of Assurance is owing to some other affection, and not to the love of Truth. Whatfoever credit we give to any Proposition more than it receives from the principles and proofs it supports it self upon, is owing to our inclinations that way, and is so far a derogation from the Love of Truth as such: which as it can receive no evidence from our Passions or Interests, so it should receive no tincture from them.

The assuming an Authority of dictating to others, and a Forwardness to prescribe to their opinions, is a constant concomitant of this bias and corruption of our Judgments. For how can it be otherwise, but that he should be ready to impose on others Belief, who has already imposed on his own?

Upon this occasion I shall consider a third ground of Assent, which with some men has the same Authority as either Faith or Reason, I mean Enthusias; which laying by Reason, would set up Revelation without it. Whereby in effect it takes away both Reason and Revelation, and substitutes in the room of it, the ungrounded sancies of a man's own brain, and assumes them for a soundation both of Opinion and Conduct.

Immediate Revelation being a much eafier way for men to establish their Opinions, and regulate their Conduct, than the tedious labour of strict Reasoning, it is no wonder that some have been very apt to pretend to it, especially in such of their Actions and Opinions as they cannot ac-

count for by the ordinary methods of Knowledge. and principles of Reason. Hence we see that in all ages, men, in whom Melancholy has mixed with Devotion, or whose Conceit of themselves has raifed them into an Opinion of a greater familiarity with God than is allowed others, have often flatter'd themselves with a persuasion of an immediate Intercourse with the Deity, and frequent Communications from the divine Spirit. Their minds being thus prepared, whatever groundless Opinion comes to fettle itself strongly upon their fancies, is an Illumination from the Spirit of God; and whatfoever odd action they find in themselves a strong Inclination to do, that Impulse is concluded to be a Call or Direction from Heaven. and must be obeyed. This I take to be properly Enthusiasm, which the' rising from the Conceit of a warmed or overweening Brain, works, where it once gets footing, more powerfully on the perfuafions and actions of men, than either Reason or Revelation, or both together; men being most forwardly obedient to the Impulses they receive from themselves. Strong Conceit, like a new Principle, carries all eafily with it, when got above Common Sense, and freed from all restraint of Reason, and check of Reslection, it is heighten'd into a divine Authority, in concurrence with our own Temper and Inclination.

When men are once got into this way of imme-

diate Revelation, of Illumination without Search, and of Certainty without Proof, 'tis a hard matter to get them out of it. Reason is lost upon them, they are above it: they see the Light infus'd into their Understandings, and cannot be mistaken; 'tis clear and visible there, like the light of bright Sun-shine, shews it felf, and needs no other Proof, but its own Evidence: they feel the hand of God moving them within, and the Impulses of the Spirit, and cannot be mistaken in what they feel.

This is the way of talking of these men: they are fure because they are fure: and their persuafions are right, only because they are strong in them. For when what they say is strip'd of the metaphor of feeing and feeling, this is all it amounts to. These men have, they say, clear light, and they fee; they have an awaken'd fenfe, and they feel: this cannot, they are fure, be disputed them. But here let me ask: this feeing is it the perception of the Truth of the Proposition, or of this, that it is a Revelation from God? This feeling is it a Perception of an Inclination to do fomething, or of the Spirit of God moving that Inclination? These are two very different Perceptions, and must be carefully diftinguish'd. I may perceive the Truth of a Proposition, and yet not perceive that it is an immediate Revelation from God. Nay, I may perceive I came not by it in a natural way,

without perceiving that it is a Revelation from God. Because there be Spirits, which without being divinely commission'd, may excite those ideas in me, and make their Connexion perceiv'd. So that the Knowledge of any Proposition coming into my mind I know not how, is not a Perception that it is from God. But however it be call'd Light and Seeing; I suppose it is at most but Belief and Affurance. For where a Proposition is known to be true. Revelation is needlefs. If therefore it be a Proposition which they are perfuaded, but do not know to be true, it is not feeing but believing. What I see, I know to be so by the Evidence of the thing it felf: what I believe, I take to be fo upon the Testimony of another: but this Testimony I must know to be given, or else what ground have I of believing? I must fee that it is God that reveals this to me, or elfe I fee nothing. If I know not this, how great foever my Assurance is, it is groundless: whatever Light I pretend to, it is but Enthusiasm.

In all that is of divine Revelation, there is need of no other Proof, but that it is from God: for he can neither deceive nor be deceived. But how shall it be known that any Proposition in our minds is a Truth revealed to us by God? Here it is that Enthusiasm fails of the Evidence it pretends to. For men thus posses'd boast of a Light, whereby they say they are brought into the Knowledge of

this or that Truth. But if they know it to be a Truth, they must know it to be so, either by its own felf-evidence or by the rational Proofs that make it out to be fo. If they know it to be a Truth either of these two ways, they in vain suppose it to be a Revelation. For thus all Truths of what kind foever, that men uninspired are enlighten'd with come into their minds. If they fay they know it to be true, because it is a Revelation from God, the Reason is good: but then it will be demanded, how they know it to be a Revelation from God. If they fay by the Light it brings with it, I befeech them to confider, whether this be any more, than that it is a Revelation because they strongly believe it to be true. For all the Light they speak of, is but a strong persuasion of their own minds that it is a Truth, which is a very unfafe ground to proceed on, either in our tenets or actions.

True Light in the mind is nothing else but the Evidence of the Truth of any Proposition: and if it be not self-evident, all the Light it can have is from Clearness of those Proofs upon which it is received. To talk of any other Light in the Understanding, is to put ourselves in the dark, or in the power of the Prince of Darkness. For if strength of persuasion be the Light which must guide us, how shall any one distinguish between the Delusions of Satan, and the Inspirations of the Holy

Ghaft? He therefore that will not give up himfelf to Delusion and Error, must bring this guide of his Light within to the trial. God when he makes the Prophet, does not unmake the Man. He leaves his faculties in their natural state, to enable him to judge of his Inspirations, whether they be of divine Original or no. If he would have us affent to the Truth of any Proposition, he either evidences that Truth by the usual methods of natural Reason, or else makes it known to be a Truth which he would have us affent to by his Authority; and convinces us that it is from him, by fome marks, which Reafon cannot be mistaken in. Reason must be our last Judge and Guide in every thing. I do not mean that we must consult Reason, and examine whether a Proposition reveal'd from God can be made out by natural Principles, and if it cannot, that then we may reject it: but confult it we must, and by it examine, whether it be a Revelation from God or no: and if Reason finds it to be revealed from God, Reason then declares for it, as much as for any other Truth, and makes it one of her Dictates. Every conceit that throughly warms our fancies must pass for an Inspiration, if there be nothing but the thrength of our perfuations whereby to judge of them: if Reafon must not examine their Truth by fomething extrinsical to the persuasions themfelves, Infpirations and Delusions, Truth and Falshood, will have the same measure, and will not be possible to be distinguished.

Thus we fee the holy men of God, who had Revelations from God, had fomething elfe besides that internal Light of Affurance in their own minds, to tellifie to them, that it was from God. They had outward figns to convince them of the Author of those Revelations. And when they were to convince others, they had a power given them to justifie the truth of their Commission from Heaven; and by visible figns to affert the divine Authority of the message they were sent with. Moses faw the Bush burn without being confumed, and heard a voice out of it. God by another miracle of his rod turn'd into a Scrpent, affured him likewife of a power to tellifie his mission by the same Miracle repeated before them, to whom he was fent. This, and the like Instances to be found among the Prophets of old, are enough to shew, that they thought not an inward feeing or perfuafion of their own minds a fufficient Evidence without any other proof, that it was from God, tho' the Scripture does not every where mention their demanding or having fuch proofs.

I do not deny that God can, or doth fometimes enlighten mens minds in the apprehending of certain Truths, or excite them to good actions by the immediate influence and affiftance of the Holy Spirit, without any extraordinary figns accompanying it. But in such cases too we have Reason and the Scripture, unerring rules to know whether it be from God or no. Where the Truth embraced is conforant to the Revelation in the written Word of God; or the Action conformable to the Dictates of Right Reason, or Holy Writ, we run no risque in entertaining it as such; because tho' perhaps it be not an immediate Revelation from God, extraordinarily operating on our minds, yet we are fure it is warranted by that Revelation which he has given us of Truth. Where Reason or Scripture is express for any Opinion or Action, we may receive it as of divine Authority: but 'tis not the strength of our own perfuzions which can by itself give it that flamp. The bent of our own minds may favour it as much as we please; that may shew it to be a fondling of our own, but will by no means prove it to be an Offspring of Heaven, and of divine Original.

#### CHAP. XX.

## Of wrong Affent or Error.

ERROR is a Missake of our Judgment, giving Assent to that which is not true. The Reasons whereof may be reduced to these four: First, Want of Proofs. Secondly, Want of Ability to use them. Thirdly, Want of Will to use them. Fourthly, Wrong Measures of Probability.

First, Want of Proofs; by which I do not mean only the want of those Proofs which are not to be had, but also of those Proofs which are in being, or might be procured. The greatest part of mankind want the conveniencies and opportunities of making Experiments and Observations themselves, or of collecting the Testimonies of others, being enslaved to the necessity of their mean Condition, whose lives are worn out only in the Provisions for living. These men are by the Constitution of human Affairs, unavoidably given over to invincible Ignorance of those Proofs, on which others build, and which are necessary to establish those Opinions. For having much to do to get the means of living, they are not in a Condition

to look after those of learned and laborious Enquiries.

It is true, that God has furnished men with faculties sufficient to direct them in the way they should take, if they will but seriously employ them that way, when their ordinary vocations allow them leisure. No man is so wholly taken up with the attendance on the means of living, as to have no spare time at all to think on his Soul, and inform himself in matters of Religion, were men as intent on this, as they are on things of lower concernment. There are none so enslaved to the necessity of life, who might not find many vacancies, that might be husbanded to this advantage of their Knowledge.

Secondly, Want of Ability to use them. There be many who cannot carry a Train of Consequences in their heads, nor weigh exactly the preponderancy of contrary Proofs and Testimonies. These cannot discern that side on which the strongest Proofs lie; nor follow that which in it self is the most probable Opinion. It is certain, that there is a wide difference in mens Understandings, Apprehensions and Reasonings, to a very great Latitude, so that one may, without doing Injury to mankind, affirm, that there is a greater distance between some men and others in this respect, than between some men and some beasts: but how this comes about is a Speculation, though of

great Consequence, yet not necessary to our prefent Purpose.

Thirdly, For want of Will to use them. Some, tho' they have opportunities and leisure enough, and want neither parts nor learning, nor other helps, are yet never the better for them, and never come to the Knowledge of several Truths that lie within their reach; either upon the account of their hot pursuit of Pleasure, constant drudgery in Business, Laziness and Oscitancy in general, or a particular aversion for Books and Study: and some out of sear that an impartial Inquiry would not savour those Opinions, which best suit their Prejudices, Lives, Designs, Interests, &c. as many men forbear to cast up their Accounts, who have reason to fear that their Affairs are in no very good Posture.

How men, whose plentiful fortunes allow them leisure to improve their Understandings, can satisfie themselves with a lazy Ignorance, I cannot tell: but methinks they have a low Opinion of their Souls, who lay out all their Incomes in Provisions for the Body, and employ none of it to procure the Means and Helps of Knowledge. I will not here mention how unreasonable this is for men that ever think of a future State, and their Concernment in it, which no rational man can avoid to do sometimes: nor shall I take notice what a shame it is to the greatest Contemners of Know-

ledge, to be found ignorant in things they are concerned to know. But this, at least, is worth the Consideration of those who call themselves Gentlemen; that however they may think Credit, Respect, and Authority, the concomitants of their Birth and Fortune; yet they will find all these still carried away from them by men of lower Condition, who surpass them in Knowledge. They who are blind, will always be led by those that see, or else sall into the Ditch: and he is certainly the most subjected, the most enslaved, who is so in his Understanding.

Fourthly, Wrong measures of Probability; which are,

First, Propositions that are not in themselves certain and evident, but doubtful and salse, taken for Principles. Propositions looked on as Principles, have so great an Insuence upon our Opinions, that is usually by them we judge of Truth, and what is inconsistent with them, is so far from passing for probable with us, that it will not be allowed possible. The Reverence born to these Principles is so great, that the Testimony, not only of other men, but the Evidence of our own Senses are often rejected, when they offer to vouch any thing contrary to these established Rules. The great Obstinacy that is to be sound in men, firmly believing quite contrary Opinions, though many times equally absurd, in the various Religions of man-

kind, are as evident a proof, as they are an unavoidable confequence of this way of Reasoning from received traditional principles: so that men will disbelieve their own eyes, renounce the Evidence of their Senses, and give their own Experience the Lye, rather than admit of any thing disagreeing with these facred Tenets.

Secondly, Received Hypothefes. The difference between these and the former, is, that those who proceed by these, will admit of matter of fact, and agree with Dissenters in that; but differ in assigning of Reasons, and explaining the manner of Operation. These are not at that open desiance with their Senses as the former: they can endure to hearken to their Information a little more patiently; but will by no means admit of their Reports in the Explanation of things; nor be prevailed on by Probabilities which would convince them, that things are not brought about just aster the same manner that they have decreed within themselves that they are.

Thirdly, Predominant Passions or Inclinations: let never so much Probability hang on one side of a covetous man's Reasoning, and money on the other, it is easie to foresee which will prevail. Tho' men cannot always openly gain-say, or resist the sorce of manifest Probabilities, that make against them, yet yield they not to the Argument. Not

but that it is the Nature of the Understanding, constantly to close with the more probable side: but yet a man hath power to suspend and restrain its Enquiries, and not permit a sull and satisfactory Examination. Until that be done, there will be always these two ways left of evading the most apparent Probabilities.

First, That the Arguments being brought in Words, there may be Fallacy latent in them; and the consequences being perhaps many in train, may be some of them incoherent. There are sew discourses so short and clear, to which men may not, with satisfaction enough to themselves raise this doubt, and from whose Conviction they may not without reproach of Disingenuity or Unreasonableness set themselves free.

Secondly, Manifelt Probabilities may be evaded upon this Suggestion, that I know not yet all that may be faid on the contrary side: and therefore, tho' a man be beaten, it is not necessary he should yield, not knowing what Forces there are in referve behind.

Fourthly, Authority, or the giving up our Affent to the common received Opinions, either of our Friends or Party, Neighbourhood or Country. How many men have no other ground for their Tenets, than the supposed Honesty or Learning, or Number of those of the same Profession? as if

honest or bookish men could not err; or Truth were to be established by the Vote of the Multitude. Yet this with most men serves the Turn. All men are liable to Error, and most men are in many points by Paffion or Interest under temptation to it. This is certain, that there is not an Opinion fo abfurd, which a man may not receive upon this Ground. There is no Error to be named, which has not had its Profesfors. And a man shall never want crooked Paths to walk in, if he thinks that he is in the right Way, where-ever he has the Footsteps of others to follow. But, notwithflanding the great Noise is made in the World about Errors and Opinions, I must do Mankind that Right as to fay, there are not fo many men in Errors and wrong Opinions as is commonly supposed: not that I think they embrace the Truth, but indeed, because, concerning those Doctrines they keep fuch a Stir about, they have no Thought, no Opinion at all. For if any one should a little catechife the greatest part of the Partisans of most of the Sects in the World, he would not find concerning those Matters, they are so zealous for, that they have any Opinions of their own: much less would he have Reason to think, that they took them upon the Examination of Arguments, and Appearance of Probability. They are refolved to flick to a Party, that Education or Interest

has engaged them in; and there, like the common Soldiers of an Army, shew their Courage and, Warmth, as their Leaders direct, without ever examining, or so much as knowing the Cause they, contend for.

#### CHAP. XXI.

### Of the Division of the Sciences.

A LL that can fall within the compass of Human Understanding, being either, 1st, The Nature of Things, their Relations, and their Manner of Operation: Or, 2dly, That which Manhimself ought to do as a rational and voluntary. Agent, for the attainment of any End, especially Happiness: Or, 3dly, The Ways and Means whereby the Knowledge of both of these are attained and communicated. I think Science may be properly, divided into these three Scrts.

First, The Knowledge of Things, their Constitutions, Properties, and Operations, whether material or immaterial: this, in a little more enlarged sense of the Word, I call During, or Natural Philosophy. The End of this is bare speculative Truth, and whatsoever can afford the mind of man, any such, salls under this Branch: whether it be God

himself. Angels, Spirits, Bodies, or any of their Assections, as Number, Figure, &c.

Secondly,  $\Pi_p \propto l(\kappa)$ , the Skill of right-applying our own Powers and Actions for the attainment of things good and useful. The most considerable under this head, is *Ethicks*, which is the seeking out those Rules and Measures of humane Actions, which lead to *Happiness*, and the Means to practise them. The End of this is not bare Speculation; but Right, and a Conduct suitable thereto.

Thirdly, Enperolism, or the Doctrine of Signs: the most usual being Words, it is aptly enough term'd Logick: the business whereof is to consider the Nature of Signs, which the mind makes use of for the understanding of things, or conveying its Knowledge to others. Things are represented to the mind by ideas: and mens ideas are communicated to one another, by articulate Sounds, or Words. The Consideration then of ideas and words, as the great Instruments of Knowledge makes no despicable part of their Contemplation, who would take a view of human Knowledge in the whole Extent of it.

This feems to me the first and most general, as well as natural Division of the Objects of our Understanding. For a man can employ his thoughts about nothing, but either the Contemplation of Things themselves for the Discovery of Truth,

or about the Things in his own power, which are his Actions, for the attainment of his own Ends; or the Signs the mind makes use of, both in the one and the other, and the right ordering of them, for its clearer Information. All which Three, viz. Things, as they are in themselves Knowable: Actions, as they depend on us in order to Happiness, and the right use of Signs, in order to Knowledge, being Toto Coelo different, they seemed to me to be the three great Provinces of the intellectual World wholly separate, and distinct one from another.

#### THE END.

# The CONTENTS of the Second BOOK.

T	
HE Introduction.	Page 7
Chap. 1. Of Ideas in General, and their Original.	12
Chap. 2. Of Simple Ideas.	16
Chap. 3. Of Ideas of one Sense.	17
Chap. 4. Of Solidity.	13
Chap. 5. Of Simple Ideas of divers Senses.	21
Chap. 6. Of Simple Ideas of Reflection.	ib.
Chap. 7. Of Simple Ideas of Sentation and Reflect	ion. ib.
Chap. 8. Some farther Confiderations concern	ing
Simple Ideas.	25
Chap. 9. Of Perception.	30
Chap. 10. Of Retention.	33
Chap. 11. Of Discerning, and other Operations of	the
Mind.	35
Chap. 12. Of Complex Ideas.	33
Chap. 13. Of Simple Modes, and first of the Sim	•
Modes of Space.	40
Chap. 14. Of Duration and its Simple Modes.	43
Chap. 15. Of Duration and Expansion considered	
gether.	47
Chap. 16. Of Numbers.	43
Chap. 17. Of Infinity.	50
Chap. 18. Of other simple Modes.	53
Chap. 19. Of the Modes of Thinking.	5.4
Chap. 20. Of the Modes of Pleafure and Pain.	55
Chap. 21. Of Power.	57
Chap. 22. Of Mixed Modes.	63
Chap. 23. Of our Complex Ideas of Substances.	67
Chap. 24. Of Collective Ideas of Substances.	72
Chap. 25. Of Relation.	73
Chap. 26. Of Caute and Effect, and T Relation	S. 74
Chap. 27. Of Identity and Diversity.	77
Chap. 28. Of other Rel. tions.	83
Chap. 29. Of clear, obscur , sistinet, and confused I	dcas. 89
Chap. 30. Of Real and Fantassical Ideas.	93
Chap. 31. Of Ideas Adequate or Inadequate.	95
Chap. 32. Of True and False Ideas.	97
Chap. 33. Of the Affociation of Ideas.	102

# The CONTENTS of the Third Book.

Chap. 1. Of Words or Language in General.	. 108
Chap. 2. Of the Signification of Words.	110
Chap. 3. Of General Terms.	114
Chap. 4. Of the Names of Simple Ideas.	121
Chap. 5. Of the Names of Mixed Modes and Relations	. 124
Chap. 6. Of the Names of Substances,	127
Chap. 7. Of Particles.	134
Chap. 8. Of Abstract and Concrete Terms.	136
Chap. 9. Of the Imperfection of Words.	137
Chap. 10. Of the Abuse of Words.	141
Chap. 11. Of the Remedies of the foregoing Imper-	
fections and Abuses.	150
The Contents of the Fourth Book.	
Chap. 1. Of Knowledge in General.	155
Chap. 2. Of the Degrees of our Knowledge.	159
Chap. 3. Of the Extent of Human Knowledge.	166
Chap. 4. Of the Reality of our Knowledge.	181
Chap. 5. Of Truth in General.	187
Chap. 6. Of Universal Propositions, their Truth and	
Certainty.	190
Chap. 7. Of Maxims.	194
Chap. 8. Of trifling Propositions.	201
Chap. 9. Of our Knowledge of Existence.	204
Chap. 10. Of our Knowledge of the Existence of a God.	205
Chap. 11. Of our Knowledge of the Existence of o-	
ther Things.	211
Chap. 12. Of the Improvement of our Knowledge.	218
Chap. 13. Some farther Confiderations concerning	
Knowledge.	225
Chap. 14. Of Judgment.	226
Chap. 15. Of Probability.	223
Chap. 16. Of the Degrees of Assent.	230
Chap. 17. Of Reason.	238
Chap. 18. Of Faith and Reason, and their distinct	
Provinces.	246
Chap. 19. Of Enthusiasm.	252
Chap. 20. Of wrong Assent or Error.	261
Chap. 21. Of the Division of the Sciences.	268
•	3.











